

IAN2006

Imaging and Neutrons 2006

October 23-25, 2006

Oak Ridge, TN

IAN2006 is an international action-oriented workshop to

- ◆ Identify the current needs and potential contributions of imaging with neutrons in a wide range of science and areas of applications.
- ◆ Recognize new imaging techniques that may be made possible by advanced next generation sources that go beyond established techniques of radiography and tomography.
- ◆ Produce a report identifying both potentially valuable imaging techniques and directions for additional research and investment to realize this potential worldwide.

Applications areas

- ◆ Medical/Biomedical
- ◆ Molecular and Cellular Biology
- ◆ Chemistry
- ◆ Engineering
- ◆ Physics
- ◆ Geology
- ◆ Energy/Nuclear Power
- ◆ Materials Research
- ◆ Cultural Heritage
- ◆ Homeland Security
- ◆ Contraband Detection

Techniques

- ◆ Radiography
- ◆ Tomography
- ◆ Microscopy
- ◆ Holography
- ◆ Neutron Simulated Emission
Computed Tomography
- ◆ Magnetic imaging
- ◆ Resonant imaging
- ◆ Bragg-edge imaging by Time of Flight
- ◆ Advanced reconstruction algorithms
- ◆ Other techniques to be identified

International Organizing Committee

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www.sns.gov/workshops/ian2006

For additional information, contact: Al Ekkebus, ekkebusae@sns.gov, (865) 241-5644

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- Integrated Infrastructure Initiative for Neutron Scattering and Muon Spectroscopy (NMI3) •
- Oak Ridge Associated Universities • Joint Institute for Neutron Sciences
- in cooperation with the International Atomic Energy Agency

Source: (a) D. Schwarz et al., Paleontology Electronica (2003), Neutra Facility, PSI. (d) E. Lehmann et al., Neutra Facility, PSI.
(b) E. Lehmann et al., Neutra Facility, PSI. (e) J. Brunner et al., Nuclear Instruments and Methods in Physics
(c) W. Kockelmann, Applied Physics A 83 (2006), Neurograph Facility, ILL. Research A 542 (2005), Neurograph Facility, ILL.

