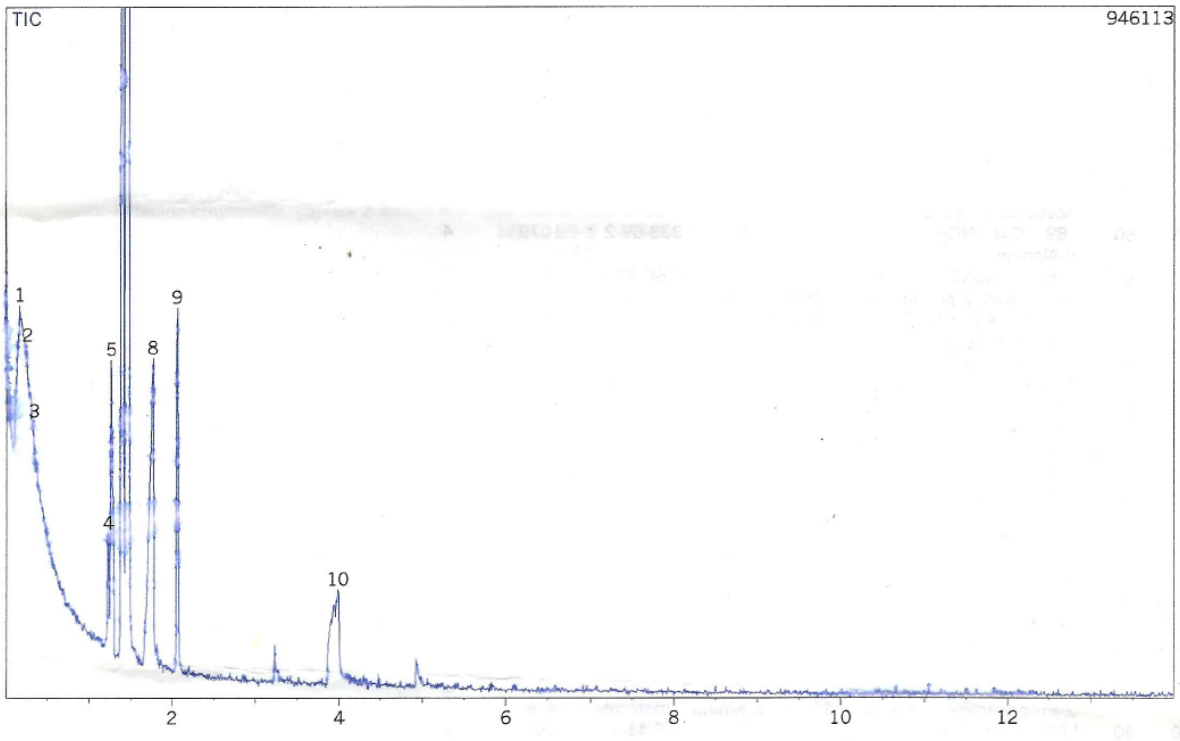
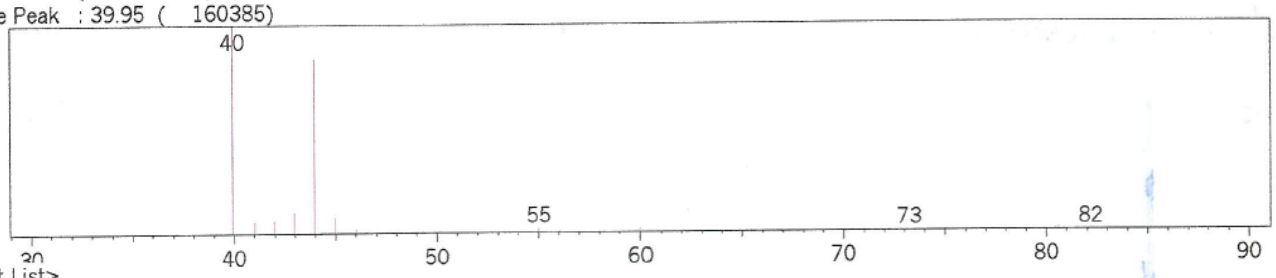
Supporting Information (SI-1)

Fig. SI-1 GC-MS graph of the filtrate obtained in solvothermal reaction after 16h.



Data for Peak -1, 2 and 3

Mass Peak # : 47 Ret. Time : (0.125 - 0.325)
Scan # : (15 - 39) B.G. Scan # : (101 - 125)
Base Peak : 39.95 (160385)



