The Synthesis and Structural Investigation of Mixed Lithium / Sodium Amides

Rebecca L. Lowton, Martin O. Jones, William I . F. David, Simon R. Johnson, Marco Sommariva, and Peter. P. Edwards

Supplementary Crystallographic Information for System I

x = 1.0

R_ expected	4.521	R_expected'	9.452
R_weighted pattern	14.989	R_weighted pattern'	31.342
R_Pattern	9.839	R_Pattern'	28.861
Weighted_Durbin_Watson	7.430		
Goodness of fit	3.316		

LiNH2_00 – LiNH2_10 Lattice Parameter	$aLi_0 = 5.03701(3)$ Å
LiNH2_00 – LiNH2_10 Lattice Parameter	$aLi_{10} = 5.04195(6)$ Å
LiNH2_00 – LiNH2_10 Lattice Parameter	$cLi_0 = 10.25577(3)$ Å
LiNH2_00 – LiNH2_10 Lattice Parameter	$cLi_{10} = 10.3311(2)$ Å
LiNH2_00 – LiNH2_10 Occ. Parameter	$yLi_0 = 0.987(3)$
LiNH2_00 – LiNH2_10 Occ. Parameter	$yLi_{10} = 0.95(1)$

Phase Name	LiNH2_00					
Space Group	I – 4					
Scale	0.000092(2)					
Lattice Parameter	$a = b = a\_liam\_00 = 1.0*aLi_0 + 0.0*aLi_{10} = 5.03701(3)$ Å					
	$c = c\_liam\_00 = 1.0*cLi_0 + 0.0*cLi_{10} = 10.25577(3)$ Å					
Occupancy Parameter	$oLi00 = 1.0* yLi_0 + 0.0*yLi_{10} = 0.987(3)$					
Site	Li 1	0.0	0.0	0.0	occ	1	$b_{eq}= 0.95(1)$
Site	Li 2	0.0	0.5	-0.25	occ (oLi00)	0.987(3)	$b_{eq}= 3.0(1)$
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi00)	0.013(3)	$b_{eq}= 3.0(1)$
Site	Li 3	0.0	0.5	0.00620	occ	1	$b_{eq}= 0.95(1)$
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	$b_{eq}= 0.95(1)$
Site	H 1	-0.226	-0.149	-0.172	occ	1	$b_{eq}= 0.95(1)$
Site	H 2	-0.308	-0.359	-0.114	occ	1	$b_{eq}= 0.95(1)$

Phase Name	LiNH2_01					
Space Group	I – 4					
Scale	0.000879(4)					
Lattice Parameter	$a = b = a\_liam\_01 = 0.9*aLi_0 + 0.1*aLi_{10} = 5.03750(2)$Å					
	$c = c\_liam\_01 = 0.9*cLi_0 + 0.1*cLi_{10} = 10.26342(5)$Å					
Occupancy Parameter	$oLi01 = 0.9* yLi_0 + 0.1*yLi_{10} = 0.983(4)$					
Site	Li 1	0.0	0.0	0.0	occ	1	$b_{eq}= 0.95(1)$
Site	Li 2	0.0	0.5	-0.25	occ (oLi01)	0.983(4)	$b_{eq}= 3.0(1)$

Site	Na 2	0.0	0.5	-0.25	occ (1-oLi01)	0.017(3)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_02						
Space Group	I – 4						
Scale	0.000110(3)						
Lattice Parameter	$a = b = a\_liam\_02 = 0.8*aLi_{10} + 0.2*aLi_0 = 5.03800(2)$Å						
	$c = c\_liam\_02 = 0.8*cLi_0 + 0.2*cLi_{10} = 10.27106(6)$Å						
Occupancy Parameter	$oLi02 = 0.8* yLi_0 + 0.2*yLi_{10} = 0.979(5)$						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi02)	0.979(5)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi02)	0.021(5)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_03						
Space Group	I – 4						
Scale	0.000013(2)						
Lattice Parameter	$a = b = a\_liam\_03 = 0.7*aLi_0 + 0.3*aLi_{10} = 5.03849(3)$ Å						
	$c = c\_liam\_03 = 0.7*cLi_0 + 0.3*cLi_{10} = 10.27871(8)$Å						
Occupancy Parameter	$oLi03 = 0.7* yLi_0 + 0.3*yLi_{10} = 0.975(6)$						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi07)	0.975(6)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi07)	0.025(6)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_04
Space Group	I – 4
Scale	0.000001(1)
Lattice Parameter	$a = b = a\_liam\_04 = 0.6*aLi_0 + 0.4*aLi_{10} = 5.03899(3)$Å
	$c = c\_liam\_04 = 0.6*cLi_0 + 0.4*cLi_{10} = 10.28635(9)$Å
Occupancy Parameter	$oLi04 = 0.6* yLi_0 + 0.4*yLi_{10} = 0.972(7)$

Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi04)	0.972(7)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi04)	0.028(7)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_05						
Space Group	I – 4						
Scale	0.0000010(9)						
Lattice Parameter	$a = b = a\_liam\_05 = 0.5*aLi_0 + 0.5*aLi_{10} = 5.03948(4)$Å						
	$c = c\_liam\_05 = 0.5*cLi_0 + 0.5*cLi_{10} = 10.2940(1)$Å						
Occupancy Parameter	oLi05= $0.5* yLi_0 + 0.5*yLi_{10} = 0.968(8)$						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi05)	0.968(8)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi05)	0.032(8)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_06						
Space Group	I – 4						
Scale	0.0000010(8)						
Lattice Parameter	$a = b = a\_liam\_06 = 0.4*aLi_0 + 0.6*aLi_{10} = 5.03997(4)$Å						
	$c = c\_liam\_06 = 0.4*cLi_0 + 0.6*cLi_{10} = 10.3016(1)$Å						
Occupancy Parameter	oLi06= $0.4* yLi_0 + 0.6*yLi_{10} = 0.964(9)$						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi06)	0.964(9)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi06)	0.036(9)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_07
Space Group	I – 4
Scale	0.0000010(7)
Lattice Parameter	$a = b = a\_liam\_07 = 0.3*aLi_0 + 0.7*aLi_{10} = 5.04047(5)$Å

		c = c_liam_07 = $0.3*cLi_0 + 0.7*cLi_{10}$ = 10.3093(1)Å					
Occupancy Parameter		oLi07= $0.3* yLi_0 + 0.7*yLi_{10}$ = 0.96(1)					
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi07)	0.96(1)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi07)	0.040(1)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name		LiNH2_08					
Space Group		I – 4					
Scale		0.0000010(7)					
Lattice Parameter		a = b = a_liam_08 = $0.2*aLi_0 + 0.8*aLi_{10}$ =5.04096(5) Å					
		c = c_liam_08 = $0.2*cLi_0 + 0.8*cLi_{10}$ = 10.3169(2)Å					
Occupancy Parameter		oLi08= $0.2* yLi_0 + 0.8*yLi_{10}$ = 0.96(1)					
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi08)	0.96(1)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi08)	0.04(1)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name		LiNH2_09					
Space Group		I – 4					
Scale		0.0000010(6)					
Lattice Parameter		a = b = a_liam_09 = $0.1*aLi_0 + 0.9*aLi_{10}$ = 5.04146(6)Å					
		c = c_liam_09 = $0.1*cLi_0 + 0.9*cLi_{10}$ = 10.3246(2)Å					
Occupancy Parameter		oLi09= $0.1* yLi_0 + 0.9*yLi_{10}$ = 0.95(1)					
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi09)	0.95(1)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi09)	0.05(1)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_10

Space Group		I – 4					
Scale		0.0000010(4)					
Lattice Parameter		$a = b = a\_liam\_10 = 0.0*aLi_0 + 1.0*aLi_{10} = 5.04195(6)$Å					
		$c = c\_liam\_10 = 0.0*cLi_0 + 1.0*cLi_{10} = 10.3311(2)$Å					
Occupancy Parameter		$oLi10 = 0.0* yLi_0 + 1.0*yLi_{10} = 0.95(1)$					
Site	Li 1	0.0	0.0	0.0	occ	1	$b_{eq} = 0.95(1)$
Site	Li 2	0.0	0.5	-0.25	occ (oLi10)	0.95(1)	$b_{eq} = 3.0(1)$
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi10)	0.05(1)	$b_{eq} = 3.0(1)$
Site	Li 3	0.0	0.5	0.00620	occ	1	$b_{eq} = 0.95(1)$
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	$b_{eq} = 0.95(1)$
Site	H 1	-0.226	-0.149	-0.172	occ	1	$b_{eq} = 0.95(1)$
Site	H 2	-0.308	-0.359	-0.114	occ	1	$b_{eq} = 0.95(1)$

Phase Name		Li_2O					
Space Group		Fm3m					
Scale		0.000126(2)					
Lattice Parameter		$a = b = c = 4.61589(5)$ Å					
Site	Li	0.25	0.25	0.25	occ	1	$b_{eq} = 0.9148$
Site	O	0.0	0.0	0.0	occ	1	$b_{eq} = 0.8$

Phase Name		$LiNa_2(NH_2)_3$					
Space Group		P42/m					
Scale		0.00000013(5)					
Lattice Parameter		$a = b = 6.2838(1)$Å					
		$c = 11.1485(2)$Å					
Site	N 1	0.66317	0.27595	0.0	occ	1	$b_{eq} = 1.5810$
Site	H 1	0.73697	0.29827	0.056	occ	1	$b_{eq} = 1.5810$
Site	N 2	0.20732	0.27336	0.15765	occ	1	$b_{eq} = 1.5810$
Site	H 2	0.16362	0.18116	0.21186	occ	1	$b_{eq} = 1.5810$
Site	H 3	0.10362	0.32316	0.14126	occ	1	$b_{eq} = 1.5810$
Site	Na 1	0.50	0.0	0.14216	occ	1	$b_{eq} = 2.2740$
Site	Na 2	0.0	0.0	0.0	occ	1	$b_{eq} = 2.2740$
Site	Na 3	0.50	0.50	0.25	occ	1	$b_{eq} = 2.2740$
Site	Li 1	0.35356	0.36094	0.0	occ	1	$b_{eq} = 2.0455$

Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	$a_0 = 5.0828(4)$
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	$a_{10} = 5.0700(2)$
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	$c_0 = 11.5415(2)$
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	$c_{10} = 11.2562(9)$
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	$z\_N_0 = 0.0997(2)$
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	$z\_N_{10} = 0.1014(7)$
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Occ. Parameter	$yNa_0 = 0.938(7)$
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Occ. Parameter	$yNa_{10} = 0.79(2)$

Phase Name		Li3Na(NH2)4_00					
Space Group		I – 4					
Scale		0.0000001(4)					
Lattice Parameter		$a = b = a\_00 = 1.0*a_0 + 0.0*a_{10} = 5.08280(4)$Å					
		$c = c\_00 = 1.0*c_0 + 0.0*c_{10} = 11.5415(2)$Å					
Nitrogen Z Coordinate		$z\_N = z\_N_0 = 1.0* z\_N_0 + 0.0* z\_N_{10} = 0.0997(2)$					
Occupancy Parameter		$oNa00 = 1.0* yNa_0 + 0.0*yNa_{10} = 0.938(7)$					
Site	Na 1	0.0	0.50	0.25	occ (oNa_00)	0.983(7)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_00)	0.062(7)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.0997(2)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name		Li3Na(NH2)4_01					
Space Group		I – 4					
Scale		0.0000001(6)					
Lattice Parameter		$a = b = a\_01 = 0.9*a_0 + 0.1*a_{10} = 5.08152(6)$Å					
		$c = c\_01 = 0.9*c_0 + 0.1*c_{10} = 11.5130(3)$ Å					
Nitrogen Z Coordinate		$z\_N = z\_N_0 = 0.9* z\_N_0 + 0.1* z\_N_{10} = 0.0998(3)$					
Occupancy Parameter		$oNa01 = 0.9* yNa_0 + 0.1*yNa_{10} = 0.923(8)$					
Site	Na 1	0.0	0.50	0.25	occ (oNa_01)	0.923(8)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_01)	0.077(8)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.0998(3)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name		Li3Na(NH2)4_02					
Space Group		I – 4					
Scale		0.0000001(6)					
Lattice Parameter		$a = b = a\_02 = 0.8*a_{10} + 0.2*a_{10} = 5.08024(7)$Å					
		$c = c\_02 = 0.8*c_{10} + 0.2*c_{10} = 11.4844(3)$ Å					
Nitrogen Z Coordinate		$z\_N = z\_N_0 = 0.8* z\_N_0 + 0.2* z\_N_{10} = 0.1000(3)$					
Occupancy Parameter		$oNa02 = 0.8* yNa_0 + 0.2*yNa_{10} = 0.91(1)$					
Site	Na 1	0.0	0.50	0.25	occ (oNa_02)	0.91(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_02)	0.09(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1000(3)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_03
Space Group	I – 4

Scale	0.0000001(6)					
Lattice Parameter	$a = b = a\_03 = 0.7*a_{10} + 0.3*a_{10} = 5.07896(9)$ Å					
	$c = c\_03 = 0.7*c_{10} + 0.3*c_{10} = 11.4559(4)$ Å					
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.7* z\_N_0 + 0.3* z\_N_{10} = 0.1002(4)$					
Occupancy Parameter	$oNa03= 0.7* yNa_0 + 0.3* yNa_{10} = 0.89(1)$					
Site	Na 1	0.0	0.50	0.25	occ (oNa_03)	0.89(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_03)	0.11(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1002(4)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_04					
Space Group	I – 4					
Scale	0.0000001(6)					
Lattice Parameter	$a = b = a\_04 = 0.6*a_{10} + 0.4*a_{10} = 5.0777(1)$Å					
	$c = c\_04 = 0.6*c_{10} + 0.4*c_{10} = 11.4274(5)$Å					
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.6* z\_N_0 + 0.4* z\_N_{10} = 0.1003(4)$					
Occupancy Parameter	$oNa04= 0.6* yNa_0 + 0.4*yNa_{10} = 0.88(1)$					
Site	Na 1	0.0	0.50	0.25	occ (oNa_04)	0.88(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_04)	0.12(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1003(4)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_05					
Space Group	I – 4					
Scale	0.0000001(6)					
Lattice Parameter	$a = b = a\_05 = 0.5*a_{10} + 0.5*a_{10} = 5.0764(1)$Å					
	$c = c\_05 = 0.5*c_{10} + 0.5*c_{10} = 11.3989(6)$Å					
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.5* z\_N_0 + 0.5* z\_N_{10} = 0.1005(5)$					
Occupancy Parameter	$oNa05= 0.5* yNa_0 + 0.5*yNa_{10} = 0.87(1)$					
Site	Na 1	0.0	0.50	0.25	occ (oNa_05)	0.87(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_05)	0.13(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1005(5)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_06
Space Group	I – 4
Scale	0.0000001(6)
Lattice Parameter	$a = b = a\_06 = 0.4*a_{10} + 0.6*a_{10} = 5.0751(1)$Å

		$c = c\_06 = 0.4*c_{10} + 0.6*c_{10} = 11.3703(6)$Å					
Nitrogen Z Coordinate		$z\_N = z\_N_0 = 0.4* z\_N_0 + 0.6* z\_N_{10} = 0.1007(5)$					
Occupancy Parameter		$oNa06 = 0.4* yNa_0 + 0.6*yNa_{10} = 0.85(1)$					
Site	Na 1	0.0	0.50	0.25	occ (oNa_06)	0.85(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_06)	0.15(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1007(5)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name		Li3Na(NH2)4_07					
Space Group		I – 4					
Scale		0.0000001(5)					
Lattice Parameter		$a = b = a\_07 = 0.3*a_{10} + 0.7*a_{10} = 5.0738(2)$Å					
		$c = c\_07 = 0.3*c_{10} + 0.7*c_{10} = 11.3418(7)$Å					
Nitrogen Z Coordinate		$z\_N = z\_N_0 = 0.3* z\_N_0 + 0.7* z\_N_{10} = 0.1008(6)$					
Occupancy Parameter		$oNa07 = 0.3* yNa_0 + 0.7*yNa_{10} = 0.83(2)$					
Site	Na 1	0.0	0.50	0.25	occ (oNa_07)	0.83(2)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_07)	0.17(2)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1008(6)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name		Li3Na(NH2)4_08					
Space Group		I – 4					
Scale		0.0000001(6)					
Lattice Parameter		$a = b = a\_08 = 0.2*a_{10} + 0.8*a_{10} = 5.0726(2)$Å					
		$c = c\_08 = 0.2*c_{10} + 0.8*c_{10} = 11.3133(8)$Å					
Nitrogen Z Coordinate		$z\_N = z\_N_0 = 0.2* z\_N_0 + 0.8* z\_N_{10} = 0.1010(6)$					
Occupancy Parameter		$oNa08 = 0.2* yNa_0 + 0.8*yNa_{10} = 0.82(2)$					
Site	Na 1	0.0	0.50	0.25	occ (oNa_08)	0.82(2)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_08)	0.18(2)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1010(6)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_09
Space Group	I – 4
Scale	0.0000001(6)
Lattice Parameter	$a = b = a\_09 = 0.1*a_{10} + 0.9*a_{10} = 5.0713(2)$Å
	$c = c\_09 = 0.1*c_{10} + 0.9*c_{10} = 11.2847(8)$Å
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.1* z\_N_0 + 0.9* z\_N_{10} = 0.1012(7)$

Occupancy Parameter				$oNa09 = 0.1* yNa_0 + 0.9*yNa_{10} = 0.81(2)$			
Site	Na 1	0.0	0.50	0.25	occ (oNa_09)	0.81(2)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_09)	0.19(2)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1012(7)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name				Li3Na(NH2)4_10			
Space Group				I – 4			
Scale				0.0000001(5)			
Lattice Parameter				$a = b = a\_10 = 0.0*a_{10} + 1.0*a_{10} = 5.0700(2)$Å			
				$c = c\_10 = 0.0*c_{10} + 1.0*c_{10} = 11.2562(9)$Å			
Nitrogen Z Coordinate				$z\_N = z\_N_0 = 0.0* z\_N_0 + 1.0* z\_N_{10} = 0.1014(7)$			
Occupancy Parameter				$oNa10 = 0.0* yNa_0 + 1.0*yNa_{10} = 0.79(2)$			
Site	Na 1	0.0	0.50	0.25	occ (oNa_10)	0.79(2)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_10)	0.21(2)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1014(7)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name				NaNH2			
Space Group				Fddd			
Scale				0.00000009(2)			
Lattice Parameter				a = 8.95853(2) Å			
				b = 10.4344(3) Å			
				c = 8.07177(2) Å			
Site	Na 1	0.0	0.14841	0.0	occ	1	b_{eq} 2.6283
Site	N	0.0	0.0	0.23425	occ	1	b_{eq} 3.2183
Site	H 1	0.05938	0.95625	0.29968	occ	1	b_{eq} 2.7556

x = 0.917

R_ expected	4.521	R_expected'	9.452
R_weighted pattern	14.989	R_weighted pattern'	31.342
R_Pattern	9.839	R_Pattern'	28.861
Weighted_Durbin_Watson	7.430		
Goodness of fit	3.316		

LiNH2_00 – LiNH2_10 Lattice Parameter	$aLi_0 = 5.03701(3)$ Å
LiNH2_00 – LiNH2_10 Lattice Parameter	$aLi_{10} = 5.04195(6)$ Å
LiNH2_00 – LiNH2_10 Lattice Parameter	$cLi_0 = 10.25577(3)$ Å
LiNH2_00 – LiNH2_10 Lattice Parameter	$cLi_{10} = 10.3311(2)$ Å
LiNH2_00 – LiNH2_10 Occ. Parameter	$yLi_0 = 0.987(3)$
LiNH2_00 – LiNH2_10 Occ. Parameter	$yLi_{10} = 0.95(1)$

Phase Name	LiNH2_00					
Space Group	I – 4					
Scale	0.000012(3)					
Lattice Parameter	a = b = a_liam_00 = 1.0*aLi$_0$ + 0.0*aLi$_{10}$ = 5.03701(3) Å					
	c = c_liam_00 = 1.0*cLi$_0$ + 0.0*cLi$_{10}$ = 10.25577(3) Å					
Occupancy Parameter	oLi00 = 1.0* yLi$_0$ + 0.0*yLi$_{10}$ = 0.987(3)					
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi00)	0.987(3)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi00)	0.013(3)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_01					
Space Group	I – 4					
Scale	0.000349(5)					
Lattice Parameter	a = b = a_liam_01 = 0.9*aLi$_0$ + 0.1*aLi$_{10}$ = 5.03750(2)Å					
	c = c_liam_01 = 0.9*cLi$_0$ + 0.1*cLi$_{10}$ = 10.26342(5)Å					
Occupancy Parameter	oLi01= 0.9* yLi$_0$ + 0.1*yLi$_{10}$ = 0.987(3)					
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi01)	0.987(3)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi01)	0.017(3)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_02					
Space Group	I – 4					
Scale	0.000249(5)					
Lattice Parameter	a = b = a_liam_02 = 0.8*aLi$_{10}$ + 0.2*aLi$_0$ = 5.03800(2)Å					
	c = c_liam_02 = 0.8*cLi$_0$ + 0.2*cLi$_{10}$ = 10.27106(6)Å					
Occupancy Parameter	oLi02= 0.8* yLi$_0$ + 0.2*yLi$_{10}$ = 0.979(5)					
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi02)	0.979(5)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi02)	0.021(5)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)

Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_03						
Space Group	I – 4						
Scale	0.000143(4)						
Lattice Parameter	a = b = a_liam_03 = 0.7*aLi$_0$ + 0.3*aLi$_{10}$ = 5.03849(3) Å						
	c = c_liam_03 = 0.7*cLi$_0$ + 0.3*cLi$_{10}$ = 10.27871(8)Å						
Occupancy Parameter	oLi03= 0.7* yLi$_0$ + 0.3*yLi$_{10}$ = 0.975(6)						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi07)	0.975(6)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi07)	0.025(6)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_04						
Space Group	I – 4						
Scale	0.000090(4)						
Lattice Parameter	a = b = a_liam_04 = 0.6*aLi$_0$ + 0.4*aLi$_{10}$ = 5.03899(3)Å						
	c = c_liam_04 = 0.6*cLi$_0$ + 0.4*cLi$_{10}$ = 10.28635(9)Å						
Occupancy Parameter	oLi04= 0.6* yLi$_0$ + 0.4*yLi$_{10}$ = 0.972(7)						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi04)	0.972(7)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi04)	0.028(7)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_05						
Space Group	I – 4						
Scale	0.000060(3)						
Lattice Parameter	a = b = a_liam_05 = 0.5*aLi$_0$ + 0.5*aLi$_{10}$ = 5.03948(4)Å						
	c = c_liam_05 = 0.5*cLi$_0$ + 0.5*cLi$_{10}$ = 10.2940(1)Å						
Occupancy Parameter	oLi05= 0.5* yLi$_0$ + 0.5*yLi$_{10}$ = 0.968(8)						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi05)	0.968(8)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-	0.032(8)	b_{eq}= 3.0(1)

					oLi05)		
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_06						
Space Group	I – 4						
Scale	0.000037(2)						
Lattice Parameter	a = b = a_liam_06 = $0.4*aLi_0 + 0.6*aLi_{10}$ = 5.03997(4)Å						
	c = c_liam_06 = $0.4*cLi_0 + 0.6*cLi_{10}$ = 10.3016(1)Å						
Occupancy Parameter	oLi06= $0.4* yLi_0 + 0.6*yLi_{10}$ = 0.964(9)						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi06)	0.964(9)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi06)	0.036(9)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_07						
Space Group	I – 4						
Scale	0.000027(2)						
Lattice Parameter	a = b = a_liam_07 = $0.3*aLi_0 + 0.7*aLi_{10}$ = 5.04047(5)Å						
	c = c_liam_07 = $0.3*cLi_0 + 0.7*cLi_{10}$ = 10.3093(1)Å						
Occupancy Parameter	oLi07= $0.3* yLi_0 + 0.7*yLi_{10}$ = 0.96(1)						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi07)	0.96(1)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi07)	0.040(1)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_08						
Space Group	I – 4						
Scale	0.000019(2)						
Lattice Parameter	a = b = a_liam_08 = $0.2*aLi_0 + 0.8*aLi_{10}$ =5.04096(5) Å						
	c = c_liam_08 = $0.2*cLi_0 + 0.8*cLi_{10}$ = 10.3169(2)Å						
Occupancy Parameter	oLi08= $0.2* yLi_0 + 0.8*yLi_{10}$ = 0.96(1)						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)

Site	Li 2	0.0	0.5	-0.25	occ (oLi08)	0.96(1)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi08)	0.04(1)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_09						
Space Group	I – 4						
Scale	0.000012(2)						
Lattice Parameter	a = b = a_liam_09 = $0.1*aLi_0 + 0.9*aLi_{10}$ = 5.04146(6)Å						
	c = c_liam_09 = $0.1*cLi_0 + 0.9*cLi_{10}$ = 10.3246(2)Å						
Occupancy Parameter	oLi09= $0.1* yLi_0 + 0.9*yLi_{10}$ = 0.95(1)						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi09)	0.95(1)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi09)	0.05(1)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_10						
Space Group	I – 4						
Scale	0.000022(1)						
Lattice Parameter	a = b = a_liam_10 = $0.0*aLi_0 + 1.0*aLi_{10}$ = 5.04195(6)Å						
	c = c_liam_10 = $0.0*cLi_0 + 1.0*cLi_{10}$ = 10.3311(2)Å						
Occupancy Parameter	oLi10= $0.0* yLi_0 + 1.0*yLi_{10}$ = 0.95(1)						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi10)	0.95(1)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi10)	0.05(1)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	Li2O						
Space Group	Fm3m						
Scale	0.000193(4)						
Lattice Parameter	a = b = c = 4.61589(5) Å						
Site	Li	0.25	0.25	0.25	occ	1	b_{eq} = 0.9148

Site	O	0.0	0.0	0.0	occ	1	b_{eq} = 0.8

Phase Name		LiNa2(NH2)3					
Space Group		P42/m					
Scale		0.0000361(3)					
Lattice Parameter		a = b = 6.2838(1)Å					
		c = 11.1485(2)Å					
Site	N 1	0.66317	0.27595	0.0	occ	1	b_{eq} = 1.5810
Site	H 1	0.73697	0.29827	0.056	occ	1	b_{eq} = 1.5810
Site	N 2	0.20732	0.27336	0.15765	occ	1	b_{eq} = 1.5810
Site	H 2	0.16362	0.18116	0.21186	occ	1	b_{eq} = 1.5810
Site	H 3	0.10362	0.32316	0.14126	occ	1	b_{eq} = 1.5810
Site	Na 1	0.50	0.0	0.14216	occ	1	b_{eq} = 2.2740
Site	Na 2	0.0	0.0	0.0	occ	1	b_{eq} = 2.2740
Site	Na 3	0.50	0.50	0.25	occ	1	b_{eq} = 2.2740
Site	Li 1	0.35356	0.36094	0.0	occ	1	b_{eq} = 2.0455

Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	a_0 = 5.0828(4)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	a_{10} = 5.0700(2)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	c_0 = 11.5415(2)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	c_{10} = 11.2562(9)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	z_N_0 = 0.0997(2)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	z_N_{10} = 0.1014(7)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Occ. Parameter	yNa_0 = 0.938(7)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Occ. Parameter	yNa_{10} = 0.79(2)

Phase Name		Li3Na(NH2)4_00					
Space Group		I – 4					
Scale		0.0000012(8)					
Lattice Parameter		a = b = a_ 00 = 1.0*a_0 + 0.0*a_{10} = 5.08280(4)Å					
		c = c_ 00 = 1.0*c_0 + 0.0*c_{10} = 11.5415(2)Å					
Nitrogen Z Coordinate		$z\_N = z\_N_0 = 1.0* z\_N_0 + 0.0* z\_N_{10}$ = 0.0997(2)					
Occupancy Parameter		$oNa00 = 1.0* yNa_0 + 0.0*yNa_{10}$ = 0.938(7)					
Site	Na 1	0.0	0.50	0.25	occ (oNa_00)	0.983(7)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_00)	0.062(7)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.0997(2)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_01
Space Group	I – 4
Scale	0.000019(1)
Lattice Parameter	a = b = a_ 01 = 0.9*a_0 + 0.1*a_{10} = 5.08152(6)Å
	c = c_ 01 = 0.9*c_0 + 0.1*c_{10} = 11.5130(3) Å
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.9* z\_N_0 + 0.1* z\_N_{10}$ = 0.0998(3)

Occupancy Parameter				oNa01= 0.9* yNa$_0$ + 0.1*yNa$_{10}$ = 0.923(8)		
Site	Na 1	0.0	0.50	0.25	occ (oNa_01)	0.923(8)	b$_{eq}$ 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_01)	0.077(8)	b$_{eq}$ 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b$_{eq}$ 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b$_{eq}$ 2.2484
Site	N	0.2390(7)	0.2390(9)	0.0998(3)	occ	1	b$_{eq}$ 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b$_{eq}$ 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b$_{eq}$ 2.2484

Phase Name		Li3Na(NH2)4_02				
Space Group		I – 4				
Scale		0.000033				
Lattice Parameter		a = b = a_ 02 = 0.8*a$_{10}$ + 0.2*a$_{10}$ = 5.08024(7)Å				
		c = c_ 02 = 0.8*c$_{10}$ + 0.2*c$_{10}$ = 11.4844(3) Å				
Nitrogen Z Coordinate		z_N = z_N$_0$ = 0.8* z_N$_0$ + 0.2* z_N$_{10}$ = 0.1000(3)				
Occupancy Parameter		oNa02= 0.8* yNa$_0$ + 0.2*yNa$_{10}$ = 0.91(1)				
Site	Na 1	0.0	0.50	0.25	occ (oNa_02)	0.91(1)	b$_{eq}$ 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_02)	0.09(1)	b$_{eq}$ 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b$_{eq}$ 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b$_{eq}$ 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1000(3)	occ	1	b$_{eq}$ 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b$_{eq}$ 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b$_{eq}$ 2.2484

Phase Name		Li3Na(NH2)4_03				
Space Group		I – 4				
Scale		0.000020(1)				
Lattice Parameter		a = b = a_ 03 = 0.7*a$_{10}$ + 0.3*a$_{10}$ = 5.07896(9) Å				
		c = c_ 03 = 0.7*c$_{10}$ + 0.3*c$_{10}$ = 11.4559(4) Å				
Nitrogen Z Coordinate		z_N = z_N$_0$ = 0.7* z_N$_0$ + 0.3* z_N$_{10}$ = 0.1002(4)				
Occupancy Parameter		oNa03= 0.7* yNa$_0$ + 0.3*yNa$_{10}$ = 0.89(1)				
Site	Na 1	0.0	0.50	0.25	occ (oNa_03)	0.89(1)	b$_{eq}$ 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_03)	0.11(1)	b$_{eq}$ 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b$_{eq}$ 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b$_{eq}$ 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1002(4)	occ	1	b$_{eq}$ 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b$_{eq}$ 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b$_{eq}$ 2.2484

Phase Name		Li3Na(NH2)4_04				
Space Group		I – 4				
Scale		0.000016(1)				
Lattice Parameter		a = b = a_ 04 = 0.6*a$_{10}$ + 0.4*a$_{10}$ = 5.0777(1)Å				
		c = c_ 04 = 0.6*c$_{10}$ + 0.4*c$_{10}$ = 11.4274(5)Å				
Nitrogen Z Coordinate		z_N = z_N$_0$ = 0.6* z_N$_0$ + 0.4* z_N$_{10}$ = 0.1003(4)				
Occupancy Parameter		oNa04= 0.6* yNa$_0$ + 0.4*yNa$_{10}$ = 0.88(1)				
Site	Na 1	0.0	0.50	0.25	occ (oNa_04)	0.88(1)	b$_{eq}$ 2.2484

