

**SCHEDULE FOR SATURDAY, August 10, 2013**

3:00 - 6:00 PM School participants arrive at Argonne and register at the Argonne Guest House, Building 460.

6:00 - 8:00 PM - Informal get-together Argonne Guest House. Food and beverages will be provided. All School participants and program presenters are invited to attend.

**ARGONNE SCHOOL OPENING - SUNDAY, AUGUST 11, 2013**  
APS Building 401, Room A1100

Time/Date	Sunday, August 11	Time/Date	Sunday, August 11	Time/Date	Sunday, August 11
8:30 AM	Breakfast Buffet Argonne Guest House Restaurant	9:45 – 10:45	Lecture Interaction of X-rays and Neutrons with Matter R. Pynn Univ. of Indiana	3:30 – 4:30	Lecture X-ray Detection N. Miceli Argonne National Laboratory
9:30 AM	Opening Remarks  Dr. Brian Stephenson Associate Laboratory Director Advanced Photon Source Argonne National Laboratory  Dr. Suzanne G.E. te Velthuis Physicist Materials Science Division Argonne National Laboratory  Dr. Jonathan C. Lang Physicist X-ray Science Division Advanced Photon Source Argonne National Laboratory	10:45 – 11:00	Break	4:30 - 4:45	Break
		11:00 – 12:00	Lecture Continued Interaction of X-rays and Neutrons with Matter R. Pynn Univ. of Indiana	4:45 - 6:00	Advanced Photon Source (APS) Tour
		12:00 – 1:00	Lunch	6:00 - 7:00	Dinner
		1:00 – 2:00	Lecture X-ray Generation/Instrumentation D. M. Mills Argonne National Laboratory		
		2:00 - 2:15	Break		
		2:15 - 3:15	Lecture Continued X-ray Generation/Instrumentation D. M. Mills Argonne National Laboratory		
		3:15 – 3:30	Break		

National School on Neutron and X-ray Scattering  
August 10-24, 2013

Argonne National Laboratory  
Argonne, Illinois

Program Week 1 - August 12-17, 2013  
APS Building 401 Room A1100

Time/Date	Monday August 12	Tuesday August 13	Wednesday August 14	Thursday August 15	Friday August 16	Saturday August 17
8:30 - 9:30	Lecture Continued Interaction of X-rays and Neutrons with Matter R. Pynn Univ. of Indiana	Lecture Single Crystal Diffraction A. Schultz Argonne National Lab	Lecture X-ray Abs. Spectroscopy G. B. Bunker Illinois Institute of Technology	Lecture X-ray Imaging C. Jacobsen Northwestern University/ Argonne National Laboratory	Lecture High Pressure Techniques M. Guthrie Carnegie Institute - Washington	Bus Travel to Oak Ridge  Bus departs Argonne Guest House - 8:00 AM
9:30 - 9:45	Break	Break	Break	Break	Break	
9:45 - 10:45	Lecture Continued Interaction of X-rays and Neutrons with Matter R. Pynn Univ. of Indiana	Lecture Powder Diffraction B. Toby Argonne National Lab	Lecture Continued X-ray Abs. Spectroscopy G. B. Bunker Illinois Institute of Technology	Lecture Continued X-ray Imaging C. Jacobsen Northwestern University/ Argonne National Laboratory	Lecture Time Resolved Scattering P. Evans Univ. of Wisconsin	
10:45 - 11:00	Break	Break	Break	Break	Break	
11:00 - 12:00	Lecture SAXS/SANS D. Schaefer University of Cincinnati	Lecture Polycrystalline Diffraction R. Suter Carnegie Mellon University	Lecture XAS Applications I. Pickering University of Saskatchewan	Lecture XPCS R. Aymeric Stanford University	Lecture Inelastic X-ray Scattering E. Alp Argonne National Laboratory	
12:00 - 1:15	Lunch	Group Photo/Lunch	Lunch	Lunch	Lunch	
1:30 - 6:00	X-ray Experiment 1  See Experiments Schedule	Free Afternoon in Chicago (Optional)  Buses depart Argonne Guest House for down- town Chicago - 1:30 PM	X-ray Experiment 2  See Experiments Schedule	X-ray Experiment 3  See Experiments Schedule	X-ray Experiment 4  See Experiments Schedule	
6:00 - 7:00	Dinner	Buses depart downtown Chicago for Argonne Guest House - 8:00 PM	Dinner	Dinner	Dinner Week 1 wrap-up Picnic	Dinner at Oak Ridge

**SCHEDULE FOR SATURDAY, August 17, 2013**

School participants arrive in Oak Ridge, TN and check in at the Comfort Inn.

