

EE 491 Weekly Report
MAY15-29 Week 5(9/29/14-10/5/14)

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 : Members talked about the next step for the project. We discuss the process that we need to do with Dr. meng. We design the way to solve the set up process, which help us see the result in the labview. For the 3D printer part, we have already printed the water container with 3D printer. The 3D printer used 10 hours to get the product.



Meeting notes:

10/4 Group Meeting with Advisor

Duration: 60 min

Members Present: All

Purpose and Goals: Members feel confused about the next step. We talked the next step with Dr. Meng. We thought the next step will be the programming in the main part. We thought we should pay attention of the labview to study some programming.

Achievements:

1. First version of sample holder has been printed already.
2. Get the data from oscilloscope by PC using LabVIEW
3. Finished the test of new material (J-91). The sample of making a sensor has been determined.

Pending issues:

1. The other part of sample holder which holds the acoustic wave transducer has not been decided yet.
2. How to store the data in to readable and editable file for advanced progress.

Plans for next week

Xuan Zhang and Chenyin Liu

- Revise the design for sample holder.
- Use 3-D printer to print out the sample holder.

Wenbing Ma and Zhikai Cui

- Figure out the data saving problem.
- Try to coding remote control the motorize stage by LabVIEW

Jingxiang Zhang

- Find out an appropriate way to locate the sensor inside of sample holder

Other notes

Individual Contributions (this week)

- Wenbing Ma attended the meeting (1.5hr) and wried code for labVIEW code for motorize stage and ocilloscope (5hr)
- Jingxiang Zhang attended the meeting (1.5hr), and finished the measurement of new sample (J-91) (2hr)
- Xuan Zhang measured and determined the size and length between holes on optimic table.(1hr)
- used Solidworks to design the sample holder and print it via 3D printer. (2hr)
- Zhikai Cui attended the meeting (1.5hr) and wrote labview code for oscilloscope and motorized stage(5hr)

- Chenyin Liu attended the meeting (1.5hr) and design the water container, he then go to college of design, and printer the water container.(5hr)

Total contributions for the project

Wenbing Ma (6.5hr)

Jiangxiang Zhang (3.5hr)

Xuan Zhang (3hr)

Zhikai Cui (6.5hr)

Chenyin Liu (6.5 hr)