Site	Li 1	0.0	0.50	0.25	occ (1-oNa_04)	0.12(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1003(4)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_05						
Space Group	I – 4						
Scale	0.000012(1)						
Lattice Parameter	$a = b = a\_05 = 0.5*a_{10} + 0.5*a_{10} = 5.0764(1)$Å						
	$c = c\_05 = 0.5*c_{10} + 0.5*c_{10} = 11.3989(6)$Å						
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.5* z\_N_0 + 0.5* z\_N_{10} = 0.1005(5)$						
Occupancy Parameter	$oNa05 = 0.5* yNa_0 + 0.5*yNa_{10} = 0.87(1)$						
Site	Na 1	0.0	0.50	0.25	occ (oNa_05)	0.87(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_05)	0.13(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1005(5)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_06						
Space Group	I – 4						
Scale	0.000014(1)						
Lattice Parameter	$a = b = a\_06 = 0.4*a_{10} + 0.6*a_{10} = 5.0751(1)$Å						
	$c = c\_06 = 0.4*c_{10} + 0.6*c_{10} = 11.3703(6)$Å						
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.4* z\_N_0 + 0.6* z\_N_{10} = 0.1007(5)$						
Occupancy Parameter	$oNa06 = 0.4* yNa_0 + 0.6*yNa_{10} = 0.85(1)$						
Site	Na 1	0.0	0.50	0.25	occ (oNa_06)	0.85(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_06)	0.15(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1007(5)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_07						
Space Group	I – 4						
Scale	0.000010(1)						
Lattice Parameter	$a = b = a\_07 = 0.3*a_{10} + 0.7*a_{10} = 5.0738(2)$Å						
	$c = c\_07 = 0.3*c_{10} + 0.7*c_{10} = 11.3418(7)$Å						
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.3* z\_N_0 + 0.7* z\_N_{10} = 0.1008(6)$						
Occupancy Parameter	$oNa07 = 0.3* yNa_0 + 0.7*yNa_{10} = 0.83(2)$						
Site	Na 1	0.0	0.50	0.25	occ (oNa_07)	0.83(2)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_07)	0.17(2)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484

Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1008(6)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_08					
Space Group	$I - 4$					
Scale	0.000012(1)					
Lattice Parameter	$a = b = a\_08 = 0.2*a_{10} + 0.8*a_{10} = 5.0726(2)$Å					
	$c = c\_08 = 0.2*c_{10} + 0.8*c_{10} = 11.3133(8)$Å					
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.2* z\_N_0 + 0.8* z\_N_{10} = 0.1010(6)$					
Occupancy Parameter	$oNa08 = 0.2* yNa_0 + 0.8*yNa_{10} = 0.82(2)$					
Site	Na 1	0.0	0.50	0.25	occ (oNa_08)	0.82(2)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_08)	0.18(2)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1010(6)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_09					
Space Group	$I - 4$					
Scale	0.000010(1)					
Lattice Parameter	$a = b = a\_09 = 0.1*a_{10} + 0.9*a_{10} = 5.0713(2)$Å					
	$c = c\_09 = 0.1*c_{10} + 0.9*c_{10} = 11.2847(8)$Å					
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.1* z\_N_0 + 0.9* z\_N_{10} = 0.1012(7)$					
Occupancy Parameter	$oNa09 = 0.1* yNa_0 + 0.9*yNa_{10} = 0.81(2)$					
Site	Na 1	0.0	0.50	0.25	occ (oNa_09)	0.81(2)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_09)	0.19(2)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1012(7)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_10					
Space Group	$I - 4$					
Scale	0.000013(1)					
Lattice Parameter	$a = b = a\_10 = 0.0*a_{10} + 1.0*a_{10} = 5.0700(2)$Å					
	$c = c\_10 = 0.0*c_{10} + 1.0*c_{10} = 11.2562(9)$Å					
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.0* z\_N_0 + 1.0* z\_N_{10} = 0.1014(7)$					
Occupancy Parameter	$oNa10 = 0.0* yNa_0 + 1.0*yNa_{10} = 0.79(2)$					
Site	Na 1	0.0	0.50	0.25	occ (oNa_10)	0.79(2)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_10)	0.21(2)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1014(7)	occ	1	b_{eq} 2.2484

Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name		NaNH2					
Space Group		Fddd					
Scale		0.00000085(5)					
Lattice Parameter		a = 8.95853(2) Å					
		b = 10.4344(3) Å					
		c = 8.07177(2) Å					
Site	Na 1	0.0	0.14841	0.0	occ	1	b_{eq} 2.6283
Site	N	0.0	0.0	0.23425	occ	1	b_{eq} 3.2183
Site	H 1	0.05938	0.95625	0.29968	occ	1	b_{eq} 2.7556

x = 0.833

R_expected	4.521	R_expected'	9.452
R_weighted pattern	14.989	R_weighted pattern'	31.342
R_Pattern	9.839	R_Pattern'	28.861
Weighted_Durbin_Watson	7.430		
Goodness of fit	3.316		

LiNH2_00 – LiNH2_10 Lattice Parameter	aLi_0 = 5.03701(3) Å
LiNH2_00 – LiNH2_10 Lattice Parameter	aLi_{10} = 5.04195(6) Å
LiNH2_00 – LiNH2_10 Lattice Parameter	cLi_0 = 10.25577(3) Å
LiNH2_00 – LiNH2_10 Lattice Parameter	cLi_{10} = 10.3311(2) Å
LiNH2_00 – LiNH2_10 Occ. Parameter	yLi_0 = 0.987(3)
LiNH2_00 – LiNH2_10 Occ. Parameter	yLi_{10} = 0.95(1)

Phase Name		LiNH2_00					
Space Group		I – 4					
Scale		0.000001(2)					
Lattice Parameter		a = b = a_liam_00 = $1.0*aLi_0 + 0.0*aLi_{10}$ = 5.03701(3) Å					
		c = c_liam_00 = $1.0*cLi_0 + 0.0*cLi_{10}$ = 10.25577(3) Å					
Occupancy Parameter		oLi00 = $1.0* yLi_0 + 0.0*yLi_{10}$ = 0.987(3)					
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi00)	0.987(3)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi00)	0.013(3)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_01
Space Group	I – 4
Scale	0.000282(4)
Lattice Parameter	a = b = a_liam_01 = $0.9*aLi_0 + 0.1*aLi_{10}$ = 5.03750(2)Å

		$c = c\_liam\_01 = 0.9*cLi_0 + 0.1*cLi_{10} = 10.26342(5)$Å					
Occupancy Parameter		$oLi01 = 0.9* yLi_0 + 0.1*yLi_{10} = 0.987(3)$					
Site	Li 1	0.0	0.0	0.0	occ	1	$b_{eq} = 0.95(1)$
Site	Li 2	0.0	0.5	-0.25	occ (oLi01)	0.987(3)	$b_{eq} = 3.0(1)$
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi01)	0.017(3)	$b_{eq} = 3.0(1)$
Site	Li 3	0.0	0.5	0.00620	occ	1	$b_{eq} = 0.95(1)$
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	$b_{eq} = 0.95(1)$
Site	H 1	-0.226	-0.149	-0.172	occ	1	$b_{eq} = 0.95(1)$
Site	H 2	-0.308	-0.359	-0.114	occ	1	$b_{eq} = 0.95(1)$

Phase Name		LiNH2_02					
Space Group		I – 4					
Scale		0.000174(4)					
Lattice Parameter		$a = b = a\_liam\_02 = 0.8*aLi_{10} + 0.2*aLi_0 = 5.03800(2)$Å					
		$c = c\_liam\_02 = 0.8*cLi_0 + 0.2*cLi_{10} = 10.27106(6)$Å					
Occupancy Parameter		$oLi02 = 0.8* yLi_0 + 0.2*yLi_{10} = 0.979(5)$					
Site	Li 1	0.0	0.0	0.0	occ	1	$b_{eq} = 0.95(1)$
Site	Li 2	0.0	0.5	-0.25	occ (oLi02)	0.979(5)	$b_{eq} = 3.0(1)$
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi02)	0.021(5)	$b_{eq} = 3.0(1)$
Site	Li 3	0.0	0.5	0.00620	occ	1	$b_{eq} = 0.95(1)$
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	$b_{eq} = 0.95(1)$
Site	H 1	-0.226	-0.149	-0.172	occ	1	$b_{eq} = 0.95(1)$
Site	H 2	-0.308	-0.359	-0.114	occ	1	$b_{eq} = 0.95(1)$

Phase Name		LiNH2_03					
Space Group		I – 4					
Scale		0.000098(4)					
Lattice Parameter		$a = b = a\_liam\_03 = 0.7*aLi_0 + 0.3*aLi_{10} = 5.03849(3)$ Å					
		$c = c\_liam\_03 = 0.7*cLi_0 + 0.3*cLi_{10} = 10.27871(8)$Å					
Occupancy Parameter		$oLi03 = 0.7* yLi_0 + 0.3*yLi_{10} = 0.975(6)$					
Site	Li 1	0.0	0.0	0.0	occ	1	$b_{eq} = 0.95(1)$
Site	Li 2	0.0	0.5	-0.25	occ (oLi07)	0.975(6)	$b_{eq} = 3.0(1)$
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi07)	0.025(6)	$b_{eq} = 3.0(1)$
Site	Li 3	0.0	0.5	0.00620	occ	1	$b_{eq} = 0.95(1)$
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	$b_{eq} = 0.95(1)$
Site	H 1	-0.226	-0.149	-0.172	occ	1	$b_{eq} = 0.95(1)$
Site	H 2	-0.308	-0.359	-0.114	occ	1	$b_{eq} = 0.95(1)$

Phase Name	LiNH2_04

Space Group	I – 4					
Scale	0.000063(3)					
Lattice Parameter	$a = b = a\_liam\_04 = 0.6*aLi_0 + 0.4*aLi_{10} = 5.03899(3)$Å					
	$c = c\_liam\_04 = 0.6*cLi_0 + 0.4*cLi_{10} = 10.28635(9)$Å					
Occupancy Parameter	$oLi04 = 0.6* yLi_0 + 0.4*yLi_{10} = 0.972(7)$					
Site	Li 1	0.0	0.0	0.0	occ	1	$b_{eq} = 0.95(1)$
Site	Li 2	0.0	0.5	-0.25	occ (oLi04)	0.972(7)	$b_{eq} = 3.0(1)$
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi04)	0.028(7)	$b_{eq} = 3.0(1)$
Site	Li 3	0.0	0.5	0.00620	occ	1	$b_{eq} = 0.95(1)$
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	$b_{eq} = 0.95(1)$
Site	H 1	-0.226	-0.149	-0.172	occ	1	$b_{eq} = 0.95(1)$
Site	H 2	-0.308	-0.359	-0.114	occ	1	$b_{eq} = 0.95(1)$

Phase Name	LiNH2_05					
Space Group	I – 4					
Scale	0.00042(3)					
Lattice Parameter	$a = b = a\_liam\_05 = 0.5*aLi_0 + 0.5*aLi_{10} = 5.03948(4)$Å					
	$c = c\_liam\_05 = 0.5*cLi_0 + 0.5*cLi_{10} = 10.2940(1)$Å					
Occupancy Parameter	$oLi05 = 0.5* yLi_0 + 0.5*yLi_{10} = 0.968(8)$					
Site	Li 1	0.0	0.0	0.0	occ	1	$b_{eq} = 0.95(1)$
Site	Li 2	0.0	0.5	-0.25	occ (oLi05)	0.968(8)	$b_{eq} = 3.0(1)$
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi05)	0.032(8)	$b_{eq} = 3.0(1)$
Site	Li 3	0.0	0.5	0.00620	occ	1	$b_{eq} = 0.95(1)$
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	$b_{eq} = 0.95(1)$
Site	H 1	-0.226	-0.149	-0.172	occ	1	$b_{eq} = 0.95(1)$
Site	H 2	-0.308	-0.359	-0.114	occ	1	$b_{eq} = 0.95(1)$

Phase Name	LiNH2_06					
Space Group	I – 4					
Scale	0.00027(2)					
Lattice Parameter	$a = b = a\_liam\_06 = 0.4*aLi_0 + 0.6*aLi_{10} = 5.03997(4)$Å					
	$c = c\_liam\_06 = 0.4*cLi_0 + 0.6*cLi_{10} = 10.3016(1)$Å					
Occupancy Parameter	$oLi06 = 0.4* yLi_0 + 0.6*yLi_{10} = 0.964(9)$					
Site	Li 1	0.0	0.0	0.0	occ	1	$b_{eq} = 0.95(1)$
Site	Li 2	0.0	0.5	-0.25	occ (oLi06)	0.964(9)	$b_{eq} = 3.0(1)$
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi06)	0.036(9)	$b_{eq} = 3.0(1)$
Site	Li 3	0.0	0.5	0.00620	occ	1	$b_{eq} = 0.95(1)$
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	$b_{eq} = 0.95(1)$
Site	H 1	-0.226	-0.149	-0.172	occ	1	$b_{eq} = 0.95(1)$

Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_07						
Space Group	$I-4$						
Scale	0.000019(2)						
Lattice Parameter	a = b = a_liam_07 = $0.3*aLi_0 + 0.7*aLi_{10}$ = 5.04047(5)Å						
	c = c_liam_07 = $0.3*cLi_0 + 0.7*cLi_{10}$ = 10.3093(1)Å						
Occupancy Parameter	oLi07= $0.3* yLi_0 + 0.7*yLi_{10}$ = 0.96(1)						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi07)	0.96(1)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi07)	0.040(1)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_08						
Space Group	$I-4$						
Scale	0.000011(2)						
Lattice Parameter	a = b = a_liam_08 = $0.2*aLi_0 + 0.8*aLi_{10}$ =5.04096(5) Å						
	c = c_liam_08 = $0.2*cLi_0 + 0.8*cLi_{10}$ = 10.3169(2)Å						
Occupancy Parameter	oLi08= $0.2* yLi_0 + 0.8*yLi_{10}$ = 0.96(1)						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi08)	0.96(1)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi08)	0.04(1)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_09						
Space Group	$I-4$						
Scale	0.000010(2)						
Lattice Parameter	a = b = a_liam_09 = $0.1*aLi_0 + 0.9*aLi_{10}$ = 5.04146(6)Å						
	c = c_liam_09 = $0.1*cLi_0 + 0.9*cLi_{10}$ = 10.3246(2)Å						
Occupancy Parameter	oLi09= $0.1* yLi_0 + 0.9*yLi_{10}$ = 0.95(1)						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi09)	0.95(1)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi09)	0.05(1)	b_{eq}= 3.0(1)

Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_10						
Space Group	I – 4						
Scale	0.000013(1)						
Lattice Parameter	a = b = a_liam_10 = 0.0*aLi$_0$ + 1.0*aLi$_{10}$ = 5.04195(6)Å						
	c = c_liam_10 = 0.0*cLi$_0$ + 1.0*cLi$_{10}$ = 10.3311(2)Å						
Occupancy Parameter	oLi10= 0.0* yLi$_0$ + 1.0*yLi$_{10}$ = 0.95(1)						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi10)	0.95(1)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi10)	0.05(1)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	Li2O					
Space Group	Fm3m					
Scale	0.000121(3)					
Lattice Parameter	a = b = c = 4.61589(5) Å					
Site	Li	0.25	0.25	0.25	occ	1	b_{eq} = 0.9148
Site	O	0.0	0.0	0.0	occ	1	b_{eq} = 0.8

Phase Name	LiNa2(NH2)3					
Space Group	P42/m					
Scale	0.0000669(3)					
Lattice Parameter	a = b = 6.2838(1)Å					
	c = 11.1485(2)Å					
Site	N 1	0.66317	0.27595	0.0	occ	1	b_{eq} = 1.5810
Site	H 1	0.73697	0.29827	0.056	occ	1	b_{eq} = 1.5810
Site	N 2	0.20732	0.27336	0.15765	occ	1	b_{eq} = 1.5810
Site	H 2	0.16362	0.18116	0.21186	occ	1	b_{eq} = 1.5810
Site	H 3	0.10362	0.32316	0.14126	occ	1	b_{eq} = 1.5810
Site	Na 1	0.50	0.0	0.14216	occ	1	b_{eq} = 2.2740
Site	Na 2	0.0	0.0	0.0	occ	1	b_{eq} = 2.2740
Site	Na 3	0.50	0.50	0.25	occ	1	b_{eq} = 2.2740
Site	Li 1	0.35356	0.36094	0.0	occ	1	b_{eq} = 2.0455

Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	a_0 = 5.0828(4)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	a_{10} = 5.0700(2)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	c_0 = 11.5415(2)

Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	c_{10} = 11.2562(9)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	z_N_0 = 0.0997(2)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	z_N_{10} = 0.1014(7)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Occ. Parameter	yNa_0 = 0.938(7)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Occ. Parameter	yNa_{10} = 0.79(2)

Phase Name		Li3Na(NH2)4_00					
Space Group		I – 4					
Scale		0.000001(1)					
Lattice Parameter		a = b = a_ 00 = 1.0*a_0 + 0.0*a_{10} = 5.08280(4)Å					
		c = c_ 00 = 1.0*c_0 + 0.0*c_{10} = 11.5415(2)Å					
Nitrogen Z Coordinate		z_N = z_N_0 = 1.0* z_N_0 + 0.0* z_N_{10} = 0.0997(2)					
Occupancy Parameter		oNa00= 1.0* yNa_0 + 0.0*yNa_{10} = 0.938(7)					
Site	Na 1	0.0	0.50	0.25	occ (oNa_00)	0.983(7)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_00)	0.062(7)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.0997(2)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name		Li3Na(NH2)4_01					
Space Group		I – 4					
Scale		0.000019(1)					
Lattice Parameter		a = b = a_ 01 = 0.9*a_0 + 0.1*a_{10} = 5.08152(6)Å					
		c = c_ 01 = 0.9*c_0 + 0.1*c_{10} = 11.5130(3) Å					
Nitrogen Z Coordinate		z_N = z_N_0 = 0.9* z_N_0 + 0.1* z_N_{10} = 0.0998(3)					
Occupancy Parameter		oNa01= 0.9* yNa_0 + 0.1*yNa_{10} = 0.923(8)					
Site	Na 1	0.0	0.50	0.25	occ (oNa_01)	0.923(8)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_01)	0.077(8)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.0998(3)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name		Li3Na(NH2)4_02					
Space Group		I – 4					
Scale		0.000028(1)					
Lattice Parameter		a = b = a_ 02 = 0.8*a_{10} + 0.2*a_{10} = 5.08024(7)Å					
		c = c_ 02 = 0.8*c_{10} + 0.2*c_{10} = 11.4844(3) Å					
Nitrogen Z Coordinate		z_N = z_N_0 = 0.8* z_N_0 + 0.2* z_N_{10} = 0.1000(3)					
Occupancy Parameter		oNa02= 0.8* yNa_0 + 0.2*yNa_{10} = 0.91(1)					
Site	Na 1	0.0	0.50	0.25	occ (oNa_02)	0.91(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_02)	0.09(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484

Site	N	0.2390(7)	0.2390(9)	0.1000(3)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_03						
Space Group	I – 4						
Scale	0.000021(1)						
Lattice Parameter	$a = b = a\_03 = 0.7*a_{10} + 0.3*a_{10} = 5.07896(9)$ Å						
	$c = c\_03 = 0.7*c_{10} + 0.3*c_{10} = 11.4559(4)$ Å						
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.7* z\_N_0 + 0.3* z\_N_{10} = 0.1002(4)$						
Occupancy Parameter	$oNa03 = 0.7* yNa_0 + 0.3*yNa_{10} = 0.89(1)$						
Site	Na 1	0.0	0.50	0.25	occ (oNa_03)	0.89(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_03)	0.11(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1002(4)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_04						
Space Group	I – 4						
Scale	0.000015(1)						
Lattice Parameter	$a = b = a\_04 = 0.6*a_{10} + 0.4*a_{10} = 5.0777(1)$Å						
	$c = c\_04 = 0.6*c_{10} + 0.4*c_{10} = 11.4274(5)$Å						
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.6* z\_N_0 + 0.4* z\_N_{10} = 0.1003(4)$						
Occupancy Parameter	$oNa04 = 0.6* yNa_0 + 0.4*yNa_{10} = 0.88(1)$						
Site	Na 1	0.0	0.50	0.25	occ (oNa_04)	0.88(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_04)	0.12(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1003(4)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_05						
Space Group	I – 4						
Scale	0.000010(1)						
Lattice Parameter	$a = b = a\_05 = 0.5*a_{10} + 0.5*a_{10} = 5.0764(1)$Å						
	$c = c\_05 = 0.5*c_{10} + 0.5*c_{10} = 11.3989(6)$Å						
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.5* z\_N_0 + 0.5* z\_N_{10} = 0.1005(5)$						
Occupancy Parameter	$oNa05 = 0.5* yNa_0 + 0.5*yNa_{10} = 0.87(1)$						
Site	Na 1	0.0	0.50	0.25	occ (oNa_05)	0.87(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_05)	0.13(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1005(5)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484

Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_06						
Space Group	I – 4						
Scale	0.000012(1)						
Lattice Parameter	$a = b = a\_06 = 0.4*a_{10} + 0.6*a_{10} = 5.0751(1)$Å						
	$c = c\_06 = 0.4*c_{10} + 0.6*c_{10} = 11.3703(6)$Å						
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.4* z\_N_0 + 0.6* z\_N_{10} = 0.1007(5)$						
Occupancy Parameter	$oNa06 = 0.4* yNa_0 + 0.6*yNa_{10} = 0.85(1)$						
Site	Na 1	0.0	0.50	0.25	occ (oNa_06)	0.85(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_06)	0.15(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1007(5)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_07						
Space Group	I – 4						
Scale	0.000009(1)						
Lattice Parameter	$a = b = a\_07 = 0.3*a_{10} + 0.7*a_{10} = 5.0738(2)$Å						
	$c = c\_07 = 0.3*c_{10} + 0.7*c_{10} = 11.3418(7)$Å						
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.3* z\_N_0 + 0.7* z\_N_{10} = 0.1008(6)$						
Occupancy Parameter	$oNa07 = 0.3* yNa_0 + 0.7*yNa_{10} = 0.83(2)$						
Site	Na 1	0.0	0.50	0.25	occ (oNa_07)	0.83(2)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_07)	0.17(2)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1008(6)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_08						
Space Group	I – 4						
Scale	0.000010(1)						
Lattice Parameter	$a = b = a\_08 = 0.2*a_{10} + 0.8*a_{10} = 5.0726(2)$Å						
	$c = c\_08 = 0.2*c_{10} + 0.8*c_{10} = 11.3133(8)$Å						
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.2* z\_N_0 + 0.8* z\_N_{10} = 0.1010(6)$						
Occupancy Parameter	$oNa08 = 0.2* yNa_0 + 0.8*yNa_{10} = 0.82(2)$						
Site	Na 1	0.0	0.50	0.25	occ (oNa_08)	0.82(2)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_08)	0.18(2)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1010(6)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_09					
Space Group	I – 4					
Scale	0.000008(1)					
Lattice Parameter	a = b = a_ 09 = 0.1*a_{10} + 0.9*a_{10} = 5.0713(2)Å					
	c = c_ 09 = 0.1*c_{10} + 0.9*c_{10} = 11.2847(8)Å					
Nitrogen Z Coordinate	z_N = z_N_0 = 0.1* z_N_0 + 0.9* z_N_{10} = 0.1012(7)					
Occupancy Parameter	oNa09= 0.1* yNa_0 + 0.9*yNa_{10} = 0.81(2)					
Site	Na 1	0.0	0.50	0.25	occ (oNa_09)	0.81(2)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_09)	0.19(2)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1012(7)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_10					
Space Group	I – 4					
Scale	0.000008(1)					
Lattice Parameter	a = b = a_ 10 = 0.0*a_{10} + 1.0*a_{10} = 5.0700(2)Å					
	c = c_ 10 = 0.0*c_{10} + 1.0*c_{10} = 11.2562(9)Å					
Nitrogen Z Coordinate	z_N = z_N_0 = 0.0* z_N_0 + 1.0* z_N_{10} = 0.1014(7)					
Occupancy Parameter	oNa10= 0.0* yNa_0 + 1.0*yNa_{10} = 0.79(2)					
Site	Na 1	0.0	0.50	0.25	occ (oNa_10)	0.79(2)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_10)	0.21(2)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1014(7)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	NaNH2					
Space Group	Fddd					
Scale	0.00000495(7)					
Lattice Parameter	a = 8.95853(2) Å					
	b = 10.4344(3) Å					
	c = 8.07177(2) Å					
Site	Na 1	0.0	0.14841	0.0	occ	1	b_{eq} 2.6283
Site	N	0.0	0.0	0.23425	occ	1	b_{eq} 3.2183
Site	H 1	0.05938	0.95625	0.29968	occ	1	b_{eq} 2.7556

x = 0.75

R_ expected	4.521	R_expected'	9.452
R_weighted pattern	14.989	R_weighted pattern'	31.342
R_Pattern	9.839	R_Pattern'	28.861
Weighted_Durbin_Watson	7.430		
Goodness of fit	3.316		

LiNH2_00 – LiNH2_10 Lattice Parameter	$aLi_0 = 5.03701(3)$ Å
LiNH2_00 – LiNH2_10 Lattice Parameter	$aLi_{10} = 5.04195(6)$ Å
LiNH2_00 – LiNH2_10 Lattice Parameter	$cLi_0 = 10.25577(3)$ Å
LiNH2_00 – LiNH2_10 Lattice Parameter	$cLi_{10} = 10.3311(2)$ Å
LiNH2_00 – LiNH2_10 Occ. Parameter	$yLi_0 = 0.987(3)$
LiNH2_00 – LiNH2_10 Occ. Parameter	$yLi_{10} = 0.95(1)$

Phase Name	LiNH2_00					
Space Group	I – 4					
Scale	0.000001(2)					
Lattice Parameter	$a = b = a\_liam\_00 = 1.0*aLi_0 + 0.0*aLi_{10} = 5.03701(3)$ Å					
	$c = c\_liam\_00 = 1.0*cLi_0 + 0.0*cLi_{10} = 10.25577(3)$ Å					
Occupancy Parameter	$oLi00 = 1.0* yLi_0 + 0.0*yLi_{10} = 0.987(3)$					
Site	Li 1	0.0	0.0	0.0	occ	1	$b_{eq}= 0.95(1)$
Site	Li 2	0.0	0.5	-0.25	occ (oLi00)	0.987(3)	$b_{eq}= 3.0(1)$
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi00)	0.013(3)	$b_{eq}= 3.0(1)$
Site	Li 3	0.0	0.5	0.00620	occ	1	$b_{eq}= 0.95(1)$
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	$b_{eq}= 0.95(1)$
Site	H 1	-0.226	-0.149	-0.172	occ	1	$b_{eq}= 0.95(1)$
Site	H 2	-0.308	-0.359	-0.114	occ	1	$b_{eq}= 0.95(1)$

Phase Name	LiNH2_01					
Space Group	I – 4					
Scale	0.000150(3)					
Lattice Parameter	$a = b = a\_liam\_01 = 0.9*aLi_0 + 0.1*aLi_{10} = 5.03750(2)$Å					
	$c = c\_liam\_01 = 0.9*cLi_0 + 0.1*cLi_{10} = 10.26342(5)$Å					
Occupancy Parameter	$oLi01= 0.9* yLi_0 + 0.1*yLi_{10} = 0.987(3)$					
Site	Li 1	0.0	0.0	0.0	occ	1	$b_{eq}= 0.95(1)$
Site	Li 2	0.0	0.5	-0.25	occ (oLi01)	0.987(3)	$b_{eq}= 3.0(1)$
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi01)	0.017(3)	$b_{eq}= 3.0(1)$
Site	Li 3	0.0	0.5	0.00620	occ	1	$b_{eq}= 0.95(1)$
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	$b_{eq}= 0.95(1)$
Site	H 1	-0.226	-0.149	-0.172	occ	1	$b_{eq}= 0.95(1)$
Site	H 2	-0.308	-0.359	-0.114	occ	1	$b_{eq}= 0.95(1)$

Phase Name	LiNH2_02
Space Group	I – 4
Scale	0.000128(4)
Lattice Parameter	$a = b = a\_liam\_02 = 0.8*aLi_{10} + 0.2*aLi_0 = 5.03800(2)$Å
	$c = c\_liam\_02 = 0.8*cLi_0 + 0.2*cLi_{10} = 10.27106(6)$Å
Occupancy	$oLi02= 0.8* yLi_0 + 0.2*yLi_{10} = 0.979(5)$

Parameter							
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi02)	0.979(5)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi02)	0.021(5)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_03						
Space Group	I – 4						
Scale	0.000061(3)						
Lattice Parameter	a = b = a_liam_03 = $0.7*aLi_0 + 0.3*aLi_{10}$ = 5.03849(3) Å						
	c = c_liam_03 = $0.7*cLi_0 + 0.3*cLi_{10}$ = 10.27871(8)Å						
Occupancy Parameter	oLi03= $0.7* yLi_0 + 0.3*yLi_{10}$ = 0.975(6)						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi07)	0.975(6)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi07)	0.025(6)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_04						
Space Group	I – 4						
Scale	0.000042(3)						
Lattice Parameter	a = b = a_liam_04 = $0.6*aLi_0 + 0.4*aLi_{10}$ = 5.03899(3)Å						
	c = c_liam_04 = $0.6*cLi_0 + 0.4*cLi_{10}$ = 10.28635(9)Å						
Occupancy Parameter	oLi04= $0.6* yLi_0 + 0.4*yLi_{10}$ = 0.972(7)						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi04)	0.972(7)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi04)	0.028(7)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_05
Space Group	I – 4
Scale	0.000032(3)

Lattice Parameter	$a = b = a\_liam\_05 = 0.5*aLi_0 + 0.5*aLi_{10} = 5.03948(4)$Å					
	$c = c\_liam\_05 = 0.5*cLi_0 + 0.5*cLi_{10} = 10.2940(1)$Å					
Occupancy Parameter	$oLi05 = 0.5* yLi_0 + 0.5*yLi_{10} = 0.968(8)$					
Site	Li 1	0.0	0.0	0.0	occ	1	$b_{eq}= 0.95(1)$
Site	Li 2	0.0	0.5	-0.25	occ (oLi05)	0.968(8)	$b_{eq}= 3.0(1)$
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi05)	0.032(8)	$b_{eq}= 3.0(1)$
Site	Li 3	0.0	0.5	0.00620	occ	1	$b_{eq}= 0.95(1)$
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	$b_{eq}= 0.95(1)$
Site	H 1	-0.226	-0.149	-0.172	occ	1	$b_{eq}= 0.95(1)$
Site	H 2	-0.308	-0.359	-0.114	occ	1	$b_{eq}= 0.95(1)$

Phase Name	LiNH2_06					
Space Group	I – 4					
Scale	0.000021(2)					
Lattice Parameter	$a = b = a\_liam\_06 = 0.4*aLi_0 + 0.6*aLi_{10} = 5.03997(4)$Å					
	$c = c\_liam\_06 = 0.4*cLi_0 + 0.6*cLi_{10} = 10.3016(1)$Å					
Occupancy Parameter	$oLi06 = 0.4* yLi_0 + 0.6*yLi_{10} = 0.964(9)$					
Site	Li 1	0.0	0.0	0.0	occ	1	$b_{eq}= 0.95(1)$
Site	Li 2	0.0	0.5	-0.25	occ (oLi06)	0.964(9)	$b_{eq}= 3.0(1)$
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi06)	0.036(9)	$b_{eq}= 3.0(1)$
Site	Li 3	0.0	0.5	0.00620	occ	1	$b_{eq}= 0.95(1)$
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	$b_{eq}= 0.95(1)$
Site	H 1	-0.226	-0.149	-0.172	occ	1	$b_{eq}= 0.95(1)$
Site	H 2	-0.308	-0.359	-0.114	occ	1	$b_{eq}= 0.95(1)$

