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Mini Symposium Cryo-TEM

Freie Universität Berlin
June 02, 2017 | 9:00 am - 2:00 pm

Venue

Zuse Institute Berlin
Main Lecture Hall
Takustr. 7, 14195 Berlin, Germany

Registration deadline: April 30, 2017
www.biosupramol.de

The symposium is free of charge
and will be supported by the DFG.

Local Organization

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Core Facility BioSupraMol

Research Center of Electron Microscopy (FZEM)

Cryogenic Transmission Electron Microscopy of Biological and Synthetic Supramolecular Architectures

Program | Mini-Symposium - June 02, 2017



DFG

Mini-Symposium 2017

Cryogenic Transmission Electron Microscopy

Core Facility BioSupraMol and Research Center of Electron Microscopy (Freie Universität Berlin) cordially invite you to our Talos Arctica inauguration Mini-Symposium on topics of Cryogenic Transmission Electron Microscopy, which will take place on June 02, 2017.

For the understanding of complex molecular systems in chemistry, biology and pharmacy, the analysis of the structure of new supramolecular and biomacromolecular architectures is of great importance. The Core Facility BioSupraMol, which was established a few years ago by the Freie Universität Berlin with grant support from the German Science Foundation (DFG), provides a powerful center focused on high-resolution analytical techniques including electron microscopy.

The launch of a new state-of-the-art cryo-transmission electron microscope with automated data acquisition and novel electron detector technology is a good reason to review the rapid developments over the past few years in the field of cryogenic transmission electron microscopy.

Proven experts will present an overview of the developments of the technique from the very beginnings to the present day. The speakers will cover the characterization of biological and synthetic supramolecular assemblies by the use of state-of-the-art image analysis and 3D reconstruction techniques up to near atomic resolution.



New FEI Talos Arctica at the Research Center of Electron Microscopy at the Freie Universität Berlin

Program

Friday, June 02, 2017

Zuse Institute Berlin, Takustr. 7, Lecture Hall

9.00 – 9.05 Welcome Address

Prof. Dr. Rainer Haag
Freie Universität Berlin

9.05 – 9.15 Opening Remarks

Dr. Andrea Bör
Director of Administration and Finance,
Freie Universität Berlin

Core Facility
BioSupraMol

Session Chair: C. Böttcher, Freie Universität Berlin

9.15 – 10.15 Yeshayahu Talmon

Technion – Israel Institute of Technology
Keynote Lecture “Cryo-TEM - Development and perspectives”

10.15 – 10.30 Coffee Break

10.30 – 11.00 Marin van Heel

Leiden University
“Dynamic structures of biological complexes by single particle cryo-EM”

11.00 – 11.30 Christian Spahn

Charité – Universitätsmedizin Berlin
“Large-scale conformational dynamics of the ribosome and the mechanism of translation”

11.30 – 12.00 Carsten Sachse

EMBL Heidelberg
“Cryo-EM reconstruction of helical protein assemblies”

12.00 – 12.30 Buffet

Session Chair: R. Haag, Freie Universität Berlin

12.30 – 13.00 Nico Sommerdijk

Eindhoven University of Technology
“pending”

13.00 – 13.30 Egbert Boekema

University of Groningen
“Supercomplexes of Photosystem I”

13.30 – 14.00 Christoph Böttcher

Freie Universität Berlin
“Amphiphilic assembly structures”