

What: A review of TESCAN Plasma Focused Ion Beam, Scanning Electron Microscopy, and Laser Cross-Sectioning Applications and Instrumentation

Whereⁱ: G51 Astronomy Annex, White Hall, 135 Willey Street, Morgantown, WV 26506

When: 9:00 am Fri May 06, 2022.

<i>Time</i>	<i>Event</i>	<i>Comments</i>
9 - 9:10 am	Introductions	
9:10 – 10:00 am	Materials Science Applications	<ul style="list-style-type: none"> • 2D and 3D characterization methods of PFIB/SEM and laser sectioning for materials science applications. • TRUE-X™ sectioning and/or the TESCAN rocking stage methods for mitigating curtaining artifacts ubiquitous with PFIB milling will be presented. • Unique analytical capabilities of integrated RAMAN and TOF SIMS as well as conventional 2D and 3D uses of EDS and EBSD. • Specimen preparation methods for transmission electron microscopy (TEM). • Unique features allow integration of <i>in situ</i> holders for electrical, heating or mechanical testing
10:00 – 10:30 am	Q&A	
10:30 -11:30 am	Biological and Life Sciences Applications	<ul style="list-style-type: none"> • Examples of biological and life sciences FIB and SEM applications, including 3D FIB-SEM tomography on diverse biological samples. • Advantages and benefits of 3D tomography data sets acquired with PFIB vs. Ga FIB will be highlighted. • Innovative solutions for serial block face imaging (SBF-SEM) of stained, embedded samples, cryo-EM. • Specimen preparation for cryo-ET and applications of integrated Raman and TOF-SIMS in life sciences applications.
11:30 am – 12 pm	Q&A	

1. ⁱ Participants can also join via MS Teams using the following link.

[Click here to join the meeting](https://teams.microsoft.com/l/meetup-join/19%3ameeting_MGZIMjdmNmMtNTBiYy00NjJmLWFjMzUtZDYzNzI5NDlwNTBh%40thread.v2/0?context=%7b%22Tid%22%3a%22a7531e18-3e5d-4145-ae4c-336d320ca7e4%22%2c%22Oid%22%3a%2228699bc4-5e5b-415b-8529-79652c9550d7%22%7d)

([https://teams.microsoft.com/l/meetup-](https://teams.microsoft.com/l/meetup-join/19%3ameeting_MGZIMjdmNmMtNTBiYy00NjJmLWFjMzUtZDYzNzI5NDlwNTBh%40thread.v2/0?context=%7b%22Tid%22%3a%22a7531e18-3e5d-4145-ae4c-336d320ca7e4%22%2c%22Oid%22%3a%2228699bc4-5e5b-415b-8529-79652c9550d7%22%7d)

[join/19%3ameeting_MGZIMjdmNmMtNTBiYy00NjJmLWFjMzUtZDYzNzI5NDlwNTBh%40thread.v2/0?context=%7b%22Tid%22%3a%22a7531e18-3e5d-4145-ae4c-336d320ca7e4%22%2c%22Oid%22%3a%2228699bc4-5e5b-415b-8529-79652c9550d7%22%7d](https://teams.microsoft.com/l/meetup-join/19%3ameeting_MGZIMjdmNmMtNTBiYy00NjJmLWFjMzUtZDYzNzI5NDlwNTBh%40thread.v2/0?context=%7b%22Tid%22%3a%22a7531e18-3e5d-4145-ae4c-336d320ca7e4%22%2c%22Oid%22%3a%2228699bc4-5e5b-415b-8529-79652c9550d7%22%7d))

2. The presentation will be recorded and made available for later viewing.