

Report for IF20-001

Summary

Accomplishment: In the last 6 months , the PO for SHG One laser system from Spectra Physics was successfully sent out from the university. There was a delay in purchasing due to legal and contractual obligations on both the company and university. The PO was sent out in the beginning of January. The entire budget of the incubation fund was used towards this purchase along with a cost match from the PI.

Plan forward:

In the next 6 month we plan to accomplish the following tasks

Task 1: Set up the laser system: The laser has a 3 month lead time. We plan to have the laser installed in the beginning of May.

Task 2: Set up the optical fabrication set up: We will set the fabrication set up for this system. We believe this will be done by Mid May

Task 3: Fabricate the sensors and testing: The fabrication of the sensors both, based on conventional Fiber Bragg Grating design and the designed Long Period Grating sensors will be fabricated on optical fibers and their performance will be characterized. We project the first sensor to be fabricated in the beginning of June and tested by mid June.

Summary of budget expenditure

Entire budget has been encumbered through the PO to Spectra physics

Number of faculty and student participation

Currently, Faculty participation: 1

Anticipated graduate student participation : 1

Patents, copyright received

None

Status of industry partnership

Fiberguide is currently waiting for the laser system. The PI and the company will leverage this instrument to submit a followup grant to NSF-COBRE.