Phase Name	LiNH2_07					
Space Group	I – 4					
Scale	0.000017(2)					
Lattice Parameter	$a = b = a\_liam\_07 = 0.3*aLi_0 + 0.7*aLi_{10} = 5.04047(5)$Å					
	$c = c\_liam\_07 = 0.3*cLi_0 + 0.7*cLi_{10} = 10.3093(1)$Å					
Occupancy Parameter	$oLi07 = 0.3* yLi_0 + 0.7*yLi_{10} = 0.96(1)$					
Site	Li 1	0.0	0.0	0.0	occ	1	$b_{eq}= 0.95(1)$
Site	Li 2	0.0	0.5	-0.25	occ (oLi07)	0.96(1)	$b_{eq}= 3.0(1)$
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi07)	0.040(1)	$b_{eq}= 3.0(1)$
Site	Li 3	0.0	0.5	0.00620	occ	1	$b_{eq}= 0.95(1)$
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	$b_{eq}= 0.95(1)$
Site	H 1	-0.226	-0.149	-0.172	occ	1	$b_{eq}= 0.95(1)$
Site	H 2	-0.308	-0.359	-0.114	occ	1	$b_{eq}= 0.95(1)$

Phase Name	LiNH2_08					
Space Group	I – 4					
Scale	0.000010(2)					
Lattice Parameter	a = b = a_liam_08 = $0.2*aLi_0 + 0.8*aLi_{10}$ =5.04096(5) Å					
	c = c_liam_08 = $0.2*cLi_0 + 0.8*cLi_{10}$ = 10.3169(2)Å					
Occupancy Parameter	oLi08= $0.2* yLi_0 + 0.8*yLi_{10}$ = 0.96(1)					
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi08)	0.96(1)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi08)	0.04(1)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_09					
Space Group	I – 4					
Scale	0.000011(2)					
Lattice Parameter	a = b = a_liam_09 = $0.1*aLi_0 + 0.9*aLi_{10}$ = 5.04146(6)Å					
	c = c_liam_09 = $0.1*cLi_0 + 0.9*cLi_{10}$ = 10.3246(2)Å					
Occupancy Parameter	oLi09= $0.1* yLi_0 + 0.9*yLi_{10}$ = 0.95(1)					
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi09)	0.95(1)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi09)	0.05(1)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_10					
Space Group	I – 4					
Scale	0.000013(1)					
Lattice Parameter	a = b = a_liam_10 = $0.0*aLi_0 + 1.0*aLi_{10}$ = 5.04195(6)Å					
	c = c_liam_10 = $0.0*cLi_0 + 1.0*cLi_{10}$ = 10.3311(2)Å					
Occupancy Parameter	oLi10= $0.0* yLi_0 + 1.0*yLi_{10}$ = 0.95(1)					
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi10)	0.95(1)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi10)	0.05(1)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)

Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	Li2O						
Space Group	Fm3m						
Scale	0.000223(4)						
Lattice Parameter	a = b = c = 4.61589(5) Å						
Site	Li	0.25	0.25	0.25	occ	1	b_{eq} = 0.9148
Site	O	0.0	0.0	0.0	occ	1	b_{eq} = 0.8

Phase Name	LiNa2(NH2)3						
Space Group	P42/m						
Scale	0.0001032(4)						
Lattice Parameter	a = b = 6.2838(1)Å						
	c = 11.1485(2)Å						
Site	N 1	0.66317	0.27595	0.0	occ	1	b_{eq} = 1.5810
Site	H 1	0.73697	0.29827	0.056	occ	1	b_{eq} = 1.5810
Site	N 2	0.20732	0.27336	0.15765	occ	1	b_{eq} = 1.5810
Site	H 2	0.16362	0.18116	0.21186	occ	1	b_{eq} = 1.5810
Site	H 3	0.10362	0.32316	0.14126	occ	1	b_{eq} = 1.5810
Site	Na 1	0.50	0.0	0.14216	occ	1	b_{eq} = 2.2740
Site	Na 2	0.0	0.0	0.0	occ	1	b_{eq} = 2.2740
Site	Na 3	0.50	0.50	0.25	occ	1	b_{eq} = 2.2740
Site	Li 1	0.35356	0.36094	0.0	occ	1	b_{eq} = 2.0455

Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	a_0 = 5.0828(4)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	a_{10} = 5.0700(2)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	c_0 = 11.5415(2)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	c_{10} = 11.2562(9)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	z_N_0 = 0.0997(2)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	z_N_{10} = 0.1014(7)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Occ. Parameter	yNa_0 = 0.938(7)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Occ. Parameter	yNa_{10} = 0.79(2)

Phase Name	Li3Na(NH2)4_00						
Space Group	I – 4						
Scale	0.000000(1)						
Lattice Parameter	a = b = a_00 = 1.0*a_0 + 0.0*a_{10} = 5.08280(4)Å						
	c = c_00 = 1.0*c_0 + 0.0*c_{10} = 11.5415(2)Å						
Nitrogen Z Coordinate	z_N = z_N_0 = 1.0* z_N_0 + 0.0* z_N_{10} = 0.0997(2)						
Occupancy Parameter	oNa00= 1.0* yNa_0 + 0.0*yNa_{10} = 0.938(7)						
Site	Na 1	0.0	0.50	0.25	occ (oNa_00)	0.983(7)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_00)	0.062(7)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.0997(2)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484

Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_01						
Space Group	I – 4						
Scale	0.000059(2)						
Lattice Parameter	$a = b = a\_01 = 0.9*a_0 + 0.1*a_{10} = 5.08152(6)$Å						
	$c = c\_01 = 0.9*c_0 + 0.1*c_{10} = 11.5130(3)$ Å						
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.9* z\_N_0 + 0.1* z\_N_{10} = 0.0998(3)$						
Occupancy Parameter	$oNa01 = 0.9* yNa_0 + 0.1*yNa_{10} = 0.923(8)$						
Site	Na 1	0.0	0.50	0.25	occ (oNa_01)	0.923(8)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_01)	0.077(8)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.0998(3)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_02						
Space Group	I – 4						
Scale	0.000081(2)						
Lattice Parameter	$a = b = a\_02 = 0.8*a_{10} + 0.2*a_{10} = 5.08024(7)$Å						
	$c = c\_02 = 0.8*c_{10} + 0.2*c_{10} = 11.4844(3)$ Å						
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.8* z\_N_0 + 0.2* z\_N_{10} = 0.1000(3)$						
Occupancy Parameter	$oNa02 = 0.8* yNa_0 + 0.2*yNa_{10} = 0.91(1)$						
Site	Na 1	0.0	0.50	0.25	occ (oNa_02)	0.91(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_02)	0.09(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1000(3)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_03						
Space Group	I – 4						
Scale	0.000041(2)						
Lattice Parameter	$a = b = a\_03 = 0.7*a_{10} + 0.3*a_{10} = 5.07896(9)$ Å						
	$c = c\_03 = 0.7*c_{10} + 0.3*c_{10} = 11.4559(4)$ Å						
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.7* z\_N_0 + 0.3* z\_N_{10} = 0.1002(4)$						
Occupancy Parameter	$oNa03 = 0.7* yNa_0 + 0.3*yNa_{10} = 0.89(1)$						
Site	Na 1	0.0	0.50	0.25	occ (oNa_03)	0.89(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_03)	0.11(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1002(4)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name		Li3Na(NH2)4_04					
Space Group		I – 4					
Scale		0.000033(2)					
Lattice Parameter		$a = b = a\_04 = 0.6*a_{10} + 0.4*a_{10} = 5.0777(1)$Å					
		$c = c\_04 = 0.6*c_{10} + 0.4*c_{10} = 11.4274(5)$Å					
Nitrogen Z Coordinate		$z\_N = z\_N_0 = 0.6* z\_N_0 + 0.4* z\_N_{10} = 0.1003(4)$					
Occupancy Parameter		$oNa04 = 0.6* yNa_0 + 0.4*yNa_{10} = 0.88(1)$					
Site	Na 1	0.0	0.50	0.25	occ (oNa_04)	0.88(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_04)	0.12(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1003(4)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name		Li3Na(NH2)4_05					
Space Group		I – 4					
Scale		0.000021(2)					
Lattice Parameter		$a = b = a\_05 = 0.5*a_{10} + 0.5*a_{10} = 5.0764(1)$Å					
		$c = c\_05 = 0.5*c_{10} + 0.5*c_{10} = 11.3989(6)$Å					
Nitrogen Z Coordinate		$z\_N = z\_N_0 = 0.5* z\_N_0 + 0.5* z\_N_{10} = 0.1005(5)$					
Occupancy Parameter		$oNa05 = 0.5* yNa_0 + 0.5*yNa_{10} = 0.87(1)$					
Site	Na 1	0.0	0.50	0.25	occ (oNa_05)	0.87(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_05)	0.13(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1005(5)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name		Li3Na(NH2)4_06					
Space Group		I – 4					
Scale		0.000024(1)					
Lattice Parameter		$a = b = a\_06 = 0.4*a_{10} + 0.6*a_{10} = 5.0751(1)$Å					
		$c = c\_06 = 0.4*c_{10} + 0.6*c_{10} = 11.3703(6)$Å					
Nitrogen Z Coordinate		$z\_N = z\_N_0 = 0.4* z\_N_0 + 0.6* z\_N_{10} = 0.1007(5)$					
Occupancy Parameter		$oNa06 = 0.4* yNa_0 + 0.6*yNa_{10} = 0.85(1)$					
Site	Na 1	0.0	0.50	0.25	occ (oNa_06)	0.85(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_06)	0.15(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1007(5)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_07
Space Group	I – 4

Scale	0.000016(1)					
Lattice Parameter	$a = b = a\_07 = 0.3*a_{10} + 0.7*a_{10} = 5.0738(2)$Å					
	$c = c\_07 = 0.3*c_{10} + 0.7*c_{10} = 11.3418(7)$Å					
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.3* z\_N_0 + 0.7* z\_N_{10} = 0.1008(6)$					
Occupancy Parameter	$oNa07 = 0.3* yNa_0 + 0.7*yNa_{10} = 0.83(2)$					
Site	Na 1	0.0	0.50	0.25	occ (oNa_07)	0.83(2)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_07)	0.17(2)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1008(6)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_08					
Space Group	I – 4					
Scale	0.000018(1)					
Lattice Parameter	$a = b = a\_08 = 0.2*a_{10} + 0.8*a_{10} = 5.0726(2)$Å					
	$c = c\_08 = 0.2*c_{10} + 0.8*c_{10} = 11.3133(8)$Å					
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.2* z\_N_0 + 0.8* z\_N_{10} = 0.1010(6)$					
Occupancy Parameter	$oNa08 = 0.2* yNa_0 + 0.8*yNa_{10} = 0.82(2)$					
Site	Na 1	0.0	0.50	0.25	occ (oNa_08)	0.82(2)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_08)	0.18(2)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1010(6)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_09					
Space Group	I – 4					
Scale	0.000012(1)					
Lattice Parameter	$a = b = a\_09 = 0.1*a_{10} + 0.9*a_{10} = 5.0713(2)$Å					
	$c = c\_09 = 0.1*c_{10} + 0.9*c_{10} = 11.2847(8)$Å					
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.1* z\_N_0 + 0.9* z\_N_{10} = 0.1012(7)$					
Occupancy Parameter	$oNa09 = 0.1* yNa_0 + 0.9*yNa_{10} = 0.81(2)$					
Site	Na 1	0.0	0.50	0.25	occ (oNa_09)	0.81(2)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_09)	0.19(2)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1012(7)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_10
Space Group	I – 4
Scale	0.000017(1)
Lattice Parameter	$a = b = a\_10 = 0.0*a_{10} + 1.0*a_{10} = 5.0700(2)$Å

		$c = c\_10 = 0.0*c_{10} + 1.0*c_{10} = 11.2562(9)$Å					
Nitrogen Z Coordinate		$z\_N = z\_N_0 = 0.0* z\_N_0 + 1.0* z\_N_{10} = 0.1014(7)$					
Occupancy Parameter		$oNa10 = 0.0* yNa_0 + 1.0*yNa_{10} = 0.79(2)$					
Site	Na 1	0.0	0.50	0.25	occ (oNa_10)	0.79(2)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ ($1-oNa\_10$)	0.21(2)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1014(7)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name		NaNH2				
Space Group		Fddd				
Scale		0.00000306(6)				
Lattice Parameter		$a = 8.95853(2)$ Å				
		$b = 10.4344(3)$ Å				
		$c = 8.07177(2)$ Å				
Site	Na 1	0.0	0.14841	0.0	occ	1	b_{eq} 2.6283
Site	N	0.0	0.0	0.23425	occ	1	b_{eq} 3.2183
Site	H 1	0.05938	0.95625	0.29968	occ	1	b_{eq} 2.7556

$x = 0.667$

R_ expected	4.521	R_ expected'	9.452
R_weighted pattern	14.989	R_weighted pattern'	31.342
R_Pattern	9.839	R_Pattern'	28.861
Weighted_Durbin_Watson	7.430		
Goodness of fit	3.316		

LiNH2_00 – LiNH2_10 Lattice Parameter	$aLi_0 = 5.03701(3)$ Å
LiNH2_00 – LiNH2_10 Lattice Parameter	$aLi_{10} = 5.04195(6)$ Å
LiNH2_00 – LiNH2_10 Lattice Parameter	$cLi_0 = 10.25577(3)$ Å
LiNH2_00 – LiNH2_10 Lattice Parameter	$cLi_{10} = 10.3311(2)$ Å
LiNH2_00 – LiNH2_10 Occ. Parameter	$yLi_0 = 0.987(3)$
LiNH2_00 – LiNH2_10 Occ. Parameter	$yLi_{10} = 0.95(1)$

Phase Name		LiNH2_00					
Space Group		I – 4					
Scale		0.000004(1)					
Lattice Parameter		$a = b = a\_liam\_00 = 1.0*aLi_0 + 0.0*aLi_{10} = 5.03701(3)$ Å					
		$c = c\_liam\_00 = 1.0*cLi_0 + 0.0*cLi_{10} = 10.25577(3)$ Å					
Occupancy Parameter		$oLi00 = 1.0* yLi_0 + 0.0*yLi_{10} = 0.987(3)$					
Site	Li 1	0.0	0.0	0.0	occ	1	$b_{eq}= 0.95(1)$
Site	Li 2	0.0	0.5	-0.25	occ ($oLi00$)	0.987(3)	$b_{eq}= 3.0(1)$
Site	Na 2	0.0	0.5	-0.25	occ (1-	0.013(3)	$b_{eq}= 3.0(1)$

					oLi00)		
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_01						
Space Group	I – 4						
Scale	0.000061(2)						
Lattice Parameter	a = b = a_liam_01 = $0.9*aLi_0 + 0.1*aLi_{10}$ = 5.03750(2)Å						
	c = c_liam_01 = $0.9*cLi_0 + 0.1*cLi_{10}$ = 10.26342(5)Å						
Occupancy Parameter	oLi01= $0.9* yLi_0 + 0.1*yLi_{10}$ = 0.987(3)						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi01)	0.987(3)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi01)	0.017(3)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_02						
Space Group	I – 4						
Scale	0.000042(2)						
Lattice Parameter	a = b = a_liam_02 = $0.8*aLi_{10} + 0.2*aLi_0$ = 5.03800(2)Å						
	c = c_liam_02 = $0.8*cLi_0 + 0.2*cLi_{10}$ = 10.27106(6)Å						
Occupancy Parameter	oLi02= $0.8* yLi_0 + 0.2*yLi_{10}$ = 0.979(5)						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi02)	0.979(5)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi02)	0.021(5)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_03						
Space Group	I – 4						
Scale	0.000024(2)						
Lattice Parameter	a = b = a_liam_03 = $0.7*aLi_0 + 0.3*aLi_{10}$ = 5.03849(3) Å						
	c = c_liam_03 = $0.7*cLi_0 + 0.3*cLi_{10}$ = 10.27871(8)Å						
Occupancy Parameter	oLi03= $0.7* yLi_0 + 0.3*yLi_{10}$ = 0.975(6)						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)

Site	Li 2	0.0	0.5	-0.25	occ (oLi07)	0.975(6)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi07)	0.025(6)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_04						
Space Group	$I - 4$						
Scale	0.000020(2)						
Lattice Parameter	$a = b = a\_liam\_04 = 0.6*aLi_0 + 0.4*aLi_{10} = 5.03899(3)$Å						
	$c = c\_liam\_04 = 0.6*cLi_0 + 0.4*cLi_{10} = 10.28635(9)$Å						
Occupancy Parameter	$oLi04 = 0.6* yLi_0 + 0.4*yLi_{10} = 0.972(7)$						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi04)	0.972(7)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi04)	0.028(7)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_05						
Space Group	$I - 4$						
Scale	0.000011(2)						
Lattice Parameter	$a = b = a\_liam\_05 = 0.5*aLi_0 + 0.5*aLi_{10} = 5.03948(4)$Å						
	$c = c\_liam\_05 = 0.5*cLi_0 + 0.5*cLi_{10} = 10.2940(1)$Å						
Occupancy Parameter	$oLi05 = 0.5* yLi_0 + 0.5*yLi_{10} = 0.968(8)$						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi05)	0.968(8)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi05)	0.032(8)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_06
Space Group	$I - 4$
Scale	0.000009(2)
Lattice Parameter	$a = b = a\_liam\_06 = 0.4*aLi_0 + 0.6*aLi_{10} = 5.03997(4)$Å
	$c = c\_liam\_06 = 0.4*cLi_0 + 0.6*cLi_{10} = 10.3016(1)$Å

Occupancy Parameter		oLi06= 0.4* yLi$_0$ + 0.6*yLi$_{10}$ = 0.964(9)					
Site	Li 1	0.0	0.0	0.0	occ	1	b$_{eq}$= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi06)	0.964(9)	b$_{eq}$= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi06)	0.036(9)	b$_{eq}$= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b$_{eq}$= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b$_{eq}$= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b$_{eq}$= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b$_{eq}$= 0.95(1)

Phase Name	LiNH2_07						
Space Group	I – 4						
Scale	0.000007(2)						
Lattice Parameter	a = b = a_liam_07 = 0.3*aLi$_0$ + 0.7*aLi$_{10}$ = 5.04047(5)Å						
	c = c_liam_07 = 0.3*cLi$_0$ + 0.7*cLi$_{10}$ = 10.3093(1)Å						
Occupancy Parameter	oLi07= 0.3* yLi$_0$ + 0.7*yLi$_{10}$ = 0.96(1)						
Site	Li 1	0.0	0.0	0.0	occ	1	b$_{eq}$= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi07)	0.96(1)	b$_{eq}$= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi07)	0.040(1)	b$_{eq}$= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b$_{eq}$= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b$_{eq}$= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b$_{eq}$= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b$_{eq}$= 0.95(1)

Phase Name	LiNH2_08						
Space Group	I – 4						
Scale	0.000006(1)						
Lattice Parameter	a = b = a_liam_08 = 0.2*aLi$_0$ + 0.8*aLi$_{10}$ =5.04096(5) Å						
	c = c_liam_08 = 0.2*cLi$_0$ + 0.8*cLi$_{10}$ = 10.3169(2)Å						
Occupancy Parameter	oLi08= 0.2* yLi$_0$ + 0.8*yLi$_{10}$ = 0.96(1)						
Site	Li 1	0.0	0.0	0.0	occ	1	b$_{eq}$= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi08)	0.96(1)	b$_{eq}$= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi08)	0.04(1)	b$_{eq}$= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b$_{eq}$= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b$_{eq}$= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b$_{eq}$= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b$_{eq}$= 0.95(1)

Phase Name	LiNH2_09
Space Group	I – 4

Scale	0.000001(1)					
Lattice Parameter	$a = b = a\_liam\_09 = 0.1*aLi_0 + 0.9*aLi_{10} = 5.04146(6)$Å					
	$c = c\_liam\_09 = 0.1*cLi_0 + 0.9*cLi_{10} = 10.3246(2)$Å					
Occupancy Parameter	$oLi09 = 0.1* yLi_0 + 0.9*yLi_{10} = 0.95(1)$					
Site	Li 1	0.0	0.0	0.0	occ	1	$b_{eq}= 0.95(1)$
Site	Li 2	0.0	0.5	-0.25	occ (oLi09)	0.95(1)	$b_{eq}= 3.0(1)$
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi09)	0.05(1)	$b_{eq}= 3.0(1)$
Site	Li 3	0.0	0.5	0.00620	occ	1	$b_{eq}= 0.95(1)$
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	$b_{eq}= 0.95(1)$
Site	H 1	-0.226	-0.149	-0.172	occ	1	$b_{eq}= 0.95(1)$
Site	H 2	-0.308	-0.359	-0.114	occ	1	$b_{eq}= 0.95(1)$

Phase Name	LiNH2_10					
Space Group	I – 4					
Scale	0.000006(1)					
Lattice Parameter	$a = b = a\_liam\_10 = 0.0*aLi_0 + 1.0*aLi_{10} = 5.04195(6)$Å					
	$c = c\_liam\_10 = 0.0*cLi_0 + 1.0*cLi_{10} = 10.3311(2)$Å					
Occupancy Parameter	$oLi10 = 0.0* yLi_0 + 1.0*yLi_{10} = 0.95(1)$					
Site	Li 1	0.0	0.0	0.0	occ	1	$b_{eq}= 0.95(1)$
Site	Li 2	0.0	0.5	-0.25	occ (oLi10)	0.95(1)	$b_{eq}= 3.0(1)$
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi10)	0.05(1)	$b_{eq}= 3.0(1)$
Site	Li 3	0.0	0.5	0.00620	occ	1	$b_{eq}= 0.95(1)$
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	$b_{eq}= 0.95(1)$
Site	H 1	-0.226	-0.149	-0.172	occ	1	$b_{eq}= 0.95(1)$
Site	H 2	-0.308	-0.359	-0.114	occ	1	$b_{eq}= 0.95(1)$

Phase Name	Li2O					
Space Group	Fm3m					
Scale	0.000089(3)					
Lattice Parameter	$a = b = c = 4.61589(5)$ Å					
Site	Li	0.25	0.25	0.25	occ	1	$b_{eq} = 0.9148$
Site	O	0.0	0.0	0.0	occ	1	$b_{eq} = 0.8$

Phase Name	LiNa2(NH2)3					
Space Group	P42/m					
Scale	0.0000529(3)					
Lattice Parameter	$a = b = 6.2838(1)$Å					
	$c = 11.1485(2)$Å					
Site	N 1	0.66317	0.27595	0.0	occ	1	$b_{eq} = 1.5810$
Site	H 1	0.73697	0.29827	0.056	occ	1	$b_{eq} = 1.5810$
Site	N 2	0.20732	0.27336	0.15765	occ	1	$b_{eq} = 1.5810$
Site	H 2	0.16362	0.18116	0.21186	occ	1	$b_{eq} = 1.5810$

Site	H 3	0.10362	0.32316	0.14126	occ	1	b_{eq} = 1.5810
Site	Na 1	0.50	0.0	0.14216	occ	1	b_{eq} = 2.2740
Site	Na 2	0.0	0.0	0.0	occ	1	b_{eq} = 2.2740
Site	Na 3	0.50	0.50	0.25	occ	1	b_{eq} = 2.2740
Site	Li 1	0.35356	0.36094	0.0	occ	1	b_{eq} = 2.0455

Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	a_0 = 5.0828(4)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	a_{10} = 5.0700(2)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	c_0 = 11.5415(2)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	c_{10} = 11.2562(9)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	z_N_0 = 0.0997(2)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	z_N_{10} = 0.1014(7)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Occ. Parameter	yNa_0 = 0.938(7)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Occ. Parameter	yNa_{10} = 0.79(2)

Phase Name	Li3Na(NH2)4_00					
Space Group	I – 4					
Scale	0.000012(1)					
Lattice Parameter	$a = b = a\_00 = 1.0*a_0 + 0.0*a_{10}$ = 5.08280(4)Å					
	$c = c\_00 = 1.0*c_0 + 0.0*c_{10}$ = 11.5415(2)Å					
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 1.0* z\_N_0 + 0.0* z\_N_{10}$ = 0.0997(2)					
Occupancy Parameter	$oNa00 = 1.0* yNa_0 + 0.0*yNa_{10}$ = 0.938(7)					
Site	Na 1	0.0	0.50	0.25	occ (oNa_00)	0.983(7)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_00)	0.062(7)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.0997(2)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_01					
Space Group	I – 4					
Scale	0.000014(1)					
Lattice Parameter	$a = b = a\_01 = 0.9*a_0 + 0.1*a_{10}$ = 5.08152(6)Å					
	$c = c\_01 = 0.9*c_0 + 0.1*c_{10}$ = 11.5130(3) Å					
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.9* z\_N_0 + 0.1* z\_N_{10}$ = 0.0998(3)					
Occupancy Parameter	$oNa01 = 0.9* yNa_0 + 0.1*yNa_{10}$ = 0.923(8)					
Site	Na 1	0.0	0.50	0.25	occ (oNa_01)	0.923(8)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_01)	0.077(8)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.0998(3)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_02
Space Group	I – 4

Scale	0.000017(1)					
Lattice Parameter	$a = b = a\_02 = 0.8*a_{10} + 0.2*a_{10} = 5.08024(7)$Å					
	$c = c\_02 = 0.8*c_{10} + 0.2*c_{10} = 11.4844(3)$ Å					
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.8* z\_N_0 + 0.2* z\_N_{10} = 0.1000(3)$					
Occupancy Parameter	$oNa02 = 0.8* yNa_0 + 0.2*yNa_{10} = 0.91(1)$					
Site	Na 1	0.0	0.50	0.25	occ (oNa_02)	0.91(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_02)	0.09(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1000(3)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_03					
Space Group	I – 4					
Scale	0.000012(1)					
Lattice Parameter	$a = b = a\_03 = 0.7*a_{10} + 0.3*a_{10} = 5.07896(9)$ Å					
	$c = c\_03 = 0.7*c_{10} + 0.3*c_{10} = 11.4559(4)$ Å					
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.7* z\_N_0 + 0.3* z\_N_{10} = 0.1002(4)$					
Occupancy Parameter	$oNa03 = 0.7* yNa_0 + 0.3*yNa_{10} = 0.89(1)$					
Site	Na 1	0.0	0.50	0.25	occ (oNa_03)	0.89(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_03)	0.11(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1002(4)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_04					
Space Group	I – 4					
Scale	0.000009(1)					
Lattice Parameter	$a = b = a\_04 = 0.6*a_{10} + 0.4*a_{10} = 5.0777(1)$Å					
	$c = c\_04 = 0.6*c_{10} + 0.4*c_{10} = 11.4274(5)$Å					
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.6* z\_N_0 + 0.4* z\_N_{10} = 0.1003(4)$					
Occupancy Parameter	$oNa04 = 0.6* yNa_0 + 0.4*yNa_{10} = 0.88(1)$					
Site	Na 1	0.0	0.50	0.25	occ (oNa_04)	0.88(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_04)	0.12(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1003(4)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_05
Space Group	I – 4
Scale	0.000008(1)
Lattice Parameter	$a = b = a\_05 = 0.5*a_{10} + 0.5*a_{10} = 5.0764(1)$Å

		$c = c\_05 = 0.5*c_{10} + 0.5*c_{10} = 11.3989(6)$Å					
Nitrogen Z Coordinate		$z\_N = z\_N_0 = 0.5* z\_N_0 + 0.5* z\_N_{10} = 0.1005(5)$					
Occupancy Parameter		$oNa05 = 0.5* yNa_0 + 0.5*yNa_{10} = 0.87(1)$					
Site	Na 1	0.0	0.50	0.25	occ (oNa_05)	0.87(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_05)	0.13(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1005(5)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name		Li3Na(NH2)4_06					
Space Group		I – 4					
Scale		0.000005(1)					
Lattice Parameter		$a = b = a\_06 = 0.4*a_{10} + 0.6*a_{10} = 5.0751(1)$Å					
		$c = c\_06 = 0.4*c_{10} + 0.6*c_{10} = 11.3703(6)$Å					
Nitrogen Z Coordinate		$z\_N = z\_N_0 = 0.4* z\_N_0 + 0.6* z\_N_{10} = 0.1007(5)$					
Occupancy Parameter		$oNa06 = 0.4* yNa_0 + 0.6*yNa_{10} = 0.85(1)$					
Site	Na 1	0.0	0.50	0.25	occ (oNa_06)	0.85(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_06)	0.15(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1007(5)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name		Li3Na(NH2)4_07					
Space Group		I – 4					
Scale		0.000007(1)					
Lattice Parameter		$a = b = a\_07 = 0.3*a_{10} + 0.7*a_{10} = 5.0738(2)$Å					
		$c = c\_07 = 0.3*c_{10} + 0.7*c_{10} = 11.3418(7)$Å					
Nitrogen Z Coordinate		$z\_N = z\_N_0 = 0.3* z\_N_0 + 0.7* z\_N_{10} = 0.1008(6)$					
Occupancy Parameter		$oNa07 = 0.3* yNa_0 + 0.7*yNa_{10} = 0.83(2)$					
Site	Na 1	0.0	0.50	0.25	occ (oNa_07)	0.83(2)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_07)	0.17(2)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1008(6)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_08
Space Group	I – 4
Scale	0.000006(1)
Lattice Parameter	$a = b = a\_08 = 0.2*a_{10} + 0.8*a_{10} = 5.0726(2)$Å
	$c = c\_08 = 0.2*c_{10} + 0.8*c_{10} = 11.3133(8)$Å
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.2* z\_N_0 + 0.8* z\_N_{10} = 0.1010(6)$

Occupancy Parameter		oNa08= 0.2* yNa_0 + 0.8*yNa_{10} = 0.82(2)				
Site	Na 1	0.0	0.50	0.25	occ (oNa_08)	0.82(2)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_08)	0.18(2)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1010(6)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_09					
Space Group	I – 4					
Scale	0.000006(1)					
Lattice Parameter	a = b = a_ 09 = 0.1*a_{10} + 0.9*a_{10} = 5.0713(2)Å					
	c = c_ 09 = 0.1*c_{10} + 0.9*c_{10} = 11.2847(8)Å					
Nitrogen Z Coordinate	z_N = z_N_0 = 0.1* z_N_0 + 0.9* z_N_{10} = 0.1012(7)					
Occupancy Parameter	oNa09= 0.1* yNa_0 + 0.9*yNa_{10} = 0.81(2)					
Site	Na 1	0.0	0.50	0.25	occ (oNa_09)	0.81(2)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_09)	0.19(2)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1012(7)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_10					
Space Group	I – 4					
Scale	0.000005(1)					
Lattice Parameter	a = b = a_ 10 = 0.0*a_{10} + 1.0*a_{10} = 5.0700(2)Å					
	c = c_ 10 = 0.0*c_{10} + 1.0*c_{10} = 11.2562(9)Å					
Nitrogen Z Coordinate	z_N = z_N_0 = 0.0* z_N_0 + 1.0* z_N_{10} = 0.1014(7)					
Occupancy Parameter	oNa10= 0.0* yNa_0 + 1.0*yNa_{10} = 0.79(2)					
Site	Na 1	0.0	0.50	0.25	occ (oNa_10)	0.79(2)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_10)	0.21(2)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1014(7)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	NaNH2					
Space Group	Fddd					
Scale	0.00000208(5)					
Lattice Parameter	a = 8.95853(2) Å					
	b = 10.4344(3) Å					
	c = 8.07177(2) Å					
Site	Na 1	0.0	0.14841	0.0	occ	1	b_{eq} 2.6283
Site	N	0.0	0.0	0.23425	occ	1	b_{eq} 3.2183

