Biosourced 1,2,3-Triazolium Chiral Ionic Liquids derived from Isosorbide

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Supporting information (New Journal of Chemistry)

Table S1. Solubility of 1,2,3-triazolium-Based Ionic Liquids **17-24** and their 1,2,3-triazole precursors **15**,**16**

Entry	H_2O	Hexane	MeOH	EtOAc	Acetone	Et_2O	THF	CH_2Cl_2	$CHCl_3$	CH_3CN	$PhCH_3$	DMF	DMSO
15	++	–	++	++	++	–	++	++	++	++	–	++	++
16	++	–	++	++	++	–	++	++	++	++	–	++	++
17	++	–	++	~	++	–	–	++	++	++	–	++	++
18	++	–	++	~	++	–	–	++	++	++	–	++	++
19	++	–	++	–	++	–	–	++	++	++	–	++	++
20	++	–	++	–	++	–	–	++	++	++	–	++	++
21	++	–	++	–	++	–	–	++	++	++	–	++	++
22	++	–	++	–	++	–	–	++	++	++	–	++	++
23	++	–	++	–	++	–	–	++	++	++	–	++	++
24	++	–	++	–	++	–	–	++	++	++	–	++	++

"++" indicates solubility at 10 $mg.mL^{-1}$, "+" indicates solubility at 1 $mg.mL^{-1}$, "~" indicates partial solubility at 0.1 $mg.mL^{-1}$, while "–" indicates no detectable solubility even at 0.1 $mg.mL^{-1}$.

Table S2.HRMS data for 1,2,3-triazolium-Based Ionic Liquids **17-24**[a] and their 1,2,3-triazole precursors **15**,**16**[b] (g.mol^{-1})										
Entry	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**
fragment	$[M+H]^+$	$[M+H]^+$	$[M+2I]^-$	$[M+2I]^-$	$[M+2BF_4]^-$	$[M+2PF_6]^-$	$[M+2NTf_2]^-$	$[M+2BF_4]^-$	$[M+2PF_6]^-$	$[M+2NTf_2]^-$
Calcd	240.1343	240.1343	507.9600	507.9600	428.1573	544.0794	813.9856	428.1573	544.0794	813.9856
Found	240.1335	240.1340	507.9605	507.9604	428.1570	544.0802	813.9858	428.1579	544.0797	813.9861

[a] negative mode ESI-HRMS $[M+2X]^-$; [b] positive mode ESI-HRMS $[M+H]^+$.

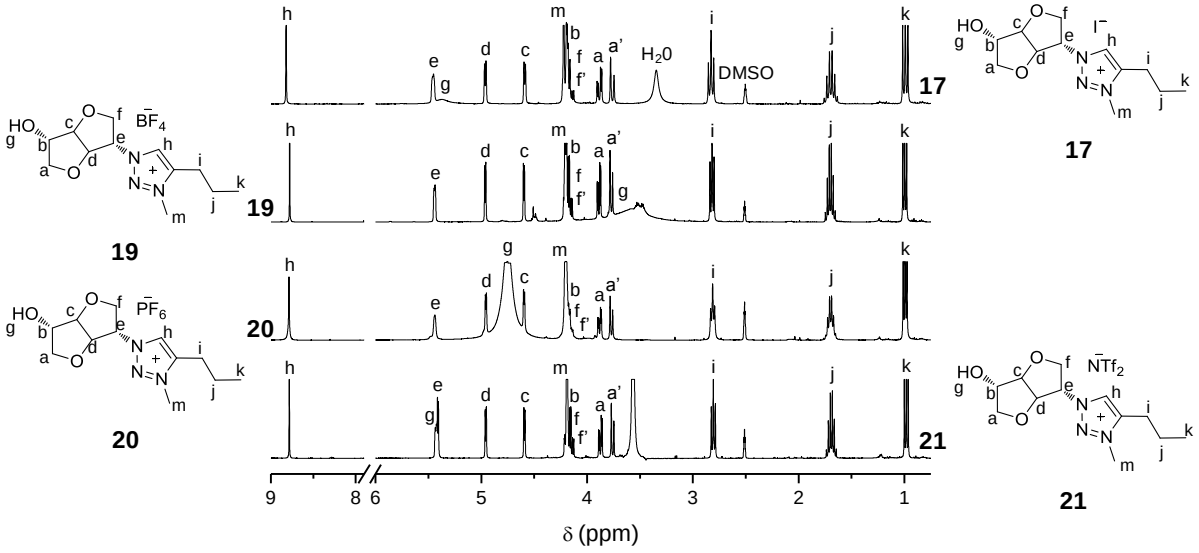


Figure S1.[1]H NMR (DMSO-d_6, 25 °C) of biosourced 1,2,3-triazoliums **17**,**19**-**21**.

