



EP Facilities and Process R&D

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- 1-cell setup
- Samples R&D
- Tumbling
- Simulations



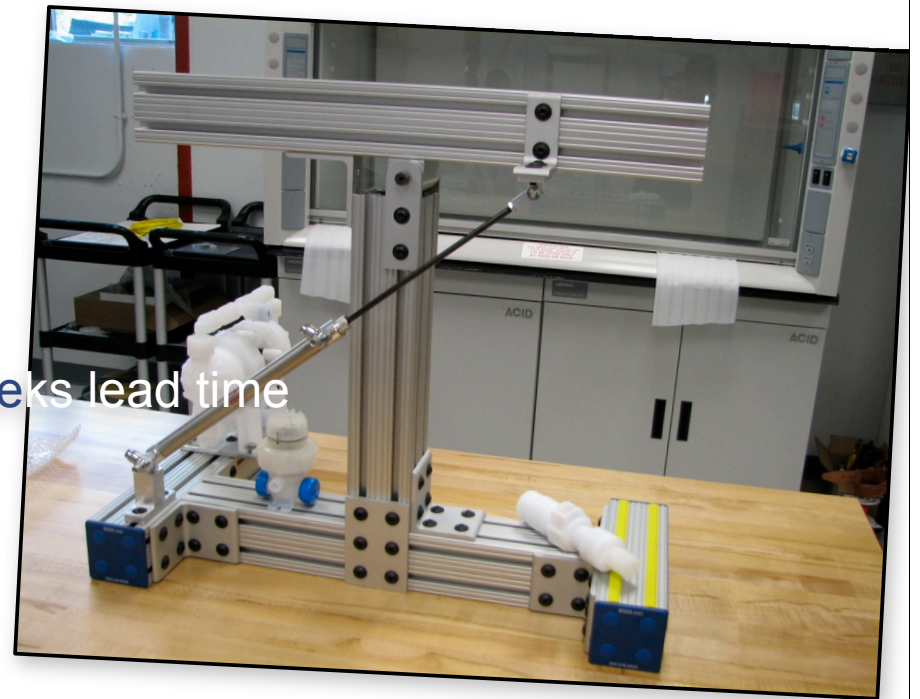
1-Cell Setup (C. Boffo)



- Design almost finalized (detailing of assemblies K. Ewald)
- Assembly of mechanical structure ongoing (D. Assell)
- Control system implementation ongoing (A. Thode, L. Elementi)
- Hood preparation in IB3 (D. Assell)
- On budget

Needs and issues:

- Need approval to Operate IB3 hood
 - End groups procured but at least 3 weeks lead time
 - Safety documentation
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- GOAL: be operative in 1 month





Samples (C. Antoine)



- Claire prepared acid solutions for her experiments
- Data acquisition software is being upgraded (A. Riccomi)
- First test of the system this week
- Rinal will be performing most of the experiments with support by Claire in the next two weeks

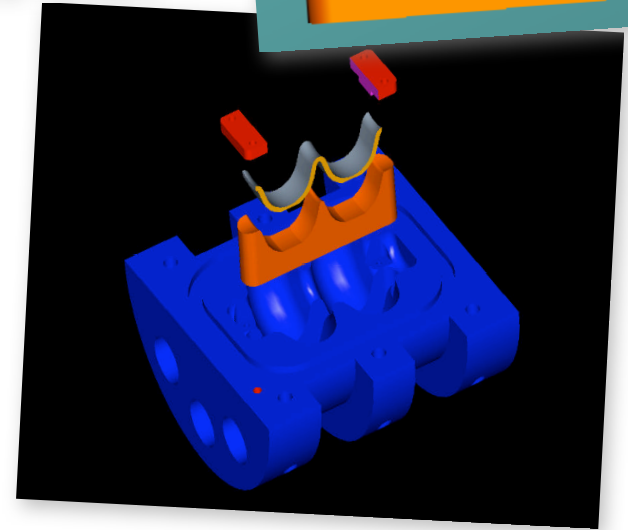
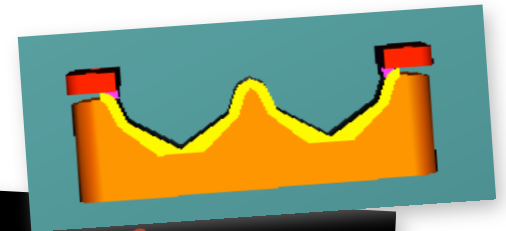
- Claire characterized the viscosity of the EP solution, more test are needed for a Temperature dependent characterization to be used in simulations
- Claire is testing the ion selective sensors and working on a technique that allows using these sensors to measure the F-concentration in solution.



Tumbling (C. Cooper)



- Tumbling device being detailed (K. Ewald)
- Several options for device material and surface finish
- Starting design of rotating fixture
- Samples have been cut





Simulations



- Cristiano Gnesutta, simulation expert, joined the group this week and will be at FNAL until mid September. He will work on EP simulation for his Laurea degree on computational Physics.
- Nandhini is simulating the acid flow in the cathode to optimize the dimensions of the holes for acid inlet in each cell