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Contribution ID: **2597** Type: **Oral Competition (Graduate Student) / Compétition orale (Étudiant(e) du 2e ou 3e cycle)**

Investigating Novel Anion-Exchange Membranes via Scattering and Simulation

Tuesday 4 June 2019 14:00 (15 minutes)

While perfluorinated polymers dominate the commercial fuel cell industry, hostility to catalysts, difficult and expensive synthetic routes, and challenging disposal hamper wide adoption of fuel cell technology and impede further development. Hydrocarbon-based membranes utilize simple, well-developed synthetic routes that allow for rapid material development. We have investigated a promising series of sterically hindered methylated imidazole-based ionenes utilizing a combination of lab-scale X-ray scattering and OPLS-AA-based molecular dynamics simulations to elucidate the morphology of these materials

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