

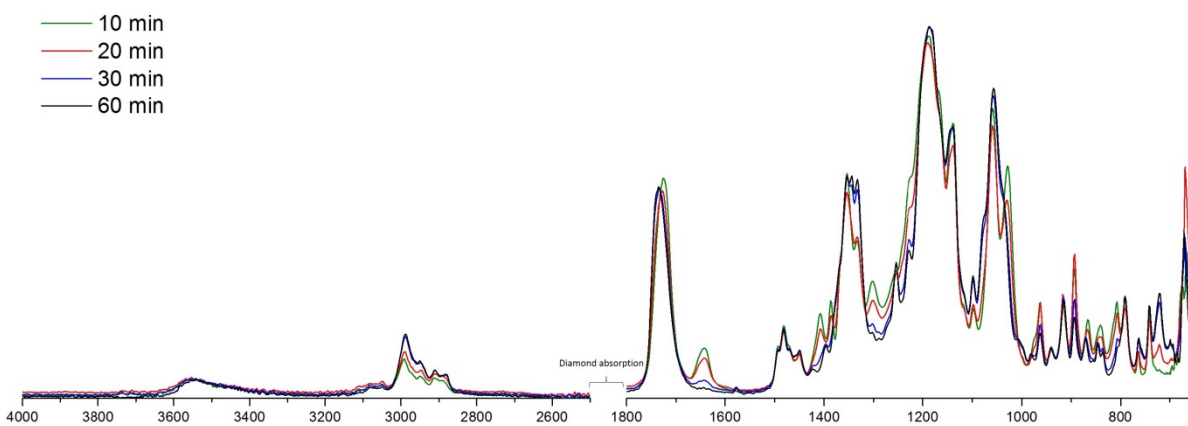
Supplementary Information

Green Chemistry

## Hydrogen-bond-rich ionic liquids as effective organocatalysts for Diels-Alder reaction

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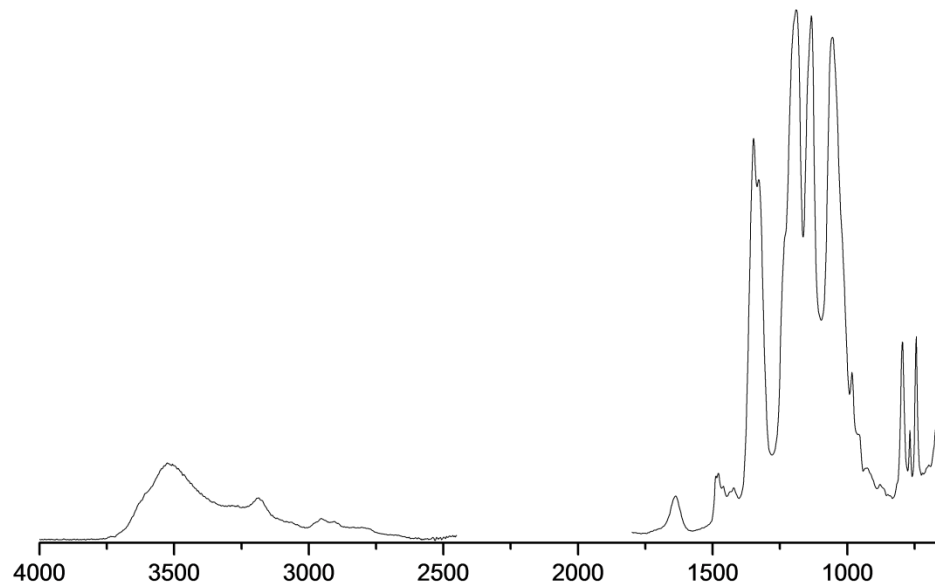
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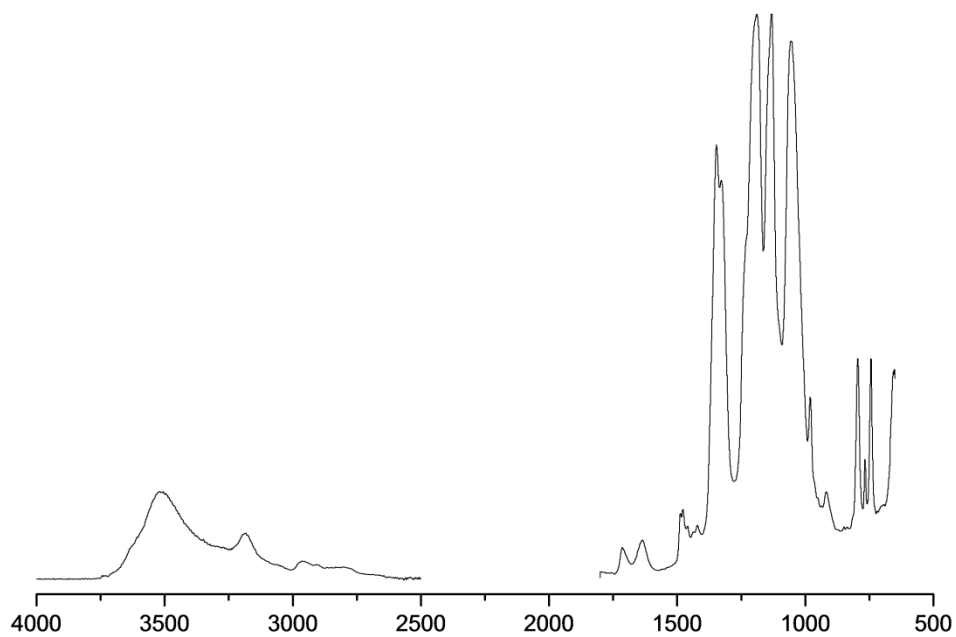
**Fig. 1** FT-IR spectra of the reaction course of cyclopentadiene (5 mmol) with diethyl maleate (5 mmol) in the presence of the D-glucose-based ionic liquid VI in catalytic amounts (0.20 mmol).