Site	H 1	0.05938	0.95625	0.29968	occ	1	b_{eq} 2.7556

x = 0.583

R_expected	4.521	R_expected'	9.452
R_weighted pattern	14.989	R_weighted pattern'	31.342
R_Pattern	9.839	R_Pattern'	28.861
Weighted_Durbin_Watson	7.430		
Goodness of fit	3.316		

LiNH2_00 – LiNH2_10 Lattice Parameter	$aLi_0 = 5.03701(3)$ Å
LiNH2_00 – LiNH2_10 Lattice Parameter	$aLi_{10} = 5.04195(6)$ Å
LiNH2_00 – LiNH2_10 Lattice Parameter	$cLi_0 = 10.25577(3)$ Å
LiNH2_00 – LiNH2_10 Lattice Parameter	$cLi_{10} = 10.3311(2)$ Å
LiNH2_00 – LiNH2_10 Occ. Parameter	$yLi_0 = 0.987(3)$
LiNH2_00 – LiNH2_10 Occ. Parameter	$yLi_{10} = 0.95(1)$

Phase Name	LiNH2_00						
Space Group	I – 4						
Scale	0.000001(1)						
Lattice Parameter	$a = b = a\_liam\_00 = 1.0*aLi_0 + 0.0*aLi_{10} = 5.03701(3)$ Å						
	$c = c\_liam\_00 = 1.0*cLi_0 + 0.0*cLi_{10} = 10.25577(3)$ Å						
Occupancy Parameter	$oLi00 = 1.0* yLi_0 + 0.0*yLi_{10} = 0.987(3)$						
Site	Li 1	0.0	0.0	0.0	occ	1	$b_{eq}= 0.95(1)$
Site	Li 2	0.0	0.5	-0.25	occ (oLi00)	0.987(3)	$b_{eq}= 3.0(1)$
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi00)	0.013(3)	$b_{eq}= 3.0(1)$
Site	Li 3	0.0	0.5	0.00620	occ	1	$b_{eq}= 0.95(1)$
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	$b_{eq}= 0.95(1)$
Site	H 1	-0.226	-0.149	-0.172	occ	1	$b_{eq}= 0.95(1)$
Site	H 2	-0.308	-0.359	-0.114	occ	1	$b_{eq}= 0.95(1)$

Phase Name	LiNH2_01						
Space Group	I – 4						
Scale	0.000011(2)						
Lattice Parameter	$a = b = a\_liam\_01 = 0.9*aLi_0 + 0.1*aLi_{10} = 5.03750(2)$ Å						
	$c = c\_liam\_01 = 0.9*cLi_0 + 0.1*cLi_{10} = 10.26342(5)$ Å						
Occupancy Parameter	$oLi01 = 0.9* yLi_0 + 0.1*yLi_{10} = 0.987(3)$						
Site	Li 1	0.0	0.0	0.0	occ	1	$b_{eq}= 0.95(1)$
Site	Li 2	0.0	0.5	-0.25	occ (oLi01)	0.987(3)	$b_{eq}= 3.0(1)$
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi01)	0.017(3)	$b_{eq}= 3.0(1)$
Site	Li 3	0.0	0.5	0.00620	occ	1	$b_{eq}= 0.95(1)$

Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_02						
Space Group	I – 4						
Scale	0.000001(2)						
Lattice Parameter	$a = b = a\_liam\_02 = 0.8*aLi_{10} + 0.2*aLi_0 = 5.03800(2)$Å						
	$c = c\_liam\_02 = 0.8*cLi_0 + 0.2*cLi_{10} = 10.27106(6)$Å						
Occupancy Parameter	$oLi02 = 0.8* yLi_0 + 0.2*yLi_{10} = 0.979(5)$						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi02)	0.979(5)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi02)	0.021(5)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_03						
Space Group	I – 4						
Scale	0.000001(2)						
Lattice Parameter	$a = b = a\_liam\_03 = 0.7*aLi_0 + 0.3*aLi_{10} = 5.03849(3)$ Å						
	$c = c\_liam\_03 = 0.7*cLi_0 + 0.3*cLi_{10} = 10.27871(8)$Å						
Occupancy Parameter	$oLi03 = 0.7* yLi_0 + 0.3*yLi_{10} = 0.975(6)$						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi07)	0.975(6)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi07)	0.025(6)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_04						
Space Group	I – 4						
Scale	0.000001(2)						
Lattice Parameter	$a = b = a\_liam\_04 = 0.6*aLi_0 + 0.4*aLi_{10} = 5.03899(3)$Å						
	$c = c\_liam\_04 = 0.6*cLi_0 + 0.4*cLi_{10} = 10.28635(9)$Å						
Occupancy Parameter	$oLi04 = 0.6* yLi_0 + 0.4*yLi_{10} = 0.972(7)$						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi04)	0.972(7)	b_{eq}= 3.0(1)

Site	Na 2	0.0	0.5	-0.25	occ (1-oLi04)	0.028(7)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_05						
Space Group	I – 4						
Scale	0.000001(2)						
Lattice Parameter	$a = b = a\_liam\_05 = 0.5*aLi_0 + 0.5*aLi_{10} = 5.03948(4)$Å						
	$c = c\_liam\_05 = 0.5*cLi_0 + 0.5*cLi_{10} = 10.2940(1)$Å						
Occupancy Parameter	$oLi05 = 0.5* yLi_0 + 0.5*yLi_{10} = 0.968(8)$						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi05)	0.968(8)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi05)	0.032(8)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_06						
Space Group	I – 4						
Scale	0.000001(1)						
Lattice Parameter	$a = b = a\_liam\_06 = 0.4*aLi_0 + 0.6*aLi_{10} = 5.03997(4)$Å						
	$c = c\_liam\_06 = 0.4*cLi_0 + 0.6*cLi_{10} = 10.3016(1)$Å						
Occupancy Parameter	$oLi06 = 0.4* yLi_0 + 0.6*yLi_{10} = 0.964(9)$						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi06)	0.964(9)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi06)	0.036(9)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_07
Space Group	I – 4
Scale	0.000001(1)
Lattice Parameter	$a = b = a\_liam\_07 = 0.3*aLi_0 + 0.7*aLi_{10} = 5.04047(5)$Å
	$c = c\_liam\_07 = 0.3*cLi_0 + 0.7*cLi_{10} = 10.3093(1)$Å
Occupancy Parameter	$oLi07 = 0.3* yLi_0 + 0.7*yLi_{10} = 0.960(1)$

Site							
Site	Li 1	0.0	0.0	0.0	occ	1	$b_{eq}= 0.95(1)$
Site	Li 2	0.0	0.5	-0.25	occ (oLi07)	0.960(1)	$b_{eq}= 3.0(1)$
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi07)	0.040(1)	$b_{eq}= 3.0(1)$
Site	Li 3	0.0	0.5	0.00620	occ	1	$b_{eq}= 0.95(1)$
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	$b_{eq}= 0.95(1)$
Site	H 1	-0.226	-0.149	-0.172	occ	1	$b_{eq}= 0.95(1)$
Site	H 2	-0.308	-0.359	-0.114	occ	1	$b_{eq}= 0.95(1)$

Phase Name	LiNH2_08						
Space Group	$I - 4$						
Scale	0.000001(1)						
Lattice Parameter	$a = b = a\_liam\_08 = 0.2*aLi_0 + 0.8*aLi_{10} = 5.04096(5)$ Å						
	$c = c\_liam\_08 = 0.2*cLi_0 + 0.8*cLi_{10} = 10.3169(2)$Å						
Occupancy Parameter	$oLi08 = 0.2* yLi_0 + 0.8*yLi_{10} = 0.96(1)$						
Site	Li 1	0.0	0.0	0.0	occ	1	$b_{eq}= 0.95(1)$
Site	Li 2	0.0	0.5	-0.25	occ (oLi08)	0.96(1)	$b_{eq}= 3.0(1)$
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi08)	0.04(1)	$b_{eq}= 3.0(1)$
Site	Li 3	0.0	0.5	0.00620	occ	1	$b_{eq}= 0.95(1)$
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	$b_{eq}= 0.95(1)$
Site	H 1	-0.226	-0.149	-0.172	occ	1	$b_{eq}= 0.95(1)$
Site	H 2	-0.308	-0.359	-0.114	occ	1	$b_{eq}= 0.95(1)$

Phase Name	LiNH2_09						
Space Group	$I - 4$						
Scale	0.000001(1)						
Lattice Parameter	$a = b = a\_liam\_09 = 0.1*aLi_0 + 0.9*aLi_{10} = 5.04146(6)$Å						
	$c = c\_liam\_09 = 0.1*cLi_0 + 0.9*cLi_{10} = 10.3246(2)$Å						
Occupancy Parameter	$oLi09 = 0.1* yLi_0 + 0.9*yLi_{10} = 0.95(1)$						
Site	Li 1	0.0	0.0	0.0	occ	1	$b_{eq}= 0.95(1)$
Site	Li 2	0.0	0.5	-0.25	occ (oLi09)	0.95(1)	$b_{eq}= 3.0(1)$
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi09)	0.05(1)	$b_{eq}= 3.0(1)$
Site	Li 3	0.0	0.5	0.00620	occ	1	$b_{eq}= 0.95(1)$
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	$b_{eq}= 0.95(1)$
Site	H 1	-0.226	-0.149	-0.172	occ	1	$b_{eq}= 0.95(1)$
Site	H 2	-0.308	-0.359	-0.114	occ	1	$b_{eq}= 0.95(1)$

Phase Name	LiNH2_10
Space Group	$I - 4$
Scale	0.000001(1)
Lattice Parameter	$a = b = a\_liam\_10 = 0.0*aLi_0 + 1.0*aLi_{10} = 5.04195(6)$Å

		c = c_liam_10 = 0.0*cLi$_0$ + 1.0*cLi$_{10}$ = 10.3311(2)Å					
Occupancy Parameter		oLi10= 0.0* yLi$_0$ + 1.0*yLi$_{10}$ = 0.95(1)					
Site	Li 1	0.0	0.0	0.0	occ	1	b$_{eq}$= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi10)	0.95(1)	b$_{eq}$= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi10)	0.05(1)	b$_{eq}$= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b$_{eq}$= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b$_{eq}$= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b$_{eq}$= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b$_{eq}$= 0.95(1)

Phase Name		Li2O					
Space Group		Fm3m					
Scale		0.000135(4)					
Lattice Parameter		a = b = c = 4.61589(5) Å					
Site	Li	0.25	0.25	0.25	occ	1	b$_{eq}$ = 0.9148
Site	O	0.0	0.0	0.0	occ	1	b$_{eq}$ = 0.8

Phase Name		LiNa2(NH2)3					
Space Group		P42/m					
Scale		0.0001670(6)					
Lattice Parameter		a = b = 6.2838(1)Å					
		c = 11.1485(2)Å					
Site	N 1	0.66317	0.27595	0.0	occ	1	b$_{eq}$ = 1.5810
Site	H 1	0.73697	0.29827	0.056	occ	1	b$_{eq}$ = 1.5810
Site	N 2	0.20732	0.27336	0.15765	occ	1	b$_{eq}$ = 1.5810
Site	H 2	0.16362	0.18116	0.21186	occ	1	b$_{eq}$ = 1.5810
Site	H 3	0.10362	0.32316	0.14126	occ	1	b$_{eq}$ = 1.5810
Site	Na 1	0.50	0.0	0.14216	occ	1	b$_{eq}$ = 2.2740
Site	Na 2	0.0	0.0	0.0	occ	1	b$_{eq}$ = 2.2740
Site	Na 3	0.50	0.50	0.25	occ	1	b$_{eq}$ = 2.2740
Site	Li 1	0.35356	0.36094	0.0	occ	1	b$_{eq}$ = 2.0455

Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	a$_0$ = 5.0828(4)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	a$_{10}$ = 5.0700(2)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	c$_0$ = 11.5415(2)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	c$_{10}$ = 11.2562(9)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	z_N$_0$ = 0.0997(2)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	z_N$_{10}$ = 0.1014(7)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Occ. Parameter	yNa$_0$ = 0.938(7)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Occ. Parameter	yNa$_{10}$ = 0.79(2)

Phase Name	Li3Na(NH2)4_00
Space Group	I – 4
Scale	0.000017(2)

Lattice Parameter		$a = b = a\_00 = 1.0*a_0 + 0.0*a_{10} = 5.08280(4)$Å					
		$c = c\_00 = 1.0*c_0 + 0.0*c_{10} = 11.5415(2)$Å					
Nitrogen Z Coordinate		$z\_N = z\_N_0 = 1.0* z\_N_0 + 0.0* z\_N_{10} = 0.0997(2)$					
Occupancy Parameter		$oNa00 = 1.0* yNa_0 + 0.0*yNa_{10} = 0.938(7)$					
Site	Na 1	0.0	0.50	0.25	occ (oNa_00)	0.983(7)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_00)	0.062(7)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.0997(2)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name		Li3Na(NH2)4_01					
Space Group		I – 4					
Scale		0.000254(3)					
Lattice Parameter		$a = b = a\_01 = 0.9*a_0 + 0.1*a_{10} = 5.08152(6)$Å					
		$c = c\_01 = 0.9*c_0 + 0.1*c_{10} = 11.5130(3)$ Å					
Nitrogen Z Coordinate		$z\_N = z\_N_0 = 0.9* z\_N_0 + 0.1* z\_N_{10} = 0.0998(3)$					
Occupancy Parameter		$oNa01 = 0.9* yNa_0 + 0.1*yNa_{10} = 0.923(8)$					
Site	Na 1	0.0	0.50	0.25	occ (oNa_01)	0.923(8)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_01)	0.077(8)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.0998(3)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name		Li3Na(NH2)4_02					
Space Group		I – 4					
Scale		0.000062(2)					
Lattice Parameter		$a = b = a\_02 = 0.8*a_{10} + 0.2*a_{10} = 5.08024(7)$Å					
		$c = c\_02 = 0.8*c_{10} + 0.2*c_{10} = 11.4844(3)$ Å					
Nitrogen Z Coordinate		$z\_N = z\_N_0 = 0.8* z\_N_0 + 0.2* z\_N_{10} = 0.1000(3)$					
Occupancy Parameter		$oNa02 = 0.8* yNa_0 + 0.2*yNa_{10} = 0.91(1)$					
Site	Na 1	0.0	0.50	0.25	occ (oNa_02)	0.91(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_02)	0.09(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1000(3)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_03
Space Group	I – 4
Scale	0.000022(2)
Lattice Parameter	$a = b = a\_03 = 0.7*a_{10} + 0.3*a_{10} = 5.07896(9)$ Å
	$c = c\_03 = 0.7*c_{10} + 0.3*c_{10} = 11.4559(4)$ Å

Nitrogen Z Coordinate		$z\_N = z\_N_0 = 0.7* z\_N_0 + 0.3* z\_N_{10} = 0.1002(4)$				
Occupancy Parameter		$oNa03 = 0.7* yNa_0 + 0.3*yNa_{10} = 0.89(1)$				
Site	Na 1	0.0	0.50	0.25	occ (oNa_03)	0.89(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_03)	0.11(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1002(4)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name		Li3Na(NH2)4_04				
Space Group		I – 4				
Scale		0.000013(2)				
Lattice Parameter		$a = b = a\_04 = 0.6*a_{10} + 0.4*a_{10} = 5.0777(1)$Å				
		$c = c\_04 = 0.6*c_{10} + 0.4*c_{10} = 11.4274(5)$Å				
Nitrogen Z Coordinate		$z\_N = z\_N_0 = 0.6* z\_N_0 + 0.4* z\_N_{10} = 0.1003(4)$				
Occupancy Parameter		$oNa04 = 0.6* yNa_0 + 0.4*yNa_{10} = 0.88(1)$				
Site	Na 1	0.0	0.50	0.25	occ (oNa_04)	0.88(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_04)	0.12(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1003(4)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name		Li3Na(NH2)4_05				
Space Group		I – 4				
Scale		0.000007(1)				
Lattice Parameter		$a = b = a\_05 = 0.5*a_{10} + 0.5*a_{10} = 5.0764(1)$Å				
		$c = c\_05 = 0.5*c_{10} + 0.5*c_{10} = 11.3989(6)$Å				
Nitrogen Z Coordinate		$z\_N = z\_N_0 = 0.5* z\_N_0 + 0.5* z\_N_{10} = 0.1005(5)$				
Occupancy Parameter		$oNa05 = 0.5* yNa_0 + 0.5*yNa_{10} = 0.87(1)$				
Site	Na 1	0.0	0.50	0.25	occ (oNa_05)	0.87(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_05)	0.13(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1005(5)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_06
Space Group	I – 4
Scale	0.000004(1)
Lattice Parameter	$a = b = a\_06 = 0.4*a_{10} + 0.6*a_{10} = 5.0751(1)$Å
	$c = c\_06 = 0.4*c_{10} + 0.6*c_{10} = 11.3703(6)$Å
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.4* z\_N_0 + 0.6* z\_N_{10} = 0.1007(5)$
Occupancy Parameter	$oNa06 = 0.4* yNa_0 + 0.6*yNa_{10} = 0.85(1)$

Site	Na 1	0.0	0.50	0.25	occ (oNa_06)	0.85(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_06)	0.15(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1007(5)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_07						
Space Group	I – 4						
Scale	0.000003(1)						
Lattice Parameter	a = b = a_ 07 = $0.3*a_{10} + 0.7*a_{10}$ = 5.0738(2)Å						
	c = c_ 07 = $0.3*c_{10} + 0.7*c_{10}$ = 11.3418(7)Å						
Nitrogen Z Coordinate	z_N = z_N_0 = $0.3* z\_N_0 + 0.7* z\_N_{10}$ = 0.1008(6)						
Occupancy Parameter	oNa07= $0.3* yNa_0 + 0.7*yNa_{10}$ = 0.83(2)						
Site	Na 1	0.0	0.50	0.25	occ (oNa_07)	0.83(2)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_07)	0.17(2)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1008(6)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_08						
Space Group	I – 4						
Scale	0.000002(1)						
Lattice Parameter	a = b = a_ 08 = $0.2*a_{10} + 0.8*a_{10}$ = 5.0726(2)Å						
	c = c_ 08 = $0.2*c_{10} + 0.8*c_{10}$ = 11.3133(8)Å						
Nitrogen Z Coordinate	z_N = z_N_0 = $0.2* z\_N_0 + 0.8* z\_N_{10}$ = 0.1010(6)						
Occupancy Parameter	oNa08= $0.2* yNa_0 + 0.8*yNa_{10}$ = 0.82(2)						
Site	Na 1	0.0	0.50	0.25	occ (oNa_08)	0.82(2)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_08)	0.18(2)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1010(6)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_09						
Space Group	I – 4						
Scale	0.000002(1)						
Lattice Parameter	a = b = a_ 09 = $0.1*a_{10} + 0.9*a_{10}$ = 5.0713(2)Å						
	c = c_ 09 = $0.1*c_{10} + 0.9*c_{10}$ = 11.2847(8)Å						
Nitrogen Z Coordinate	z_N = z_N_0 = $0.1* z\_N_0 + 0.9* z\_N_{10}$ = 0.1012(7)						
Occupancy Parameter	oNa09= $0.1* yNa_0 + 0.9*yNa_{10}$ = 0.81(2)						
Site	Na 1	0.0	0.50	0.25	occ (oNa_09)	0.81(2)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_09)	0.19(2)	b_{eq} 2.2484

Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1012(7)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_10						
Space Group	I – 4						
Scale	0.000001(1)						
Lattice Parameter	$a = b = a\_10 = 0.0*a_{10} + 1.0*a_{10} = 5.0700(2)$Å						
	$c = c\_10 = 0.0*c_{10} + 1.0*c_{10} = 11.2562(9)$Å						
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.0* z\_N_0 + 1.0* z\_N_{10} = 0.1014(7)$						
Occupancy Parameter	$oNa10= 0.0* yNa_0 + 1.0*yNa_{10} = 0.79(2)$						
Site	Na 1	0.0	0.50	0.25	occ (oNa_10)	0.79(2)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_10)	0.21(2)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1014(7)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	NaNH2						
Space Group	Fddd						
Scale	0.00000000(5)						
Lattice Parameter	a = 8.95853(2) Å						
	b = 10.4344(3) Å						
	c = 8.07177(2) Å						
Site	Na 1	0.0	0.14841	0.0	occ	1	b_{eq} 2.6283
Site	N	0.0	0.0	0.23425	occ	1	b_{eq} 3.2183
Site	H 1	0.05938	0.95625	0.29968	occ	1	b_{eq} 2.7556

x = 0.5

R_ expected	4.521	R_ expected'	9.452
R_weighted pattern	14.989	R_weighted pattern'	31.342
R_Pattern	9.839	R_Pattern'	28.861
Weighted_Durbin_Watson	7.430		
Goodness of fit	3.316		

LiNH2_00 – LiNH2_10 Lattice Parameter	$aLi_0 = 5.03701(3)$ Å
LiNH2_00 – LiNH2_10 Lattice Parameter	$aLi_{10} = 5.04195(6)$ Å
LiNH2_00 – LiNH2_10 Lattice Parameter	$cLi_0 = 10.25577(3)$ Å
LiNH2_00 – LiNH2_10 Lattice Parameter	$cLi_{10} = 10.3311(2)$ Å
LiNH2_00 – LiNH2_10 Occ. Parameter	$yLi_0 = 0.987(3)$
LiNH2_00 – LiNH2_10 Occ. Parameter	$yLi_{10} = 0.95(1)$

Phase Name	LiNH2_00

Space Group	I – 4					
Scale	0.000001(1)					
Lattice Parameter	$a = b = a\_liam\_00 = 1.0*aLi_0 + 0.0*aLi_{10} = 5.03701(3)$ Å					
	$c = c\_liam\_00 = 1.0*cLi_0 + 0.0*cLi_{10} = 10.25577(3)$ Å					
Occupancy Parameter	$oLi00 = 1.0* yLi_0 + 0.0*yLi_{10} = 0.987(3)$					
Site	Li 1	0.0	0.0	0.0	occ	1	$b_{eq}= 0.95(1)$
Site	Li 2	0.0	0.5	-0.25	occ (oLi00)	0.987(3)	$b_{eq}= 3.0(1)$
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi00)	0.013(3)	$b_{eq}= 3.0(1)$
Site	Li 3	0.0	0.5	0.00620	occ	1	$b_{eq}= 0.95(1)$
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	$b_{eq}= 0.95(1)$
Site	H 1	-0.226	-0.149	-0.172	occ	1	$b_{eq}= 0.95(1)$
Site	H 2	-0.308	-0.359	-0.114	occ	1	$b_{eq}= 0.95(1)$

Phase Name	LiNH2_01					
Space Group	I – 4					
Scale	0.000001(1)					
Lattice Parameter	$a = b = a\_liam\_01 = 0.9*aLi_0 + 0.1*aLi_{10} = 5.03750(2)$Å					
	$c = c\_liam\_01 = 0.9*cLi_0 + 0.1*cLi_{10} = 10.26342(5)$Å					
Occupancy Parameter	$oLi01= 0.9* yLi_0 + 0.1*yLi_{10} = 0.987(3)$					
Site	Li 1	0.0	0.0	0.0	occ	1	$b_{eq}= 0.95(1)$
Site	Li 2	0.0	0.5	-0.25	occ (oLi01)	0.987(3)	$b_{eq}= 3.0(1)$
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi01)	0.017(3)	$b_{eq}= 3.0(1)$
Site	Li 3	0.0	0.5	0.00620	occ	1	$b_{eq}= 0.95(1)$
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	$b_{eq}= 0.95(1)$
Site	H 1	-0.226	-0.149	-0.172	occ	1	$b_{eq}= 0.95(1)$
Site	H 2	-0.308	-0.359	-0.114	occ	1	$b_{eq}= 0.95(1)$

Phase Name	LiNH2_02					
Space Group	I – 4					
Scale	0.000001(1)					
Lattice Parameter	$a = b = a\_liam\_02 = 0.8*aLi_{10} + 0.2*aLi_0 = 5.03800(2)$Å					
	$c = c\_liam\_02 = 0.8*cLi_0 + 0.2*cLi_{10} = 10.27106(6)$Å					
Occupancy Parameter	$oLi02= 0.8* yLi_0 + 0.2*yLi_{10} = 0.979(5)$					
Site	Li 1	0.0	0.0	0.0	occ	1	$b_{eq}= 0.95(1)$
Site	Li 2	0.0	0.5	-0.25	occ (oLi02)	0.979(5)	$b_{eq}= 3.0(1)$
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi02)	0.021(5)	$b_{eq}= 3.0(1)$
Site	Li 3	0.0	0.5	0.00620	occ	1	$b_{eq}= 0.95(1)$
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	$b_{eq}= 0.95(1)$
Site	H 1	-0.226	-0.149	-0.172	occ	1	$b_{eq}= 0.95(1)$

Site	H 2	-0.308	-0.359	-0.114	occ	1	$b_{eq}= 0.95(1)$

Phase Name	LiNH2_03						
Space Group	I – 4						
Scale	0.000001(1)						
Lattice Parameter	$a = b = a\_liam\_03 = 0.7*aLi_0 + 0.3*aLi_{10} = 5.03849(3)$ Å						
	$c = c\_liam\_03 = 0.7*cLi_0 + 0.3*cLi_{10} = 10.27871(8)$Å						
Occupancy Parameter	$oLi03= 0.7* yLi_0 + 0.3*yLi_{10} = 0.975(6)$						
Site	Li 1	0.0	0.0	0.0	occ	1	$b_{eq}= 0.95(1)$
Site	Li 2	0.0	0.5	-0.25	occ (oLi07)	0.975(6)	$b_{eq}= 3.0(1)$
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi07)	0.025(6)	$b_{eq}= 3.0(1)$
Site	Li 3	0.0	0.5	0.00620	occ	1	$b_{eq}= 0.95(1)$
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	$b_{eq}= 0.95(1)$
Site	H 1	-0.226	-0.149	-0.172	occ	1	$b_{eq}= 0.95(1)$
Site	H 2	-0.308	-0.359	-0.114	occ	1	$b_{eq}= 0.95(1)$

Phase Name	LiNH2_04						
Space Group	I – 4						
Scale	0.000001(1)						
Lattice Parameter	$a = b = a\_liam\_04 = 0.6*aLi_0 + 0.4*aLi_{10} = 5.03899(3)$Å						
	$c = c\_liam\_04 = 0.6*cLi_0 + 0.4*cLi_{10} = 10.28635(9)$Å						
Occupancy Parameter	$oLi04= 0.6* yLi_0 + 0.4*yLi_{10} = 0.972(7)$						
Site	Li 1	0.0	0.0	0.0	occ	1	$b_{eq}= 0.95(1)$
Site	Li 2	0.0	0.5	-0.25	occ (oLi04)	0.972(7)	$b_{eq}= 3.0(1)$
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi04)	0.028(7)	$b_{eq}= 3.0(1)$
Site	Li 3	0.0	0.5	0.00620	occ	1	$b_{eq}= 0.95(1)$
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	$b_{eq}= 0.95(1)$
Site	H 1	-0.226	-0.149	-0.172	occ	1	$b_{eq}= 0.95(1)$
Site	H 2	-0.308	-0.359	-0.114	occ	1	$b_{eq}= 0.95(1)$

Phase Name	LiNH2_05						
Space Group	I – 4						
Scale	0.000001(1)						
Lattice Parameter	$a = b = a\_liam\_05 = 0.5*aLi_0 + 0.5*aLi_{10} = 5.03948(4)$Å						
	$c = c\_liam\_05 = 0.5*cLi_0 + 0.5*cLi_{10} = 10.2940(1)$Å						
Occupancy Parameter	$oLi05= 0.5* yLi_0 + 0.5*yLi_{10} = 0.968(8)$						
Site	Li 1	0.0	0.0	0.0	occ	1	$b_{eq}= 0.95(1)$
Site	Li 2	0.0	0.5	-0.25	occ (oLi05)	0.968(8)	$b_{eq}= 3.0(1)$
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi05)	0.032(8)	$b_{eq}= 3.0(1)$

Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_06						
Space Group	I – 4						
Scale	0.000001(1)						
Lattice Parameter	a = b = a_liam_06 = $0.4*aLi_0 + 0.6*aLi_{10}$ = 5.03997(4)Å						
	c = c_liam_06 = $0.4*cLi_0 + 0.6*cLi_{10}$ = 10.3016(1)Å						
Occupancy Parameter	oLi06= $0.4* yLi_0 + 0.6*yLi_{10}$ = 0.964(9)						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi06)	0.964(9)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi06)	0.036(9)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_07						
Space Group	I – 4						
Scale	0.000001(1)						
Lattice Parameter	a = b = a_liam_07 = $0.3*aLi_0 + 0.7*aLi_{10}$ = 5.04047(5)Å						
	c = c_liam_07 = $0.3*cLi_0 + 0.7*cLi_{10}$ = 10.3093(1)Å						
Occupancy Parameter	oLi07= $0.3* yLi_0 + 0.7*yLi_{10}$ = 0.96(1)						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi07)	0.96(1)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi07)	0.040(1)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_08						
Space Group	I – 4						
Scale	0.000001(1)						
Lattice Parameter	a = b = a_liam_08 = $0.2*aLi_0 + 0.8*aLi_{10}$ =5.04096(5) Å						
	c = c_liam_08 = $0.2*cLi_0 + 0.8*cLi_{10}$ = 10.3169(2)Å						
Occupancy Parameter	oLi08= $0.2* yLi_0 + 0.8*yLi_{10}$ = 0.96(1)						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ	0.96(1)	b_{eq}= 3.0(1)

					(oLi08)		
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi08)	0.04(1)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_09						
Space Group	I – 4						
Scale	0.000001(1)						
Lattice Parameter	a = b = a_liam_09 = 0.1*aLi$_0$ + 0.9*aLi$_{10}$ = 5.04146(6)Å						
	c = c_liam_09 = 0.1*cLi$_0$ + 0.9*cLi$_{10}$ = 10.3246(2)Å						
Occupancy Parameter	oLi09= 0.1* yLi$_0$ + 0.9*yLi$_{10}$ = 0.95(1)						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi09)	0.95(1)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi09)	0.05(1)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_10						
Space Group	I – 4						
Scale	0.000001(1)						
Lattice Parameter	a = b = a_liam_10 = 0.0*aLi$_0$ + 1.0*aLi$_{10}$ = 5.04195(6)Å						
	c = c_liam_10 = 0.0*cLi$_0$ + 1.0*cLi$_{10}$ = 10.3311(2)Å						
Occupancy Parameter	oLi10= 0.0* yLi$_0$ + 1.0*yLi$_{10}$ = 0.95(1)						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi10)	0.95(1)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi10)	0.05(1)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	Li2O						
Space Group	Fm3m						
Scale	0.000277(5)						
Lattice Parameter	a = b = c = 4.61589(5) Å						
Site	Li	0.25	0.25	0.25	occ	1	b_{eq} = 0.9148
Site	O	0.0	0.0	0.0	occ	1	b_{eq} = 0.8