Transportation provided from airport and dinner hosted by Oak Ridge National Laboratory.

**OAK RIDGE SCHOOL OPENING - SUNDAY, August 18, 2013**

Spallation Neutron Source (SNS) Building 8600, Iran Thomas Auditorium, Room A103

Time/Date	Sunday, August 18	Time/Date	Sunday, August 18
9:30 - 11:30	-Badging -Safety Training (PFE)	1:00 - 1:45	Lecture Neutron Generation and Detection J. M. Carpenter Argonne National Laboratory
11:30 - 12:15	Lunch	1:45 - 2:00	Break
12:15 - 1:00	Welcomes  Dr. Kelly Beierschmitt Associate Laboratory Director Neutron Directorate Oak Ridge National Laboratory  Dr. Thom Mason Director Oak Ridge National Laboratory	2:00 - 2:45	Lecture Neutron optics and Instrumentation L. Robertson Oak Ridge National Laboratory
		2:45 - 3:00	Break
		3:00 - 6:30	Tours SNS, HFIR, and Graphite Reactor
	Opening Remarks Dr. Bryan C. Chakoumakos Group Leader Structure of Matter Quantum Condensed Matter Div. Oak Ridge National Laboratory	6:30 - 8:00	Dinner and Discussion

Program Week 2 - August 19-24, 2013  
Spallation Neutron Source (SNS) Building 8600, Iran Thomas Auditorium, Room A103

Time/Date	Monday August 19	Tuesday August 20	Wednesday August 21	Thursday August 22	Friday August 23	Saturday August 24
8:30 - 9:30	Lecture Quasi-elastic Neutron Scattering K. W. Herwig Oak Ridge National Laboratory	Lecture Magnetic Scattering C. Broholm Johns Hopkins University	Lecture PDF Analysis T. Proffen Oak Ridge National Laboratory	Lecture Materials Engineering D. Brown Los Alamos National Laboratory	Lecture Diffuse Scattering G. E. Ice Oak Ridge National Laboratory	School participants depart for home
9:30 - 9:45	Break	Break	Break	Break	Break	
9:45 - 10:45	Lecture Inelastic Neutron Scattering Young Lee Massachusetts Institute of Technology	Lecture Reflectivity C. F. Majkrzak National Institute of Standards and Technology	Lecture Applications of Small Angle Scattering V. S. Urban Oak Ridge National Laboratory	Lecture Powder Diffraction Applications A. Huq Oak Ridge National Laboratory	Lecture Micro-Diffraction G. E. Ice Oak Ridge National Laboratory	
10:45 - 11:00	Break	Break	Break	Break	Break	
11:00 - 12:00	Lecture Continued Inelastic Neutron Scattering Young Lee Massachusetts Institute of Technology	Lecture Neutron Polarization C. F. Majkrzak National Institute of Standards and Technology	Lecture Imaging with Neutrons H. Bilheux Oak Ridge National Laboratory	Lecture Writing Proposals for Neutron & X-ray Beamtime J. D. Budai Oak Ridge National Laboratory	Presentation preparation	
12:00 - 12:45	Lunch	Lunch	Lunch	Lunch	Lunch	
12:45 - 6:30	HFIR/SNS Experiment 1 (17 Instruments)	HFIR/SNS Experiment 2 (17 Instruments)	HFIR/SNS Experiment 3 (17 Instruments)	HFIR/SNS Experiment 4 (17 Instruments)	Student Presentations  Break Student Presentations	
6:30 - 8:00	Dinner and Discussion	Dinner and Discussion	Dinner and Discussion	Dinner and Discussion	Dinner in the SNS Cafeteria & Social on the Patio	