



The Egyptian Society of Electron Microscopy

INTERNATIONAL CONFERENCE 2025

In Collaboration with
Theodor Bilharz Research Institute
Tanta University & Assiut University

Role of EM in Enlightening the Invisible

14 October 2025

8:00-9:45

Registration

10:00 a.m.- 10.05 a.m.

Overview of the day sessions

Emeritus Prof. Soheir Mansy

Session V

Nanoscale Analysis: AFM & Aberration- Corrected STEM

Chairpersons

Prof. Manal Salman

*Prof. of Pathology, Faculty of Medicine - Ain Shams University
Director of Electron Microscope Unit Ain Shams University Hospital*

Prof. Nermine Maysour Refaat

Prof. of Polymeric Chemistry the Egyptian Petroleum Research Institute

10: 10 a.m. -10:40 a.m. .

Atomic force microscopy: From imaging to characterization

*Prof. Manar Elsayed Abdel-Raouf
Prof. of polymer science
Head of additives Lab.
The Egyptian Petroleum Research Institute.*

10:40 a.m. – 11:10 a.m.

10: 40 a.m. -11:10 a.m.

Advances of Aberration-Corrected Scanning Transmission Electron Microscopy

*Dr. Hesham El-Sherif
Materials Science and Engineering
Department, McMaster University,
Hamilton, ON, Canada.
The Rowland Institute at Harvard,
Harvard University, Cambridge, MA,
USA*

Session VI
EM at the Interface of Applied Research-1

Moderator

Prof. Naglaa Sarhan

Prof. of Histology and Head of Histology Dept. Tanta University

Chairpersons

Prof. Ehab El Dabaa Sabry

Deputy and Director of the Biochemistry & Molecular Biology and Medicinal Chemistry Division- Head of Center of Excellence in Recombinant Biopharmaceutic Proteins TBRI

Prof. Doaa Gamal

Prof. of Microbiology, Head of Microbiology Dept. Theodor Bilharz Research Institute

Assoc. Prof. Mohamed Hussein

Assoc. Prof. of Urology Head of Urology Department Theodor Bilharz Research Institute

11:15 a.m. -11:45 a.m.

10:15 a.m. – 10:45 a.m.
Time zone Netherland

Mycobacteria and Microscopes; a Massive Mixture

Associate Prof. Nicole van der Wel
Medical Biology Amsterdam institute for immunology and infectious diseases
Head of Electron Microscopy center Amsterdam

11: 45 a.m. – 12:15 p.m

The Invisible Pathogens in Vegetables and their Human Health Implications

Emeritus Prof. Zakaria Baka Etta.
Prof. of Mycology and plant Pathology
Dept. of Botany and Microbiology
Faculty of Science, Damietta University- New Damietta

12:15p.m. -12:45 p.m.

Electron Microscopy in the Characterization and Application of Nano-Formulated Drug Carriers

Prof. Mona AbouSamra
Prof. of Pharmaceutics
Pharmaceutical Technology
Department National Research Center

12:45 p.m.-1.15 p.m.

Telocytes' Role-Play in Urinary Bladder Cancer

Dr .Ehab Osama
Researcher Lecturer of Pathology &EM
Electron Microscopy Research Dept.
Theodor Bilharz Research Institute

Coffee Break 1:15 – 1: 30 p.m.

During break documentary video for ESEM will be displayed

Session VII

EM at the Interface of Applied Research-2

Moderator

Prof. Naglaa Sarhan

Prof. of Histology and Head of Histology Dept. Tanta University

Chairpersons

Emeritus Prof. Tarak AbouShousha

Prof. of Pathology, Former Head of Pathology Depart .and Vice President of TBRI

Emeritus Prof. Hoda Yehia

Prof. of Pathology & EM Former Head of EM Depart. TBRI

1: 30 p.m.-2:00 p.m.

5:30 a.m. – 6:00 a.m.
time zone Chicago USA

Development of an AI Histologic Biomarker Exceeding Pathologist Performance for Breast Cancer Prognosis: Lessons Learned and Opportunities for Electron Microscopy Assessment

*Dr Mohamed T. Amgad
Resident Pathologist
Northwestern University Feinberg
School of Medicine USA*

2.00 p.m. - 2.30 p.m.

From Micro to Nano: How Electron Microscopy Contributed to my Research Findings.

*Emeritus Prof. Soheir Mansy
Prof. of Pathology and Electron Microscopy, Theodor Bilharz Research Institute- President of ESEM and president of the Association of TBRI Research Staff, Former Head of EM Dept. TBRI
Councilor for the Middle East& North Africa/ the Society for Ultrastructural Pathology*

Snack Break 2:30 – 2:45 p.m.

During break documentary video for ESEM will be displayed

Session VII

EM and Microorganisms

Moderator

Prof. Naglaa Sarhan

Prof. of Histology and Head of Histology Dept. Tanta University

Chairpersons

Emeritus Prof. Soheir Mansy

Prof. of Pathology & EM TBRI

Emeritus Prof. Hala Badawy

Prof. of Microbiology former Head of Microbiology Dept. TBRI

Emeritus Assoc.Prof Magda Azmi

Assoc.Prof. Of Clinical Pathology Microbiology TBRI

2.45 p.m.-3.15 p.m.	<i>Deep Learning Meets Transmission Electron Microscopy: A New Era in Virus Classification</i>	<i>Dr. Omar Sayouh Researcher Clinical Microbiologist,EM Dept.Director of IPC unit, Theodor Bilharz Research Institute Clinical Microbiology Consultant, US Naval Medical Research Unit-3</i>
3:15 p.m.- 3: 45 p.m. 8:15 a.m. – 8:45 a.m. Carolina time Zone	<i>EM of Viruses: Specimen Handling, Virus Identification, and Look-Alikes</i>	<i>Prof. Sara E. Miller Department of Pathology Director, Center for Electron Microscopy & Nanoscale Technology Duke Medical Center -USA</i>
3:45 p.m. -4.15 p.m. 8:45 a.m. – 9: 15 a.m. Carolina time Zone	<i>Tropical and Subtropical Viruses (Diseases, Etiology, and Identification)</i>	<i>Prof. Sara E. Miller Department of Pathology Director, Center for Electron Microscopy & Nanoscale Technology Duke Medical Center- USA</i>
4.15 p.m. – 4.25 p.m.	<i>e. poster Ethical Considerations in the Integration of Artificial Intelligence into Histopathology Practice: A Narrative Review.</i>	<i>Dr. Nada Shamina Registrar in Chemical Pathology Department of Chemical Pathology, NHS, Nottingham, UK</i>
4:25 p.m. – 4: 30 p.m.	Wrap- up & Notifications	<i>Prof. Soheir Mansy</i>