Date	Research Area	Presenter	Subject	Abstract
January 13, 2020	AGM	Marc Secanell	Annual State of the Lab Address	
January 27, 2020		Experimental group	FC SOP development	Scott is in charge of making sure we can access the SOP and to find all SOPs currently available for testing. Also, in charge of drafting a new one with the current structure (From Mike) Luis is in charge of dividing the current tutorial into two parts: a) electrode fabrication; b) testing. Manas is in charge of drafting the first version of the one in electrolyzers.
February 3, 2020		Marc Secanell	Telluride Electrocatalysis conference talk OpenFCST review and future goals	Presentation on role of EIS in electrochem Plan openFCST targets for 2020
February 10, 2020		Himanshi Dhawan	Supported iridium catalyst (candidacy rehersal - draft)	
February 24, 2020		Daniel Ziegler	Breakthrough pressure and saturation in GDLs	Final presentation about liquid water management in gas diffusion layers.
		Himanshi Dhawan	Supported iridium catalyst (candidacy rehersal - draft)	
March 2, 2020		Alex Jarauta	Fluid flow solvers in OpenFCST	Updates on the general structure of fluid flow solvers in OpenFCST, and also the latest version of the incompressible fluid flow solvers.
March 9, 2020		Manas Mandal and Michael Moore	Modeling of water electrolyzer electrodes	The proton-transport resistance (PTR) of the catalyst layer (CL) of polymer electrolyte membrane water electrolyzer (PEMWE) is an important factor in determining the optimal cell performance. In literature, it had been measured in two ways; using a semi-empirical model and using electrochemical impedance spectroscopy (EIS) with H2/N2. In this work, a hydrogen pump technique is used to estimate the PTR of a PEMWE CL. In this technique, a catalyst layer is sandwiched between two membranes and the proton resistance is measured for the two membranes and the two membranes plus the catalyst layer. In order to investigate the effect of electrolyte content, CL with electrolyte loading varying from 15 to 60 %wt. were analyzed. The measured PTR decreased with increasing ionomer loading and relative humidity. The PTR of the 15%wt. PCL is two to three orders of magnitude higher than the other higher ionomer loading PCLs, indicating a loss of ionomer connectivity. In addition to PTR, electron-transport resistance (ETR) was also measured and compared to the PTR. The ETR is two to three orders of magnitude higher than the PTR. The ETR of the 60 %wt. PCL is two orders of magnitude higher than other lower ionomer loading PCLs, indicating a loss of particle connectivity.
May 8, 2020		Michael Moore	Numerical Modelling of Proton Exchange Membrane (PEM) Water Electrolysis	Practice session for the candidacy exam
May 15, 2020		Wei Fei	Understanding the Role of Porous Media Micro-structure in Mass Management in Proton Exchange Membrane Fuel Cells	Practice session for the candidacy exam
May 25, 2020	AGM	Marc Secanell	Updates on return to campus, productivity tools, and OpenFCST integration with deal.II	Discussion on: 1) [Everyone] Return to campus -- Schedule and discussion; 2) [Everyone] Productivity tools -- Overleaf and BitBucket; 3) [Modeling team] OpenFCST -- Towards seamless integration with deal.II and upgrading to Ubuntu 20 LTS
June 8, 2020		Seongyeop Jung	OpenPNM tutorial	Tutorial for simulations in OpenPNM using a network extracted from tomography images.