Phase Name		LiNa2(NH2)3					
Space Group		P42/m					
Scale		0.0002494(7)					
Lattice Parameter		a = b = 6.2838(1)Å					
		c = 11.1485(2)Å					
Site	N 1	0.66317	0.27595	0.0	occ	1	b_{eq} = 1.5810
Site	H 1	0.73697	0.29827	0.056	occ	1	b_{eq} = 1.5810
Site	N 2	0.20732	0.27336	0.15765	occ	1	b_{eq} = 1.5810
Site	H 2	0.16362	0.18116	0.21186	occ	1	b_{eq} = 1.5810
Site	H 3	0.10362	0.32316	0.14126	occ	1	b_{eq} = 1.5810
Site	Na 1	0.50	0.0	0.14216	occ	1	b_{eq} = 2.2740
Site	Na 2	0.0	0.0	0.0	occ	1	b_{eq} = 2.2740
Site	Na 3	0.50	0.50	0.25	occ	1	b_{eq} = 2.2740
Site	Li 1	0.35356	0.36094	0.0	occ	1	b_{eq} = 2.0455

Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	a_0 = 5.0828(4)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	a_{10} = 5.0700(2)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	c_0 = 11.5415(2)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	c_{10} = 11.2562(9)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	z_N_0 = 0.0997(2)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	z_N_{10} = 0.1014(7)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Occ. Parameter	yNa_0 = 0.938(7)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Occ. Parameter	yNa_{10} = 0.79(2)

Phase Name			Li3Na(NH2)4_00				
Space Group			I – 4				
Scale			0.000000(1)				
Lattice Parameter			a = b = a_00 = 1.0*a_0 + 0.0*a_{10} = 5.08280(4)Å				
			c = c_00 = 1.0*c_0 + 0.0*c_{10} = 11.5415(2)Å				
Nitrogen Z Coordinate			$z\_N = z\_N_0$ = 1.0* z_N_0 + 0.0* z_N_{10} = 0.0997(2)				
Occupancy Parameter			oNa00= 1.0* yNa_0 + 0.0*yNa_{10} = 0.938(7)				
Site	Na 1	0.0	0.50	0.25	occ (oNa_00)	0.983(7)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_00)	0.062(7)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.0997(2)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_01
Space Group	I – 4
Scale	0.000179(3)
Lattice Parameter	a = b = a_01 = 0.9*a_0 + 0.1*a_{10} = 5.08152(6)Å
	c = c_01 = 0.9*c_0 + 0.1*c_{10} = 11.5130(3) Å
Nitrogen Z Coordinate	$z\_N = z\_N_0$ = 0.9* z_N_0 + 0.1* z_N_{10} = 0.0998(3)
Occupancy Parameter	oNa01= 0.9* yNa_0 + 0.1*yNa_{10} = 0.923(8)

Site	Na 1	0.0	0.50	0.25	occ (oNa_01)	0.923(8)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_01)	0.077(8)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.0998(3)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_02						
Space Group	I – 4						
Scale	0.000010(2)						
Lattice Parameter	$a = b = a\_02 = 0.8*a_{10} + 0.2*a_{10} = 5.08024(7)$Å						
	$c = c\_02 = 0.8*c_{10} + 0.2*c_{10} = 11.4844(3)$ Å						
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.8* z\_N_0 + 0.2* z\_N_{10} = 0.1000(3)$						
Occupancy Parameter	$oNa02 = 0.8* yNa_0 + 0.2*yNa_{10} = 0.91(1)$						
Site	Na 1	0.0	0.50	0.25	occ (oNa_02)	0.91(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_02)	0.09(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1000(3)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_03						
Space Group	I – 4						
Scale	0.000008(1)						
Lattice Parameter	$a = b = a\_03 = 0.7*a_{10} + 0.3*a_{10} = 5.07896(9)$ Å						
	$c = c\_03 = 0.7*c_{10} + 0.3*c_{10} = 11.4559(4)$ Å						
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.7* z\_N_0 + 0.3* z\_N_{10} = 0.1002(4)$						
Occupancy Parameter	$oNa03 = 0.7* yNa_0 + 0.3*yNa_{10} = 0.89(1)$						
Site	Na 1	0.0	0.50	0.25	occ (oNa_03)	0.89(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_03)	0.11(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1002(4)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_04						
Space Group	I – 4						
Scale	0.000002(1)						
Lattice Parameter	$a = b = a\_04 = 0.6*a_{10} + 0.4*a_{10} = 5.0777(1)$Å						
	$c = c\_04 = 0.6*c_{10} + 0.4*c_{10} = 11.4274(5)$Å						
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.6* z\_N_0 + 0.4* z\_N_{10} = 0.1003(4)$						
Occupancy Parameter	$oNa04 = 0.6* yNa_0 + 0.4*yNa_{10} = 0.88(1)$						
Site	Na 1	0.0	0.50	0.25	occ (oNa_04)	0.88(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_04)	0.12(1)	b_{eq} 2.2484

Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1003(4)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_05						
Space Group	I – 4						
Scale	0.000003(1)						
Lattice Parameter	$a = b = a\_05 = 0.5*a_{10} + 0.5*a_{10} = 5.0764(1)$Å						
	$c = c\_05 = 0.5*c_{10} + 0.5*c_{10} = 11.3989(6)$Å						
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.5* z\_N_0 + 0.5* z\_N_{10} = 0.1005(5)$						
Occupancy Parameter	$oNa05 = 0.5* yNa_0 + 0.5*yNa_{10} = 0.87(1)$						
Site	Na 1	0.0	0.50	0.25	occ (oNa_05)	0.87(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_05)	0.13(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1005(5)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_06						
Space Group	I – 4						
Scale	0.000000(1)						
Lattice Parameter	$a = b = a\_06 = 0.4*a_{10} + 0.6*a_{10} = 5.0751(1)$Å						
	$c = c\_06 = 0.4*c_{10} + 0.6*c_{10} = 11.3703(6)$Å						
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.4* z\_N_0 + 0.6* z\_N_{10} = 0.1007(5)$						
Occupancy Parameter	$oNa06 = 0.4* yNa_0 + 0.6*yNa_{10} = 0.85(1)$						
Site	Na 1	0.0	0.50	0.25	occ (oNa_06)	0.85(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_06)	0.15(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1007(5)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_07						
Space Group	I – 4						
Scale	0.000001(1)						
Lattice Parameter	$a = b = a\_07 = 0.3*a_{10} + 0.7*a_{10} = 5.0738(2)$Å						
	$c = c\_07 = 0.3*c_{10} + 0.7*c_{10} = 11.3418(7)$Å						
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.3* z\_N_0 + 0.7* z\_N_{10} = 0.1008(6)$						
Occupancy Parameter	$oNa07 = 0.3* yNa_0 + 0.7*yNa_{10} = 0.83(2)$						
Site	Na 1	0.0	0.50	0.25	occ (oNa_07)	0.83(2)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_07)	0.17(2)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484

Site	N	0.2390(7)	0.2390(9)	0.1008(6)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_08					
Space Group	I – 4					
Scale	0.000001(1)					
Lattice Parameter	$a = b = a\_08 = 0.2*a_{10} + 0.8*a_{10} = 5.0726(2)$Å					
	$c = c\_08 = 0.2*c_{10} + 0.8*c_{10} = 11.3133(8)$Å					
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.2* z\_N_0 + 0.8* z\_N_{10} = 0.1010(6)$					
Occupancy Parameter	$oNa08= 0.2* yNa_0 + 0.8*yNa_{10} = 0.82(2)$					
Site	Na 1	0.0	0.50	0.25	occ (oNa_08)	0.82(2)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_08)	0.18(2)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1010(6)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_09					
Space Group	I – 4					
Scale	0.000000(1)					
Lattice Parameter	$a = b = a\_09 = 0.1*a_{10} + 0.9*a_{10} = 5.0713(2)$Å					
	$c = c\_09 = 0.1*c_{10} + 0.9*c_{10} = 11.2847(8)$Å					
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.1* z\_N_0 + 0.9* z\_N_{10} = 0.1012(7)$					
Occupancy Parameter	$oNa09= 0.1* yNa_0 + 0.9*yNa_{10} = 0.81(2)$					
Site	Na 1	0.0	0.50	0.25	occ (oNa_09)	0.81(2)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_09)	0.19(2)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1012(7)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_10					
Space Group	I – 4					
Scale	0.000001(1)					
Lattice Parameter	$a = b = a\_10 = 0.0*a_{10} + 1.0*a_{10} = 5.0700(2)$Å					
	$c = c\_10 = 0.0*c_{10} + 1.0*c_{10} = 11.2562(9)$Å					
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.0* z\_N_0 + 1.0* z\_N_{10} = 0.1014(7)$					
Occupancy Parameter	$oNa10= 0.0* yNa_0 + 1.0*yNa_{10} = 0.79(2)$					
Site	Na 1	0.0	0.50	0.25	occ (oNa_10)	0.79(2)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_10)	0.21(2)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1014(7)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484

Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	NaNH2						
Space Group	Fddd						
Scale	0.00000000(4)						
Lattice Parameter	a = 8.95853(2) Å						
	b = 10.4344(3) Å						
	c = 8.07177(2) Å						
Site	Na 1	0.0	0.14841	0.0	occ	1	b_{eq} 2.6283
Site	N	0.0	0.0	0.23425	occ	1	b_{eq} 3.2183
Site	H 1	0.05938	0.95625	0.29968	occ	1	b_{eq} 2.7556

x = 0.417

R_ expected	4.521	R_ expected'	9.452
R_weighted pattern	14.989	R_weighted pattern'	31.342
R_Pattern	9.839	R_Pattern'	28.861
Weighted_Durbin_Watson	7.430		
Goodness of fit	3.316		

LiNH2_00 – LiNH2_10 Lattice Parameter	aLi_0 = 5.03701(3) Å
LiNH2_00 – LiNH2_10 Lattice Parameter	aLi_{10} = 5.04195(6) Å
LiNH2_00 – LiNH2_10 Lattice Parameter	cLi_0 = 10.25577(3) Å
LiNH2_00 – LiNH2_10 Lattice Parameter	cLi_{10} = 10.3311(2) Å
LiNH2_00 – LiNH2_10 Occ. Parameter	yLi_0 = 0.987(3)
LiNH2_00 – LiNH2_10 Occ. Parameter	yLi_{10} = 0.95(1)

Phase Name	LiNH2_00						
Space Group	I – 4						
Scale	0.000001(1)						
Lattice Parameter	a = b = a_liam_00 = $1.0*aLi_0 + 0.0*aLi_{10}$ = 5.03701(3) Å						
	c = c_liam_00 = $1.0*cLi_0 + 0.0*cLi_{10}$ = 10.25577(3) Å						
Occupancy Parameter	oLi00 = $1.0* yLi_0 + 0.0*yLi_{10}$ = 0.987(3)						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi00)	0.987(3)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi00)	0.013(3)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_01
Space Group	I – 4
Scale	0.000001(1)

Lattice Parameter		$a = b = a\_liam\_01 = 0.9*aLi_0 + 0.1*aLi_{10} = 5.03750(2)$Å					
		$c = c\_liam\_01 = 0.9*cLi_0 + 0.1*cLi_{10} = 10.26342(5)$Å					
Occupancy Parameter		$oLi01 = 0.9* yLi_0 + 0.1*yLi_{10} = 0.987(3)$					
Site	Li 1	0.0	0.0	0.0	occ	1	$b_{eq}= 0.95(1)$
Site	Li 2	0.0	0.5	-0.25	occ (oLi01)	0.987(3)	$b_{eq}= 3.0(1)$
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi01)	0.017(3)	$b_{eq}= 3.0(1)$
Site	Li 3	0.0	0.5	0.00620	occ	1	$b_{eq}= 0.95(1)$
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	$b_{eq}= 0.95(1)$
Site	H 1	-0.226	-0.149	-0.172	occ	1	$b_{eq}= 0.95(1)$
Site	H 2	-0.308	-0.359	-0.114	occ	1	$b_{eq}= 0.95(1)$

Phase Name		LiNH2_02					
Space Group		I – 4					
Scale		0.000001(1)					
Lattice Parameter		$a = b = a\_liam\_02 = 0.8*aLi_{10} + 0.2*aLi_0 = 5.03800(2)$Å					
		$c = c\_liam\_02 = 0.8*cLi_0 + 0.2*cLi_{10} = 10.27106(6)$Å					
Occupancy Parameter		$oLi02 = 0.8* yLi_0 + 0.2*yLi_{10} = 0.979(5)$					
Site	Li 1	0.0	0.0	0.0	occ	1	$b_{eq}= 0.95(1)$
Site	Li 2	0.0	0.5	-0.25	occ (oLi02)	0.979(5)	$b_{eq}= 3.0(1)$
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi02)	0.021(5)	$b_{eq}= 3.0(1)$
Site	Li 3	0.0	0.5	0.00620	occ	1	$b_{eq}= 0.95(1)$
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	$b_{eq}= 0.95(1)$
Site	H 1	-0.226	-0.149	-0.172	occ	1	$b_{eq}= 0.95(1)$
Site	H 2	-0.308	-0.359	-0.114	occ	1	$b_{eq}= 0.95(1)$

Phase Name		LiNH2_03					
Space Group		I – 4					
Scale		0.000001(1)					
Lattice Parameter		$a = b = a\_liam\_03 = 0.7*aLi_0 + 0.3*aLi_{10} = 5.03849(3)$ Å					
		$c = c\_liam\_03 = 0.7*cLi_0 + 0.3*cLi_{10} = 10.27871(8)$Å					
Occupancy Parameter		$oLi03 = 0.7* yLi_0 + 0.3*yLi_{10} = 0.975(6)$					
Site	Li 1	0.0	0.0	0.0	occ	1	$b_{eq}= 0.95(1)$
Site	Li 2	0.0	0.5	-0.25	occ (oLi07)	0.975(6)	$b_{eq}= 3.0(1)$
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi07)	0.025(6)	$b_{eq}= 3.0(1)$
Site	Li 3	0.0	0.5	0.00620	occ	1	$b_{eq}= 0.95(1)$
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	$b_{eq}= 0.95(1)$
Site	H 1	-0.226	-0.149	-0.172	occ	1	$b_{eq}= 0.95(1)$
Site	H 2	-0.308	-0.359	-0.114	occ	1	$b_{eq}= 0.95(1)$

Phase Name	LiNH2_04					
Space Group	I – 4					
Scale	0.000001(1)					
Lattice Parameter	$a = b = a\_liam\_04 = 0.6*aLi_0 + 0.4*aLi_{10} = 5.03899(3)$Å					
	$c = c\_liam\_04 = 0.6*cLi_0 + 0.4*cLi_{10} = 10.28635(9)$Å					
Occupancy Parameter	$oLi04 = 0.6* yLi_0 + 0.4*yLi_{10} = 0.972(7)$					
Site	Li 1	0.0	0.0	0.0	occ	1	$b_{eq}= 0.95(1)$
Site	Li 2	0.0	0.5	-0.25	occ (oLi04)	0.972(7)	$b_{eq}= 3.0(1)$
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi04)	0.028(7)	$b_{eq}= 3.0(1)$
Site	Li 3	0.0	0.5	0.00620	occ	1	$b_{eq}= 0.95(1)$
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	$b_{eq}= 0.95(1)$
Site	H 1	-0.226	-0.149	-0.172	occ	1	$b_{eq}= 0.95(1)$
Site	H 2	-0.308	-0.359	-0.114	occ	1	$b_{eq}= 0.95(1)$

Phase Name	LiNH2_05					
Space Group	I – 4					
Scale	0.000001(1)					
Lattice Parameter	$a = b = a\_liam\_05 = 0.5*aLi_0 + 0.5*aLi_{10} = 5.03948(4)$Å					
	$c = c\_liam\_05 = 0.5*cLi_0 + 0.5*cLi_{10} = 10.2940(1)$Å					
Occupancy Parameter	$oLi05 = 0.5* yLi_0 + 0.5*yLi_{10} = 0.968(8)$					
Site	Li 1	0.0	0.0	0.0	occ	1	$b_{eq}= 0.95(1)$
Site	Li 2	0.0	0.5	-0.25	occ (oLi05)	0.968(8)	$b_{eq}= 3.0(1)$
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi05)	0.032(8)	$b_{eq}= 3.0(1)$
Site	Li 3	0.0	0.5	0.00620	occ	1	$b_{eq}= 0.95(1)$
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	$b_{eq}= 0.95(1)$
Site	H 1	-0.226	-0.149	-0.172	occ	1	$b_{eq}= 0.95(1)$
Site	H 2	-0.308	-0.359	-0.114	occ	1	$b_{eq}= 0.95(1)$

Phase Name	LiNH2_06					
Space Group	I – 4					
Scale	0.000001(1)					
Lattice Parameter	$a = b = a\_liam\_06 = 0.4*aLi_0 + 0.6*aLi_{10} = 5.03997(4)$Å					
	$c = c\_liam\_06 = 0.4*cLi_0 + 0.6*cLi_{10} = 10.3016(1)$Å					
Occupancy Parameter	$oLi06 = 0.4* yLi_0 + 0.6*yLi_{10} = 0.964(9)$					
Site	Li 1	0.0	0.0	0.0	occ	1	$b_{eq}= 0.95(1)$
Site	Li 2	0.0	0.5	-0.25	occ (oLi06)	0.964(9)	$b_{eq}= 3.0(1)$
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi06)	0.036(9)	$b_{eq}= 3.0(1)$
Site	Li 3	0.0	0.5	0.00620	occ	1	$b_{eq}= 0.95(1)$
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	$b_{eq}= 0.95(1)$

Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_07						
Space Group	I – 4						
Scale	0.000001(1)						
Lattice Parameter	a = b = a_liam_07 = $0.3*aLi_0 + 0.7*aLi_{10}$ = 5.04047(5)Å						
	c = c_liam_07 = $0.3*cLi_0 + 0.7*cLi_{10}$ = 10.3093(1)Å						
Occupancy Parameter	oLi07= $0.3* yLi_0 + 0.7*yLi_{10}$ = 0.96(1)						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi07)	0.96(1)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi07)	0.040(1)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_08						
Space Group	I – 4						
Scale	0.000001(1)						
Lattice Parameter	a = b = a_liam_08 = $0.2*aLi_0 + 0.8*aLi_{10}$ =5.04096(5) Å						
	c = c_liam_08 = $0.2*cLi_0 + 0.8*cLi_{10}$ = 10.3169(2)Å						
Occupancy Parameter	oLi08= $0.2* yLi_0 + 0.8*yLi_{10}$ = 0.96(1)						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi08)	0.96(1)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi08)	0.04(1)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_09						
Space Group	I – 4						
Scale	0.000001(1)						
Lattice Parameter	a = b = a_liam_09 = $0.1*aLi_0 + 0.9*aLi_{10}$ = 5.04146(6)Å						
	c = c_liam_09 = $0.1*cLi_0 + 0.9*cLi_{10}$ = 10.3246(2)Å						
Occupancy Parameter	oLi09= $0.1* yLi_0 + 0.9*yLi_{10}$ = 0.95(1)						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi09)	0.95(1)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-	0.05(1)	b_{eq}= 3.0(1)

					oLi09)		
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_10						
Space Group	I – 4						
Scale	0.000001(1)						
Lattice Parameter	a = b = a_liam_10 = 0.0*aLi$_0$ + 1.0*aLi$_{10}$ = 5.04195(6)Å						
	c = c_liam_10 = 0.0*cLi$_0$ + 1.0*cLi$_{10}$ = 10.3311(2)Å						
Occupancy Parameter	oLi10= 0.0* yLi$_0$ + 1.0*yLi$_{10}$ = 0.95(1)						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi10)	0.95(1)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi10)	0.05(1)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	Li2O						
Space Group	Fm3m						
Scale	0.000351(5)						
Lattice Parameter	a = b = c = 4.61589(5) Å						
Site	Li	0.25	0.25	0.25	occ	1	b_{eq} = 0.9148
Site	O	0.0	0.0	0.0	occ	1	b_{eq} = 0.8

Phase Name	LiNa2(NH2)3						
Space Group	P42/m						
Scale	0.000383(1)						
Lattice Parameter	a = b = 6.2838(1)Å						
	c = 11.1485(2)Å						
Site	N 1	0.66317	0.27595	0.0	occ	1	b_{eq} = 1.5810
Site	H 1	0.73697	0.29827	0.056	occ	1	b_{eq} = 1.5810
Site	N 2	0.20732	0.27336	0.15765	occ	1	b_{eq} = 1.5810
Site	H 2	0.16362	0.18116	0.21186	occ	1	b_{eq} = 1.5810
Site	H 3	0.10362	0.32316	0.14126	occ	1	b_{eq} = 1.5810
Site	Na 1	0.50	0.0	0.14216	occ	1	b_{eq} = 2.2740
Site	Na 2	0.0	0.0	0.0	occ	1	b_{eq} = 2.2740
Site	Na 3	0.50	0.50	0.25	occ	1	b_{eq} = 2.2740
Site	Li 1	0.35356	0.36094	0.0	occ	1	b_{eq} = 2.0455

Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	a_0 = 5.0828(4)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	a_{10} = 5.0700(2)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	c_0 = 11.5415(2)

Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	$c_{10} = 11.2562(9)$
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	$z\_N_0 = 0.0997(2)$
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	$z\_N_{10} = 0.1014(7)$
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Occ. Parameter	$yNa_0 = 0.938(7)$
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Occ. Parameter	$yNa_{10} = 0.79(2)$

Phase Name			Li3Na(NH2)4_00			
Space Group			$I-4$			
Scale			0.000010(1)			
Lattice Parameter			$a = b = a\_00 = 1.0*a_0 + 0.0*a_{10} = 5.08280(4)$Å			
			$c = c\_00 = 1.0*c_0 + 0.0*c_{10} = 11.5415(2)$Å			
Nitrogen Z Coordinate			$z\_N = z\_N_0 = 1.0* z\_N_0 + 0.0* z\_N_{10} = 0.0997(2)$			
Occupancy Parameter			$oNa00 = 1.0* yNa_0 + 0.0*yNa_{10} = 0.938(7)$			
Site	Na 1	0.0	0.50	0.25	occ (oNa_00)	0.983(7)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_00)	0.062(7)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.0997(2)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name			Li3Na(NH2)4_01			
Space Group			$I-4$			
Scale			0.000151(3)			
Lattice Parameter			$a = b = a\_01 = 0.9*a_0 + 0.1*a_{10} = 5.08152(6)$Å			
			$c = c\_01 = 0.9*c_0 + 0.1*c_{10} = 11.5130(3)$ Å			
Nitrogen Z Coordinate			$z\_N = z\_N_0 = 0.9* z\_N_0 + 0.1* z\_N_{10} = 0.0998(3)$			
Occupancy Parameter			$oNa01 = 0.9* yNa_0 + 0.1*yNa_{10} = 0.923(8)$			
Site	Na 1	0.0	0.50	0.25	occ (oNa_01)	0.923(8)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_01)	0.077(8)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.0998(3)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name			Li3Na(NH2)4_02			
Space Group			$I-4$			
Scale			0.000000(2)			
Lattice Parameter			$a = b = a\_02 = 0.8*a_{10} + 0.2*a_{10} = 5.08024(7)$Å			
			$c = c\_02 = 0.8*c_{10} + 0.2*c_{10} = 11.4844(3)$ Å			
Nitrogen Z Coordinate			$z\_N = z\_N_0 = 0.8* z\_N_0 + 0.2* z\_N_{10} = 0.1000(3)$			
Occupancy Parameter			$oNa02 = 0.8* yNa_0 + 0.2*yNa_{10} = 0.91(1)$			
Site	Na 1	0.0	0.50	0.25	occ (oNa_02)	0.91(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_02)	0.09(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484

Site	N	0.2390(7)	0.2390(9)	0.1000(3)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_03						
Space Group	I – 4						
Scale	0.000006(1)						
Lattice Parameter	$a = b = a\_03 = 0.7*a_{10} + 0.3*a_{10} = 5.07896(9)$ Å						
	$c = c\_03 = 0.7*c_{10} + 0.3*c_{10} = 11.4559(4)$ Å						
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.7* z\_N_0 + 0.3* z\_N_{10} = 0.1002(4)$						
Occupancy Parameter	$oNa03 = 0.7* yNa_0 + 0.3*yNa_{10} = 0.89(1)$						
Site	Na 1	0.0	0.50	0.25	occ (oNa_03)	0.89(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_03)	0.11(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1002(4)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_04						
Space Group	I – 4						
Scale	0.000002(1)						
Lattice Parameter	$a = b = a\_04 = 0.6*a_{10} + 0.4*a_{10} = 5.0777(1)$Å						
	$c = c\_04 = 0.6*c_{10} + 0.4*c_{10} = 11.4274(5)$Å						
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.6* z\_N_0 + 0.4* z\_N_{10} = 0.1003(4)$						
Occupancy Parameter	$oNa04 = 0.6* yNa_0 + 0.4*yNa_{10} = 0.88(1)$						
Site	Na 1	0.0	0.50	0.25	occ (oNa_04)	0.88(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_04)	0.12(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1003(4)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_05						
Space Group	I – 4						
Scale	0.000001(1)						
Lattice Parameter	$a = b = a\_05 = 0.5*a_{10} + 0.5*a_{10} = 5.0764(1)$Å						
	$c = c\_05 = 0.5*c_{10} + 0.5*c_{10} = 11.3989(6)$Å						
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.5* z\_N_0 + 0.5* z\_N_{10} = 0.1005(5)$						
Occupancy Parameter	$oNa05 = 0.5* yNa_0 + 0.5*yNa_{10} = 0.87(1)$						
Site	Na 1	0.0	0.50	0.25	occ (oNa_05)	0.87(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_05)	0.13(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1005(5)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484

Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_06						
Space Group	I – 4						
Scale	0.000000(1)						
Lattice Parameter	a = b = a_ 06 = $0.4*a_{10} + 0.6*a_{10}$ = 5.0751(1)Å						
	c = c_ 06 = $0.4*c_{10} + 0.6*c_{10}$ = 11.3703(6)Å						
Nitrogen Z Coordinate	z_N = z_N_0 = $0.4* z\_N_0 + 0.6* z\_N_{10}$ = 0.1007(5)						
Occupancy Parameter	oNa06= $0.4* yNa_0 + 0.6*yNa_{10}$ = 0.85(1)						
Site	Na 1	0.0	0.50	0.25	occ (oNa_06)	0.85(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_06)	0.15(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1007(5)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_07						
Space Group	I – 4						
Scale	0.000000(1)						
Lattice Parameter	a = b = a_ 07 = $0.3*a_{10} + 0.7*a_{10}$ = 5.0738(2)Å						
	c = c_ 07 = $0.3*c_{10} + 0.7*c_{10}$ = 11.3418(7)Å						
Nitrogen Z Coordinate	z_N = z_N_0 = $0.3* z\_N_0 + 0.7* z\_N_{10}$ = 0.1008(6)						
Occupancy Parameter	oNa07= $0.3* yNa_0 + 0.7*yNa_{10}$ = 0.83(2)						
Site	Na 1	0.0	0.50	0.25	occ (oNa_07)	0.83(2)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_07)	0.17(2)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1008(6)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_08						
Space Group	I – 4						
Scale	0.000000(1)						
Lattice Parameter	a = b = a_ 08 = $0.2*a_{10} + 0.8*a_{10}$ = 5.0726(2)Å						
	c = c_ 08 = $0.2*c_{10} + 0.8*c_{10}$ = 11.3133(8)Å						
Nitrogen Z Coordinate	z_N = z_N_0 = $0.2* z\_N_0 + 0.8* z\_N_{10}$ = 0.1010(6)						
Occupancy Parameter	oNa08= $0.2* yNa_0 + 0.8*yNa_{10}$ = 0.82(2)						
Site	Na 1	0.0	0.50	0.25	occ (oNa_08)	0.82(2)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_08)	0.18(2)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1010(6)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_09					
Space Group	I – 4					
Scale	0.000000(1)					
Lattice Parameter	$a = b = a\_09 = 0.1*a_{10} + 0.9*a_{10} = 5.0713(2)$Å					
	$c = c\_09 = 0.1*c_{10} + 0.9*c_{10} = 11.2847(8)$Å					
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.1* z\_N_0 + 0.9* z\_N_{10} = 0.1012(7)$					
Occupancy Parameter	$oNa09 = 0.1* yNa_0 + 0.9*yNa_{10} = 0.81(2)$					
Site	Na 1	0.0	0.50	0.25	occ (oNa_09)	0.81(2)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_09)	0.19(2)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1012(7)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_10					
Space Group	I – 4					
Scale	0.000000(1)					
Lattice Parameter	$a = b = a\_10 = 0.0*a_{10} + 1.0*a_{10} = 5.0700(2)$Å					
	$c = c\_10 = 0.0*c_{10} + 1.0*c_{10} = 11.2562(9)$Å					
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.0* z\_N_0 + 1.0* z\_N_{10} = 0.1014(7)$					
Occupancy Parameter	$oNa10 = 0.0* yNa_0 + 1.0*yNa_{10} = 0.79(2)$					
Site	Na 1	0.0	0.50	0.25	occ (oNa_10)	0.79(2)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_10)	0.21(2)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1014(7)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	NaNH2					
Space Group	Fddd					
Scale	0.00000000(5)					
Lattice Parameter	$a = 8.95853(2)$ Å					
	$b = 10.4344(3)$ Å					
	$c = 8.07177(2)$ Å					
Site	Na 1	0.0	0.14841	0.0	occ	1	b_{eq} 2.6283
Site	N	0.0	0.0	0.23425	occ	1	b_{eq} 3.2183
Site	H 1	0.05938	0.95625	0.29968	occ	1	b_{eq} 2.7556

x = 0.333

R_expected	4.521	R_expected'	9.452
R_weighted pattern	14.989	R_weighted pattern'	31.342
R_Pattern	9.839	R_Pattern'	28.861
Weighted_Durbin_Watson	7.430		
Goodness of fit	3.316		

LiNH2_00 – LiNH2_10 Lattice Parameter	aLi_0 = 5.03701(3) Å
LiNH2_00 – LiNH2_10 Lattice Parameter	aLi_{10} = 5.04195(6) Å
LiNH2_00 – LiNH2_10 Lattice Parameter	cLi_0 = 10.25577(3) Å
LiNH2_00 – LiNH2_10 Lattice Parameter	cLi_{10} = 10.3311(2) Å
LiNH2_00 – LiNH2_10 Occ. Parameter	yLi_0 = 0.987(3)
LiNH2_00 – LiNH2_10 Occ. Parameter	yLi_{10} = 0.95(1)

Phase Name		LiNH2_00						
Space Group		I – 4						
Scale		0.000001(1)						
Lattice Parameter		a = b = a_liam_00 = $1.0*aLi_0 + 0.0*aLi_{10}$ = 5.03701(3) Å						
		c = c_liam_00 = $1.0*cLi_0 + 0.0*cLi_{10}$ = 10.25577(3) Å						
Occupancy Parameter		oLi00 = $1.0* yLi_0 + 0.0*yLi_{10}$ = 0.987(3)						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)	
Site	Li 2	0.0	0.5	-0.25	occ (oLi00)	0.987(3)	b_{eq}= 3.0(1)	
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi00)	0.013(3)	b_{eq}= 3.0(1)	
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)	
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)	
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)	
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)	

Phase Name		LiNH2_01						
Space Group		I – 4						
Scale		0.000021(2)						
Lattice Parameter		a = b = a_liam_01 = $0.9*aLi_0 + 0.1*aLi_{10}$ = 5.03750(2)Å						
		c = c_liam_01 = $0.9*cLi_0 + 0.1*cLi_{10}$ = 10.26342(5)Å						
Occupancy Parameter		oLi01= $0.9* yLi_0 + 0.1*yLi_{10}$ = 0.987(3)						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)	
Site	Li 2	0.0	0.5	-0.25	occ (oLi01)	0.987(3)	b_{eq}= 3.0(1)	
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi01)	0.017(3)	b_{eq}= 3.0(1)	
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)	
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)	
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)	
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)	

