



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 Kubsy, 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	<i>Coffee break & Socializing</i>
11:30 - 12:00	X-ray tomography for adaptation of trees to global warming Eric Badel, INRAE, France
12:00 - 14:00	<i>Lunch break</i>
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	<i>Coffee break & Socializing</i>
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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