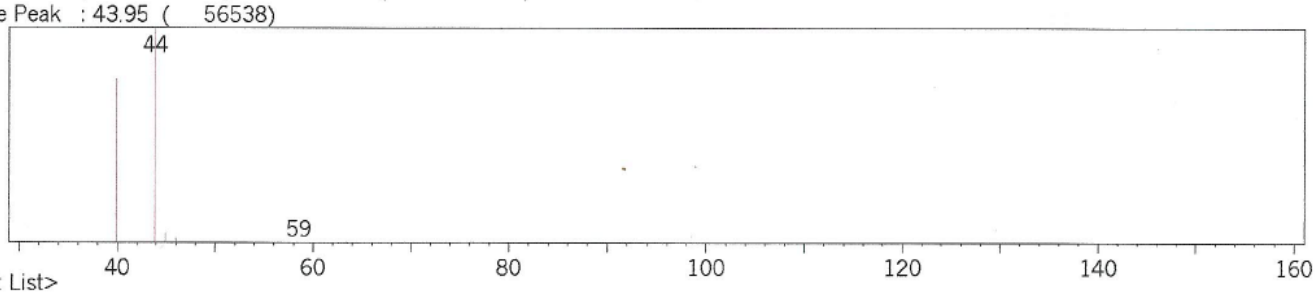
<Hit List>

No	SI	Mol.Wgt.	Mol.Form./Compound Name	CAS No.	Entry	LIB#
1	82	85	$C_3H_3NO_2$	372-09-8	547	1
			Acetic acid, cyano-			
2	80	89	$C_3H_7NO_2$	338-69-2	1079	4
			d-Alanine			
3	80	75	C_3H_9NO	6168-72-5	411	3
			1-Propanol, 2-amino-, (.+/-.)- $$ 1-Propanol, 2-amino-, DL- $$.+/-.-2-Amino-1-propan ol $$ DL-Alaninol $$ DL-2-Amino-1-propanol $$ DL-2-Aminopropanol $$ 1-Propanol, 2-ami no-, (.+-.)- $$.+-.-2-Amino-1-propanol $$ 2-Amino-1-propanol # $$			
4	80	75	C_3H_9NO	2749-11-3	354	1
			1-Propanol, 2-amino-, (S)-			
5	80	89	$C_3H_7NO_2$	302-72-7	1087	4
			dl-Alanine			
6	80	89	$C_3H_7NO_2$	56-41-7	1083	4
			Alanine			
7	80	75	C_3H_9NO	78-91-1	406	3
			1-Propanol, 2-amino- $$ Alaninol $$ .beta.-Propanolamine $$ 1-Hydroxy-2-aminopropane $$ 1-Methyl-2-hydroxyethylamine $$ 2-Amino-1-propanol $$ 2-Amino-2-methylethanol $$ 2 -Aminopropanol $$ 1-Amino-2-propanol $$ 2-Aminopropyl alcohol $$ 2-Hydroxypropylamine $$ Aliphatic amine $$ Isopropanolamine $$ MIPA $$ Monoisopropanolamine $$			
8	80	75	C_3H_9NO	78-91-1	350	2
			1-Propanol, 2-amino- $$ .beta.-Propanolamine $$ Alaninol $$ 1-Hydroxy-2-aminopropane $$ 1-Methyl-2-hydroxyethylamine $$ 2-Amino-1-propanol $$ 2-Amino-2-methylethanol $$ 2 -Aminopropanol			
9	80	89	$C_4H_{11}NO$	37143-54-7	883	2
			2-Propanamine, 1-methoxy- $$.+/-.-2-Amino-1-methoxypropane			
10	80	89	$C_3H_7NO_2$	56-41-7	867	2
			Alanine $$ L-Alanine $$ Alanine, L- $$ .alpha.-Alanine $$ .alpha.-Aminopropionic acid $$ (S)-Alanine $$ L-.alpha.-Alanine $$ L-.alpha.-Aminopropionic acid $$ L-(+)-Alanin e $$ L-2-Aminopropanoic acid $$ L-2-Aminopropionic acid $$ Propanoic acid, 2-amino- $ $ Propanoic acid, 2-amino-, (S)- $$ L-CH3CH(NH2)COOH $$ (S)-2-Aminopropanoic acid			

Library Name
(1) NIST12.LIB (2) NIST62.LIB (3) NIST147.LIB (4) NIST27.LIB

Data for Peak -4

Mass Peak # : 6 Ret. Time : (1.217 - 1.267)
Scan # : (146 - 152) B.G. Scan # : (268 - 292)
Base Peak : 43.95 (56538)



