**A TEM Short Course from the AIM Lab, NanoCenter, University of Maryland**

**AN INTRODUCTION TO TEM FOR NEW TEM OPERATORS**

A Transmission Electron Microscopy (TEM) short course will be offered this winter break (January 2018) through the AIMLab at the NanoCenter, University of Maryland. This is a hands-on course aimed at introducing the basic concepts, instrumentations and application of TEM to new operators. The lecture portion of the course will focus on fundamental theory in TEM; laboratory exercises are designed to provide instruction on both the operation of TEM and useful techniques for materials characterization using TEM. This course is also recommended as a refresher course to individuals with prior knowledge and operating familiarity with the TEM.

**TEM Class: Date:** Four days, January 18, 19, 22 and 23, 2018

 **Lecture:** 09:30 - 11:40am. (Theory)

 **Laboratory:** January 18, 19, 22 and 23, 2018

 Two hours/group/day (TEM operation, 2 ~ 3 students/group)

 **Rooms:** Lecture: Room 1207 (Large Conference Room), IREAP, ERF Build.

 Lab: TEM facility, Room 1237B, Kim Building.

 **Fee:** Lecture and Lab Course: $425 per person\*, $375 per person for members of research groups with multiple enrollments, or for individuals concurrently enrolled in the TEM and SEM short courses.

 Lecture only: $210 per person.

 **Limit:** Maximum enrollment is 9 (three groups, 2-3 students per group)

To encourage all potential users to register for the short course, a discount will be offered to individuals if they are affiliated with a research group where other members are also enrolled in the course or if s/he is attending both TEM and SEM (see SEM short course announcement). \* This fee applies to UMD users only. Different fees apply for non-UMD participants; please check with the AIM Lab office.

To enroll, please fill out the attached application form and submit to W-A Chiou or S-C. Liou by 5:00 pm, Friday (01/12/18). Students accepted into the class will be informed by email by Tuesday (01/16/18).

Please call W-A Chiou at 5-0541 or send an e-mail to wachiou@umd.edu for more information.

Enclosure: Application Form

## Application Form for Winter (2018) TEM Short Course

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Last, First Middle Initial

Department: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Telephone No.: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

E Mail Address: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Advisor: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Payment: Check or FRS Account No.: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Course to be attended: \_\_TEM Short Course\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Research Topic: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Is there any other attendee from your research group? \_\_\_\_\_\_\_\_\_\_\_, and his/her

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Will you also attend SEM short course? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signed: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(Student) Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signed: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(Advisor) Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_