**FT-IR spectra of tetraalkylammonium bistriflamides (IV a-c, VIII-XII):**

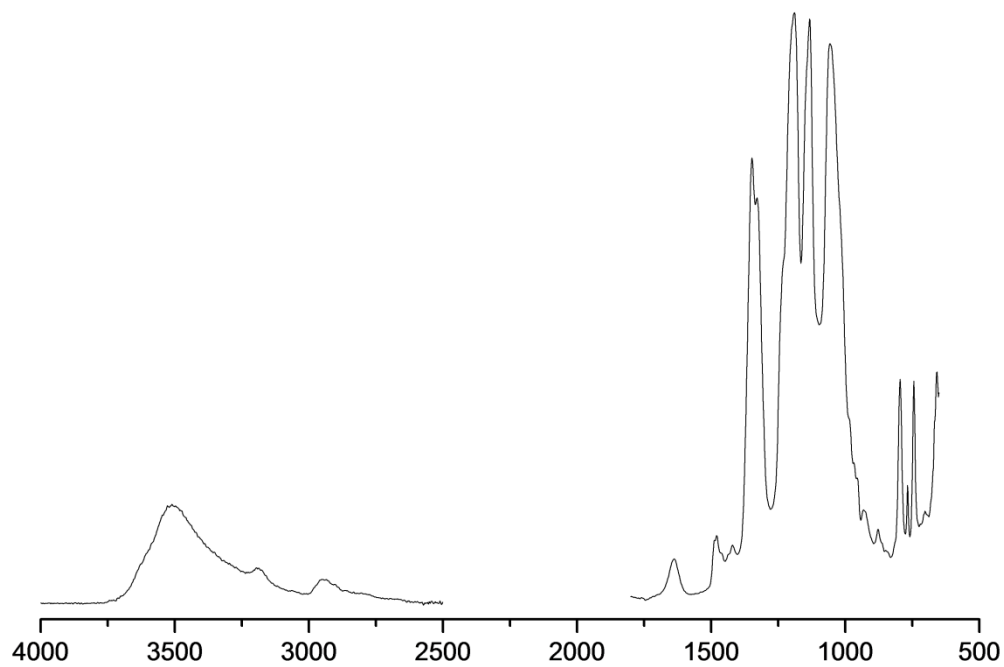
**(2-D-glucopyranosyloxyethyl)trimethylammonium bistriflamide (V):**



