

## Poster Session

Title:	P. 7	Photopolymerization of crosslinked proton conducting membranes
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Abstract:		<p>Polymer electrolyte membranes for fuel cell applications need high proton conductivity and low permeability for gases like oxygen or hydrogen and liquids like water or methanol, respectively. As proton conductive monomer, primarily 2-acrylamido-2-methylpropane sulfonic acid (AMPS) and 2-sulfoethyl methacrylate (SEM) were used. The monomers were crosslinked with various hydrophobic and hydrophilic multifunctional monomers.</p> <p>Polymer membranes were filled with the monomer formulations and UV cured. Conductivity, water uptake, weight gain and methanol permeability was used to characterize the new hybrid materials. Selected material combinations showed conductivity similar to normally applied nafion.</p>

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