



European University Alliance for Global Health

EUGLOH Summer School on Large-Scale Facilities for Global Health: Opportunities, Project Writing and Career Orientation

June 29 – July 2, 2020 **online**, organized by Dr. Slavka Kascakova (Université Paris-Saclay, France) and Dr. Matthieu Réfrégiers (SOLEIL synchrotron, France) with the participation of speakers from University of Szeged (Hungary), Lund University (Sweden) and from Ludwig-Maximilians-Universität München (Germany)



Monday June 29, 2020

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| 9:00 - 9:10 | Welcome by Scientific Director of Life Sciences at SOLEIL synchrotron, Andrew Thompson |
| 9:10 - 9:30 | Introduction of the school by organizers, Slavka Kascakova from Université Paris-Saclay and Matthieu Réfrégiers from SOLEIL synchrotron |
| 9:30 - 10:00 | History of synchrotron light. Presentation of SOLEIL synchrotron (France)
Stefan Kubsky, SOLEIL synchrotron, France |
| | Utility of synchrotron light for society: Research on the COVID-19 |
| 10:00 - 10:30 | SARS-CoV-2 and COVID-19: What have we learned so far?
Joakim Esbjornsson, Lund University, Sweden |
| 10:30 - 11:00 | COVID-19 under the synchrotron light
Leonard Chavas, SOLEIL synchrotron, France |

11:00 - 11:30 ***Coffee break & Socializing***

11:30 - 12:00 **Presentation of MAX IV synchrotron (Sweden)**
Marjolein Thunnissen, MAX IV synchrotron, Sweden

12:00 - 12:30 **Presentation of ELI-ALPS (Hungary)**
Dimitris Charalambidis, ELI-ALPS, Hungary

12:30 - 14:00 ***Lunch break***

Illustrated applications of these light sources in *Biomedical Research*

14:00 - 14:30 **X-ray microCT tomography in Biology**
Timm Weitkamp, SOLEIL synchrotron, France

14:30 - 15:00 **Antibiotic resistant bacteria under UV light**
Muriel Masi, Université Paris-Saclay, France

15:00 - 15:30 **Diagnosis of Wilson disease by X-ray fluorescence**
Slavka Kascakova, Université Paris-Saclay, France

16:00 - 16:30 ***Coffee break & Socializing***

16:30 - 17:00 **XRF imaging of pancreatic islets to explore disease mechanism in diabetes**
Jens Lagerstedt, MAX IV synchrotron, Sweden

17:00 - 17:30 **Biomedical research in large laser facilities**
Katalin Hideghéty, ELI-ALPS Laser Center, Hungary

17:30 - 18:00 **Toward radiooncological application of laser based technology**
Katalin Hideghéty, ELI-ALPS Laser Center, Hungary

Tuesday June 30, 2020

Illustrated applications of these light sources in *Food and Environmental Science*

9:30 - 10:00 **X-ray fluorescence imaging and spectroscopy in food and environmental science**
Camille Rivard, INRAE, SOLEIL synchrotron, France

- 10:00 - 10:30** **Enzymatic activity for green chemistry with UV and infrared light**
Frédéric Jamme, SOLEIL synchrotron, France
- 10:30 - 11:00** **Synchrotron radiation brings a new light on food flavour mechanism**
Francis Canon, INRAE, France
- 11:00 - 11:30** ***Coffee break & Socializing***
- 11:30 - 12:00** **X-ray tomography for adaptation of trees to global warming**
Eric Badel, INRAE, France
- 12:00 - 14:00** ***Lunch break***
- 14:00 - 14:30** **Career orientation: Overview of professional opportunities in large-scale facilities**
Garance Aubry, SOLEIL synchrotron, France
- 14:30 - 15:30** **Networking with people of different professions working in SOLEIL synchrotron, France**
Céline Lory (Industrial Liaison Officer)
Stefan Kubsky (Surface Lab Manager)
Franck Wien (Beamline Scientist)
Gabriel David (Responsible for Biosafety issues)
Hernan-Gabriel Pais (Coordinator)
- 15:30 - 16:00** ***Coffee break & Socializing***
- 16:00 - 17:00** **Interested by an experiment at a large-scale facility? Practical information on the procedure of access will be given with remote access control on a crystallography beamlines.**
Matthieu Réfrégiers, SOLEIL synchrotron, France
Marjolein Thunnissen, MAX IV synchrotron, Sweden
Zita Varadi, ELI-ALPS Laser Center, Hungary
- 17:00 - 18:00** **Virtual tour of large-scale facilities**

Wednesday July 1, 2020

Practical sessions on writing proposal application for synchrotron beamtime

Divya Madhavan, CentraleSupélec, Université Paris-Saclay, France

Daniel Graziadei, Ludwig-Maximilians-Universität München, Germany

9:30 - 12:30 Practical session (Part 1/4)

- How to write as a serious scientist
- How to convey an idea
- How to synthesize a flow of ideas

12:30 - 14:00 *Lunch break*

14:00 - 18:00 Practical session (Part 2/4)

- What is the art of persuasion and why is it important to science?
- Thinking about a proposal for large-scale facilities and how to portray it convincingly
- Discussion on the informal art of persuasion

Thursday July 2, 2020

9:30 - 12:30 Practical session (Part 3/4)

- Assignment feedback (on the overnight assignment) in breakout sessions with a feedback template
- Review (+ open questions)

12:30 - 14:00 *Lunch break*

14:00 - 16:00 Practical session (Part 4/4)

- How to do an accuracy read
- How to give written feedback on a paper
- Peer-to-peer accuracy read
- Feedback

16:00 - 16:30 ***Coffee break & Socializing***

16:30 - 18:00 **Assessment of what has been learnt so far and general discussion and feedback on the summer school**
Slavka Kascakova, Université Paris-Saclay, France
Matthieu Réfrégiers, SOLEIL synchrotron, France



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