AFM Summer Research
Project Overview
Polymer

AFM

Detector and Feedback Electronics

Photodiode

Laser

Sample Surface

Cantilever & Tip

PZT Scanner

Picture taken from wikipedia’s article on atomic force microscopy
350°C →

300°C →

400°C →

TCNL
Incubation Can Destroy Polymer
Not Sure Whether “Balloons” Stick

Before Incubation

After Incubation
Conclusions and Future Work

• Despite difficulties, I can thermally pattern and incubate the polymer with “balloons.”

• I am not sure whether the “balloons” stick yet, and this would be the subject of later work.

• Further steps would be to develop a better process that would consistently preserve the polymer during incubation. Also, there needs to be testing of our strategy with particular “scissors.”
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