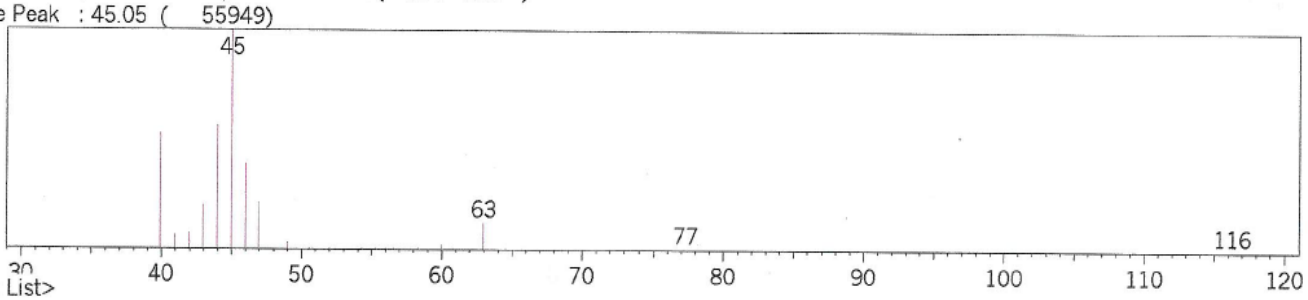
<Hit List>

No	SI	Mol.Wgt.	Mol.Form./Compound Name	CAS No.	Entry	LIB#
1	84	116	$C_5H_{12}N_2O$	71773-95-0	4410	3
			l-Alanine ethylamide, (S)- $$ 2-Amino-N-ethylpropanamide # $$			
2	82	117	$C_5H_{11}NO_2$	17344-99-9	4665	3
			dl-Alanine ethyl ester $$ Ethyl 2-aminopropanoate # $$			
3	81	117	$C_5H_{11}NO_2$	3082-75-5	2155	1
			L-Alanine, ethyl ester			
4	81	160	$C_6H_{12}N_2O_3$	59247-16-4	19066	3
			dl-Alanyl-l-alanine $$ N-(2-Aminopropanoyl)alanine # $$			
5	81	89	$C_3H_7NO_2$	56-41-7	867	2
			Alanine $$ L-Alanine $$ Alanine, L- $$ .alpha.-Alanine $$ .alpha.-Aminopropionic acid $$ (S)-Alanine $$ L-.alpha.-Alanine $$ L-.alpha.-Aminopropionic acid $$ L-(+)-Alanine $$ L-2-Aminopropanoic acid $$ L-2-Aminopropionic acid $$ Propanoic acid, 2-amino- $$ Propanoic acid, 2-amino-, (S)- $$ L-CH3CH(NH2)COOH $$ (S)-2-Aminopropanoic acid			
6	81	74	$C_3H_{10}N_2$	78-90-0	430	4
			1,2-Propanediamine			
7	81	74	$C_3H_{10}N_2$	78-90-0	377	3
			1,2-Propanediamine $$ Propylenediamine $$ 1,2-Diaminopropane $$ 1,2-Propylenediamine $$ UN 2258 $$			
8	80	74	$C_3H_{10}N_2$	78-90-0	325	2
			1,2-Propanediamine $$ Propylenediamine $$ 1,2-Diaminopropane $$ 1,2-Propylenediamine $$ UN 2258			
9	80	143	$C_9H_{21}N$	2439-54-5	8203	2
			1-Octanamine, N-methyl- $$ N-Methyloctylamine $$ Octylamine, N-methyl- $$ Octylmethylamine $$ N-Methyl-n-octylamine $$ Methyloctylamine $$ N-Octyl-N-methylamine $$ N-Methyl-N-n-octylamine			
10	80	89	$C_3H_7NO_2$	302-72-7	1047	3
			dl-Alanine $$ (.+/-.)-Alanine $$ dl-.alpha.-Aminopropionic acid $$ dl-2-Aminopropanoic acid $$ Alanine, DL- $$ ALANINE, .alpha. $$ DL-.alpha.-Alanine $$ Alanine # $$			

Library Name
(1) NIST12.LIB (2) NIST62.LIB (3) NIST147.LIB (4) NIST27.LIB

Data for Peak -5

Mass Peak # : 30 Ret. Time : (1.267 - 1.317)
Scan # : (152 - 158) B.G. Scan # : (126 - 138)
Base Peak : 45.05 (55949)



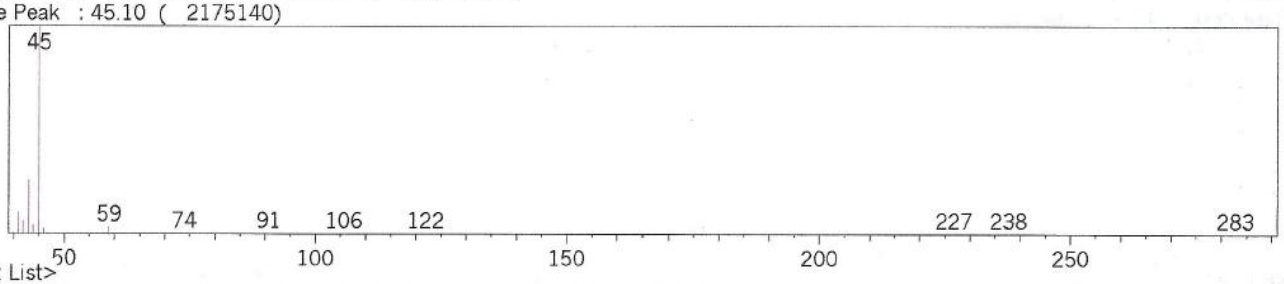
<Hit List>

No	SI	Mol.Wgt.	Mol.Form./Compound Name	CAS No.	Entry	LIB#
1	82	136	$C_3H_4O_6$	560-27-0	9058	3
			Propanedioic acid, dihydroxy- $$ 2,2-Dihydroxymalonic acid # $$			
2	82	76	$C_2H_4O_3$	79-14-1	422	3
			Acetic acid, hydroxy- $$ Glycolic acid $$ .alpha.-Hydroxyacetic acid $$ Glycollic aci d $$ Hydroxyacetic acid $$ Hydroxyethanoic acid $$ HOCH2COOH $$ Kyselina glykolova $$ Kyselina hydroxyoctova $$ 2-Hydroxyacetic acid $$			
3	81	46	C_2H_6O	64-17-5	46	4
			Ethanol			
4	81	46	C_2H_6O	64-17-5	42	1
			Ethanol			
5	81	46	C_2H_6O	64-17-5	47	4
			Ethanol			
6	80	89	$C_3H_7NO_2$	2043-43-8	1081	4
			Propanamide, 2-hydroxy-			
7	80	46	C_2H_6O	64-17-5	49	2
			Ethanol $$ Ethyl alcohol $$ Alcohol $$ Alcohol anhydrous $$ Algrain $$ Anhydrol $$ De natured ethanol $$ Ethyl hydrate $$ Ethyl hydroxide $$ Jaysol $$ Jaysol S $$ Methylca rbinol $$ SD Alchol 23-hydrogen $$ Tecsol $$ C2H5OH $$ Absolute ethanol $$ Cologne sp irit $$ Fermentation alcohol $$ Grain alcohol $$ Molasses alcohol $$ Potato alcohol $ $$ Aethanol $$ Aethylalkohol $$ Alcohol, dehydrated $$ Alcohol, diluted $$ Alcohols $$ Alcool ethylique $$ Alcool etilico $$ Alkohol $$ Cologne spirits $$ Denatured alcoho l			
8	79	46	CH_6N_2	60-34-4	44	4
			Hydrazine, methyl-			
9	78	124	$C_2H_8N_2O_4$	6009-70-7	5651	3
			Ammonium oxalate $$ Ethanedioic acid diammonium salt monohydrate $$			
10	77	89	$C_3H_7NO_2$	2043-43-8	1080	4
			Propanamide, 2-hydroxy-			

