

**User Community Building
Workshop in Synchrotron
Radiation Techniques
available for Cypriot academia
and industrial users at
SESAME**

Report of Contributions

Contribution ID: 1

Type: **not specified**

Building bridges with light: The SESAME story

Monday 24 November 2025 09:50 (20 minutes)

Presenter: Prof. ELKADIME, Atef (SESAME)

Contribution ID: 2

Type: **not specified**

High Brilliance, High Impact: Science at SESAME

Monday 24 November 2025 10:10 (20 minutes)

Presenter: Dr LAUSI, Andrea (SESAME)

Contribution ID: 3

Type: **not specified**

National strategic research infrastructures BioMERA Platform microCT and the new BioMERApplus XRF and labXAFS: Twinning with SESAME beamlines

Monday 24 November 2025 11:00 (20 minutes)

Presenters: Dr LORENTZ, Kirsi (The Cyprus Institute); Dr FATIMA, Anis (The Cyprus Institute)

Session Classification: Connecting research ideas and needs relevant for Cypriot scientists with analytical synchrotron techniques and services offered at the SESAME user facility

Contribution ID: 4

Type: **not specified**

Deep Learning for 3D Synchrotron X-ray Tomography Data

Monday 24 November 2025 11:50 (10 minutes)

Presenter: SYED MUHAMMAD, Haider Shah (The Cyprus Institute)

Session Classification: Connecting research ideas and needs relevant for Cypriot scientists with analytical synchrotron techniques and services offered at the SESAME user facility

Contribution ID: 5

Type: **not specified**

Recent Advances in XAS/XEOL at BM08-XAFS/XRF: Machine Learning-Driven XAFS Data Analysis

Monday 24 November 2025 12:00 (20 minutes)

Presenter: Dr KHAN, Latif Ullah (SESAME)

Session Classification: Connecting research ideas and needs relevant for Cypriot scientists with analytical synchrotron techniques and services offered at the SESAME user facility

Contribution ID: 6

Type: **not specified**

Recent Advances in XAS/XEOL at BM08-XAFS/XRF: Machine Learning-Driven XAFS Data Analysis

Presenter: Dr KHAN, Latif Ullah (SESAME)

Session Classification: Connecting research ideas and needs relevant for Cypriot scientists with analytical synchrotron techniques and services offered at the SESAME user facility

Contribution ID: 7

Type: **not specified**

Identification, spatial distribution, and speciation of relevant trace elements in manganese umbers from the Troodos Mountain in Cyprus: a combined X-ray fluorescence and X-ray absorption fine structure spectroscopy study

Monday 24 November 2025 12:20 (20 minutes)

Presenter: CHADJIGEORGIOU, George (Geological Survey Department Cyprus)

Session Classification: Connecting research ideas and needs relevant for Cypriot scientists with analytical synchrotron techniques and services offered at the SESAME user facility

Contribution ID: 8

Type: **not specified**

Leveraging the power of exposomics to study the impact of environment on human health

Monday 24 November 2025 12:40 (20 minutes)

Presenter: Prof. MAKRIS, Konstantinos (Cyprus University of Technology)

Session Classification: Connecting research ideas and needs relevant for Cypriot scientists with analytical synchrotron techniques and services offered at the SESAME user facility

Contribution ID: 9

Type: **not specified**

Synchrotron X-ray Phase Contrast Imaging: Opportunities and Applications

Monday 24 November 2025 14:00 (20 minutes)

Presenter: Dr IORI, Gianluca (Paul Scherrer Institute (PSI))

Session Classification: Connecting research ideas and needs relevant for Cypriot scientists with analytical synchrotron techniques and services offered at the SESAME user facility

Contribution ID: 10

Type: **not specified**

ANAXAM: How industry profits from applied material analytics using Neutron and Synchrotron radiation

Monday 24 November 2025 14:20 (20 minutes)

Author: Dr GRÜNZWEIG, Christian (ANAXAM, Switzerland)

Presenter: Dr GRÜNZWEIG, Christian (ANAXAM, Switzerland)

Session Classification: Connecting research ideas and needs relevant for Cypriot scientists with analytical synchrotron techniques and services offered at the SESAME user facility

Contribution ID: 11

Type: **not specified**

Utilizing Synchrotron Radiation to Explore Material Properties

Monday 24 November 2025 14:40 (20 minutes)

Presenter: Dr MENELAOU, Melita (Cyprus University of Technology)

Session Classification: Connecting research ideas and needs relevant for Cypriot scientists with analytical synchrotron techniques and services offered at the SESAME user facility

Contribution ID: 12

Type: **not specified**

Discussions and networking

Monday 24 November 2025 15:30 (30 minutes)

Presenter: ALL

Session Classification: Connecting research ideas and needs relevant for Cypriot scientists with analytical synchrotron techniques and services offered at the SESAME user facility

Contribution ID: 13

Type: **not specified**

Why Synchrotrons Make Powder Diffraction Powerful

Tuesday 25 November 2025 09:00 (20 minutes)

Presenter: Dr LAUSI, Andrea (SESAME)

Session Classification: Connecting research ideas and needs relevant for Cypriot scientists with analytical synchrotron techniques and services offered at the SESAME user facility

Contribution ID: 14

Type: **not specified**

Micro-Computed Tomography of Mouse Bone Tissue: Applications in Ex Vivo and In Vivo Studies

