EE 491 Weekly Report
MAY15-29 Week 6 (10/6/14-10/12/14)
Advisors: Meng Lu **Client:**
Members (roles): Wenbing Ma, Jiangxiang Zhang(sensor design), Xuan Zhang (Webmaster) , Zhikai Cui (Leader), Chenyin Liu(sample holder design)
Project Title: A high-resolution two-dimensional ultrasonic detector using plasmonic crystals

Weekly Summary

In this week, all of us have done with assigned work. The process of the project goes well. We have already set up the sample holder onto the optical table in the lab. We are on the half way of the serial communication, which is very good.

Meeting notes:

10/11 Group Meeting with Advisor
Duration: *60min* **Members Present:** *All*

Purpose and Goals:
1. We need a holder of accustic wave transducer.
2. We need to design a cell phone shell for specific camera stuff and need to design a App for special usage for the camera.
3. Still need to learn skills about Labview.
4. Still working on how to place sample inside of the sample holder

Achievements:
1. Sample holder has been set up yet.
2. Website are already done at: http://may1529.weebly.com/
3. The data saving process for the laview is done
4. Half way of the serial communication
5. Found several ways to settle down the sample

Pending issues

1. Data period that the ociloscope give back
2. Holder for accustic wave transducer
3. Found several ways to how place the sample inside of the sample holder
   - stick the sample to the holder with tape
   - make a coating on the periphery of sample and stick it with sample holder. Then, the assembly is followed by the exposure of UV light.
   - place wax to the periphery of sample and get it stick with the sample holder. Then, the assembly is placed on heating pad for melting.

Plans for next week

Wenbing Ma & Zhikai Cui
-figure out the serial communication of motorize stage using labview thtough the COM

port
-go figure out the data period that the ociloscope give back
Jiangxiang Zhang
- find out how to place the sample inside of the sample holder
- figure out how to set up the laser diode
Xuan Zhang & Chenyin Liu
- Go to machine shop to make an apropriate holder for accustic wave transducer
- Design an cell phone shell
- Start to design a App

Individual Contributions (this week)

- Wenbing Ma attended the meeting(1hr), did the research and coding for the Labview (4hr)
- Jianxiang Zhang attended the meeting attender the meeting(1hr), made a new sample of 2D PDMS and did the research of how to make the sample settled down inside of sample holder.(3hr)
- Xuan Zhang attended the meeting.(1hr) Set up the sample holder.(2.5hr) Build the website.(2hr)
- Zhikai Cui attended the meeting （1hr）， do research code and coding to save result from labview.(4hr)
- Chenyin Liu attended the meeting.(1hr) Set up the sample holder.(2.5hr) Build the website.(2hr)

Total contributions for the project

Wenbing Ma (5hr)
Jiangxiang Zhang (4hr)
Xuan Zhang (5.5hr)
Zhikai Cui (5hr)
Chenyin Liu (5.5hr)

Picture for Sample Holder