

Final Scientific Program for SIAN Conference

The 2nd US-China Workshop on Scientific and Industrial Applications Using Neutrons, Muons and Protons

**Opening Session
(8:30~9:20)**

1. Dongguan City Official (5 min)
2. Guangdong Province Official (5 min)
3. Chinese Academia of Sciences (CAS) Representative (5 min)
4. Institute of High-Energy Physics (IHEP) Director (5 min)
5. U.S. Chair Prof. Sow-Hsin Chen (5 min)
6. China Chair Dr. Jie Wei (10 min)
7. Group Photo (15 min)

**November 8th
Session AM-1 (9:30~11:00)**

Chair: Sow-Hsin Chen (MIT, USA)

Impact of Neutron- and Proton-based Sciences on Guangdong's Enterprises
Chun-K. Loong (ANL)

Applied Research Opportunities at the Spallation Neutron Source
Ian Anderson (ORNL)

J-PARC and the Prospective Neutron Sciences
Masa Arai (JAEA)

Coffee Break (11:00~11:30)

Session AM-2 (11:30~13:00)

Chair: Jie Wei (IHEP, China)

The Researches of ADS and the Sustainable Development of the Nuclear Energy
Zhixiang Zhao [赵志祥] (CIAE)

First Results From the New OPAL Research Reactor
Rob Robinson (ANSTO, Australia)

The Nuclear Data Measurement Activities in China
Xia Haihong [夏海鸿] (CIAE)

Lunch (13:00~14:00)

**November 8th
Session PM-1 (14:00~16:00)**

Chair: Alan Hurd (LANL, USA)

Neutron Metrology for Fuel cell and Hydrogen Storage Research
Muhammad Arif (NIST)

*Neutrons and Photons in Service for Industry: 3D Structure Visualization and
Characterization - Strategy to Establish the Reference for NDE and FE-Simulations*
Rainer Schneider (Helmholtz-Centre Berlin for Materials and Energy (HZB), Germany)

Academic and Industrial interactions of KEK
Susumu Ikeda (KEK)

Progresses in Beam utilization and Application at the PEPF
K. R. Kim (PEFP)

Coffee Break (16:00~16:30)

Session PM-2 (16:30~18:00)

Chair: Michi Furusaka (Hokkaido Univ., Japan)

LANSCCE-CARR Collaborations and Opportunities for the Future
Alan Hurd (LANL)

*Application of Scattering in Polymer Research and The current progress of SANS and
Reflectometer at CARR*
Charles Han (IOC)

Industrial Applications of Low Energy Electron Linacs in Tsinghua U.
Chuanxiang Tang [唐传祥] (Tsinghua Univ.)

November 9th
Session AM-1 (8:30~11:00)

Chair: Chun-K. Loong (ANL, USA)

Ultra-Small-Angle Neutron Scattering: Principles, Applications, Concept of a Time-of-Flight Implementation, and a Revealing Experiment

Jack Carpenter (ANL)

Probing hydrogen in storage materials using neutron scattering techniques

Yun Liu (NIST)

Neutron Diffraction and Tomograph Studies of Earth Environment and Energy Materials

Yusheng Zhao (LANL)

Application of Neutron Scattering to Engineering Problems

Xun-Li Wang (ORNL)

Materials Science Using Neutron powder diffraction For Both Academic and Industrial Uses

Takashi Kamiyama (KEK)

Coffee Break (11:00~11:30)

Session AM-2 (11:30~13:00)

Chair: Rob Robinson (ANSTO, Australia)

Neutron Scattering Study of Cement Hydration Kinetics and Additive Effects

Sow-Hsin Chen (MIT)

Neutrons Probe Dynamics in Industrial Materials

Kenneth Herwig(ORNL)

Opportunities and Challenges of Neutron Science and Technology in Korea

Sungmin Choi (KAIST, Korea)

Lunch (13:00~14:00)

Session PM-1 (14:00~16:00)

Chair: Masa Arai (JAEA, Japan)

Focusing small-angle neutron scattering instrument and its applications

Michi Furusaka (Hokkaido U.)

Neutron Optics for Enhancement of Neutron Utilization Efficacy

Hirohiko Shimizu (KEK)

The application of Hefei light source

Yangchao Tian [田扬超] (USTC)

Advanced Neutron Optics made by SwissNeutronics

Christian Schanzer (SwissNeutronics)

Coffee Break (16:00~16:30)

Session PM-2 (16:30~18:00)

Chair: Dongfeng Chen (CIAE, China)

Applications of Neutron Radiography

Zhiyu Guo [郭之虞] (Beijing Univ.)

Applications of Reactor Neutron Activation Analysis in Industrial and Environmental Fields

Ni Bangfa [倪邦发] (CIAE)

The Industrial Application of Radioisotopes

Luo Zhifu [罗志福] (CIAE)

Conference Summary

Jie Wei (IHEP, China) and Chun-K. Loong (ANL, USA)