Tuesday 25 November 2025 09:20 (20 minutes)

Presenter: Dr SOPHOCLEOUS, Antonia (European University Cyprus)

Session Classification: Connecting research ideas and needs relevant for Cypriot scientists with analytical synchrotron techniques and services offered at the SESAME user facility

Contribution ID: 15

Type: **not specified**

ID11-L HESEB: Soft X ray Absorption Spectroscopy at SESAME and Scientific Opportunities

Tuesday 25 November 2025 09:40 (20 minutes)

Presenter: Dr GENISEL, Mustafa (SESAME)

Session Classification: Connecting research ideas and needs relevant for Cypriot scientists with analytical synchrotron techniques and services offered at the SESAME user facility

Contribution ID: 16

Type: **not specified**

SESAME BM02-IR Beamline: Present & Future

Tuesday 25 November 2025 10:00 (20 minutes)

Presenter: Dr KAMEL, Gihan (SESAME)

Session Classification: Connecting research ideas and needs relevant for Cypriot scientists with analytical synchrotron techniques and services offered at the SESAME user facility

Contribution ID: 18

Type: **not specified**

The TXPES beamline and its applications

Presenter: Dr ÖZTÜRK, Zeynep (SESAME)

Session Classification: Connecting research ideas and needs relevant for Cypriot scientists with analytical synchrotron techniques and services offered at the SESAME user facility

Contribution ID: 21

Type: **not specified**

TXPES: A New Soft X-ray Photoelectron Spectroscopy Beamline at SESAME

Tuesday 25 November 2025 11:00 (20 minutes)

Presenter: Dr ÖZTÜRK, Zeynep (SESAME)

Session Classification: Connecting research ideas and needs relevant for Cypriot scientists with analytical synchrotron techniques and services offered at the SESAME user facility

Contribution ID: 22

Type: **not specified**

From Beginner to Beamline: A Journey into Synchrotron FTIR Research on Ancient Human Remains at SESAME

Tuesday 25 November 2025 11:40 (20 minutes)

Presenter: Dr MIYAUCHI, Yuko (SESAME)

Session Classification: Connecting research ideas and needs relevant for Cypriot scientists with analytical synchrotron techniques and services offered at the SESAME user facility

Contribution ID: 23

Type: **not specified**

Synchrotron Radiation Techniques applied to Salt Crystallization Studies in Building Materials

Tuesday 25 November 2025 11:20 (20 minutes)

Presenter: Prof. IOANNOU, Ioannis (University of Cyprus)

Session Classification: Connecting research ideas and needs relevant for Cypriot scientists with analytical synchrotron techniques and services offered at the SESAME user facility

Contribution ID: 24

Type: **not specified**

Introduction to the mentoring sessions of the afternoon - Q&A -

Tuesday 25 November 2025 12:00 (30 minutes)

Presenter: Dr LAUSI, Andrea (SESAME)

Session Classification: Connecting research ideas and needs relevant for Cypriot scientists with analytical synchrotron techniques and services offered at the SESAME user facility

Contribution ID: 25

Type: **not specified**

Introduction to proposals writing

Tuesday 25 November 2025 13:30 (30 minutes)

Presenter: Dr FROIDEVAL ZUMBIEHL, Annick (Paul Scherrer Institute)

Session Classification: Develop your scientific idea(s) and write your SESAME proposal for beamtime request under the scientific guidance of mentoring teams

Contribution ID: 26

Type: **not specified**

**Mentoring sessions on “crazy scientific ideas” by
research topic: ◦ 1: Geology, Soil Science ◦ 2: Building
materials ◦ 3: Biology, Medicine, Pharmaceuticals ◦ 4:
Energy, Catalysis ◦ 5: Cultural Heritage, Archaeology
◦ 6: Other topics**

Tuesday 25 November 2025 14:00 (2 hours)

Mentoring sessions on “crazy scientific ideas”:

- Session 1: Geology, Soil Science
- Session 2: Building materials
- Session 3: Biology, Medicine,
Pharmaceuticals
- Session 4: Energy, Catalysis
- Session 5: Cultural Heritage, Archaeology
- Session 6: Other topics

Presenter: ALL

Session Classification: Develop your scientific idea(s) and write your SESAME proposal for beamtime request under the scientific guidance of mentoring teams

Contribution ID: 27

Type: **not specified**

Wrap-up and conclusions

Tuesday 25 November 2025 16:00 (30 minutes)

Presenter: ALL

Session Classification: Develop your scientific idea(s) and write your SESAME proposal for beamtime request under the scientific guidance of mentoring teams

Contribution ID: 28

Type: **not specified**

Revealing the Unseen: Exploring New Research Horizons for Cyprus with the BEATS Beamline at SESAME

Monday 24 November 2025 11:20 (20 minutes)

Presenter: Dr SAADALDIN, Abdellatif (SESAME)

Session Classification: Connecting research ideas and needs relevant for Cypriot scientists with analytical synchrotron techniques and services offered at the SESAME user facility

Contribution ID: 29

Type: **not specified**

Educational activities with SESAME in the context of the Marie Skłodowska-Curie ENGAGE program

Monday 24 November 2025 11:40 (10 minutes)

Presenter: Prof. ALEXANDROU, Constantia (The Cyprus Institute)

Session Classification: Connecting research ideas and needs relevant for Cypriot scientists with analytical synchrotron techniques and services offered at the SESAME user facility