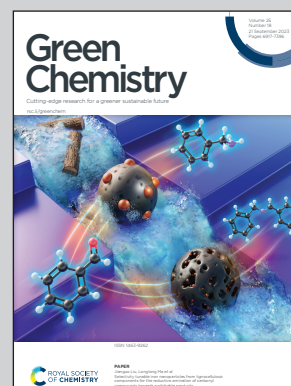


Showcasing research from Professor Takahashi's laboratory, Graduate School of Natural Science and Technology, Kanazawa University, Kanazawa, Japan.

Dehydrogenative silylation of cellulose in ionic liquid

Illustration of dual roles of 1-ethyl-3-methylimidazolium acetate (EmimOAc) for dehydrogenative silylation of cellulose with monohydrosilane as a green synthetic method of bio-based polymer. It shows that EmimOAc interact with the O-H group on cellulose to dissolve it while EmimOAc catalyze the formation of Si-O bonds, generating clean H₂ gas as bubbles from hydrogen atoms on the O-H group of cellulose and the Si-H group of monohydrosilane.

As featured in:



See Daisuke Hirose, Kenji Takahashi *et al.*, *Green Chem.*, 2023, 25, 7062.