Library Name
(1) NIST12.LIB (2) NIST62.LIB (3) NIST147.LIB (4) NIST27.LIB

Data for Peak -6

Mass Peak # : 34 Ret. Time : (1.358 - 1.442)
Scan # : (163 - 173) B.G. Scan # : (119 - 134)
Base Peak : 45.10 (2175140)



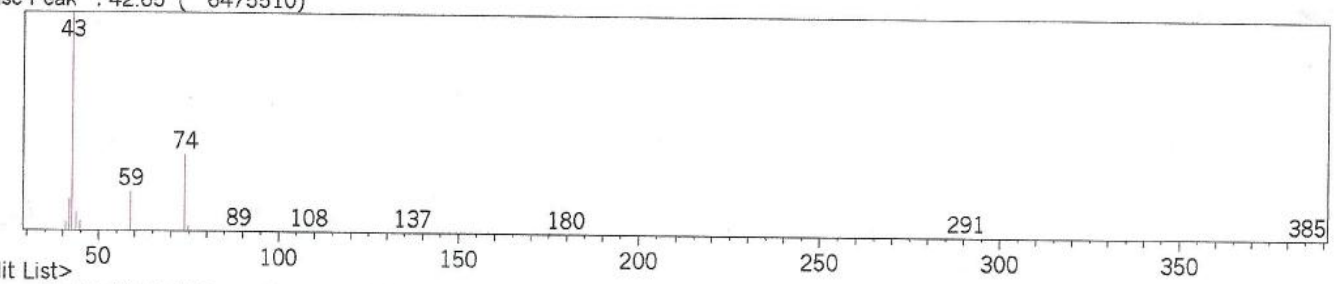
<Hit List>

No	SI	Mol.Wgt.	Mol.Form./Compound Name	CAS No.	Entry	LIB#
1	98	60	C_3H_8O Isopropyl Alcohol	67-63-0	147	4
2	97	60	C_3H_8O Isopropyl Alcohol	67-63-0	124	1
3	97	60	C_3H_8O Isopropyl Alcohol	67-63-0	122	1
4	96	60	C_3H_8O Isopropyl Alcohol	67-63-0	123	1
5	96	60	C_3H_8O Isopropyl Alcohol	67-63-0	146	4
6	96	60	C_3H_8O Isopropyl Alcohol $$ 2-Propanol $$ sec-Propyl Alcohol $$ Alcojel $$ Alcosolve 2 $$ Avantin $$ Avantine $$ Combi-Schutz $$ Dimethylcarbinol $$ Hartosol $$ Imsol A $$ Isohol $$ Isopropanol $$ Lutosol $$ Petrohol $$ Propol $$ PRO $$ Takineocol $$ 1-Methylethyl Alcohol $$ iso-C3H7OH $$ 2-Hydroxypropane $$ Propane, 2-hydroxy- $$ sec-Propanol $$ Propan-2-ol $$ i-Propylalkohol $$ Alcohol, rubbing $$ Alcolo $$ Alcool isopropilico $$ Alcool isopropylique $$ Alkolave $$ Arquad DMCB $$ iso-Propylalkohol $$ Isopropyl	67-63-0	141	3
7	96	60	C_3H_8O Isopropyl Alcohol $$ 2-Propanol $$ n-Propan-2-ol $$ sec-Propyl Alcohol $$ Alcojel $$ Alcosolve 2 $$ Avantin $$ Avantine $$ Combi-Schutz $$ Dimethylcarbinol $$ Hartosol $$ Imsol A $$ Isohol $$ Isopropanol $$ Lutosol $$ Petrohol $$ Propol $$ PRO $$ Takineocol $$ 1-Methylethyl Alcohol $$ iso-C3H7OH $$ 2-Hydroxypropane $$ Propane, 2-hydroxy- $$ sec-Propanol $$ Propan-2-ol $$ i-Propylalkohol $$ Alcohol, rubbing $$ Alcolo $$ Alcool isopropilico $$ Alcool isopropylique $$ Alkolave $$ Arquad DMCB $$ Iso-propylalko	67-63-0	126	2
8	95	86	$C_5H_{10}O$ 4-Penten-2-ol $$ 1-Penten-4-ol $$ 4-Hydroxypent-1-ene $$ CH2=CHCH2CH(OH)CH3	625-31-0	713	2
9	94	86	$C_5H_{10}O$ 4-Penten-2-ol	625-31-0	891	4
10	94	76	$C_3H_8O_2$ Propylene Glycol $$ 1,2-Propanediol $$ .alpha.-Propylene glycol $$ Methyl glycol $$ Methylethyl glycol $$ Methylethylene glycol $$ Monopropylene glycol $$ PG 12 $$ Sirlene $$ 1,2-Dihydroxypropane $$ 1,2-Propylene Glycol $$ 2-Hydroxypropanol $$ 2,3-Propanediol $$ Propane-1,2-diol $$ Trimethyl glycol $$ Dowfrost $$ Propylene glycol usp $$ 1,2-Propylenglykol $$ Solar winter ban $$ Sentry Propylene Glycol $$ Isopropylene glycol $$ Ucar 35 $$ Solargard P	57-55-6	378	2

