Hitachi High-Tech America, Inc. Seminar
Introduction to Broad and Focused Ion Beam Applications and Systems

Hitachi High-Tech America, Inc.,

May 16	**12 p.m. – 2:30 p.m.**	**WH 105**

Introduction:
Introduction of Hitachi High-Tech America, Inc. and speakers.

Session I [Material Science Focused]:

Talk 1:
Speaker: Jamil J. Clarke
An overview of the latest ion and electron technologies along with respective application examples of advanced materials, including unique TEM preparation methodologies such as Ar-FIB processing for atomic-scale imaging in an aberration-corrected 200-kV STEM, chemical analysis and other analytical techniques.

Talk 2:
Speaker: Terae Jones
Hitachi High-Tech America, Inc. FIB System Introduction
A brief overview of the various ion based platforms that Hitachi offers. A system overview of various configurations and options will be introduced.

Session II [Biomedical Science Focused]:
Talk 3:
Speaker: Jamil J. Clarke
An overview of bio-medical applications as it relates to ion processing. A host of unique technologies exclusive to Hitachi will be presented illustrating cryogenic applications. Synergistic capabilities such as combined sample preparation techniques relating to broad and focused ion beam platforms will be explained. Hitachi technologies comprehensive portfolio offers start to finish solutions to address challenging specimens that are liquid, soft or organic for observation and analysis.

Talk 4:
Speaker: Terae Jones
Hitachi High-Tech America, Inc. FIB System Introduction
A brief overview of the various ion-based platforms that Hitachi offers. A system overview of various configurations and options will be introduced.

[Hitachi Members and Speakers]

Sammy Nozaki
Director, Business Development. Sammy joined Nissei Sangyo Co. Ltd. (later became Hitachi High Tech Co., Ltd.) after graduating Meiji University in Japan in 1986. After 4 years of expat experience in the US (1996-2000), he joined Hitachi High Tech America in 2000. Sammy has been in electron microscopy business for over 30 years.

Jamil J. Clarke
Hitachi High-Tech America, Inc.
Mr. Jamil J. Clarke is currently a Senior Applications Engineer within the Nanotechnology Systems Division of Hitachi High Technologies America, Inc. Jamil earned his Bachelor of Science degree in Electronics Engineering in 1999 from DeVry University and later continued his study in Mito, Ibaraki Japan at the Global Applications Center with a focus on ion beam theory and its applications. During the course of his stay in Japan, Jamil contributed in the development, design and implementation of the first generation FIB-SEM system at Hitachi, the NANO Due'T NB5000. In his current role, he is responsible for supporting North and South America providing technical expertise, applications development and collaborating with researchers in several nanotechnology-related fields. His research interests include FIB-SEM systems development, broad ion beam/focused ion beam applications and advanced automated image processing.

Terae Jones
Mr. Terae Jones Jr. is an Applications Engineer for FIB-SEM at Hitachi High-Tech America, Inc. Terae earned his bachelor's in physics from Willamette University in 2018. Following his undergraduate degree he began working at Hitachi as an electron microscopist specializing as a focused ion beam engineer in Hillsboro, Oregon. Currently he provides application support to the North American region specifically in the semiconductor industry with an emphasis in focused ion beam technology.