

nMat Industry Seminar: Application of Neutrons to Polymer Electrolyte Fuel Cells Analysis at Toyota CRDL

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Abstract. After joining nSoft at NIST, we have advanced the investigation of polymer electrolyte fuel cells (PEFC) using neutrons at J-PARC. Since PEFC performance is critically governed by mass transport within the catalyst layers, we have analyzed the hierarchical structures and interfacial phenomena using small-angle scattering and neutron reflectivity. Furthermore, water behavior under operating conditions is evaluated through operando observations of a power-generating PEFC. Finally, I will briefly touch upon our participation in an ongoing NEDO project.

Friday, October 23, 2026

1:30 PM (UTC-05:00) Eastern Time (US & Canada) | Hybrid format, remote presentation
Attend in person (room K04B, NCNR) if you have access to the NIST campus, or remotely using the link below. NCNR access is not required.

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