Library Name
(1) NIST12.LIB (2) NIST62.LIB (3) NIST147.LIB (4) NIST27.LIB

Data for Peak -7

Mass Peak # : 52 Ret. Time : (1.442 - 1.517)
Scan # : (173 - 182) B.G. Scan # : (123 - 139)
Base Peak : 42.65 (6475510)



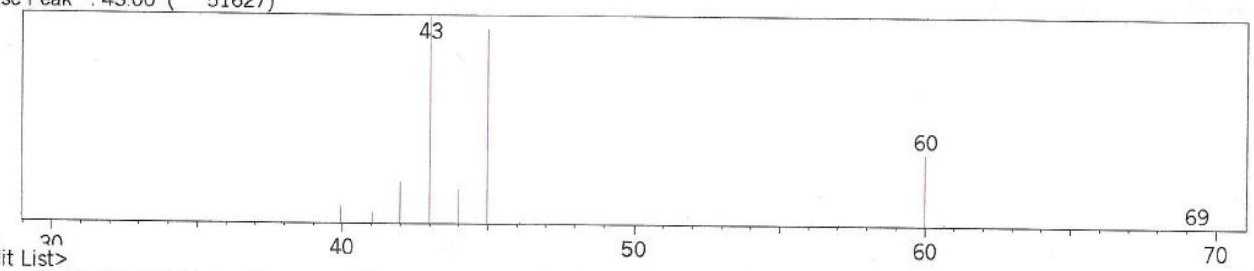
<Hit List>

No	SI	Mol.Wgt.	Mol.Form./Compound Name	CAS No.	Entry	LIB#
1	96	74	$C_3H_6O_2$ Acetic acid, methyl ester	79-20-9	415	4
2	94	74	$C_3H_6O_2$ Acetic acid, methyl ester	79-20-9	313	1
3	94	74	$C_3H_6O_2$ Acetic acid, methyl ester	79-20-9	312	1
4	93	74	$C_3H_6O_2$ Acetic acid, methyl ester	79-20-9	311	1
5	93	74	$C_3H_6O_2$ Acetic acid, methyl ester $$ Methyl acetate $$ Devoton $$ Tereton $$ CH3COOCH3 $$ Methyl ethanoate $$ Acetate de methyle $$ Methyl acetic ester $$ Methylacetaat $$ Methyl acetat $$ Methyle (acetate de) $$ Methylester kiseliny octove $$ Metile (acetato di) $$ Ethyl ester of monoacetic acid $$ Metile $$ UN 1231 $$ Methyl ester of acetic acid $$	79-20-9	366	3
6	92	74	$C_3H_6O_2$ Acetic acid, methyl ester $$ Devoton $$ Methyl acetate $$ Tereton $$ CH3COOCH3 $$ Methyl ethanoate $$ Acetate de methyle $$ Methyl acetic ester $$ Methylacetaat $$ Methyl acetat $$ Methyle (acetate de) $$ Methylester kiseliny octove $$ Metile (acetato di) $$ Octan metylu $$ Ethyl ester of monoacetic acid $$ Metile $$ UN 1231 $$ Methyl ester of acetic acid	79-20-9	316	2
7	90	74	$C_2H_6N_2O$ Acetic acid, hydrazide $$ Acethydrazide $$ Acetohydrazide $$ Acetyl hydrazide $$ Acetylhydrazine $$ Ethanehydrazonic acid $$ ENT-61241 $$ Hydrazine, Acetyl- $$ Monoacetyl hydrazine $$ N-Acetylhydrazine $$ NSC 53155 $$ 374 $$ Acetic hydrazide $$ Hydrazid kyseliny octove $$	1068-57-1	354	3
8	90	74	$C_3H_6O_2$ 2-Propanone, 1-hydroxy-	116-09-6	418	4
9	89	74	$C_3H_6O_2$ 2-Propanone, 1-hydroxy-	116-09-6	318	1
10	88	101	$C_4H_7NO_2$ Diacetamide	625-77-4	1882	4

Library Name
(1) NIST12.LIB (2) NIST62.LIB (3) NIST147.LIB (4) NIST27.LIB

Data for Peak -8

Mass Peak # : 20 Ret. Time : (1.658 - 1.825)
Scan # : (199 - 219) B.G. Scan # : (231 - 242)
Base Peak : 43.00 (51627)



