

MNTC Independent Study Projects

Rationale

With the expansion of the UofL Micro/NanoTechnology Cleanroom (MNTC), there is the need for assistance with both equipment installation/characterization and process development. Therefore, the MNTC would like to offer Independent Study opportunities for interested and appropriately-trained students. There would be no cleanroom service center fee charged during this activity because you would be benefiting the MNTC and its general user base.

Possible Independent Study Projects

- a) Installation and characterization of Lexmark Axxis RIE system(s)
- b) Installation and characterization of Electroplating Bench
- c) Characterization of new LPCVD System
- d) Process development to obtain stress-free PECVD/LPCVD films
- e) GLAD - glancing angle deposition
- f) Installation and characterization of Kasper aligner
- g) SEM setup and characterization

Policy

- a) Cleanroom Committee (CC) endorses a specific project list and publishes it on the web for the students to see (such as above).
- b) The interested student must be championed by a member of the CC (champion does not need to be his/her advisor).
- c) The CC champion/representative presents the resume of the student to CC along with the proposed project, and the merits of the proposal are discussed.
- d) If acceptable, the student presents a plan of action with anticipated outcomes to the CC (ABET required).
- e) If acceptable, the student performs the work and at a minimum produces a SOP, written report, and gives an oral presentation to the CC upon completion of the project

Cleanroom Committee

Dr. Kevin Walsh
Dr. Rob Keynton
Dr. Shamus McNamara
Mark Crain