



Pittsburgh Diffraction Conference 2013

Hauptman Woodward Institute,
Buffalo, NY

September 18-20, 2013

September 18th

from 4:00 pm

Hotel Registration

5:30-8:30 pm

Opening reception at Bacchus Wine Bar and Restaurant

September 19th

8:00 am

Conference Registration opens, light breakfast available

9:00 am – 9:10 am

Opening introduction – Vivian Cody

First session:

RNA and DNA (Chair Clara Kielkopf)

9:10 am – 9:40 am

Ned Seeman, New York University
"DNA: Not Merely the Secret of Life"

9:40 am – 10:10 am

Guillermo Calero, University of Pittsburgh
"Crystal structure of RNA polymerase II in complex with a complete nucleic acid scaffold"

10:10 am – 10:40 am

Joseph Wedekind, University of Rochester
"PreQ₁ riboswitches use diverse modes of pyrrolopyrimidine recognition in gene regulation"

10:40 am – 11:00 am

Coffee

Second session:

Crystallization (Chair Ed Snell)

11:00 am – 11:30 am

John Hunt, Columbia University
"Rational engineering of improved protein crystallization"

11:30 am – 12:00 noon

Joseph R. Luft, Hauptman Woodward Institute
"Crystallization Screening: Technologies and Science"

12:00 noon – 12:30 pm

Hilary Stevenson, University of Pittsburgh
"Nanocrystal Identification and Crystal Optimization by Electron Microscopy"

12:30 pm – 1:30 pm

Lunch provided

Third session:

Small Molecule Crystallography (Chair Matt Zeller)

1:30 pm – 2:00 pm

Jesse Rowsell, Oberlin College

"A Common Supramolecular Motif in Compounds of "H-Acid", featuring the Incommensurately Modulated Phase of the Commercially Important Sodium Hydrate"

2:00 pm – 2:30 pm

Silvina Pagola, College of William and Mary

"Crystal structure analysis of organic mechanochemical reaction products from X-ray powder diffraction"

2:30 pm – 3:00 pm

Yurij Mozharivskyj, McMaster University

"Elucidating fine structural features and physical properties in responsive materials via single crystal X-ray diffraction"

3:00 pm – 3:30 pm

Coffee

Fourth session:

Short talks to be selected from submitted abstracts

3:30 pm – 3:50 pm

tba

3:50 pm – 4:10 pm

tba

4:10 pm – 4:30 pm

tba

4:30 pm – 4:50 pm

tba

4:50 pm – 5:10 pm

tba

5:10 pm – 5:30 pm

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5:30 pm – 6:30 pm

Poster session (posters will also be available during the banquet)

6:30 pm

Banquet – Poster prizes

September 20th

Fifth session:

New Diffraction Technologies (Chair John Rose)

9:00 am – 9:30 am

Aina Cohen, SLAC National Accelerator Laboratory
"Femtosecond high-resolution diffraction studies at LCLS"

9:30 am – 10:00 am

Flora Meilleur, Oak Ridge National Laboratory
"Locating Hydrogen Atoms in Enzymes Using Neutron Protein Crystallography"

10:00 am – 10:30 am

Marian Szebenyi, Cornell University
"Developments and Opportunities for Structural Biology at MacCHESS"

10:30 am – 11:00 am

Coffee

11:00 am – 11:30 am

John Rose, University of Georgia
"The SER-CAT Virtual Beamline: Lessons learned when over 95% of all data is collected remotely"

11:30 am – 12:00 noon

Roger Durst, Bruker AXS
"Design and Characteristics of MetalJet X-Ray Sources"

All member business meeting:

12:00 noon – 1:00 pm

1:00 pm

Lunch provided