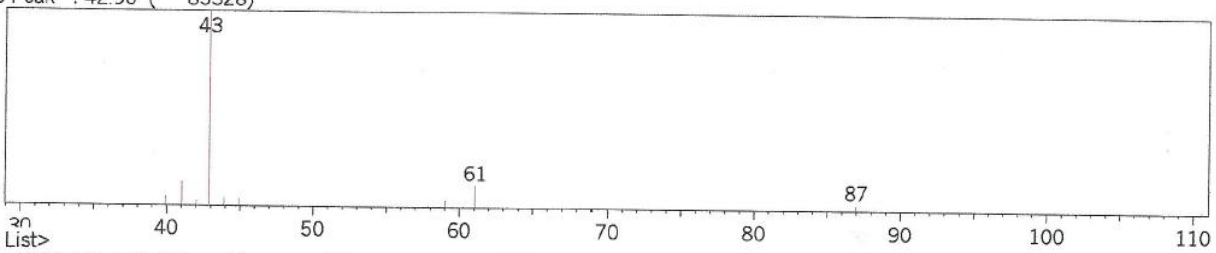
<Hit List>

No	SI	Mol.Wgt.	Mol.Form./Compound Name	CAS No.	Entry	LIB#
1	96	60	$C_2H_4O_2$	64-19-7	135	4
			Acetic acid			
2	96	60	$C_2H_4O_2$	64-19-7	116	2
			Acetic acid $$ Ethanoic acid $$ Ethylic acid $$ Glacial acetic acid $$ Methanecarboxylic acid $$ Vinegar acid $$ CH3COOH $$ component of Aci-Jel $$ Acetasol $$ Acide acetique $$ Acido acetico $$ Azijnzuur $$ Essigsaeure $$ Octowy kwas $$ Acetic acid, glacial $$ Kyselina octova $$ UN 2789 $$ UN 2790			
3	96	60	$C_2H_4O_2$	64-19-7	118	1
			Acetic acid			
4	95	60	$C_2H_4O_2$	64-19-7	116	1
			Acetic acid			
5	95	60	$C_2H_4O_2$	64-19-7	133	4
			Acetic acid			
6	95	60	$C_2H_4O_2$	64-19-7	134	4
			Acetic acid			
7	95	60	$C_2H_4O_2$	64-19-7	117	1
			Acetic acid			
8	94	60	$C_2H_4O_2$	64-19-7	136	4
			Acetic acid			
9	93	77	$C_2H_7NO_2$	631-61-8	451	3
			Ammonium acetate $$ Acetic acid, ammonium salt $$ Mindererus's spirit $$			
10	93	60	$C_2H_4O_2$	64-19-7	131	3
			Acetic acid $$ Ethanoic acid $$ Ethylic acid $$ Glacial acetic acid $$ Methanecarboxylic acid $$ Vinegar acid $$ CH3COOH $$ component of Aci-Jel $$ Acetasol $$ Acide acetique $$ Acido acetico $$ Azijnzuur $$ Essigsaeure $$ Octowy kwas $$ Acetic acid, glacial $$ Kyselina octova $$ UN 2789 $$ UN 2790 $$ Aci-jel $$ Shotgun $$ TCLP extraction fluid 2 $$ Vinegar $$			

Library Name
(1) NIST12.LIB (2) NIST62.LIB (3) NIST147.LIB (4) NIST27.LIB

Data for Peak -9

Mass Peak # : 16 Ret. Time : (2.042 - 2.125)
Scan # : (245 - 255) B.G. Scan # : (266 - 288)
Base Peak : 42.90 (85328)



