

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

## **AN INTRODUCTION TO SEM AND EDS FOR THE NEW SEM OPERATOR**

The AIM Lab at NanoCenter will be offering a short course in Scanning Electron Microscopy (SEM) during this summer break (June 2025) using our Hitachi SU-70 High Resolution Analytical SEM and Tescan XEIA FIB/SEM.

The short course provides an introduction to the SEM for those with little or no prior experience. This course covers basic principles and knowledge of the scanning electron microscope including energy-dispersive x-ray spectroscopy (EDS). In addition to lectures, there will be an emphasis on laboratory exercises that focus on instrument operation and practical applications.

**Date:** Four days, June 10, 11, 12 and 13, 2025

**Lecture:** 9:30 am to 12:00 pm.

**Laboratory:** Two hours/group/day (4 days, June 10, 11, 12 and 13, 2025)

**Rooms:** Lecture Room: TBA

Lab: SEM facility, AIM Lab, Kim Building room 1237C and E

**Limit:** Maximum enrollment is 9 (3 lab groups, 3 persons per group)

**Fee:** \$395 per person, \$360 per person from the same research group and/or participate in the FIB/TEM short course. \$220 per person for taking lectures or labs (permission is required from the instructor) only. Fees for non-UMD participants will be different. Please check with the AIM Lab office.

To enroll, please print and fill out the attached application form, and submit to the AIM Lab office by 12:00 pm, June 5, 2025 (Thursday) at room 1234 Kim Building. Students accepted into the class will be informed by e-mail by the weekend (06/07 or 08/25).

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 same course or if s/he is attending both TEM and SEM short courses (see TEM short course announcement). \* This fee applies to UMD users only. Different fees apply for non-UMD participants; please check with the AIM Lab office. For more information, please contact Wen-An Chiou at (301)-405-0541 or send an e-mail to wachiou@umd.edu.

Attachment: SEM Short Course Application Form

## Application Form for UMD Summer (June 2025) SEM Short Course

Name: \_\_\_\_\_  
Last, First Middle Initial

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

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

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

Advisor and/or PI: \_\_\_\_\_

Payment: Check or UMD Worktag account No.: \_\_\_\_\_

Course to be attended: SEM Short Course

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

\_\_\_\_\_

Is (are) there any other attendee(s) from your research group?

If yes, please provide his/her Name: \_\_\_\_\_

Will you also attend TEM and/or FIB short course? \_\_\_\_\_

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

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