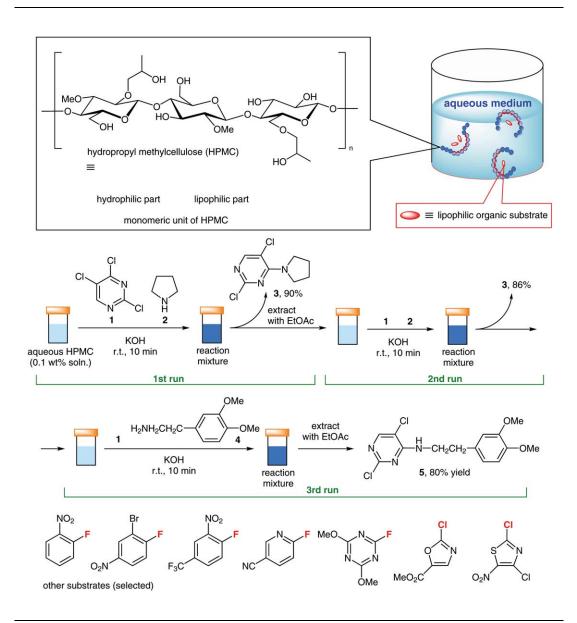
N. BORLINGHAUS, T. N. ANSARI, L. H. BRAJE, D. OGULU, S. HANDA, V. WITTMANN, W. M. BRAJE* (ABBVIEDEUTSCHLAND GMBH & CO. KG, LUDWINGSHAFEN, GERMANY) Nucleophilic Aromatic Substitution Reactions under Aqueous, Mild Conditions Using Polymeric Additive HPMC Green Chem. 2021, 23, 3955-3962, DOI: 10.1039/d1gc00128k.

Aromatic Substitution in Water by Using a Polymeric **Amphiphilic Additive**



Significance: S_NAr amination reactions of various aryl fluorides or chlorides with amine nucleophiles was achieved in water in the presence of amphiphilic hydroxypropyl methylcellulose (HPMC). The aqueous HPMC phase could be reused in consecutive runs.

Comment: A lipophilic reaction pocket formed by folding of HPMC in water promotes the organic reaction. S_NAr reactions with thiols or a benzylic alcohol were also examined.

SYNFACTS Contributors: Yasuhiro Uozumi, Ryoko Niimi Synfacts 2021, 17(09), 1023 Published online: 18.08.2021 DOI: 10.1055/s-0040-1720820; Reg-No.: Y08221SF

Polymer-Supported Synthesis

Key words

aqueous media aromatic substitution aryl halides polysaccharides aromatic amination S_NAr reaction

