

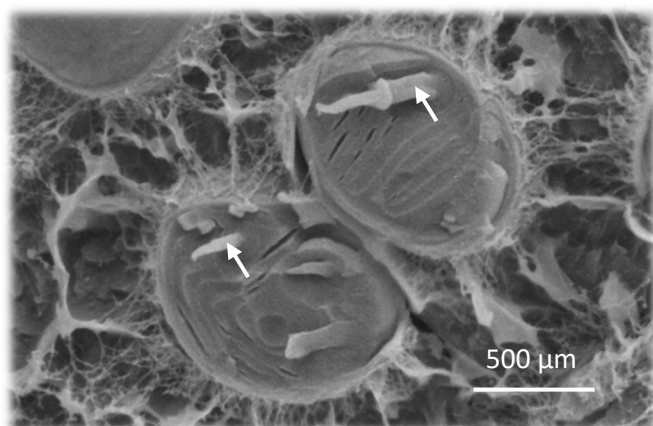
## Online workshop „Advanced Cryo-SEM techniques in life science“

19<sup>th</sup> November 2020

Please, fill in the [registration form](#) and we can sent you the **ZOOM link** on your e-mail.  
Deadline: **18.11.2020**

### Preliminary program (for the updated [schedule](#))

- 9:00 – 9:10 **Welcome** (Vladislav Krzyžánek, Institute of Scientific Instruments of the CAS, Brno)
- 9:10 – 9:40 Eyal Shimoni ([Weizmann Institute of Science, Rehovot/Israel](#)):  
**Sample preparation for cryo-SEM**
- 9:40 – 10:10 Thomas Heuser ([Vienna Biocenter Core Facilities, Vienna/Austria](#)):  
**New insights into thick samples by cryo-FIB-SEM**
- 10:10 – 10:40 Jiří Nováček ([CEITEC Masaryk University, Brno](#)):  
**Preparation and cryo-FIB micromaniching of *Saccharomyces Cerevisiae* for cryo-electron tomography**
- 10:40 – 11:00 Coffee break
- 11:00 – 11:40 Miroslava Schaffer ([Max Planck Institute of Biochemistry, Martinsried/Germany](#)):  
**The lift-out preparation of HPF sample**
- 11:40 – 12:00 Jiří Týč ([Biology Centre of the CAS, České Budějovice](#)):  
**SBEM - overview and biological applications**
- 12:00 – 12:30 Petr Matula ([Faculty of Informatics, Masaryk University, Brno](#)):  
**Deep learning in microscopy**
- 12:30 – 12:50 Kamila Hrubanová ([Institute of Scientific Instruments of the CAS, Brno](#)):  
**Freeze-fracturing at liquid Helium temperature: cryo-SEM application in biotechnology**
- 12:50 – 13:00 Vladislav Krzyžánek ([Institute of Scientific Instruments of the CAS, Brno](#)):  
**Closing**



### Questions:

Kamila Hrubanová ([hurbanova@isibrno.cz](mailto:hurbanova@isibrno.cz))  
Vladislav Krzyžánek ([krzyzanek@isibrno.cz](mailto:krzyzanek@isibrno.cz))  
Institute of Scientific Instruments, CAS, Brno  
Microscopy for Biomedicine

*Cryo-SEM image of freeze-fractured bacteria  
*Cupriavidus necator* H16 containing elastic polymeric  
granules inside the cells (white arrow).*

The workshop is organized with the support of the project  
„The Strategy AV21 Czech Academy of Sciences“,  
the research program „Diagnostic methods and techniques“.

