

Team Meeting

Monday (2/13) 2-3pm

Friday (2/17) 10-11am

BDL

Meeting called by: Connor Gonzalez

Type of meeting: Team Meeting

Facilitator: Bill Merritt

Note taker: Kayla Goodrich

Minutes

Agenda item: Casting

Presenter: Kayla Goodrich

Discussion:

Casting Monday:

- First casting trial occurred Monday at 2:45pm
- Was allowed to cure for 1 hour – the usual time it takes the material to fully cure
- When CNC blocks were removed the model material was goopy and not solidified (See image below)
- This could be fixed with a longer cure time or new materials
- One material may be expired – new material ordered
- The core broke during casting
- This is okay because it is inexpensive to replace so we will simply have one-use cores
- The stabilizers were effective in keeping the core concentric
- The stabilizers will be reprinted if the core breaks off inside one
- This happened during the first casting trial
- The CNC blocks are still useful and expected to be used for every cast



Conclusions:

- Next casting: Monday most likely if the material gets here in time
- We want to do multiple castings next week and allow the model to cure overnight.

Agenda item: Fluids

Presenter: Bill Merritt

Discussion:

- Waiting on delivery of CMC samples
- Looking for inexpensive options for CMC

- Water can be used for the mean time to test the proof of concept of the device
- Finding a filler that will boost density without containing divalent cations

Conclusions:

Will be worked on once CMC arrives.

Agenda item: DAQ

Presenter: Connor Gonzalez

Discussion:

- In talks with NI to purchase a DAQ
- In talks with Omega and Seametrics to purchase a flowmeter
- In-line filter samples from Utah Medical are being sent to the BDL
- LabView interface programming
- Delegating DAQ research to BDL research assistants
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Conclusions:

This section should be finished by the second week in March.

Agenda item: Pump

Presenter: Connor Gonzalez

Discussion:

- Fisher Scientific pump is ready to be purchased (waiting on NAU to give Dr. Becker access to funds)
- Delegating pump pulsatile flow design to BDL research assistants

Conclusions:

For capstone purposes, the pump is fully ready once purchased.

Other Information

Resources:

BDL: Trevor Cotter assisting with DAQ and pump.

Special notes:

Hardware review next week