Phase Name	LiNH2_02
Space Group	I – 4
Scale	0.000020(2)
Lattice Parameter	a = b = a_liam_02 = $0.8*aLi_{10} + 0.2*aLi_0$ = 5.03800(2)Å
	c = c_liam_02 = $0.8*cLi_0 + 0.2*cLi_{10}$ = 10.27106(6)Å
Occupancy	oLi02= $0.8* yLi_0 + 0.2*yLi_{10}$ = 0.979(5)

Parameter							
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi02)	0.979(5)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi02)	0.021(5)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_03						
Space Group	I – 4						
Scale	0.000006(2)						
Lattice Parameter	a = b = a_liam_03 = $0.7 \cdot aLi_0 + 0.3 \cdot aLi_{10}$ = 5.03849(3) Å						
	c = c_liam_03 = $0.7 \cdot cLi_0 + 0.3 \cdot cLi_{10}$ = 10.27871(8)Å						
Occupancy Parameter	oLi03= $0.7 \cdot yLi_0 + 0.3 \cdot yLi_{10}$ = 0.975(6)						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi07)	0.975(6)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi07)	0.025(6)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_04						
Space Group	I – 4						
Scale	0.000007(2)						
Lattice Parameter	a = b = a_liam_04 = $0.6 \cdot aLi_0 + 0.4 \cdot aLi_{10}$ = 5.03899(3)Å						
	c = c_liam_04 = $0.6 \cdot cLi_0 + 0.4 \cdot cLi_{10}$ = 10.28635(9)Å						
Occupancy Parameter	oLi04= $0.6 \cdot yLi_0 + 0.4 \cdot yLi_{10}$ = 0.972(7)						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi04)	0.972(7)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi04)	0.028(7)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_05
Space Group	I – 4
Scale	0.000003(2)

Lattice Parameter	$a = b = a\_liam\_05 = 0.5*aLi_0 + 0.5*aLi_{10} = 5.03948(4)$Å					
	$c = c\_liam\_05 = 0.5*cLi_0 + 0.5*cLi_{10} = 10.2940(1)$Å					
Occupancy Parameter	$oLi05 = 0.5* yLi_0 + 0.5*yLi_{10} = 0.968(8)$					
Site	Li 1	0.0	0.0	0.0	occ	1	$b_{eq}= 0.95(1)$
Site	Li 2	0.0	0.5	-0.25	occ (oLi05)	0.968(8)	$b_{eq}= 3.0(1)$
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi05)	0.032(8)	$b_{eq}= 3.0(1)$
Site	Li 3	0.0	0.5	0.00620	occ	1	$b_{eq}= 0.95(1)$
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	$b_{eq}= 0.95(1)$
Site	H 1	-0.226	-0.149	-0.172	occ	1	$b_{eq}= 0.95(1)$
Site	H 2	-0.308	-0.359	-0.114	occ	1	$b_{eq}= 0.95(1)$

Phase Name	LiNH2_06					
Space Group	I – 4					
Scale	0.000004(2)					
Lattice Parameter	$a = b = a\_liam\_06 = 0.4*aLi_0 + 0.6*aLi_{10} = 5.03997(4)$Å					
	$c = c\_liam\_06 = 0.4*cLi_0 + 0.6*cLi_{10} = 10.3016(1)$Å					
Occupancy Parameter	$oLi06 = 0.4* yLi_0 + 0.6*yLi_{10} = 0.964(9)$					
Site	Li 1	0.0	0.0	0.0	occ	1	$b_{eq}= 0.95(1)$
Site	Li 2	0.0	0.5	-0.25	occ (oLi06)	0.964(9)	$b_{eq}= 3.0(1)$
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi06)	0.036(9)	$b_{eq}= 3.0(1)$
Site	Li 3	0.0	0.5	0.00620	occ	1	$b_{eq}= 0.95(1)$
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	$b_{eq}= 0.95(1)$
Site	H 1	-0.226	-0.149	-0.172	occ	1	$b_{eq}= 0.95(1)$
Site	H 2	-0.308	-0.359	-0.114	occ	1	$b_{eq}= 0.95(1)$

Phase Name	LiNH2_07					
Space Group	I – 4					
Scale	0.000004(2)					
Lattice Parameter	$a = b = a\_liam\_07 = 0.3*aLi_0 + 0.7*aLi_{10} = 5.04047(5)$Å					
	$c = c\_liam\_07 = 0.3*cLi_0 + 0.7*cLi_{10} = 10.3093(1)$Å					
Occupancy Parameter	$oLi07 = 0.3* yLi_0 + 0.7*yLi_{10} = 0.96(1)$					
Site	Li 1	0.0	0.0	0.0	occ	1	$b_{eq}= 0.95(1)$
Site	Li 2	0.0	0.5	-0.25	occ (oLi07)	0.96(1)	$b_{eq}= 3.0(1)$
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi07)	0.040(1)	$b_{eq}= 3.0(1)$
Site	Li 3	0.0	0.5	0.00620	occ	1	$b_{eq}= 0.95(1)$
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	$b_{eq}= 0.95(1)$
Site	H 1	-0.226	-0.149	-0.172	occ	1	$b_{eq}= 0.95(1)$
Site	H 2	-0.308	-0.359	-0.114	occ	1	$b_{eq}= 0.95(1)$

Phase Name	LiNH2_08					
Space Group	I – 4					
Scale	0.000002(2)					
Lattice Parameter	a = b = a_liam_08 = $0.2*aLi_0 + 0.8*aLi_{10}$ =5.04096(5) Å					
	c = c_liam_08 = $0.2*cLi_0 + 0.8*cLi_{10}$ = 10.3169(2)Å					
Occupancy Parameter	oLi08= $0.2* yLi_0 + 0.8*yLi_{10}$ = 0.96(1)					
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi08)	0.96(1)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi08)	0.04(1)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_09					
Space Group	I – 4					
Scale	0.000002(1)					
Lattice Parameter	a = b = a_liam_09 = $0.1*aLi_0 + 0.9*aLi_{10}$ = 5.04146(6)Å					
	c = c_liam_09 = $0.1*cLi_0 + 0.9*cLi_{10}$ = 10.3246(2)Å					
Occupancy Parameter	oLi09= $0.1* yLi_0 + 0.9*yLi_{10}$ = 0.95(1)					
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi09)	0.95(1)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi09)	0.05(1)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_10					
Space Group	I – 4					
Scale	0.000003(1)					
Lattice Parameter	a = b = a_liam_10 = $0.0*aLi_0 + 1.0*aLi_{10}$ = 5.04195(6)Å					
	c = c_liam_10 = $0.0*cLi_0 + 1.0*cLi_{10}$ = 10.3311(2)Å					
Occupancy Parameter	oLi10= $0.0* yLi_0 + 1.0*yLi_{10}$ = 0.95(1)					
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi10)	0.95(1)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi10)	0.05(1)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)

Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	Li2O					
Space Group	Fm3m					
Scale	0.000241(5)					
Lattice Parameter	a = b = c = 4.61589(5) Å					
Site	Li	0.25	0.25	0.25	occ	1	b_{eq} = 0.9148
Site	O	0.0	0.0	0.0	occ	1	b_{eq} = 0.8

Phase Name	LiNa2(NH2)3					
Space Group	P42/m					
Scale	0.0002066(6)					
Lattice Parameter	a = b = 6.2838(1)Å					
	c = 11.1485(2)Å					
Site	N 1	0.66317	0.27595	0.0	occ	1	b_{eq} = 1.5810
Site	H 1	0.73697	0.29827	0.056	occ	1	b_{eq} = 1.5810
Site	N 2	0.20732	0.27336	0.15765	occ	1	b_{eq} = 1.5810
Site	H 2	0.16362	0.18116	0.21186	occ	1	b_{eq} = 1.5810
Site	H 3	0.10362	0.32316	0.14126	occ	1	b_{eq} = 1.5810
Site	Na 1	0.50	0.0	0.14216	occ	1	b_{eq} = 2.2740
Site	Na 2	0.0	0.0	0.0	occ	1	b_{eq} = 2.2740
Site	Na 3	0.50	0.50	0.25	occ	1	b_{eq} = 2.2740
Site	Li 1	0.35356	0.36094	0.0	occ	1	b_{eq} = 2.0455

Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	a_0 = 5.0828(4)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	a_{10} = 5.0700(2)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	c_0 = 11.5415(2)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	c_{10} = 11.2562(9)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	z_N_0 = 0.0997(2)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	z_N_{10} = 0.1014(7)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Occ. Parameter	yNa_0 = 0.938(7)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Occ. Parameter	yNa_{10} = 0.79(2)

Phase Name	Li3Na(NH2)4_00					
Space Group	I – 4					
Scale	0.000000(1)					
Lattice Parameter	a = b = a_ 00 = 1.0*a_0 + 0.0*a_{10} = 5.08280(4)Å					
	c = c_ 00 = 1.0*c_0 + 0.0*c_{10} = 11.5415(2)Å					
Nitrogen Z Coordinate	z_N = z_N_0 = 1.0* z_N_0 + 0.0* z_N_{10} = 0.0997(2)					
Occupancy Parameter	oNa00= 1.0* yNa_0 + 0.0*yNa_{10} = 0.938(7)					
Site	Na 1	0.0	0.50	0.25	occ (oNa_00)	0.983(7)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_00)	0.062(7)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.0997(2)	occ	1	b_{eq} 2.2484

Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name		Li3Na(NH2)4_01					
Space Group		I – 4					
Scale		0.000026(1)					
Lattice Parameter		$a = b = a\_01 = 0.9*a_0 + 0.1*a_{10} = 5.08152(6)$Å					
		$c = c\_01 = 0.9*c_0 + 0.1*c_{10} = 11.5130(3)$ Å					
Nitrogen Z Coordinate		$z\_N = z\_N_0 = 0.9* z\_N_0 + 0.1* z\_N_{10} = 0.0998(3)$					
Occupancy Parameter		$oNa01 = 0.9* yNa_0 + 0.1*yNa_{10} = 0.923(8)$					
Site	Na 1	0.0	0.50	0.25	occ (oNa_01)	0.923(8)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_01)	0.077(8)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.0998(3)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name		Li3Na(NH2)4_02					
Space Group		I – 4					
Scale		0.000027(2)					
Lattice Parameter		$a = b = a\_02 = 0.8*a_{10} + 0.2*a_{10} = 5.08024(7)$Å					
		$c = c\_02 = 0.8*c_{10} + 0.2*c_{10} = 11.4844(3)$ Å					
Nitrogen Z Coordinate		$z\_N = z\_N_0 = 0.8* z\_N_0 + 0.2* z\_N_{10} = 0.1000(3)$					
Occupancy Parameter		$oNa02 = 0.8* yNa_0 + 0.2*yNa_{10} = 0.91(1)$					
Site	Na 1	0.0	0.50	0.25	occ (oNa_02)	0.91(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_02)	0.09(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1000(3)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name		Li3Na(NH2)4_03					
Space Group		I – 4					
Scale		0.000016(1)					
Lattice Parameter		$a = b = a\_03 = 0.7*a_{10} + 0.3*a_{10} = 5.07896(9)$ Å					
		$c = c\_03 = 0.7*c_{10} + 0.3*c_{10} = 11.4559(4)$ Å					
Nitrogen Z Coordinate		$z\_N = z\_N_0 = 0.7* z\_N_0 + 0.3* z\_N_{10} = 0.1002(4)$					
Occupancy Parameter		$oNa03 = 0.7* yNa_0 + 0.3*yNa_{10} = 0.89(1)$					
Site	Na 1	0.0	0.50	0.25	occ (oNa_03)	0.89(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_03)	0.11(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1002(4)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_04					
Space Group	I – 4					
Scale	0.000012(1)					
Lattice Parameter	$a = b = a\_04 = 0.6*a_{10} + 0.4*a_{10} = 5.0777(1)$Å					
	$c = c\_04 = 0.6*c_{10} + 0.4*c_{10} = 11.4274(5)$Å					
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.6* z\_N_0 + 0.4* z\_N_{10} = 0.1003(4)$					
Occupancy Parameter	$oNa04= 0.6* yNa_0 + 0.4*yNa_{10} = 0.88(1)$					
Site	Na 1	0.0	0.50	0.25	occ (oNa_04)	0.88(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_04)	0.12(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1003(4)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_05					
Space Group	I – 4					
Scale	0.000007(1)					
Lattice Parameter	$a = b = a\_05 = 0.5*a_{10} + 0.5*a_{10} = 5.0764(1)$Å					
	$c = c\_05 = 0.5*c_{10} + 0.5*c_{10} = 11.3989(6)$Å					
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.5* z\_N_0 + 0.5* z\_N_{10} = 0.1005(5)$					
Occupancy Parameter	$oNa05= 0.5* yNa_0 + 0.5*yNa_{10} = 0.87(1)$					
Site	Na 1	0.0	0.50	0.25	occ (oNa_05)	0.87(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_05)	0.13(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1005(5)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_06					
Space Group	I – 4					
Scale	0.000008(1)					
Lattice Parameter	$a = b = a\_06 = 0.4*a_{10} + 0.6*a_{10} = 5.0751(1)$Å					
	$c = c\_06 = 0.4*c_{10} + 0.6*c_{10} = 11.3703(6)$Å					
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.4* z\_N_0 + 0.6* z\_N_{10} = 0.1007(5)$					
Occupancy Parameter	$oNa06= 0.4* yNa_0 + 0.6*yNa_{10} = 0.85(1)$					
Site	Na 1	0.0	0.50	0.25	occ (oNa_06)	0.85(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_06)	0.15(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1007(5)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_07

Space Group			I – 4			
Scale			0.000003(1)			
Lattice Parameter			$a = b = a\_07 = 0.3*a_{10} + 0.7*a_{10} = 5.0738(2)$Å			
			$c = c\_07 = 0.3*c_{10} + 0.7*c_{10} = 11.3418(7)$Å			
Nitrogen Z Coordinate			$z\_N = z\_N_0 = 0.3* z\_N_0 + 0.7* z\_N_{10} = 0.1008(6)$			
Occupancy Parameter			$oNa07 = 0.3* yNa_0 + 0.7*yNa_{10} = 0.83(2)$			
Site	Na 1	0.0	0.50	0.25	occ (oNa_07)	0.83(2)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_07)	0.17(2)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1008(6)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name			Li3Na(NH2)4_08			
Space Group			I – 4			
Scale			0.000005(1)			
Lattice Parameter			$a = b = a\_08 = 0.2*a_{10} + 0.8*a_{10} = 5.0726(2)$Å			
			$c = c\_08 = 0.2*c_{10} + 0.8*c_{10} = 11.3133(8)$Å			
Nitrogen Z Coordinate			$z\_N = z\_N_0 = 0.2* z\_N_0 + 0.8* z\_N_{10} = 0.1010(6)$			
Occupancy Parameter			$oNa08 = 0.2* yNa_0 + 0.8*yNa_{10} = 0.82(2)$			
Site	Na 1	0.0	0.50	0.25	occ (oNa_08)	0.82(2)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_08)	0.18(2)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1010(6)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name			Li3Na(NH2)4_09			
Space Group			I – 4			
Scale			0.000001(1)			
Lattice Parameter			$a = b = a\_09 = 0.1*a_{10} + 0.9*a_{10} = 5.0713(2)$Å			
			$c = c\_09 = 0.1*c_{10} + 0.9*c_{10} = 11.2847(8)$Å			
Nitrogen Z Coordinate			$z\_N = z\_N_0 = 0.1* z\_N_0 + 0.9* z\_N_{10} = 0.1012(7)$			
Occupancy Parameter			$oNa09 = 0.1* yNa_0 + 0.9*yNa_{10} = 0.81(2)$			
Site	Na 1	0.0	0.50	0.25	occ (oNa_09)	0.81(2)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_09)	0.19(2)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1012(7)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_10
Space Group	I – 4
Scale	0.000002(1)

Lattice Parameter				$a = b = a\_10 = 0.0*a_{10} + 1.0*a_{10} = 5.0700(2)$Å		
				$c = c\_10 = 0.0*c_{10} + 1.0*c_{10} = 11.2562(9)$Å		
Nitrogen Z Coordinate				$z\_N = z\_N_0 = 0.0* z\_N_0 + 1.0* z\_N_{10} = 0.1014(7)$		
Occupancy Parameter				$oNa10 = 0.0* yNa_0 + 1.0*yNa_{10} = 0.79(2)$		
Site	Na 1	0.0	0.50	0.25	occ (oNa_10)	0.79(2)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ ($1-oNa\_10$)	0.21(2)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1014(7)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name		NaNH2				
Space Group		Fddd				
Scale		0.000059663(5)				
Lattice Parameter		$a = 8.95853(2)$ Å				
		$b = 10.4344(3)$ Å				
		$c = 8.07177(2)$ Å				
Site	Na 1	0.0	0.14841	0.0	occ	1	b_{eq} 2.6283
Site	N	0.0	0.0	0.23425	occ	1	b_{eq} 3.2183
Site	H 1	0.05938	0.95625	0.29968	occ	1	b_{eq} 2.7556

$x = 0.25$

R_ expected	4.521	R_ expected'	9.452
R_weighted pattern	14.989	R_weighted pattern'	31.342
R_Pattern	9.839	R_Pattern'	28.861
Weighted_Durbin_Watson	7.430		
Goodness of fit	3.316		

LiNH2_00 – LiNH2_10 Lattice Parameter	$aLi_0 = 5.03701(3)$ Å
LiNH2_00 – LiNH2_10 Lattice Parameter	$aLi_{10} = 5.04195(6)$ Å
LiNH2_00 – LiNH2_10 Lattice Parameter	$cLi_0 = 10.25577(3)$ Å
LiNH2_00 – LiNH2_10 Lattice Parameter	$cLi_{10} = 10.3311(2)$ Å
LiNH2_00 – LiNH2_10 Occ. Parameter	$yLi_0 = 0.987(3)$
LiNH2_00 – LiNH2_10 Occ. Parameter	$yLi_{10} = 0.95(1)$

Phase Name		LiNH2_00				
Space Group		I – 4				
Scale		0.0000010(3)				
Lattice Parameter		$a = b = a\_liam\_00 = 1.0*aLi_0 + 0.0*aLi_{10} = 5.03701(3)$ Å				
		$c = c\_liam\_00 = 1.0*cLi_0 + 0.0*cLi_{10} = 10.25577(3)$ Å				
Occupancy Parameter		$oLi00 = 1.0* yLi_0 + 0.0*yLi_{10} = 0.987(3)$				
Site	Li 1	0.0	0.0	0.0	occ	1	$b_{eq} = 0.95(1)$
Site	Li 2	0.0	0.5	-0.25	occ ($oLi00$)	0.987(3)	$b_{eq} = 3.0(1)$

Site	Na 2	0.0	0.5	-0.25	occ (1-oLi00)	0.013(3)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_01						
Space Group	I – 4						
Scale	0.0000010(5)						
Lattice Parameter	a = b = a_liam_01 = $0.9*aLi_0 + 0.1*aLi_{10}$ = 5.03750(2)Å						
	c = c_liam_01 = $0.9*cLi_0 + 0.1*cLi_{10}$ = 10.26342(5)Å						
Occupancy Parameter	oLi01= $0.9* yLi_0 + 0.1*yLi_{10}$ = 0.987(3)						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi01)	0.987(3)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi01)	0.017(3)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_02						
Space Group	I – 4						
Scale	0.000001(1)						
Lattice Parameter	a = b = a_liam_02 = $0.8*aLi_{10} + 0.2*aLi_0$ = 5.03800(2)Å						
	c = c_liam_02 = $0.8*cLi_0 + 0.2*cLi_{10}$ = 10.27106(6)Å						
Occupancy Parameter	oLi02= $0.8* yLi_0 + 0.2*yLi_{10}$ = 0.979(5)						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi02)	0.979(5)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi02)	0.021(5)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_03
Space Group	I – 4
Scale	0.000001(1)
Lattice Parameter	a = b = a_liam_03 = $0.7*aLi_0 + 0.3*aLi_{10}$ = 5.03849(3) Å
	c = c_liam_03 = $0.7*cLi_0 + 0.3*cLi_{10}$ = 10.27871(8)Å
Occupancy Parameter	oLi03= $0.7* yLi_0 + 0.3*yLi_{10}$ = 0.975(6)

Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi07)	0.975(6)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi07)	0.025(6)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_04						
Space Group	I – 4						
Scale	0.000001(1)						
Lattice Parameter	a = b = a_liam_04 = $0.6*aLi_0 + 0.4*aLi_{10}$ = 5.03899(3)Å						
	c = c_liam_04 = $0.6*cLi_0 + 0.4*cLi_{10}$ = 10.28635(9)Å						
Occupancy Parameter	oLi04= $0.6* yLi_0 + 0.4*yLi_{10}$ = 0.972(7)						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi04)	0.972(7)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi04)	0.028(7)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_05						
Space Group	I – 4						
Scale	0.000001(1)						
Lattice Parameter	a = b = a_liam_05 = $0.5*aLi_0 + 0.5*aLi_{10}$ = 5.03948(4)Å						
	c = c_liam_05 = $0.5*cLi_0 + 0.5*cLi_{10}$ = 10.2940(1)Å						
Occupancy Parameter	oLi05= $0.5* yLi_0 + 0.5*yLi_{10}$ = 0.968(8)						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi05)	0.968(8)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi05)	0.032(8)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_06
Space Group	I – 4
Scale	0.000001(1)
Lattice Parameter	a = b = a_liam_06 = $0.4*aLi_0 + 0.6*aLi_{10}$ = 5.03997(4)Å

		$c = c\_liam\_06 = 0.4*cLi_0 + 0.6*cLi_{10} = 10.3016(1)$Å				
Occupancy Parameter		$oLi06 = 0.4* yLi_0 + 0.6*yLi_{10} = 0.964(9)$				
Site	Li 1	0.0	0.0	0.0	occ	1	$b_{eq}= 0.95(1)$
Site	Li 2	0.0	0.5	-0.25	occ (oLi06)	0.964(9)	$b_{eq}= 3.0(1)$
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi06)	0.036(9)	$b_{eq}= 3.0(1)$
Site	Li 3	0.0	0.5	0.00620	occ	1	$b_{eq}= 0.95(1)$
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	$b_{eq}= 0.95(1)$
Site	H 1	-0.226	-0.149	-0.172	occ	1	$b_{eq}= 0.95(1)$
Site	H 2	-0.308	-0.359	-0.114	occ	1	$b_{eq}= 0.95(1)$

Phase Name		LiNH2_07				
Space Group		I – 4				
Scale		0.000001(1)				
Lattice Parameter		$a = b = a\_liam\_07 = 0.3*aLi_0 + 0.7*aLi_{10} = 5.04047(5)$Å				
		$c = c\_liam\_07 = 0.3*cLi_0 + 0.7*cLi_{10} = 10.3093(1)$Å				
Occupancy Parameter		$oLi07 = 0.3* yLi_0 + 0.7*yLi_{10} = 0.96(1)$				
Site	Li 1	0.0	0.0	0.0	occ	1	$b_{eq}= 0.95(1)$
Site	Li 2	0.0	0.5	-0.25	occ (oLi07)	0.96(1)	$b_{eq}= 3.0(1)$
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi07)	0.040(1)	$b_{eq}= 3.0(1)$
Site	Li 3	0.0	0.5	0.00620	occ	1	$b_{eq}= 0.95(1)$
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	$b_{eq}= 0.95(1)$
Site	H 1	-0.226	-0.149	-0.172	occ	1	$b_{eq}= 0.95(1)$
Site	H 2	-0.308	-0.359	-0.114	occ	1	$b_{eq}= 0.95(1)$

Phase Name		LiNH2_08				
Space Group		I – 4				
Scale		0.000001(1)				
Lattice Parameter		$a = b = a\_liam\_08 = 0.2*aLi_0 + 0.8*aLi_{10} = 5.04096(5)$ Å				
		$c = c\_liam\_08 = 0.2*cLi_0 + 0.8*cLi_{10} = 10.3169(2)$Å				
Occupancy Parameter		$oLi08 = 0.2* yLi_0 + 0.8*yLi_{10} = 0.96(1)$				
Site	Li 1	0.0	0.0	0.0	occ	1	$b_{eq}= 0.95(1)$
Site	Li 2	0.0	0.5	-0.25	occ (oLi08)	0.96(1)	$b_{eq}= 3.0(1)$
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi08)	0.04(1)	$b_{eq}= 3.0(1)$
Site	Li 3	0.0	0.5	0.00620	occ	1	$b_{eq}= 0.95(1)$
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	$b_{eq}= 0.95(1)$
Site	H 1	-0.226	-0.149	-0.172	occ	1	$b_{eq}= 0.95(1)$
Site	H 2	-0.308	-0.359	-0.114	occ	1	$b_{eq}= 0.95(1)$

Phase Name	LiNH2_09

Space Group	I – 4					
Scale	0.0000010(5)					
Lattice Parameter	a = b = a_liam_09 = $0.1*aLi_0 + 0.9*aLi_{10}$ = 5.04146(6)Å					
	c = c_liam_09 = $0.1*cLi_0 + 0.9*cLi_{10}$ = 10.3246(2)Å					
Occupancy Parameter	oLi09= $0.1* yLi_0 + 0.9*yLi_{10}$ = 0.95(1)					
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi09)	0.95(1)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi09)	0.05(1)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_10					
Space Group	I – 4					
Scale	0.0000010(3)					
Lattice Parameter	a = b = a_liam_10 = $0.0*aLi_0 + 1.0*aLi_{10}$ = 5.04195(6)Å					
	c = c_liam_10 = $0.0*cLi_0 + 1.0*cLi_{10}$ = 10.3311(2)Å					
Occupancy Parameter	oLi10= $0.0* yLi_0 + 1.0*yLi_{10}$ = 0.95(1)					
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi10)	0.95(1)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi10)	0.05(1)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	Li2O					
Space Group	Fm3m					
Scale	0.000151(2)					
Lattice Parameter	a = b = c = 4.61589(5) Å					
Site	Li	0.25	0.25	0.25	occ	1	b_{eq} = 0.9148
Site	O	0.0	0.0	0.0	occ	1	b_{eq} = 0.8

Phase Name	LiNa2(NH2)3					
Space Group	P42/m					
Scale	0.0000443(2)					
Lattice Parameter	a = b = 6.2838(1)Å					
	c = 11.1485(2)Å					
Site	N 1	0.66317	0.27595	0.0	occ	1	b_{eq} = 1.5810
Site	H 1	0.73697	0.29827	0.056	occ	1	b_{eq} = 1.5810
Site	N 2	0.20732	0.27336	0.15765	occ	1	b_{eq} = 1.5810

Site	H 2	0.16362	0.18116	0.21186	occ	1	b_{eq} = 1.5810
Site	H 3	0.10362	0.32316	0.14126	occ	1	b_{eq} = 1.5810
Site	Na 1	0.50	0.0	0.14216	occ	1	b_{eq} = 2.2740
Site	Na 2	0.0	0.0	0.0	occ	1	b_{eq} = 2.2740
Site	Na 3	0.50	0.50	0.25	occ	1	b_{eq} = 2.2740
Site	Li 1	0.35356	0.36094	0.0	occ	1	b_{eq} = 2.0455

Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	a_0 = 5.0828(4)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	a_{10} = 5.0700(2)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	c_0 = 11.5415(2)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	c_{10} = 11.2562(9)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	z_N_0 = 0.0997(2)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	z_N_{10} = 0.1014(7)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Occ. Parameter	yNa_0 = 0.938(7)
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Occ. Parameter	yNa_{10} = 0.79(2)

Phase Name	Li3Na(NH2)4_00					
Space Group	I – 4					
Scale	0.0000001(3)					
Lattice Parameter	a = b = a_ 00 = 1.0*a_0 + 0.0*a_{10} = 5.08280(4)Å					
	c = c_ 00 = 1.0*c_0 + 0.0*c_{10} = 11.5415(2)Å					
Nitrogen Z Coordinate	z_N = z_N_0 = 1.0* z_N_0 + 0.0* z_N_{10} = 0.0997(2)					
Occupancy Parameter	oNa00= 1.0* yNa_0 + 0.0*yNa_{10} = 0.938(7)					
Site	Na 1	0.0	0.50	0.25	occ (oNa_00)	0.983(7)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_00)	0.062(7)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.0997(2)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_01					
Space Group	I – 4					
Scale	0.0000001(3)					
Lattice Parameter	a = b = a_ 01 = 0.9*a_0 + 0.1*a_{10} = 5.08152(6)Å					
	c = c_ 01 = 0.9*c_0 + 0.1*c_{10} = 11.5130(3) Å					
Nitrogen Z Coordinate	z_N = z_N_0 = 0.9* z_N_0 + 0.1* z_N_{10} = 0.0998(3)					
Occupancy Parameter	oNa01= 0.9* yNa_0 + 0.1*yNa_{10} = 0.923(8)					
Site	Na 1	0.0	0.50	0.25	occ (oNa_01)	0.923(8)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_01)	0.077(8)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.0998(3)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_02

Space Group	I – 4					
Scale	0.0000001(4)					
Lattice Parameter	$a = b = a\_02 = 0.8*a_{10} + 0.2*a_{10} = 5.08024(7)$Å					
	$c = c\_02 = 0.8*c_{10} + 0.2*c_{10} = 11.4844(3)$ Å					
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.8* z\_N_0 + 0.2* z\_N_{10} = 0.1000(3)$					
Occupancy Parameter	$oNa02 = 0.8* yNa_0 + 0.2*yNa_{10} = 0.91(1)$					
Site	Na 1	0.0	0.50	0.25	occ (oNa_02)	0.91(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_02)	0.09(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1000(3)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_03					
Space Group	I – 4					
Scale	0.0000001(4)					
Lattice Parameter	$a = b = a\_03 = 0.7*a_{10} + 0.3*a_{10} = 5.07896(9)$ Å					
	$c = c\_03 = 0.7*c_{10} + 0.3*c_{10} = 11.4559(4)$ Å					
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.7* z\_N_0 + 0.3* z\_N_{10} = 0.1002(4)$					
Occupancy Parameter	$oNa03 = 0.7* yNa_0 + 0.3*yNa_{10} = 0.89(1)$					
Site	Na 1	0.0	0.50	0.25	occ (oNa_03)	0.89(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_03)	0.11(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1002(4)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_04					
Space Group	I – 4					
Scale	0.0000001(4)					
Lattice Parameter	$a = b = a\_04 = 0.6*a_{10} + 0.4*a_{10} = 5.0777(1)$Å					
	$c = c\_04 = 0.6*c_{10} + 0.4*c_{10} = 11.4274(5)$Å					
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.6* z\_N_0 + 0.4* z\_N_{10} = 0.1003(4)$					
Occupancy Parameter	$oNa04 = 0.6* yNa_0 + 0.4*yNa_{10} = 0.88(1)$					
Site	Na 1	0.0	0.50	0.25	occ (oNa_04)	0.88(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_04)	0.12(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1003(4)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_05
Space Group	I – 4
Scale	0.0000001(4)

