

# FREE VIRTUAL TUTORIAL

## Earth & Environmental Science Applications of X-ray Spectromicroscopy for New Users

### Participation is FREE

#### All the Details

Advanced Light Source  
2024 User Meeting

Wednesday August 14

8:30AM to 4:30PM PDT

#### Get Signed-Up, It is Easy

Sign-Up Using the  
“SYSTER Tutorial” Link

<https://als.lbl.gov/user-meeting/>

#### In Collaboration With

National Science  
Foundation's  
Synchrotron Earth &  
Environmental Science  
(SEES) Program

### Learn from the Experts

#### Invited Speakers

Hendrik Ohldag  
Alex Ditter  
Matthew Marcus

Advanced Light Source  
Microscopy Group  
Beamline Scientists

#### Organizers

Brandy Toner  
Sarick Matzen

University of Minnesota

SYSTER Approved Program  
SYnergy of Soft and Tender  
X-rays for Earth Research

#### Join the SEES / SYSTER Community

<https://seescience.org/>

### Jump Start Your Science

#### Practical, Friendly Content to Help You Succeed

**Tutorial 1:** An introduction to  
synchrotrons, beamlines & X-  
ray absorption spectroscopy

**Tutorial 2:** Introducing the  
strong portfolio of X-ray  
microscopes at the Advanced  
Light Source

**Science focus:** Examples of  
carbon and iron spectro-  
microscopy for Earth &  
environmental science

**Virtual tour:** join Hendrik for  
tour of an X-ray microscopy  
beamline

**Data demonstration 1:**  
analyzing scanning  
transmission X-ray spectro-  
microscopy data

**Data demonstration 2:**  
working with data at the  
COSMIC 7.0.1.2 beamline



**NSF SEES**  
SYNCHROTRON EARTH AND ENVIRONMENTAL SCIENCE