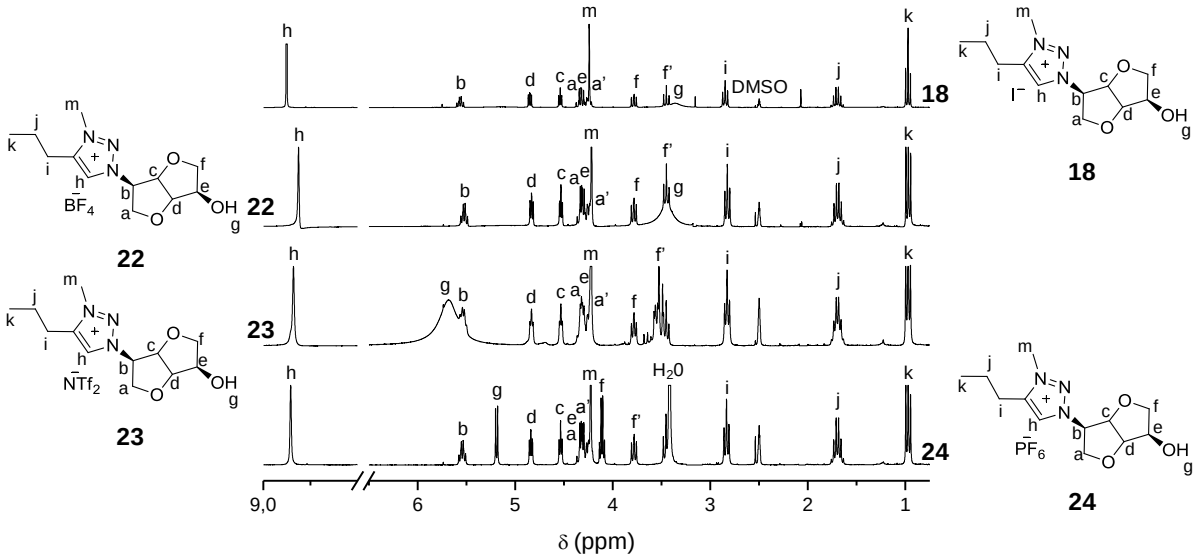


Figure S2.[1]H NMR (DMSO-d_6, 25 °C) of biosourced 1,2,3-triazoliums **18**,**22**-**24**.

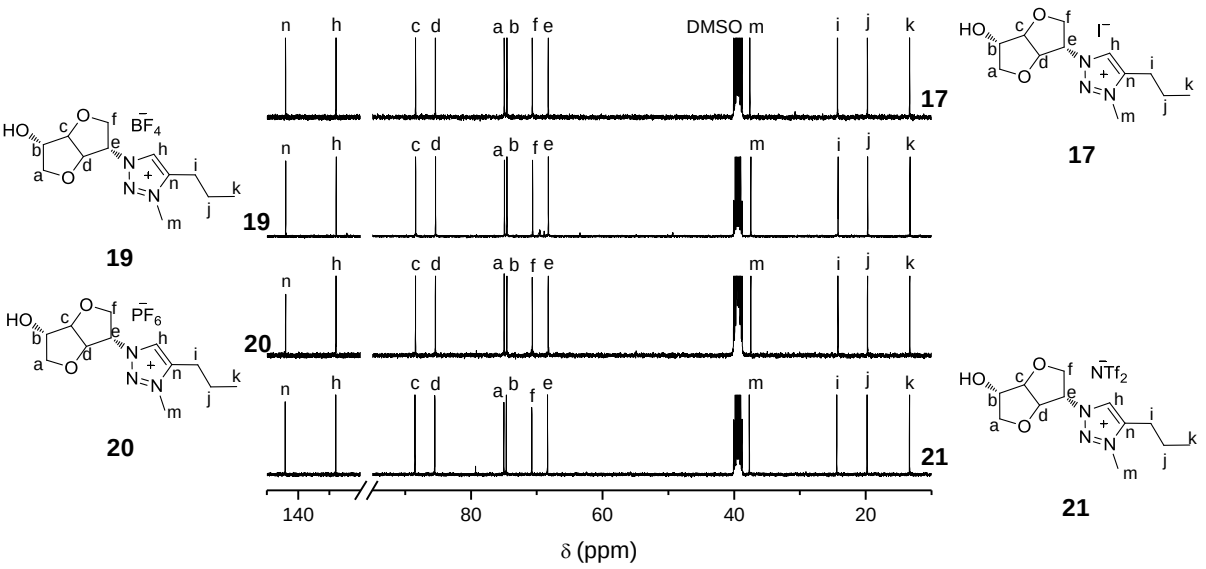


Figure S3. ^{13}C NMR (DMSO-d_6, 25 °C) of biosourced 1,2,3-triazoliums **17**,**19-21**.

