

The Howard Flack Crystallographic Lecture Series



Swiss Society for Crystallography

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On the topic:
X-ray free electron-laser based
structural biology

The 2026 Howard Flack Lecture Series will focus on biochemical mechanisms studied by ultrafast time-resolved femtosecond crystallography with Professor Ilme Schlichting as our invited Flack Lecturer. Professor Schlichting is a pioneer in structural biology by using the brightest time-resolved radiation sources to generate molecular movies of biological processes.

December 7th to December 11th, 2026

**Professor Ilme Schlichting, Max-Planck Institute for Medical
Research, Heidelberg, Germany**

The schedule is published on the next page and on swiss-crystallography.ch/en/flack_lectures.

Structural biology—especially scattering techniques using X-rays and electrons—has enabled high-resolution insights into the structure and function of molecules, assemblies, and cells. However, radiation damage remains a key limitation, particularly for redox-sensitive cofactors, where it can obscure true chemical states and reaction mechanisms. X-ray free-electron lasers (XFELs), which are nearly 10 billion times more brilliant than conventional synchrotrons, overcome this constraint by delivering ultrafast femtosecond pulses that outrun radiation damage. This “diffraction-before-destruction” approach allows researchers to capture intact structures from tiny crystals and even follow biochemical processes in real time, revealing transient intermediates and dynamic changes during enzymatic reactions. As a result, XFELs are transforming our ability to directly observe molecular mechanisms under near-physiological conditions.



2026 Howard Flack Lecture Series Schedule

Monday, December 7th: University of Zurich

Local Host: Martin Pačesa

Time: 15:00

Venue: Y15-G-19 room, UZH Irchel campus

Tuesday, December 8th: Paul-Scherrer Institute

Local Host: Meitian Wang

Time: 11:00

Venue: PSI Auditorium

Wednesday, December 9th: University of Fribourg

Local Host: Stefan Salentinig

Time: 14:00

Venue: Auditorium PER 10 0.013, Chemin du Musée 9

Thursday, December 10th: EPF Lausanne

Local Host: Florence Pojer

Time: 14:00

Venue: Room Ail 1153 at School of Life Sciences (SV) at EPFL

Friday, December 11th: University of Geneva

Local Host: Michael Hothorn

Time: 14:00

Venue: 1S081 in the Science III building, -1 level. 30 Quai E. Ansermet