Lattice Parameter		$a = b = a\_05 = 0.5*a_{10} + 0.5*a_{10} = 5.0764(1)$Å					
		$c = c\_05 = 0.5*c_{10} + 0.5*c_{10} = 11.3989(6)$Å					
Nitrogen Z Coordinate		$z\_N = z\_N_0 = 0.5* z\_N_0 + 0.5* z\_N_{10} = 0.1005(5)$					
Occupancy Parameter		$oNa05= 0.5* yNa_0 + 0.5*yNa_{10} = 0.87(1)$					
Site	Na 1	0.0	0.50	0.25	occ (oNa_05)	0.87(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_05)	0.13(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1005(5)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name		Li3Na(NH2)4_06					
Space Group		I – 4					
Scale		0.0000001(4)					
Lattice Parameter		$a = b = a\_06 = 0.4*a_{10} + 0.6*a_{10} = 5.0751(1)$Å					
		$c = c\_06 = 0.4*c_{10} + 0.6*c_{10} = 11.3703(6)$Å					
Nitrogen Z Coordinate		$z\_N = z\_N_0 = 0.4* z\_N_0 + 0.6* z\_N_{10} = 0.1007(5)$					
Occupancy Parameter		$oNa06= 0.4* yNa_0 + 0.6*yNa_{10} = 0.85(1)$					
Site	Na 1	0.0	0.50	0.25	occ (oNa_06)	0.85(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_06)	0.15(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1007(5)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name		Li3Na(NH2)4_07					
Space Group		I – 4					
Scale		0.0000001(3)					
Lattice Parameter		$a = b = a\_07 = 0.3*a_{10} + 0.7*a_{10} = 5.0738(2)$Å					
		$c = c\_07 = 0.3*c_{10} + 0.7*c_{10} = 11.3418(7)$Å					
Nitrogen Z Coordinate		$z\_N = z\_N_0 = 0.3* z\_N_0 + 0.7* z\_N_{10} = 0.1008(6)$					
Occupancy Parameter		$oNa07= 0.3* yNa_0 + 0.7*yNa_{10} = 0.83(2)$					
Site	Na 1	0.0	0.50	0.25	occ (oNa_07)	0.83(2)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_07)	0.17(2)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1008(6)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_08
Space Group	I – 4
Scale	0.0000001(4)
Lattice Parameter	$a = b = a\_08 = 0.2*a_{10} + 0.8*a_{10} = 5.0726(2)$Å
	$c = c\_08 = 0.2*c_{10} + 0.8*c_{10} = 11.3133(8)$Å

Nitrogen Z Coordinate		$z\_N = z\_N_0 = 0.2* z\_N_0 + 0.8* z\_N_{10} = 0.1010(6)$				
Occupancy Parameter		$oNa08 = 0.2* yNa_0 + 0.8*yNa_{10} = 0.82(2)$				
Site	Na 1	0.0	0.50	0.25	occ (oNa_08)	0.82(2)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_08)	0.18(2)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1010(6)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name		Li3Na(NH2)4_09				
Space Group		I – 4				
Scale		0.0000001(4)				
Lattice Parameter		$a = b = a\_09 = 0.1*a_{10} + 0.9*a_{10} = 5.0713(2)$Å				
		$c = c\_09 = 0.1*c_{10} + 0.9*c_{10} = 11.2847(8)$Å				
Nitrogen Z Coordinate		$z\_N = z\_N_0 = 0.1* z\_N_0 + 0.9* z\_N_{10} = 0.1012(7)$				
Occupancy Parameter		$oNa09 = 0.1* yNa_0 + 0.9*yNa_{10} = 0.81(2)$				
Site	Na 1	0.0	0.50	0.25	occ (oNa_09)	0.81(2)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_09)	0.19(2)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1012(7)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name		Li3Na(NH2)4_10				
Space Group		I – 4				
Scale		0.0000001(4)				
Lattice Parameter		$a = b = a\_10 = 0.0*a_{10} + 1.0*a_{10} = 5.0700(2)$Å				
		$c = c\_10 = 0.0*c_{10} + 1.0*c_{10} = 11.2562(9)$Å				
Nitrogen Z Coordinate		$z\_N = z\_N_0 = 0.0* z\_N_0 + 1.0* z\_N_{10} = 0.1014(7)$				
Occupancy Parameter		$oNa10 = 0.0* yNa_0 + 1.0*yNa_{10} = 0.79(2)$				
Site	Na 1	0.0	0.50	0.25	occ (oNa_10)	0.79(2)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_10)	0.21(2)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1014(7)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name		NaNH2				
Space Group		Fddd				
Scale		0.00002618(9)				
Lattice Parameter		a = 8.95853(2) Å				
		b = 10.4344(3) Å				
		c = 8.07177(2) Å				
Site	Na 1	0.0	0.14841	0.0	occ	1	b_{eq} 2.6283

Site	N	0.0	0.0	0.23425	occ	1	b_{eq} 3.2183
Site	H 1	0.05938	0.95625	0.29968	occ	1	b_{eq} 2.7556

x = 0.167

R_ expected	4.521	R_expected'	9.452
R_weighted pattern	14.989	R_weighted pattern'	31.342
R_Pattern	9.839	R_Pattern'	28.861
Weighted_Durbin_Watson	7.430		
Goodness of fit	3.316		

LiNH2_00 – LiNH2_10 Lattice Parameter	$aLi_0 = 5.03701(3)$ Å
LiNH2_00 – LiNH2_10 Lattice Parameter	$aLi_{10} = 5.04195(6)$ Å
LiNH2_00 – LiNH2_10 Lattice Parameter	$cLi_0 = 10.25577(3)$ Å
LiNH2_00 – LiNH2_10 Lattice Parameter	$cLi_{10} = 10.3311(2)$ Å
LiNH2_00 – LiNH2_10 Occ. Parameter	$yLi_0 = 0.987(3)$
LiNH2_00 – LiNH2_10 Occ. Parameter	$yLi_{10} = 0.95(1)$

Phase Name	LiNH2_00						
Space Group	I – 4						
Scale	0.000001(1)						
Lattice Parameter	$a = b = a\_liam\_00 = 1.0*aLi_0 + 0.0*aLi_{10} = 5.03701(3)$ Å						
	$c = c\_liam\_00 = 1.0*cLi_0 + 0.0*cLi_{10} = 10.25577(3)$ Å						
Occupancy Parameter	$oLi00 = 1.0* yLi_0 + 0.0*yLi_{10} = 0.987(3)$						
Site	Li 1	0.0	0.0	0.0	occ	1	$b_{eq} = 0.95(1)$
Site	Li 2	0.0	0.5	-0.25	occ (oLi00)	0.987(3)	$b_{eq} = 3.0(1)$
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi00)	0.013(3)	$b_{eq} = 3.0(1)$
Site	Li 3	0.0	0.5	0.00620	occ	1	$b_{eq} = 0.95(1)$
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	$b_{eq} = 0.95(1)$
Site	H 1	-0.226	-0.149	-0.172	occ	1	$b_{eq} = 0.95(1)$
Site	H 2	-0.308	-0.359	-0.114	occ	1	$b_{eq} = 0.95(1)$

Phase Name	LiNH2_01						
Space Group	I – 4						
Scale	0.000001(1)						
Lattice Parameter	$a = b = a\_liam\_01 = 0.9*aLi_0 + 0.1*aLi_{10} = 5.03750(2)$Å						
	$c = c\_liam\_01 = 0.9*cLi_0 + 0.1*cLi_{10} = 10.26342(5)$Å						
Occupancy Parameter	$oLi01 = 0.9* yLi_0 + 0.1*yLi_{10} = 0.987(3)$						
Site	Li 1	0.0	0.0	0.0	occ	1	$b_{eq} = 0.95(1)$
Site	Li 2	0.0	0.5	-0.25	occ (oLi01)	0.987(3)	$b_{eq} = 3.0(1)$
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi01)	0.017(3)	$b_{eq} = 3.0(1)$

Site	Li 3	0.0	0.5	0.00620	occ	1	$b_{eq}= 0.95(1)$
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	$b_{eq}= 0.95(1)$
Site	H 1	-0.226	-0.149	-0.172	occ	1	$b_{eq}= 0.95(1)$
Site	H 2	-0.308	-0.359	-0.114	occ	1	$b_{eq}= 0.95(1)$

Phase Name	LiNH2_02						
Space Group	$I-4$						
Scale	0.000001(1)						
Lattice Parameter	$a = b = a\_liam\_02 = 0.8*aLi_{10} + 0.2*aLi_0 = 5.03800(2)$Å						
	$c = c\_liam\_02 = 0.8*cLi_0 + 0.2*cLi_{10} = 10.27106(6)$Å						
Occupancy Parameter	$oLi02 = 0.8* yLi_0 + 0.2*yLi_{10} = 0.979(5)$						
Site	Li 1	0.0	0.0	0.0	occ	1	$b_{eq}= 0.95(1)$
Site	Li 2	0.0	0.5	-0.25	occ (oLi02)	0.979(5)	$b_{eq}= 3.0(1)$
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi02)	0.021(5)	$b_{eq}= 3.0(1)$
Site	Li 3	0.0	0.5	0.00620	occ	1	$b_{eq}= 0.95(1)$
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	$b_{eq}= 0.95(1)$
Site	H 1	-0.226	-0.149	-0.172	occ	1	$b_{eq}= 0.95(1)$
Site	H 2	-0.308	-0.359	-0.114	occ	1	$b_{eq}= 0.95(1)$

Phase Name	LiNH2_03						
Space Group	$I-4$						
Scale	0.000001(1)						
Lattice Parameter	$a = b = a\_liam\_03 = 0.7*aLi_0 + 0.3*aLi_{10} = 5.03849(3)$ Å						
	$c = c\_liam\_03 = 0.7*cLi_0 + 0.3*cLi_{10} = 10.27871(8)$Å						
Occupancy Parameter	$oLi03 = 0.7* yLi_0 + 0.3*yLi_{10} = 0.975(6)$						
Site	Li 1	0.0	0.0	0.0	occ	1	$b_{eq}= 0.95(1)$
Site	Li 2	0.0	0.5	-0.25	occ (oLi07)	0.975(6)	$b_{eq}= 3.0(1)$
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi07)	0.025(6)	$b_{eq}= 3.0(1)$
Site	Li 3	0.0	0.5	0.00620	occ	1	$b_{eq}= 0.95(1)$
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	$b_{eq}= 0.95(1)$
Site	H 1	-0.226	-0.149	-0.172	occ	1	$b_{eq}= 0.95(1)$
Site	H 2	-0.308	-0.359	-0.114	occ	1	$b_{eq}= 0.95(1)$

Phase Name	LiNH2_04						
Space Group	$I-4$						
Scale	0.000001(1)						
Lattice Parameter	$a = b = a\_liam\_04 = 0.6*aLi_0 + 0.4*aLi_{10} = 5.03899(3)$Å						
	$c = c\_liam\_04 = 0.6*cLi_0 + 0.4*cLi_{10} = 10.28635(9)$Å						
Occupancy Parameter	$oLi04 = 0.6* yLi_0 + 0.4*yLi_{10} = 0.972(7)$						
Site	Li 1	0.0	0.0	0.0	occ	1	$b_{eq}= 0.95(1)$
Site	Li 2	0.0	0.5	-0.25	occ	0.972(7)	$b_{eq}= 3.0(1)$

					(oLi04)		
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi04)	0.028(7)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_05						
Space Group	I – 4						
Scale	0.000001(1)						
Lattice Parameter	a = b = a_liam_05 = $0.5*aLi_0 + 0.5*aLi_{10}$ = 5.03948(4)Å						
	c = c_liam_05 = $0.5*cLi_0 + 0.5*cLi_{10}$ = 10.2940(1)Å						
Occupancy Parameter	oLi05= $0.5* yLi_0 + 0.5*yLi_{10}$ = 0.968(8)						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi05)	0.968(8)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi05)	0.032(8)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_06						
Space Group	I – 4						
Scale	0.000001(1)						
Lattice Parameter	a = b = a_liam_06 = $0.4*aLi_0 + 0.6*aLi_{10}$ = 5.03997(4)Å						
	c = c_liam_06 = $0.4*cLi_0 + 0.6*cLi_{10}$ = 10.3016(1)Å						
Occupancy Parameter	oLi06= $0.4* yLi_0 + 0.6*yLi_{10}$ = 0.964(9)						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi06)	0.964(9)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi06)	0.036(9)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_07
Space Group	I – 4
Scale	0.000001(1)
Lattice Parameter	a = b = a_liam_07 = $0.3*aLi_0 + 0.7*aLi_{10}$ = 5.04047(5)Å
	c = c_liam_07 = $0.3*cLi_0 + 0.7*cLi_{10}$ = 10.3093(1)Å
Occupancy	oLi07= $0.3* yLi_0 + 0.7*yLi_{10}$ = 0.96(1)

Parameter							
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi07)	0.96(1)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi07)	0.040(1)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name		LiNH2_08					
Space Group		I – 4					
Scale		0.000001(1)					
Lattice Parameter		a = b = a_liam_08 = $0.2*aLi_0 + 0.8*aLi_{10}$ =5.04096(5) Å					
		c = c_liam_08 = $0.2*cLi_0 + 0.8*cLi_{10}$ = 10.3169(2)Å					
Occupancy Parameter		oLi08= $0.2* yLi_0 + 0.8*yLi_{10}$ = 0.96(1)					
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi08)	0.96(1)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi08)	0.04(1)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name		LiNH2_09					
Space Group		I – 4					
Scale		0.000001(1)					
Lattice Parameter		a = b = a_liam_09 = $0.1*aLi_0 + 0.9*aLi_{10}$ = 5.04146(6)Å					
		c = c_liam_09 = $0.1*cLi_0 + 0.9*cLi_{10}$ = 10.3246(2)Å					
Occupancy Parameter		oLi09= $0.1* yLi_0 + 0.9*yLi_{10}$ = 0.95(1)					
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi09)	0.95(1)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi09)	0.05(1)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_10
Space Group	I – 4
Scale	0.000001(1)

Lattice Parameter			$a = b = a\_liam\_10 = 0.0*aLi_0 + 1.0*aLi_{10} = 5.04195(6)$Å				
			$c = c\_liam\_10 = 0.0*cLi_0 + 1.0*cLi_{10} = 10.3311(2)$Å				
Occupancy Parameter			$oLi10 = 0.0* yLi_0 + 1.0*yLi_{10} = 0.95(1)$				
Site	Li 1	0.0	0.0	0.0	occ	1	$b_{eq} = 0.95(1)$
Site	Li 2	0.0	0.5	-0.25	occ (oLi10)	0.95(1)	$b_{eq} = 3.0(1)$
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi10)	0.05(1)	$b_{eq} = 3.0(1)$
Site	Li 3	0.0	0.5	0.00620	occ	1	$b_{eq} = 0.95(1)$
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	$b_{eq} = 0.95(1)$
Site	H 1	-0.226	-0.149	-0.172	occ	1	$b_{eq} = 0.95(1)$
Site	H 2	-0.308	-0.359	-0.114	occ	1	$b_{eq} = 0.95(1)$

Phase Name		Li2O					
Space Group		Fm3m					
Scale		0.000065(3)					
Lattice Parameter		$a = b = c = 4.61589(5)$ Å					
Site	Li	0.25	0.25	0.25	occ	1	$b_{eq} = 0.9148$
Site	O	0.0	0.0	0.0	occ	1	$b_{eq} = 0.8$

Phase Name		LiNa2(NH2)3					
Space Group		P42/m					
Scale		0.0000174(2)					
Lattice Parameter		$a = b = 6.2838(1)$Å					
		$c = 11.1485(2)$Å					
Site	N 1	0.66317	0.27595	0.0	occ	1	$b_{eq} = 1.5810$
Site	H 1	0.73697	0.29827	0.056	occ	1	$b_{eq} = 1.5810$
Site	N 2	0.20732	0.27336	0.15765	occ	1	$b_{eq} = 1.5810$
Site	H 2	0.16362	0.18116	0.21186	occ	1	$b_{eq} = 1.5810$
Site	H 3	0.10362	0.32316	0.14126	occ	1	$b_{eq} = 1.5810$
Site	Na 1	0.50	0.0	0.14216	occ	1	$b_{eq} = 2.2740$
Site	Na 2	0.0	0.0	0.0	occ	1	$b_{eq} = 2.2740$
Site	Na 3	0.50	0.50	0.25	occ	1	$b_{eq} = 2.2740$
Site	Li 1	0.35356	0.36094	0.0	occ	1	$b_{eq} = 2.0455$

Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	$a_0 = 5.0828(4)$
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	$a_{10} = 5.0700(2)$
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	$c_0 = 11.5415(2)$
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	$c_{10} = 11.2562(9)$
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	$z\_N_0 = 0.0997(2)$
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	$z\_N_{10} = 0.1014(7)$
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Occ. Parameter	$yNa_0 = 0.938(7)$
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Occ. Parameter	$yNa_{10} = 0.79(2)$

Phase Name	Li3Na(NH2)4_00
Space Group	I – 4

Scale	0.0000001(5)				
Lattice Parameter	$a = b = a\_00 = 1.0*a_0 + 0.0*a_{10} = 5.08280(4)$Å				
	$c = c\_00 = 1.0*c_0 + 0.0*c_{10} = 11.5415(2)$Å				
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 1.0* z\_N_0 + 0.0* z\_N_{10} = 0.0997(2)$				
Occupancy Parameter	$oNa00 = 1.0* yNa_0 + 0.0*yNa_{10} = 0.938(7)$				
Site	Na 1	0.0	0.50	0.25	occ (oNa_00)	0.983(7)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_00)	0.062(7)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.0997(2)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_01				
Space Group	I – 4				
Scale	0.0000008(7)				
Lattice Parameter	$a = b = a\_01 = 0.9*a_0 + 0.1*a_{10} = 5.08152(6)$Å				
	$c = c\_01 = 0.9*c_0 + 0.1*c_{10} = 11.5130(3)$ Å				
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.9* z\_N_0 + 0.1* z\_N_{10} = 0.0998(3)$				
Occupancy Parameter	$oNa01 = 0.9* yNa_0 + 0.1*yNa_{10} = 0.923(8)$				
Site	Na 1	0.0	0.50	0.25	occ (oNa_01)	0.923(8)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_01)	0.077(8)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.0998(3)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_02				
Space Group	I – 4				
Scale	0.0000024(7)				
Lattice Parameter	$a = b = a\_02 = 0.8*a_{10} + 0.2*a_{10} = 5.08024(7)$Å				
	$c = c\_02 = 0.8*c_{10} + 0.2*c_{10} = 11.4844(3)$ Å				
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.8* z\_N_0 + 0.2* z\_N_{10} = 0.1000(3)$				
Occupancy Parameter	$oNa02 = 0.8* yNa_0 + 0.2*yNa_{10} = 0.91(1)$				
Site	Na 1	0.0	0.50	0.25	occ (oNa_02)	0.91(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_02)	0.09(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1000(3)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_03
Space Group	I – 4
Scale	0.0000001(7)
Lattice Parameter	$a = b = a\_03 = 0.7*a_{10} + 0.3*a_{10} = 5.07896(9)$ Å

		$c = c\_03 = 0.7*c_{10} + 0.3*c_{10} = 11.4559(4)$ Å					
Nitrogen Z Coordinate		$z\_N = z\_N_0 = 0.7* z\_N_0 + 0.3* z\_N_{10} = 0.1002(4)$					
Occupancy Parameter		$oNa03= 0.7* yNa_0 + 0.3*yNa_{10} = 0.89(1)$					
Site	Na 1	0.0	0.50	0.25	occ (oNa_03)	0.89(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_03)	0.11(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1002(4)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name		Li3Na(NH2)4_04					
Space Group		I – 4					
Scale		0.0000001(7)					
Lattice Parameter		$a = b = a\_04 = 0.6*a_{10} + 0.4*a_{10} = 5.0777(1)$Å					
		$c = c\_04 = 0.6*c_{10} + 0.4*c_{10} = 11.4274(5)$Å					
Nitrogen Z Coordinate		$z\_N = z\_N_0 = 0.6* z\_N_0 + 0.4* z\_N_{10} = 0.1003(4)$					
Occupancy Parameter		$oNa04= 0.6* yNa_0 + 0.4*yNa_{10} = 0.88(1)$					
Site	Na 1	0.0	0.50	0.25	occ (oNa_04)	0.88(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_04)	0.12(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1003(4)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name		Li3Na(NH2)4_05					
Space Group		I – 4					
Scale		0.0000001(7)					
Lattice Parameter		$a = b = a\_05 = 0.5*a_{10} + 0.5*a_{10} = 5.0764(1)$Å					
		$c = c\_05 = 0.5*c_{10} + 0.5*c_{10} = 11.3989(6)$Å					
Nitrogen Z Coordinate		$z\_N = z\_N_0 = 0.5* z\_N_0 + 0.5* z\_N_{10} = 0.1005(5)$					
Occupancy Parameter		$oNa05= 0.5* yNa_0 + 0.5*yNa_{10} = 0.87(1)$					
Site	Na 1	0.0	0.50	0.25	occ (oNa_05)	0.87(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_05)	0.13(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1005(5)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_06
Space Group	I – 4
Scale	0.0000001(7)
Lattice Parameter	$a = b = a\_06 = 0.4*a_{10} + 0.6*a_{10} = 5.0751(1)$Å
	$c = c\_06 = 0.4*c_{10} + 0.6*c_{10} = 11.3703(6)$Å
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.4* z\_N_0 + 0.6* z\_N_{10} = 0.1007(5)$

Occupancy Parameter				oNa06= 0.4* yNa_0 + 0.6*yNa_{10} = 0.85(1)		
Site	Na 1	0.0	0.50	0.25	occ (oNa_06)	0.85(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_06)	0.15(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1007(5)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name		Li3Na(NH2)4_07				
Space Group		I – 4				
Scale		0.0000001(6)				
Lattice Parameter		a = b = a_ 07 = 0.3*a_{10} + 0.7*a_{10} = 5.0738(2)Å				
		c = c_ 07 = 0.3*c_{10} + 0.7*c_{10} = 11.3418(7)Å				
Nitrogen Z Coordinate		z_N = z_N_0 = 0.3* z_N_0 + 0.7* z_N_{10} = 0.1008(6)				
Occupancy Parameter		oNa07= 0.3* yNa_0 + 0.7*yNa_{10} = 0.83(2)				
Site	Na 1	0.0	0.50	0.25	occ (oNa_07)	0.83(2)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_07)	0.17(2)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1008(6)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name		Li3Na(NH2)4_08				
Space Group		I – 4				
Scale		0.0000001(7)				
Lattice Parameter		a = b = a_ 08 = 0.2*a_{10} + 0.8*a_{10} = 5.0726(2)Å				
		c = c_ 08 = 0.2*c_{10} + 0.8*c_{10} = 11.3133(8)Å				
Nitrogen Z Coordinate		z_N = z_N_0 = 0.2* z_N_0 + 0.8* z_N_{10} = 0.1010(6)				
Occupancy Parameter		oNa08= 0.2* yNa_0 + 0.8*yNa_{10} = 0.82(2)				
Site	Na 1	0.0	0.50	0.25	occ (oNa_08)	0.82(2)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_08)	0.18(2)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1010(6)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name		Li3Na(NH2)4_09				
Space Group		I – 4				
Scale		0.0000001(7)				
Lattice Parameter		a = b = a_ 09 = 0.1*a_{10} + 0.9*a_{10} = 5.0713(2)Å				
		c = c_ 09 = 0.1*c_{10} + 0.9*c_{10} = 11.2847(8)Å				
Nitrogen Z Coordinate		z_N = z_N_0 = 0.1* z_N_0 + 0.9* z_N_{10} = 0.1012(7)				
Occupancy Parameter		oNa09= 0.1* yNa_0 + 0.9*yNa_{10} = 0.81(2)				
Site	Na 1	0.0	0.50	0.25	occ (oNa_09)	0.81(2)	b_{eq} 2.2484

Site	Li 1	0.0	0.50	0.25	occ (1-oNa_09)	0.19(2)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1012(7)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name		Li3Na(NH2)4_10					
Space Group		$I-4$					
Scale		0.0000001(6)					
Lattice Parameter		$a = b = a\_10 = 0.0*a_{10} + 1.0*a_{10} = 5.0700(2)$Å					
		$c = c\_10 = 0.0*c_{10} + 1.0*c_{10} = 11.2562(9)$Å					
Nitrogen Z Coordinate		$z\_N = z\_N_0 = 0.0* z\_N_0 + 1.0* z\_N_{10} = 0.1014(7)$					
Occupancy Parameter		$oNa10 = 0.0* yNa_0 + 1.0*yNa_{10} = 0.79(2)$					
Site	Na 1	0.0	0.50	0.25	occ (oNa_10)	0.79(2)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_10)	0.21(2)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1014(7)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name		NaNH2					
Space Group		Fddd					
Scale		0.0000367(1)					
Lattice Parameter		$a = 8.95853(2)$ Å					
		$b = 10.4344(3)$ Å					
		$c = 8.07177(2)$ Å					
Site	Na 1	0.0	0.14841	0.0	occ	1	b_{eq} 2.6283
Site	N	0.0	0.0	0.23425	occ	1	b_{eq} 3.2183
Site	H 1	0.05938	0.95625	0.29968	occ	1	b_{eq} 2.7556

$x = 0.083$

R_ expected	4.521	R_expected'	9.452
R_weighted pattern	14.989	R_weighted pattern'	31.342
R_Pattern	9.839	R_Pattern'	28.861
Weighted_Durbin_Watson	7.430		
Goodness of fit	3.316		

LiNH2_00 – LiNH2_10 Lattice Parameter	$aLi_0 = 5.03701(3)$ Å
LiNH2_00 – LiNH2_10 Lattice Parameter	$aLi_{10} = 5.04195(6)$ Å
LiNH2_00 – LiNH2_10 Lattice Parameter	$cLi_0 = 10.25577(3)$ Å
LiNH2_00 – LiNH2_10 Lattice Parameter	$cLi_{10} = 10.3311(2)$ Å
LiNH2_00 – LiNH2_10 Occ. Parameter	$yLi_0 = 0.987(3)$
LiNH2_00 – LiNH2_10 Occ. Parameter	$yLi_{10} = 0.95(1)$

Phase Name	LiNH2_00					
Space Group	I – 4					
Scale	0.0000010(3)					
Lattice Parameter	a = b = a_liam_00 = $1.0*aLi_0 + 0.0*aLi_{10}$ = 5.03701(3) Å					
	c = c_liam_00 = $1.0*cLi_0 + 0.0*cLi_{10}$ = 10.25577(3) Å					
Occupancy Parameter	oLi00 = $1.0* yLi_0 + 0.0*yLi_{10}$ = 0.987(3)					
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi00)	0.987(3)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi00)	0.013(3)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_01					
Space Group	I – 4					
Scale	0.000001(1)					
Lattice Parameter	a = b = a_liam_01 = $0.9*aLi_0 + 0.1*aLi_{10}$ = 5.03750(2)Å					
	c = c_liam_01 = $0.9*cLi_0 + 0.1*cLi_{10}$ = 10.26342(5)Å					
Occupancy Parameter	oLi01= $0.9* yLi_0 + 0.1*yLi_{10}$ = 0.987(3)					
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi01)	0.987(3)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi01)	0.017(3)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_02					
Space Group	I – 4					
Scale	0.000001(1)					
Lattice Parameter	a = b = a_liam_02 = $0.8*aLi_{10} + 0.2*aLi_0$ = 5.03800(2)Å					
	c = c_liam_02 = $0.8*cLi_0 + 0.2*cLi_{10}$ = 10.27106(6)Å					
Occupancy Parameter	oLi02= $0.8* yLi_0 + 0.2*yLi_{10}$ = 0.979(5)					
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi02)	0.979(5)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi02)	0.021(5)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)

Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_03						
Space Group	I – 4						
Scale	0.000001(1)						
Lattice Parameter	a = b = a_liam_03 = 0.7*aLi$_0$ + 0.3*aLi$_{10}$ = 5.03849(3) Å						
	c = c_liam_03 = 0.7*cLi$_0$ + 0.3*cLi$_{10}$ = 10.27871(8)Å						
Occupancy Parameter	oLi03= 0.7* yLi$_0$ + 0.3*yLi$_{10}$ = 0.975(6)						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi07)	0.975(6)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi07)	0.025(6)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_04						
Space Group	I – 4						
Scale	0.000001(1)						
Lattice Parameter	a = b = a_liam_04 = 0.6*aLi$_0$ + 0.4*aLi$_{10}$ = 5.03899(3)Å						
	c = c_liam_04 = 0.6*cLi$_0$ + 0.4*cLi$_{10}$ = 10.28635(9)Å						
Occupancy Parameter	oLi04= 0.6* yLi$_0$ + 0.4*yLi$_{10}$ = 0.972(7)						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi04)	0.972(7)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi04)	0.028(7)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_05						
Space Group	I – 4						
Scale	0.000001(1)						
Lattice Parameter	a = b = a_liam_05 = 0.5*aLi$_0$ + 0.5*aLi$_{10}$ = 5.03948(4)Å						
	c = c_liam_05 = 0.5*cLi$_0$ + 0.5*cLi$_{10}$ = 10.2940(1)Å						
Occupancy Parameter	oLi05= 0.5* yLi$_0$ + 0.5*yLi$_{10}$ = 0.968(8)						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi05)	0.968(8)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-	0.032(8)	b_{eq}= 3.0(1)

					oLi05)		
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_06						
Space Group	I – 4						
Scale	0.000001(1)						
Lattice Parameter	a = b = a_liam_06 = $0.4*aLi_0 + 0.6*aLi_{10}$ = 5.03997(4)Å						
	c = c_liam_06 = $0.4*cLi_0 + 0.6*cLi_{10}$ = 10.3016(1)Å						
Occupancy Parameter	oLi06= $0.4* yLi_0 + 0.6*yLi_{10}$ = 0.964(9)						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi06)	0.964(9)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi06)	0.036(9)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_07						
Space Group	I – 4						
Scale	0.000001(1)						
Lattice Parameter	a = b = a_liam_07 = $0.3*aLi_0 + 0.7*aLi_{10}$ = 5.04047(5)Å						
	c = c_liam_07 = $0.3*cLi_0 + 0.7*cLi_{10}$ = 10.3093(1)Å						
Occupancy Parameter	oLi07= $0.3* yLi_0 + 0.7*yLi_{10}$ = 0.96(1)						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi07)	0.96(1)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi07)	0.040(1)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_08						
Space Group	I – 4						
Scale	0.000001(1)						
Lattice Parameter	a = b = a_liam_08 = $0.2*aLi_0 + 0.8*aLi_{10}$ =5.04096(5) Å						
	c = c_liam_08 = $0.2*cLi_0 + 0.8*cLi_{10}$ = 10.3169(2)Å						
Occupancy Parameter	oLi08= $0.2* yLi_0 + 0.8*yLi_{10}$ = 0.96(1)						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)

Site	Li 2	0.0	0.5	-0.25	occ (oLi08)	0.96(1)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi08)	0.04(1)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_09						
Space Group	I – 4						
Scale	0.000001(1)						
Lattice Parameter	a = b = a_liam_09 = $0.1*aLi_0 + 0.9*aLi_{10}$ = 5.04146(6)Å						
	c = c_liam_09 = $0.1*cLi_0 + 0.9*cLi_{10}$ = 10.3246(2)Å						
Occupancy Parameter	oLi09= $0.1* yLi_0 + 0.9*yLi_{10}$ = 0.95(1)						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi09)	0.95(1)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi09)	0.05(1)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_10						
Space Group	I – 4						
Scale	0.0000010(3)						
Lattice Parameter	a = b = a_liam_10 = $0.0*aLi_0 + 1.0*aLi_{10}$ = 5.04195(6)Å						
	c = c_liam_10 = $0.0*cLi_0 + 1.0*cLi_{10}$ = 10.3311(2)Å						
Occupancy Parameter	oLi10= $0.0* yLi_0 + 1.0*yLi_{10}$ = 0.95(1)						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi10)	0.95(1)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi10)	0.05(1)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	Li2O						
Space Group	Fm3m						
Scale	0.000089(2)						
Lattice Parameter	a = b = c = 4.61589(5) Å						
Site	Li	0.25	0.25	0.25	occ	1	b_{eq} = 0.9148