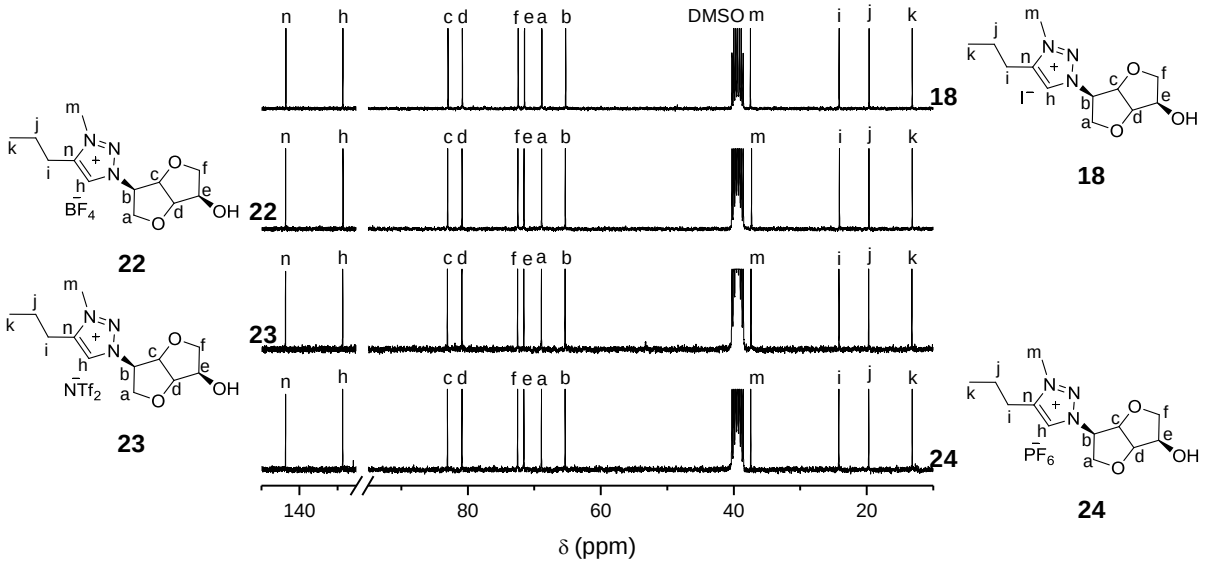
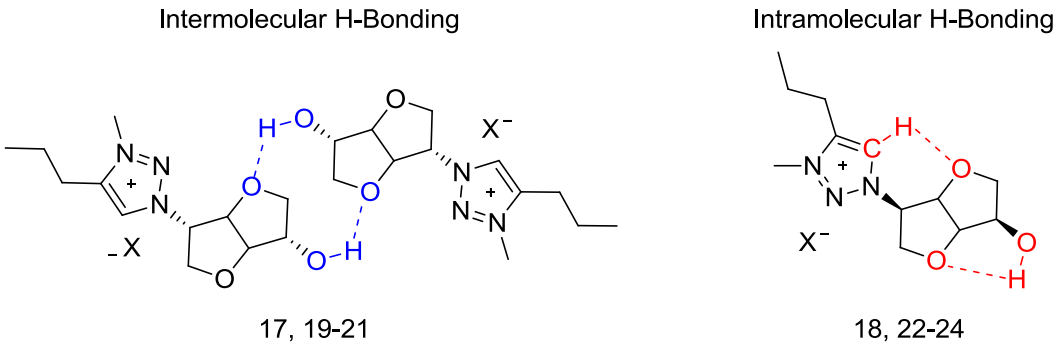


Figure S4. ^{13}C NMR (DMSO-d_6, 25 °C) of biosourced 1,2,3-triazoliums **18**,**22-24**.



Scheme S1. Difference in *H*-bonding between the isoidide (**17**,**19-21**) and isomannide (**18**,**22-24**) series.