

Summer Workshop on Chemical Imaging

Day 1 Symposium - June 17, 2025

Room 906, 9th floor, Boston University (BU) Photonics Center. Breakfast, lunch, and dinner are included.

Time (ET)	Event / Speaker	Title
8:30 am - 9:00 am	Registration, Coffee, Continental Breakfast	
9:00 am - 9:10 am	Boston University President Gilliam	Opening Remarks
9:10 am - 9:20 am	Professor Ji-Xin Cheng, Boston University	Welcome
9:20 am - 10:00 am	Professor Selim Ünlü, Boston University	“Interferometric Scattering Microscopy”
10:00 am - 10:40 am	Professor Randy Bartels, University of Wisconsin-Madison	“Low-frequency coherent Raman microscopy”
10:40 am - 11:00 am	Coffee Break	
11:00 am - 11:40 am	Professor Haonan Lin, Boston University	“Computational Chemical Imaging”
11:40 am - 1:00 pm	Lunch	
1:00 pm - 1:40 pm	Professor Wei Lu, Caltech	“Functional bond-selective microscopy toward the single-molecule, super-resolution regime”
1:40 pm - 2:20 pm	Professor Ji-Xin Cheng, Boston University	“Photothermal Chemical Imaging”
2:20 pm - 2:40 pm	Coffee Break	
2:40 pm - 3:20 pm	Professor Meng Wang, Janelia Research Campus	“Chemical Imaging of Metabolic Actions across Scales”
3:20 pm - 4:00 pm	Short talks	To be selected from posters
4:00 pm - 4:10 pm	Professor Ji-Xin Cheng, Boston University	Closing Remarks
4:00 pm - 6:00 pm	Poster and Reception, Chaired by Dr. Qing Xia	7 th floor of Photonics Center

Internet options: eduroam or BU Guest

Workshop Sponsors:

Photothermal Spectroscopic Corp,
Vibronix Inc,
Light Conversion-USA,
Refined Lasers,
Boston University College of Engineering,
Department of Electrical and Computer Engineering,
Photonics Center.

Day 2: Hands-on Training – June 18, 2025

@ BU Photonics Center

Three in-person parallel training sessions on stimulated Raman scattering (SRS) imaging, stimulated Raman photothermal (SRP) imaging, and mid-infrared photothermal (MIP) imaging, followed by a joined session on AI-assisted chemical image analysis. The maximum number of day-2 trainees will be 24.

Time (ET)	Event
8:30 am - 9:00 am	Continental Breakfast @ Room 901
9:00 am - 9:30 am	Session 1/2/3 in Parallel: Presentations
9:30 am – 11:30 am	Session 1/2/3 in Parallel: Practice
11:30 am – 1:30 pm	Lunch and Feedback to Workshop @ Room 901; Mingsheng Li will collect the feedback.
1:30 pm – 2:00 pm	Session 1/2/3 in Parallel: Presentations
2:00 pm – 4:00 pm	Session 1/2/3 in Parallel: Practice
4:00 pm – 5:00 pm	AI-assisted Data Science Session @ Room 901
5:30 pm – 7:30 pm	Dinner, Loco Taco in Fenway, 61 Brookline Ave. Boston, MA 02215 (for day 2 trainees and trainers).

Training sessions:

Stimulated Raman scattering imaging, lecture at Room 940, practice at 801D
Instructors: Chinmayee Dessai, Dingcheng Sun

FOPO-Stimulated Raman photothermal imaging, lecture at Room 822, practice at 801G
Instructors: Yifan Zhu, Biwen Gao

Mid-infrared photothermal microscope DIY, lecture at Room 901, practice at 801B
Instructors: Jiaze Yin, Jianpeng Ao