EE/CprE/SE 491 WEEKLY REPORT 10 - sdmay18-24

11/26/17 - 12/02/17

Project title: Optical force transducer for visualizing cell mechanotransduction in 3D

Client: LIOS Lab

Advisor: Prof Meng Lu

Team Members/Role:

Quan Wang --- fabrication and process development

Yalun Tang --- fabrication and process development

Jiameng Li --- theory and numerical modeling

Qinming Zhang --- theory and numerical modeling

o Past week accomplishments

- Yalun Tang, Quan Wang, Jiameng Li, and Qinming Zhang:
- 1. Made the ppt slides for the final presentation
- 2. Prepared for the final presentation
- 3. Designed the method to find the wet etching rate
- 4. Finished a new trial of surface chemistry, and ready to attach gold nanoparticles
- 5. Explore the waveguide in the 3D model

o **Pending issues**

1.

o Individual contributions

Team member	Contribution	Weekly hours	Total hours
Yalun Tang	Prepared for the presentation, wet etching preparation	10	73
Quan Wang	Wet etching preparation, surface chemistry	10	73
Jiameng Li	3D model waveguide exploration	10	69

Qinming Zhang	3D model waveguide exploration, wet etching	10	64
	preparation		

o Plan for coming week

- Yalun Tang and Quan Wang(fabrication):
- 1. Measure the wet etching rate for the cladding of the optical fiber
- Jiameng Li and Qinming Zhang(simulation and modeling):
- 1. Keep running the 3D model to create and observe the intensity vs. wavelength curve

O Summary of weekly advisor meeting

In the advisor meeting, Professor Meng Lu reviewed our project goals and final presentation powerpoint, and he talked about the preparation of experiment in the second semester. We will find the wet etching rate in next week, and develop a etching curve for the experiment of next semester.