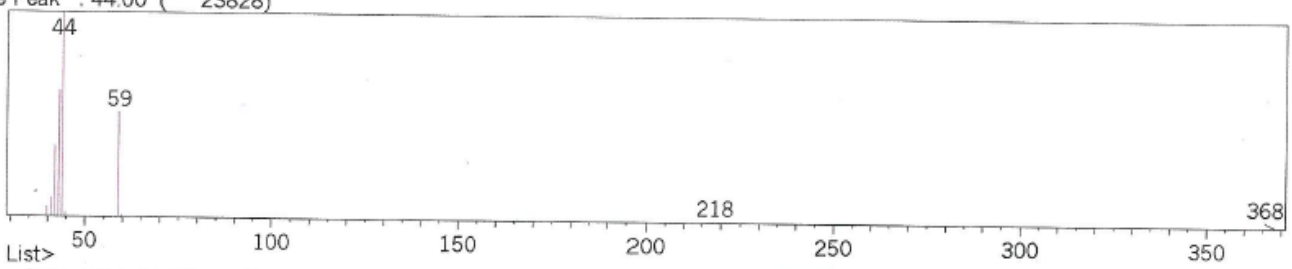
<Hit List>

No	SI	Mol.Wgt.	Mol.Form./Compound Name	CAS No.	Entry	LIB#
1	96	102	$C_5H_{10}O_2$ Acetic acid, 1-methylethyl ester	108-21-4	2007	4
2	96	102	$C_5H_{10}O_2$ Acetic acid, 1-methylethyl ester	108-21-4	1268	1
3	95	102	$C_5H_{10}O_2$ Acetic acid, 1-methylethyl ester $$ Acetic acid, isopropyl ester $$ Isopropyl acetate $$ 2-Acetoxypropane $$ 2-Propyl acetate $$ CH3COOCH(CH3)2 $$ Acetate d'isopropyle $$ Isopropile(acetato di) $$ Isopropyl ethanoate $$ Isopropyl(acetate d') $$ Isopropylacetaat $$ Isopropile $$ Isopropyl $$ Isopropylester kyseliny octove $$ UN 1220 $$ Isopropyl ester of acetic acid	108-21-4	1719	2
4	95	102	$C_5H_{10}O_2$ Acetic acid, 1-methylethyl ester	108-21-4	1269	1
5	95	102	$C_5H_{10}O_2$ Acetic acid, 1-methylethyl ester	108-21-4	2008	4
6	93	102	$C_5H_{10}O_2$ Acetic acid, 1-methylethyl ester $$ Acetic acid, isopropyl ester $$ Isopropyl acetate $$ 2-Acetoxypropane $$ 2-Propyl acetate $$ CH3COOCH(CH3)2 $$ Acetate d'isopropyle $$ Isopropile(acetato di) $$ Isopropyl ethanoate $$ Isopropyl(acetate d') $$ Isopropylacetaat $$ Isopropylester kyseliny octove $$ UN 1220 $$ Isopropyl ester of acetic acid $$ sec-Propyl acetate $$ so-Propyl acetate $$ Acetic acid, 2-propyl ester $$	108-21-4	2222	3
7	93	102	$C_5H_{10}O_2$ Acetic acid, 1-methylethyl ester	108-21-4	1270	1
8	93	102	$C_5H_{10}O_2$ Acetic acid, 1-methylethyl ester	108-21-4	2009	4
9	92	102	$C_4H_6O_3$ Acetic acid, anhydride $$ Acetic anhydride $$ Acetic oxide $$ Acetyl anhydride $$ Acetyl ether $$ Acetyl oxide $$ Ethanoic anhydride $$ Hydroxybiacetyl $$ (CH3CO)2O $$ Ethanoic anhydrate $$ Acetanhydride $$ Anhydride acetique $$ Anhydrid kyseliny octove $$ Anidride acetica $$ Azijnzuuranhydride $$ Essigsaeureanhydrid $$ Octowy bezwodnik $$ UN 1715 $$ Acetyl acetate	108-24-7	1680	2
10	92	102	$C_4H_6O_3$ Acetic anhydride	108-24-7	1966	4

Library Name
(1) NIST12.LIB (2) NIST62.LIB (3) NIST147.LIB (4) NIST27.LIB

Data for Peak -10

Data : BBK_1.D01
Mass Peak # : 13 Ret. Time : (3.842 - 4.050)
Scan # : (461 - 486) B.G. Scan # : (496 - 510)
Base Peak : 44.00 (23828)



<Hit List>

No	SI	Mol.Wgt.	Mol.Form./Compound Name	CAS No.	Entry	LIB#
1	93	59	C_2H_5NO	60-35-5	117	3
			Acetamide $$ Acetic acid amide $$ Ethanamide $$ Methanecarboxamide $$ CH3CONH2 $$ NCI-C02108 $$ Amid kyseliny octove $$			
2	92	59	C_2H_5NO	60-35-5	103	2
			Acetamide $$ Acetic acid amide $$ Acetimidic acid $$ Ethanamide $$ Methanecarboxamide $$ CH3CONH2 $$ NCI-C02108 $$ Amid kyseliny octove			
3	90	59	C_2H_5NO	60-35-5	102	1
			Acetamide			
4	89	116	$C_2H_4N_4O_2$	123-77-3	3175	2
			Diazenedicarboxamide $$ Formamide, 1,1'-azobis- $$ .delta.(Sup1,1')-Biurea $$ Azobis carbonamide $$ Azobis carboxamide $$ Azobis formamide $$ Azodicarbamide $$ Azodicarbonamide $$ Azodicarboxamide $$ Azodicarboxylic acid diamide $$ Azodiformamide $$ Celogen AZ $$ Celogen AZ 130 $$ Celogen AZ 199 $$ ChKhZ 21 $$ ChKhZ 21R $$ Ficel EP-A $$ Genitron AC $$ Genitron AC 2 $$ Genitron AC 4 $$ Kempore R 125 $$ Kempore 125 $$ Lucel ADA $$ Pinhole AK 2 $$ Porofor ADC/R $$ Porofor ChKhZ 21 $$ Por			
5	89	72	$C_3H_4O_2$	692-45-5	253	2
			Formic acid, ethenyl ester $$ Formic acid, vinyl ester $$ Vinyl formate $$ Vinyl methanoate $$ Vinylester kyseliny mravenci			
6	87	180	$C_3H_{12}N_6O_3$	593-85-1	28864	3
			Guanidine carbonate $$ Guanidinium carbonate $$ Carbonic acid, compd. with guanidine (1:2) $$ Bisguanidinium carbonate $$ Diguanidinium carbonate $$ Bis(triaminomethyl) carbonate # $$			
7	87	137	C_2H_4BrNO	79-15-2	9603	3
			N-Bromoacetamide $$ Bromoacetamide $$ Acetamide, N-bromo- $$			
8	85	74	$C_3H_6O_2$	60456-23-7	315	2
			Oxiranemethanol, (S)- $$ (S)-(-)-Glycidol			
9	85	74	$C_3H_6O_2$	556-52-5	321	2
			Glycidol $$ Oxiranemethanol $$ 1-Propanol, 2,3-epoxy- $$ Allyl alcohol oxide $$ Epihydrin alcohol $$ Glycide $$ Glycidyl alcohol $$ 1-Hydroxy-2,3-epoxypropane $$ 1,2-Epoxy-3-hydroxypropane $$ 2-(Hydroxymethyl)oxirane $$ 2,3-Epoxy-1-propanol $$ 3-Hydroxy-1,2-epoxypropane $$ 3-Hydroxypropylene oxide $$ Hydroxymethyloxirane $$ 2,3-Epoxypropanol-1 $$ Methanol, oxiranyl- $$ Monoepoxide glycidol $$ NCI-C55549 $$ Oxiranylmethanol $$ 2,3-Epoxypropanol			
10	85	74	$C_3H_6O_2$	556-52-5	371	3
			Glycidol $$ Oxiranemethanol $$ 1-Propanol, 2,3-epoxy- $$ Allyl alcohol oxide $$ Epihydrin alcohol $$ Glycide $$ Glycidyl alcohol $$ 1-Hydroxy-2,3-epoxypropane $$ 1,2-Epoxy-3-hydroxypropane $$ 2-(Hydroxymethyl)oxirane $$ 2,3-Epoxy-1-propanol $$ 3-Hydroxy-1,2-epoxypropane $$ 3-Hydroxypropylene oxide $$ Hydroxymethyloxirane $$ 2,3-Epoxypropanol-1 $$ Methanol, oxiranyl- $$ Monoepoxide glycidol $$ NCI-C55549 $$ Oxiranylmethanol $$ 2,3-Epoxypropanol $$ Hydroxymethyl ethylene oxide $$ Epoxypropyl alcohol $$ 2-Oxi			

