

Update

INTERNATIONAL CONFERENCE & EXHIBITION ON NEUTRON & X-RAY SCATTERING



(ICNX 2009)

29, 30 June & 01 July 2009

Putra World Trade Centre
Kuala Lumpur
MALAYSIA

Organised by

Malaysian Nuclear Agency (Nuclear Malaysia) - Reactor Interest Group (RIG)
Malaysian Nuclear Society (MNS) - Research Reactor & Synchrotron Chapter

Collaborators

International Union of Crystallography (IUCR)
International Centre For Theoretical Physics (ICTP)*
IAEA*

* to be confirmed later

Supported by

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INTRODUCTION

In view of the success of previous neutron and x-ray scattering conference in this region (ICNX 2007, Serpong and Bandung, Indonesia), it has been decided to reconvene the International Conference on Neutron and X-Ray Scattering, in 2009. The conference will take place from June 29, 30 and July 1, 2009 in Kuala Lumpur, Malaysia.

Scattering technique using neutron and x-ray is a powerful method to probe and study the structures and dynamics of materials ranging from the mechanics of protein folding and its effect in physiology to the ordering of atomic magnets of solid materials of industrial interest. Both neutron and x-ray can be exploited using a variety of measurement techniques to provide information not otherwise available.

The availability of new optical system that can micro-focus neutron provides opportunity to explore new characterization technique and full-utilization of small research reactor that scattered throughout the world. The emergences of new synchrotrons allow more scientists to use high-intensity x-ray for their research. In addition, new modeling approach and software development permit valuable connection between

theoretical and experimental analysis. Characterization with neutron and x-ray scattering has made significant contribution to the large research activities in engineering, materials development, polymer dynamics, chemical technology, biological studies, and physics, and will continue to do so. The objective of this conference is to bring together scientists who develop neutron and x-ray scattering instruments, perform characterization experiments, synthesized materials and computation. Discussion will be focused on recent results and ideas in these areas. The conference will consist of lectures and poster on new and emerging areas in scattering technique.

WHO SHOULD ATTEND

Researchers in research organizations, government, industry and academia, who are working on instrument development, materials synthesis and characterization, modeling and simulation of neutron and x-rays scattering experiment.

CALL FOR PAPERS/POSTERS

Papers and posters are invited on the topics outlined and others falling within the scope of the conference. Abstracts of no more than 300 words should be submitted before January 31th. 2009. We strongly encourage the submission of abstract electronically. Abstracts should clearly state the purpose, results and conclusion of the work to be described in the final poster. Final acceptance will be based on the full-length paper of the poster. The poster must be presented at the conference.

The language of the conference is English.

PUBLICATION OF PAPERS/POSTERS

Full length paper of papers/poster presented will be printed in a proceeding published by The American Institute of Physics (AIP)

CONFERENCE VENUE

Putra World Trade Centre (PWTC), Kuala Lumpur, MALAYSIA

EXHIBITION

There will be space for organizations and companies to display products, services and literature to the theme of the conference. Further details are available from the Conference Secretariat

CONFERENCE TOPICS

Include (but are not limited to):

Neutron and X-Rays Scattering

- Small/Wide Angle Scattering
- Diffraction
- Inelastic Scattering
- Reflectometry
- Tomography/Radiography
- Polarized Neutron
- Pulsed Neutron
- Synchrotron X-rays

Modeling & Algorithm

- Density Functional Theory
- Finite Element/Volume
- Molecular Dynamics
- Monte Carlo Simulation
- Computed Tomography
- Residual Stress

Instrumentation

- Cryogenic Technology
- Real-Time Experimentation

Micro-Focus Technology
Neutron/X-ray Detector
Neutron/X-ray Optics
Imaging System Development
Digital Signal Processing
Data Analysis/Software Development

LOCATION

Kuala Lumpur is the largest city in Malaysia function as the center for major commercial and social life in the country. The international airport is approximately 30 min to the city centre by train. It is a city with a combination of modern thriving metropolis and lingering old world charm. It houses over 1.3 million inhabitants with wide ethnic diversity which uniquely blends age-old customs and traditions: colorful festivals, songs and dances and a rich variety of foods to tempt the palate.

A distinctive combination of old colonial and new Asian where tea houses, shops and hawker stalls line streets next to world-class hotels and high-rise office blocks, you can see all these in Kuala Lumpur.