Site	O	0.0	0.0	0.0	occ	1	$b_{eq} = 0.8$

Phase Name	LiNa2(NH2)3						
Space Group	P42/m						
Scale	0.00000113(7)						
Lattice Parameter	a = b = 6.2838(1)Å						
	c = 11.1485(2)Å						
Site	N 1	0.66317	0.27595	0.0	occ	1	$b_{eq} = 1.5810$
Site	H 1	0.73697	0.29827	0.056	occ	1	$b_{eq} = 1.5810$
Site	N 2	0.20732	0.27336	0.15765	occ	1	$b_{eq} = 1.5810$
Site	H 2	0.16362	0.18116	0.21186	occ	1	$b_{eq} = 1.5810$
Site	H 3	0.10362	0.32316	0.14126	occ	1	$b_{eq} = 1.5810$
Site	Na 1	0.50	0.0	0.14216	occ	1	$b_{eq} = 2.2740$
Site	Na 2	0.0	0.0	0.0	occ	1	$b_{eq} = 2.2740$
Site	Na 3	0.50	0.50	0.25	occ	1	$b_{eq} = 2.2740$
Site	Li 1	0.35356	0.36094	0.0	occ	1	$b_{eq} = 2.0455$

Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	$a_0 = 5.0828(4)$
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	$a_{10} = 5.0700(2)$
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	$c_0 = 11.5415(2)$
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	$c_{10} = 11.2562(9)$
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	$z\_N_0 = 0.0997(2)$
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	$z\_N_{10} = 0.1014(7)$
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Occ. Parameter	$yNa_0 = 0.938(7)$
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Occ. Parameter	$yNa_{10} = 0.79(2)$

Phase Name	Li3Na(NH2)4_00					
Space Group	I – 4					
Scale	0.0000001(3)					
Lattice Parameter	a = b = a_ 00 = 1.0*a_0 + 0.0*a_{10} = 5.08280(4)Å					
	c = c_ 00 = 1.0*c_0 + 0.0*c_{10} = 11.5415(2)Å					
Nitrogen Z Coordinate	z_N = z_N$_0$ = 1.0* z_N$_0$ + 0.0* z_N$_{10}$ = 0.0997(2)					
Occupancy Parameter	oNa00= 1.0* yNa_0 + 0.0*yNa_{10} = 0.938(7)					
Site	Na 1	0.0	0.50	0.25	occ (oNa_00)	0.983(7)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_00)	0.062(7)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.0997(2)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_01
Space Group	I – 4
Scale	0.0000001(4)
Lattice Parameter	a = b = a_ 01 = 0.9*a_0 + 0.1*a_{10} = 5.08152(6)Å
	c = c_ 01 = 0.9*c_0 + 0.1*c_{10} = 11.5130(3) Å
Nitrogen Z Coordinate	z_N = z_N$_0$ = 0.9* z_N$_0$ + 0.1* z_N$_{10}$ = 0.0998(3)

Occupancy Parameter			oNa01= 0.9* yNa_0 + 0.1*yNa_{10} = 0.923(8)			
Site	Na 1	0.0	0.50	0.25	occ (oNa_01)	0.923(8)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_01)	0.077(8)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.0998(3)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_02					
Space Group	I – 4					
Scale	0.0000001(4)					
Lattice Parameter	a = b = a_ 02 = 0.8*a_{10} + 0.2*a_{10} = 5.08024(7)Å					
	c = c_ 02 = 0.8*c_{10} + 0.2*c_{10} = 11.4844(3) Å					
Nitrogen Z Coordinate	z_N = z_N_0 = 0.8* z_N_0 + 0.2* z_N_{10} = 0.1000(3)					
Occupancy Parameter	oNa02= 0.8* yNa_0 + 0.2*yNa_{10} = 0.91(1)					
Site	Na 1	0.0	0.50	0.25	occ (oNa_02)	0.91(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_02)	0.09(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1000(3)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_03					
Space Group	I – 4					
Scale	0.0000001(4)					
Lattice Parameter	a = b = a_ 03 = 0.7*a_{10} + 0.3*a_{10} = 5.07896(9) Å					
	c = c_ 03 = 0.7*c_{10} + 0.3*c_{10} = 11.4559(4) Å					
Nitrogen Z Coordinate	z_N = z_N_0 = 0.7* z_N_0 + 0.3* z_N_{10} = 0.1002(4)					
Occupancy Parameter	oNa03= 0.7* yNa_0 + 0.3*yNa_{10} = 0.89(1)					
Site	Na 1	0.0	0.50	0.25	occ (oNa_03)	0.89(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_03)	0.11(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1002(4)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_04					
Space Group	I – 4					
Scale	0.0000001(4)					
Lattice Parameter	a = b = a_ 04 = 0.6*a_{10} + 0.4*a_{10} = 5.0777(1)Å					
	c = c_ 04 = 0.6*c_{10} + 0.4*c_{10} = 11.4274(5)Å					
Nitrogen Z Coordinate	z_N = z_N_0 = 0.6* z_N_0 + 0.4* z_N_{10} = 0.1003(4)					
Occupancy Parameter	oNa04= 0.6* yNa_0 + 0.4*yNa_{10} = 0.88(1)					
Site	Na 1	0.0	0.50	0.25	occ (oNa_04)	0.88(1)	b_{eq} 2.2484

Site	Li 1	0.0	0.50	0.25	occ (1-oNa_04)	0.12(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1003(4)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_05						
Space Group	I – 4						
Scale	0.0000001(4)						
Lattice Parameter	$a = b = a\_05 = 0.5*a_{10} + 0.5*a_{10} = 5.0764(1)$Å						
	$c = c\_05 = 0.5*c_{10} + 0.5*c_{10} = 11.3989(6)$Å						
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.5* z\_N_0 + 0.5* z\_N_{10} = 0.1005(5)$						
Occupancy Parameter	$oNa05 = 0.5* yNa_0 + 0.5*yNa_{10} = 0.87(1)$						
Site	Na 1	0.0	0.50	0.25	occ (oNa_05)	0.87(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_05)	0.13(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1005(5)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_06						
Space Group	I – 4						
Scale	0.0000001(4)						
Lattice Parameter	$a = b = a\_06 = 0.4*a_{10} + 0.6*a_{10} = 5.0751(1)$Å						
	$c = c\_06 = 0.4*c_{10} + 0.6*c_{10} = 11.3703(6)$Å						
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.4* z\_N_0 + 0.6* z\_N_{10} = 0.1007(5)$						
Occupancy Parameter	$oNa06 = 0.4* yNa_0 + 0.6*yNa_{10} = 0.85(1)$						
Site	Na 1	0.0	0.50	0.25	occ (oNa_06)	0.85(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_06)	0.15(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1007(5)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_07						
Space Group	I – 4						
Scale	0.0000001(4)						
Lattice Parameter	$a = b = a\_07 = 0.3*a_{10} + 0.7*a_{10} = 5.0738(2)$Å						
	$c = c\_07 = 0.3*c_{10} + 0.7*c_{10} = 11.3418(7)$Å						
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.3* z\_N_0 + 0.7* z\_N_{10} = 0.1008(6)$						
Occupancy Parameter	$oNa07 = 0.3* yNa_0 + 0.7*yNa_{10} = 0.83(2)$						
Site	Na 1	0.0	0.50	0.25	occ (oNa_07)	0.83(2)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_07)	0.17(2)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484

Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1008(6)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_08						
Space Group	$I - 4$						
Scale	0.0000001(4)						
Lattice Parameter	$a = b = a\_08 = 0.2*a_{10} + 0.8*a_{10} = 5.0726(2)$Å						
	$c = c\_08 = 0.2*c_{10} + 0.8*c_{10} = 11.3133(8)$Å						
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.2* z\_N_0 + 0.8* z\_N_{10} = 0.1010(6)$						
Occupancy Parameter	$oNa08 = 0.2* yNa_0 + 0.8*yNa_{10} = 0.82(2)$						
Site	Na 1	0.0	0.50	0.25	occ (oNa_08)	0.82(2)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_08)	0.18(2)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1010(6)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_09						
Space Group	$I - 4$						
Scale	0.0000001(5)						
Lattice Parameter	$a = b = a\_09 = 0.1*a_{10} + 0.9*a_{10} = 5.0713(2)$Å						
	$c = c\_09 = 0.1*c_{10} + 0.9*c_{10} = 11.2847(8)$Å						
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.1* z\_N_0 + 0.9* z\_N_{10} = 0.1012(7)$						
Occupancy Parameter	$oNa09 = 0.1* yNa_0 + 0.9*yNa_{10} = 0.81(2)$						
Site	Na 1	0.0	0.50	0.25	occ (oNa_09)	0.81(2)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_09)	0.19(2)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1012(7)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_10						
Space Group	$I - 4$						
Scale	0.0000001(4)						
Lattice Parameter	$a = b = a\_10 = 0.0*a_{10} + 1.0*a_{10} = 5.0700(2)$Å						
	$c = c\_10 = 0.0*c_{10} + 1.0*c_{10} = 11.2562(9)$Å						
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.0* z\_N_0 + 1.0* z\_N_{10} = 0.1014(7)$						
Occupancy Parameter	$oNa10 = 0.0* yNa_0 + 1.0*yNa_{10} = 0.79(2)$						
Site	Na 1	0.0	0.50	0.25	occ (oNa_10)	0.79(2)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_10)	0.21(2)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1014(7)	occ	1	b_{eq} 2.2484

Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	NaNH2						
Space Group	Fddd						
Scale	0.0000592(1)						
Lattice Parameter	a = 8.95853(2) Å						
	b = 10.4344(3) Å						
	c = 8.07177(2) Å						
Site	Na 1	0.0	0.14841	0.0	occ	1	b_{eq} 2.6283
Site	N	0.0	0.0	0.23425	occ	1	b_{eq} 3.2183
Site	H 1	0.05938	0.95625	0.29968	occ	1	b_{eq} 2.7556

x = 0.0

R_expected	4.521	R_expected'	9.452
R_weighted pattern	14.989	R_weighted pattern'	31.342
R_Pattern	9.839	R_Pattern'	28.861
Weighted_Durbin_Watson	7.430		
Goodness of fit	3.316		

LiNH2_00 – LiNH2_10 Lattice Parameter	aLi_0 = 5.03701(3) Å
LiNH2_00 – LiNH2_10 Lattice Parameter	aLi_{10} = 5.04195(6) Å
LiNH2_00 – LiNH2_10 Lattice Parameter	cLi_0 = 10.25577(3) Å
LiNH2_00 – LiNH2_10 Lattice Parameter	cLi_{10} = 10.3311(2) Å
LiNH2_00 – LiNH2_10 Occ. Parameter	yLi_0 = 0.987(3)
LiNH2_00 – LiNH2_10 Occ. Parameter	yLi_{10} = 0.95(1)

Phase Name	LiNH2_00					
Space Group	I – 4					
Scale	0.0000010(3)					
Lattice Parameter	a = b = a_liam_00 = 1.0*aLi_0 + 0.0*aLi_{10} = 5.03701(3) Å					
	c = c_liam_00 = 1.0*cLi_0 + 0.0*cLi_{10} = 10.25577(3) Å					
Occupancy Parameter	oLi00 = 1.0* yLi_0 + 0.0*yLi_{10} = 0.987(3)					
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi00)	0.987(3)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi00)	0.013(3)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_01
Space Group	I – 4

Scale	0.0000010(5)					
Lattice Parameter	$a = b = a\_liam\_01 = 0.9*aLi_0 + 0.1*aLi_{10} = 5.03750(2)$Å					
	$c = c\_liam\_01 = 0.9*cLi_0 + 0.1*cLi_{10} = 10.26342(5)$Å					
Occupancy Parameter	$oLi01 = 0.9* yLi_0 + 0.1*yLi_{10} = 0.987(3)$					
Site	Li 1	0.0	0.0	0.0	occ	1	$b_{eq}= 0.95(1)$
Site	Li 2	0.0	0.5	-0.25	occ (oLi01)	0.987(3)	$b_{eq}= 3.0(1)$
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi01)	0.017(3)	$b_{eq}= 3.0(1)$
Site	Li 3	0.0	0.5	0.00620	occ	1	$b_{eq}= 0.95(1)$
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	$b_{eq}= 0.95(1)$
Site	H 1	-0.226	-0.149	-0.172	occ	1	$b_{eq}= 0.95(1)$
Site	H 2	-0.308	-0.359	-0.114	occ	1	$b_{eq}= 0.95(1)$

Phase Name	LiNH2_02					
Space Group	I – 4					
Scale	0.000001(1)					
Lattice Parameter	$a = b = a\_liam\_02 = 0.8*aLi_{10} + 0.2*aLi_0 = 5.03800(2)$Å					
	$c = c\_liam\_02 = 0.8*cLi_0 + 0.2*cLi_{10} = 10.27106(6)$Å					
Occupancy Parameter	$oLi02 = 0.8* yLi_0 + 0.2*yLi_{10} = 0.979(5)$					
Site	Li 1	0.0	0.0	0.0	occ	1	$b_{eq}= 0.95(1)$
Site	Li 2	0.0	0.5	-0.25	occ (oLi02)	0.979(5)	$b_{eq}= 3.0(1)$
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi02)	0.021(5)	$b_{eq}= 3.0(1)$
Site	Li 3	0.0	0.5	0.00620	occ	1	$b_{eq}= 0.95(1)$
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	$b_{eq}= 0.95(1)$
Site	H 1	-0.226	-0.149	-0.172	occ	1	$b_{eq}= 0.95(1)$
Site	H 2	-0.308	-0.359	-0.114	occ	1	$b_{eq}= 0.95(1)$

Phase Name	LiNH2_03					
Space Group	I – 4					
Scale	0.000001(1)					
Lattice Parameter	$a = b = a\_liam\_03 = 0.7*aLi_0 + 0.3*aLi_{10} = 5.03849(3)$ Å					
	$c = c\_liam\_03 = 0.7*cLi_0 + 0.3*cLi_{10} = 10.27871(8)$Å					
Occupancy Parameter	$oLi03 = 0.7* yLi_0 + 0.3*yLi_{10} = 0.975(6)$					
Site	Li 1	0.0	0.0	0.0	occ	1	$b_{eq}= 0.95(1)$
Site	Li 2	0.0	0.5	-0.25	occ (oLi07)	0.975(6)	$b_{eq}= 3.0(1)$
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi07)	0.025(6)	$b_{eq}= 3.0(1)$
Site	Li 3	0.0	0.5	0.00620	occ	1	$b_{eq}= 0.95(1)$
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	$b_{eq}= 0.95(1)$
Site	H 1	-0.226	-0.149	-0.172	occ	1	$b_{eq}= 0.95(1)$
Site	H 2	-0.308	-0.359	-0.114	occ	1	$b_{eq}= 0.95(1)$

Phase Name	LiNH2_04					
Space Group	I – 4					
Scale	0.000001(1)					
Lattice Parameter	$a = b = a\_liam\_04 = 0.6*aLi_0 + 0.4*aLi_{10} = 5.03899(3)$Å					
	$c = c\_liam\_04 = 0.6*cLi_0 + 0.4*cLi_{10} = 10.28635(9)$Å					
Occupancy Parameter	$oLi04 = 0.6* yLi_0 + 0.4*yLi_{10} = 0.972(7)$					
Site	Li 1	0.0	0.0	0.0	occ	1	$b_{eq} = 0.95(1)$
Site	Li 2	0.0	0.5	-0.25	occ (oLi04)	0.972(7)	$b_{eq} = 3.0(1)$
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi04)	0.028(7)	$b_{eq} = 3.0(1)$
Site	Li 3	0.0	0.5	0.00620	occ	1	$b_{eq} = 0.95(1)$
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	$b_{eq} = 0.95(1)$
Site	H 1	-0.226	-0.149	-0.172	occ	1	$b_{eq} = 0.95(1)$
Site	H 2	-0.308	-0.359	-0.114	occ	1	$b_{eq} = 0.95(1)$

Phase Name	LiNH2_05					
Space Group	I – 4					
Scale	0.000001(1)					
Lattice Parameter	$a = b = a\_liam\_05 = 0.5*aLi_0 + 0.5*aLi_{10} = 5.03948(4)$Å					
	$c = c\_liam\_05 = 0.5*cLi_0 + 0.5*cLi_{10} = 10.2940(1)$Å					
Occupancy Parameter	$oLi05 = 0.5* yLi_0 + 0.5*yLi_{10} = 0.968(8)$					
Site	Li 1	0.0	0.0	0.0	occ	1	$b_{eq} = 0.95(1)$
Site	Li 2	0.0	0.5	-0.25	occ (oLi05)	0.968(8)	$b_{eq} = 3.0(1)$
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi05)	0.032(8)	$b_{eq} = 3.0(1)$
Site	Li 3	0.0	0.5	0.00620	occ	1	$b_{eq} = 0.95(1)$
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	$b_{eq} = 0.95(1)$
Site	H 1	-0.226	-0.149	-0.172	occ	1	$b_{eq} = 0.95(1)$
Site	H 2	-0.308	-0.359	-0.114	occ	1	$b_{eq} = 0.95(1)$

Phase Name	LiNH2_06					
Space Group	I – 4					
Scale	0.000001(1)					
Lattice Parameter	$a = b = a\_liam\_06 = 0.4*aLi_0 + 0.6*aLi_{10} = 5.03997(4)$Å					
	$c = c\_liam\_06 = 0.4*cLi_0 + 0.6*cLi_{10} = 10.3016(1)$Å					
Occupancy Parameter	$oLi06 = 0.4* yLi_0 + 0.6*yLi_{10} = 0.964(9)$					
Site	Li 1	0.0	0.0	0.0	occ	1	$b_{eq} = 0.95(1)$
Site	Li 2	0.0	0.5	-0.25	occ (oLi06)	0.964(9)	$b_{eq} = 3.0(1)$
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi06)	0.036(9)	$b_{eq} = 3.0(1)$
Site	Li 3	0.0	0.5	0.00620	occ	1	$b_{eq} = 0.95(1)$

Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_07						
Space Group	I – 4						
Scale	0.000001(1)						
Lattice Parameter	a = b = a_liam_07 = $0.3*aLi_0 + 0.7*aLi_{10}$ = 5.04047(5)Å						
	c = c_liam_07 = $0.3*cLi_0 + 0.7*cLi_{10}$ = 10.3093(1)Å						
Occupancy Parameter	oLi07= $0.3* yLi_0 + 0.7*yLi_{10}$ = 0.96(1)						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi07)	0.96(1)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi07)	0.040(1)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_08						
Space Group	I – 4						
Scale	0.000001(1)						
Lattice Parameter	a = b = a_liam_08 = $0.2*aLi_0 + 0.8*aLi_{10}$ =5.04096(5) Å						
	c = c_liam_08 = $0.2*cLi_0 + 0.8*cLi_{10}$ = 10.3169(2)Å						
Occupancy Parameter	oLi08= $0.2* yLi_0 + 0.8*yLi_{10}$ = 0.96(1)						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi08)	0.96(1)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi08)	0.04(1)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name	LiNH2_09						
Space Group	I – 4						
Scale	0.0000010(5)						
Lattice Parameter	a = b = a_liam_09 = $0.1*aLi_0 + 0.9*aLi_{10}$ = 5.04146(6)Å						
	c = c_liam_09 = $0.1*cLi_0 + 0.9*cLi_{10}$ = 10.3246(2)Å						
Occupancy Parameter	oLi09= $0.1* yLi_0 + 0.9*yLi_{10}$ = 0.95(1)						
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi09)	0.95(1)	b_{eq}= 3.0(1)

Site	Na 2	0.0	0.5	-0.25	occ (1-oLi09)	0.05(1)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name		LiNH2_10					
Space Group		I – 4					
Scale		0.0000010(3)					
Lattice Parameter		$a = b = a\_liam\_10 = 0.0*aLi_0 + 1.0*aLi_{10} = 5.04195(6)$Å					
		$c = c\_liam\_10 = 0.0*cLi_0 + 1.0*cLi_{10} = 10.3311(2)$Å					
Occupancy Parameter		$oLi10= 0.0* yLi_0 + 1.0*yLi_{10} = 0.95(1)$					
Site	Li 1	0.0	0.0	0.0	occ	1	b_{eq}= 0.95(1)
Site	Li 2	0.0	0.5	-0.25	occ (oLi10)	0.95(1)	b_{eq}= 3.0(1)
Site	Na 2	0.0	0.5	-0.25	occ (1-oLi10)	0.05(1)	b_{eq}= 3.0(1)
Site	Li 3	0.0	0.5	0.00620	occ	1	b_{eq}= 0.95(1)
Site	N	-0.2303(1)	-0.2407(3)	-0.11436(4)	occ	1	b_{eq}= 0.95(1)
Site	H 1	-0.226	-0.149	-0.172	occ	1	b_{eq}= 0.95(1)
Site	H 2	-0.308	-0.359	-0.114	occ	1	b_{eq}= 0.95(1)

Phase Name		Li2O					
Space Group		Fm3m					
Scale		0.000000(1)					
Lattice Parameter		$a = b = c = 4.61589(5)$ Å					
Site	Li	0.25	0.25	0.25	occ	1	b_{eq} = 0.9148
Site	O	0.0	0.0	0.0	occ	1	b_{eq} = 0.8

Phase Name		LiNa2(NH2)3					
Space Group		P42/m					
Scale		0.00000019(6)					
Lattice Parameter		$a = b = 6.2838(1)$Å					
		$c = 11.1485(2)$Å					
Site	N 1	0.66317	0.27595	0.0	occ	1	b_{eq} = 1.5810
Site	H 1	0.73697	0.29827	0.056	occ	1	b_{eq} = 1.5810
Site	N 2	0.20732	0.27336	0.15765	occ	1	b_{eq} = 1.5810
Site	H 2	0.16362	0.18116	0.21186	occ	1	b_{eq} = 1.5810
Site	H 3	0.10362	0.32316	0.14126	occ	1	b_{eq} = 1.5810
Site	Na 1	0.50	0.0	0.14216	occ	1	b_{eq} = 2.2740
Site	Na 2	0.0	0.0	0.0	occ	1	b_{eq} = 2.2740
Site	Na 3	0.50	0.50	0.25	occ	1	b_{eq} = 2.2740
Site	Li 1	0.35356	0.36094	0.0	occ	1	b_{eq} = 2.0455

Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	$a_0 = 5.0828(4)$
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	$a_{10} = 5.0700(2)$

Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	$c_0 = 11.5415(2)$
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	$c_{10} = 11.2562(9)$
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	$z\_N_0 = 0.0997(2)$
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Lattice Parameter	$z\_N_{10} = 0.1014(7)$
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Occ. Parameter	$yNa_0 = 0.938(7)$
Li3Na(NH2)4_00 – Li3Na(NH2)4_10 Occ. Parameter	$yNa_{10} = 0.79(2)$

Phase Name	Li3Na(NH2)4_00					
Space Group	I – 4					
Scale	0.0000001(3)					
Lattice Parameter	$a = b = a\_00 = 1.0*a_0 + 0.0*a_{10} = 5.08280(4)$Å					
	$c = c\_00 = 1.0*c_0 + 0.0*c_{10} = 11.5415(2)$Å					
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 1.0* z\_N_0 + 0.0* z\_N_{10} = 0.0997(2)$					
Occupancy Parameter	$oNa00 = 1.0* yNa_0 + 0.0*yNa_{10} = 0.938(7)$					
Site	Na 1	0.0	0.50	0.25	occ (oNa_00)	0.983(7)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_00)	0.062(7)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.0997(2)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_01					
Space Group	I – 4					
Scale	0.0000001(4)					
Lattice Parameter	$a = b = a\_01 = 0.9*a_0 + 0.1*a_{10} = 5.08152(6)$Å					
	$c = c\_01 = 0.9*c_0 + 0.1*c_{10} = 11.5130(3)$ Å					
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.9* z\_N_0 + 0.1* z\_N_{10} = 0.0998(3)$					
Occupancy Parameter	$oNa01 = 0.9* yNa_0 + 0.1*yNa_{10} = 0.923(8)$					
Site	Na 1	0.0	0.50	0.25	occ (oNa_01)	0.923(8)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_01)	0.077(8)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.0998(3)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_02					
Space Group	I – 4					
Scale	0.0000001(4)					
Lattice Parameter	$a = b = a\_02 = 0.8*a_{10} + 0.2*a_{10} = 5.08024(7)$Å					
	$c = c\_02 = 0.8*c_{10} + 0.2*c_{10} = 11.4844(3)$ Å					
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.8* z\_N_0 + 0.2* z\_N_{10} = 0.1000(3)$					
Occupancy Parameter	$oNa02 = 0.8* yNa_0 + 0.2*yNa_{10} = 0.91(1)$					
Site	Na 1	0.0	0.50	0.25	occ (oNa_02)	0.91(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_02)	0.09(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484

Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1000(3)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_03						
Space Group	I – 4						
Scale	0.0000001(4)						
Lattice Parameter	$a = b = a\_03 = 0.7*a_{10} + 0.3*a_{10} = 5.07896(9)$ Å						
	$c = c\_03 = 0.7*c_{10} + 0.3*c_{10} = 11.4559(4)$ Å						
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.7* z\_N_0 + 0.3* z\_N_{10} = 0.1002(4)$						
Occupancy Parameter	$oNa03 = 0.7* yNa_0 + 0.3*yNa_{10} = 0.89(1)$						
Site	Na 1	0.0	0.50	0.25	occ (oNa_03)	0.89(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_03)	0.11(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1002(4)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_04						
Space Group	I – 4						
Scale	0.0000001(4)						
Lattice Parameter	$a = b = a\_04 = 0.6*a_{10} + 0.4*a_{10} = 5.0777(1)$Å						
	$c = c\_04 = 0.6*c_{10} + 0.4*c_{10} = 11.4274(5)$Å						
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.6* z\_N_0 + 0.4* z\_N_{10} = 0.1003(4)$						
Occupancy Parameter	$oNa04 = 0.6* yNa_0 + 0.4*yNa_{10} = 0.88(1)$						
Site	Na 1	0.0	0.50	0.25	occ (oNa_04)	0.88(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_04)	0.12(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1003(4)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_05						
Space Group	I – 4						
Scale	0.0000001(4)						
Lattice Parameter	$a = b = a\_05 = 0.5*a_{10} + 0.5*a_{10} = 5.0764(1)$Å						
	$c = c\_05 = 0.5*c_{10} + 0.5*c_{10} = 11.3989(6)$Å						
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.5* z\_N_0 + 0.5* z\_N_{10} = 0.1005(5)$						
Occupancy Parameter	$oNa05 = 0.5* yNa_0 + 0.5*yNa_{10} = 0.87(1)$						
Site	Na 1	0.0	0.50	0.25	occ (oNa_05)	0.87(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_05)	0.13(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1005(5)	occ	1	b_{eq} 2.2484

Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_06						
Space Group	I – 4						
Scale	0.0000001(4)						
Lattice Parameter	$a = b = a\_06 = 0.4*a_{10} + 0.6*a_{10} = 5.0751(1)$Å						
	$c = c\_06 = 0.4*c_{10} + 0.6*c_{10} = 11.3703(6)$Å						
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.4* z\_N_0 + 0.6* z\_N_{10} = 0.1007(5)$						
Occupancy Parameter	$oNa06 = 0.4* yNa_0 + 0.6*yNa_{10} = 0.85(1)$						
Site	Na 1	0.0	0.50	0.25	occ (oNa_06)	0.85(1)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_06)	0.15(1)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1007(5)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_07						
Space Group	I – 4						
Scale	0.0000001(4)						
Lattice Parameter	$a = b = a\_07 = 0.3*a_{10} + 0.7*a_{10} = 5.0738(2)$Å						
	$c = c\_07 = 0.3*c_{10} + 0.7*c_{10} = 11.3418(7)$Å						
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.3* z\_N_0 + 0.7* z\_N_{10} = 0.1008(6)$						
Occupancy Parameter	$oNa07 = 0.3* yNa_0 + 0.7*yNa_{10} = 0.83(2)$						
Site	Na 1	0.0	0.50	0.25	occ (oNa_07)	0.83(2)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_07)	0.17(2)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1008(6)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_08						
Space Group	I – 4						
Scale	0.0000001(4)						
Lattice Parameter	$a = b = a\_08 = 0.2*a_{10} + 0.8*a_{10} = 5.0726(2)$Å						
	$c = c\_08 = 0.2*c_{10} + 0.8*c_{10} = 11.3133(8)$Å						
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.2* z\_N_0 + 0.8* z\_N_{10} = 0.1010(6)$						
Occupancy Parameter	$oNa08 = 0.2* yNa_0 + 0.8*yNa_{10} = 0.82(2)$						
Site	Na 1	0.0	0.50	0.25	occ (oNa_08)	0.82(2)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_08)	0.18(2)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1010(6)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_09					
Space Group	I – 4					
Scale	0.0000001(4)					
Lattice Parameter	$a = b = a\_09 = 0.1*a_{10} + 0.9*a_{10} = 5.0713(2)$Å					
	$c = c\_09 = 0.1*c_{10} + 0.9*c_{10} = 11.2847(8)$Å					
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.1* z\_N_0 + 0.9* z\_N_{10} = 0.1012(7)$					
Occupancy Parameter	$oNa09 = 0.1* yNa_0 + 0.9*yNa_{10} = 0.81(2)$					
Site	Na 1	0.0	0.50	0.25	occ (oNa_09)	0.81(2)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_09)	0.19(2)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1012(7)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	Li3Na(NH2)4_10					
Space Group	I – 4					
Scale	0.0000001(4)					
Lattice Parameter	$a = b = a\_10 = 0.0*a_{10} + 1.0*a_{10} = 5.0700(2)$Å					
	$c = c\_10 = 0.0*c_{10} + 1.0*c_{10} = 11.2562(9)$Å					
Nitrogen Z Coordinate	$z\_N = z\_N_0 = 0.0* z\_N_0 + 1.0* z\_N_{10} = 0.1014(7)$					
Occupancy Parameter	$oNa10 = 0.0* yNa_0 + 1.0*yNa_{10} = 0.79(2)$					
Site	Na 1	0.0	0.50	0.25	occ (oNa_10)	0.79(2)	b_{eq} 2.2484
Site	Li 1	0.0	0.50	0.25	occ (1-oNa_10)	0.21(2)	b_{eq} 2.2484
Site	Li 2	0.0	0.0	0.0	occ	1	b_{eq} 2.2484
Site	Li 3	0.0	0.50	0.0087	occ	1	b_{eq} 2.2484
Site	N	0.2390(7)	0.2390(9)	0.1014(7)	occ	1	b_{eq} 2.2484
Site	H 1	0.365	0.290	0.110	occ	1	b_{eq} 2.2484
Site	H 2	0.233	0.139(6)	0.168(3)	occ	1	b_{eq} 2.2484

Phase Name	NaNH2					
Space Group	Fddd					
Scale	0.0000482(1)					
Lattice Parameter	a = 8.95853(2) Å					
	b = 10.4344(3) Å					
	c = 8.07177(2) Å					
Site	Na 1	0.0	0.14841	0.0	occ	1	b_{eq} 2.6283
Site	N	0.0	0.0	0.23425	occ	1	b_{eq} 3.2183
Site	H 1	0.05938	0.95625	0.29968	occ	1	b_{eq} 2.7556