

Agenda
Joint Institute for Neutron Sciences
Application of Neutron Scattering to Materials Science and Engineering
Pollard Auditorium, Oak Ridge Associated Universities
210 Badger Avenue, Oak Ridge, TN

Monday, October 1, 2001
Tutorial on Engineering Applications of Neutron Diffraction

7:30 Registration and Continental Breakfast

Session Chair: Angus Wilkinson
Georgia Institute of Technology

8:30	Welcome and Overview of Spallation Neutron Source	Thom Mason Spallation Neutron Source
8:50	Introduction to Joint Institute for Neutron Sciences	Lee Magid Joint Institute for Neutron Sciences
9:00	Lecture 1, Introduction to Neutron Diffraction	Jim Richardson Argonne National Laboratory
10:30	Break	
10:50	Lecture 2, Introduction to the Measurement of Stress Fields in Engineering Components	Aaron Krawitz University of Missouri
12:20	Lunch	

Session Chair: John Nemeth
Oak Ridge Associated Universities

13:30	Lecture 3, Introduction to Texture Measurements: Their Analysis and Interpretation	John Root National Research Council of Canada
15:00	Break	
15:20	Lecture 4, Probing the Microstructure of Industrial Components	Stephen Spooner Oak Ridge National Laboratory
16:50	End of Monday's session	
18:15	Cash bar at The Garden Plaza Hotel, Oak Ridge	
19:00	Dinner at The Garden Plaza Hotel, Oak Ridge	Session chair: Tom Holden Dinner Speaker: Cev Noyan, IBM

"Social Implications of Stress Analysis"

Tuesday, October 2, 2001
Tutorial on Engineering Applications of Neutron Diffraction

7:30 Registration and Continental Breakfast

Session Chair: Bernard Wehring
North Carolina State University

8:30	Lecture 5, Standardization of Stress Measurements With Neutrons: the VAMAS Exercise	George Webster Imperial College, London
10:00	Break	
10:20	Lecture 6, The Challenges of Stress Measurement by Neutron Diffraction	John Root National Research Council of Canada
11:50	Closing Remarks	Tom Holden
12:00	Lunch and End of Tutorial	

Symposium on Fundamental Studies of Materials Phenomena Using Neutrons

Session chair: Linda Horton
Oak Ridge National Laboratory

13:00	Welcome	Tim Fitzsimmons Basic Energy Sciences U.S. Department of Energy
13:15	Neutron Residual Stress Mapping Facility	Cam Hubbard Oak Ridge National Laboratory
13:30	SMARTS and HIPPO Capabilities	Mark Bourke Los Alamos National Laboratory
13:45	Materials Science and Engineering Facilities at Chalk River For Academic and Industrial Researchers	John Root National Research Council of Canada
14:00	Neutron Scattering at the Intense Pulsed Neutron Source	Jim Richardson Argonne National Laboratory
14:15	The Engineering Program at the NIST Reactor	Thomas Gnäupel-Herold National Institute of Standards and Technology
14:30	VULCAN at the Spallation Neutron Source	Xun-Li Wang Spallation Neutron Source
15:00	Break	
15:30	Studies of Plastic Deformation and Recrystallization in Metals by Neutron Diffraction and other Methods	Dorte Jensen Risø National Laboratory, Denmark
16:00	Small-Angle Neutron Scattering Studies of Porosity in Ceramics	Andrew Allen National Institute of Standards and Technology
16:30	Polycrystalline Deformation of Beryllium - Mechanisms and Import	Don Brown Los Alamos National Laboratory
17:00	End of Tuesday's session	
17:30	Depart Garden Plaza Hotel for Knoxville via chartered bus	
18:15	Cash Bar at The Foundry, Knoxville	
19:00	Dinner Buffet at The Foundry, Knoxville	Session chair: Linda Horton Dinner Speaker: Brent Fultz California Institute of Technology
	Coherent and Incoherent Viewpoints of Scattering from Materials	

Wednesday, October 3
Symposium on Fundamental Studies of Materials Phenomena Using Neutrons

- 7:30 Registration and Continental Breakfast

Session chair: Andrew Quong
Lawrence Livermore National Laboratory
- 8:30 Fundamental Interactions in Martensitic Transformations Revealed by Inelastic Neutron Scattering
Stephen Shapiro
Brookhaven National Laboratory
- 9:00 Local Disorder and Neutron Scattering: From Catalysts to High-Temperature Superconductors
Takeshi Egami
University of Pennsylvania
- 9:30 Dynamics of Disordered Materials
David Price
Argonne National Laboratory
and CNRS-CRMHT,
Orleans, France
- 10:00 Applications of Neutron Diffraction to Residual Strain Related Problems
Judy Pang
Manchester University (UK) and
Oak Ridge National Laboratory
- 10:30 Break
11:00 Posters
12:00 Lunch and Posters
- Session chair: Linda Horton
Oak Ridge National Laboratory
- 13:00 Parallel Breakout Sessions

I Phase Transformation
II Basic Mechanical Property Studies
III Nanostructured and Functional Materials I
IV Nanostructured and Functional Materials II
- 15:30 Break
- 16:00 Summary
17:00 Workshop Adjourns

Session Leaders