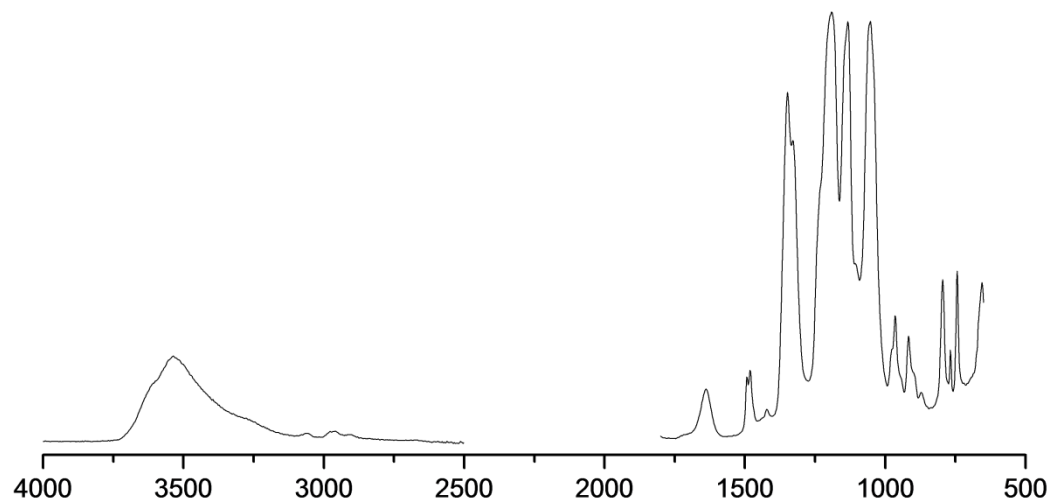
**(2-D-glucopyranosyloxypropyl)trimethylammonium bistriflamide (VI):**



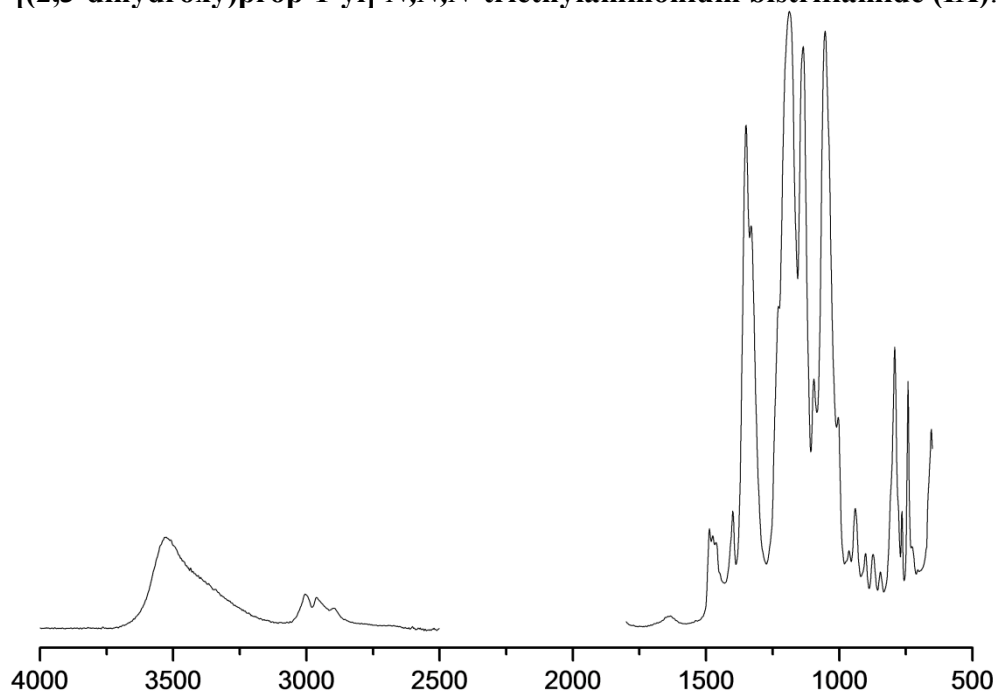
**(2-D-glucopyranosyloxy-2-hydroksypropyl)trimethylammonium bistriflamide (VII):**



***N*-[(2,3-dihydroxy)prop-1-yl]-*N,N,N*-trimethylammonium bistriflamide (VIII):**



***N*-[(2,3-dihydroxy)prop-1-yl]-*N,N,N*-triethylammonium bistriflamide (IX):**



***N*-[(2,3-dihydroxy)prop-1-yl]-*N,N,N*-tributylammonium bistriflamide (X):**