Library Name
(1) NIST12.LIB (2) NIST62.LIB (3) NIST147.LIB (4) NIST27.LIB

The above GC-MS analysis clearly shows the following major By-products

1. **Methyl acetate**
2. **Ethyl acetate**
3. **Methyl propanate**
4. **Isopropyl acetate**
5. **Acetic acid**
6. **Acetamide**
7. **Hydrazine**
8. **2-methyl isopropanoic acid**
9. **Isopropamide**

Supporting Information (SI-2)

When the solvothermal reaction was performed without guanidine carbonate for 16 hrs the clusters of 50-60nm spherical nanoparticles have been formed.

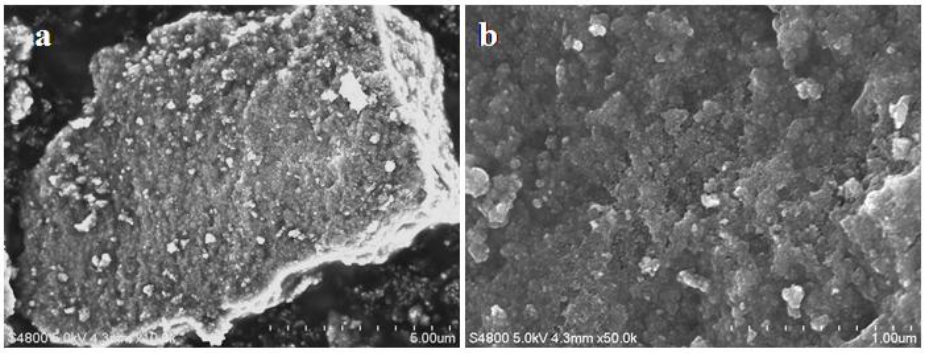


Fig.SI-2 FESEM Images of the sample synthesized without using guanidine Carbonate.

Supporting Information SI-3

Table SI-I Photocatalytic activity of reported photocatalysts and N-TiO_2 marigold flower for hydrogen production via H_2S splitting.

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Sr. No.	Catalyst	Photocatalytic activity ($\mu mol\ h^{-1}g^{-1}$)	Reference
1.	CdS-TiO_2	980	International Journal of Hydrogen Energy 32 (2007) 4786 – 4791
2	CdS Nanoparticles	180-1460	G. M. Hongjian et al; J. of catalysis; 2008, 260, 134-140
3	Cu doped ZnO	1931	K.G. Kanade et al. Materials Chemistry and Physics 102 (2007) 98–104
4	$ZnBiGaO_4$	6060	Kale et al, Int. J. Energy Res. 2010; 34, 404–411.
5	$ZnFe2Ta_2O_9$	4640	Subramanian et al, Bull. Korean Chem. Soc. 2007, Vol. 28, No. 11,2089.
6	$CuAlGaO_4$	3616	Biswas et al,Catalysis Communications 12 (2011) 651–654
7	$ZnIn_2V_2O_9$	4695	Mahapure et al, Journal of nanoscience and nanotechnology, 2011, 11, pp. 6959
8	Fe_2O_3	6266	Chaudhari et al, Dalton Trans., 2011, 40, 8003.
9	V_2S_3,VS_4/RuO_2,Pt	5.64	S. A Naman, Int. J. Hydrogen Energy, 1997,22,783-789
10	B/N co-doped TiO_2 (Water splitting)	34.9	Y Li. et al Appl. Surf. Sci. 2008, 254, 6831
11	In/N co-doped TiO_2 (Water splitting)	75	Sasikala et. al. Appl. Catal., A 2010, 377, 47.
12	N-TiO_2 (Water splitting)	3859	Chen Yeo (2010) The 13th Asia Pacific Confederation of Chemical Engineering Congress October 5-8, 2010, Taipei
13	N-TiO_2 (Water splitting)	300	J. Yuan et al, Int. J. Hydrogen Energy, 2006, 31, 1326.
14	**Present catalyst N-TiO_2**	**8800**	**Present catalyst**