ABSTRACT SUBMISSION

E-mail submission

Please submit your abstract including your name, full address and contact numbers. Submission should be directed according to the conference topics:

Neutron and X-ray Scattering

e-mail: megatharun@nuclearmalaysia.gov.my; iazmi@tmrnd.com

Modeling & Algorithm

e-mail: rafhayudi@nuclearmalaysia.gov.my; faridah_idris@nuclearmalaysia.gov.my

Instrumentation

e-mail: aziz_mohd@nuclearmalaysia.gov.my; azraf@nuclearmalaysia.gov.my

Fax submission

Fax : +603-8925-0907

Fax one copy of your abstract together with the completed Enquiry Form

Mail Submission

**Abdul Aziz Mohamed OR
Megat Harun Al Rashid Megat Ahmad
ICNX2009, Conference Secretariat,
Block 34, Materials Technology Group
Agensi Nuklear Malaysia
43000 Bangi, Selangor
MALAYSIA**

Confirmed Plenary/Invited Speakers

Anthony R West

Department of Engineering Materials, Sheffield University, United Kingdom

Crystallography/Functional Ceramics

Title of Presentation: Crystallography of some functional ceramics (Plenary)

Peter Timmins

Institut Laue-Langevin, France

Large Structure Crystallography

Title of Presentation: To be confirmed later (Plenary)

Robert Knott

Bragg Institute, Australian Nuclear Science and Technology Organization, Australia

Small Angle Neutron Scattering/Synchrotron X-ray

Title of Presentation: Liposome structure using small angle X-ray and neutron scattering (SAXS and SANS) (Plenary)

Masatoshi Arai

J-PARC, Japan Atomic Energy Agency (JAEA), Japan

Neutron Scattering

Title of Presentation: To be confirmed later (Plenary)

Pavol Mikula

Nuclear Physics Institute, Czech Republic

Neutron Optic

Title of Presentation: Recent progress of Bragg diffraction optics based on cylindrically bent perfect crystals

Michihiro Furusaka

Hokkaido University, Japan

Micro-Focus Small Angle Neutron Scattering

Title of Presentation: To be confirmed later

Jason S. Gardner

Indiana University / National Institute of Standard and Technology (NIST), Gaithersburg, USA

Polarized Neutron Scattering/Frustrated Magnetic Material

Title of Presentation: Recent Neutron Scattering Results from Geometrically Frustrated Magnets

David V. Baxter

Indiana University Cyclotron Facility, United State of America

Neutron Source

Title of Presentation: Small neutron sources as centers for innovation and science.

Hirokazu Hasegawa

Kyoto University, Japan

Small Angle Neutron Scattering/Polymer

Title of Presentation: SAXS and SANS Study on the Miscibility and Phase Behavior of Block Copolymers

Bohari Yamin

Universiti Kebangsaan Malaysia

X-ray Diffraction/Solid State Physical-chemistry

Title of Presentation: Crystallographic in chemistry research

Rolando Granada

Centro Atómico Bariloche e Instituto Balseiro, Argentina
Cold Neutron Source/Cryogenic Technology/Monte Carlo

Title of Presentation: Development of Cold Neutron Scattering Kernels for Advanced Moderators

Peter Holden

Australian Nuclear Science & Technology Organisation, Australia
Deuteration Technology

Title of Presentation: *Applications of deuteration for neutron scattering, at the Australian National Deuteration Facility*

Sung-Min Choi

Korea Advanced Institute of Science and Technology (KAIST)
Neutron Spin Echo/Small Angle Neutron Scattering/Nanoscale Material

Title of Presentation: Neutron Scattering Studies of Self-Assembled Carbon Nanotube Superstructures

Kulikov Sergei

Joint Institute For Nuclear Research (JINR), Russia
Cold Neutron Source/Cryogenic Technology

Title of Presentation: Development of cryogenic moderators for neutron sources

Mikihito Takenaka

Kyoto University, Japan
Small Angle Neutron Scattering/Polymer

Title of Presentation: To be confirmed later

Alexander Ioffe

Jülich Centre for Neutron Science at FRM II (JCNS@FRM-II), Germany
Polarized neutron scattering/high resolution neutron spectroscopy/neutron optics

Title of Presentation: Polarized neutron scattering/high resolution neutron spectroscopy/neutron optics

Saibal Basu

Bhaba Atomic Research Centre (BARC), India
Neutron Diffraction/Condensed Matter

Title of Presentation: To be confirmed later

Edy Giri Rachman Putra

Badan Tenaga Nuklir Nasional (BATAN), Indonesia
Small Angle Neutron Scattering/Polymer

Title of Presentation: A 36 m SANS BATAN spectrometer (SMARTer) for Materials Science and Biology

Abdul Aziz Mohamed

Malaysian Nuclear Agency (Nuclear Malaysia), Malaysia
Neutron Beam Applications

Title of Presentation: *Micro-focus SANS at TRIGA reactor: A preliminary study*

ENQUIRY FORM

Wherever possible, information about this conference will be sent to you by e-mail

| | |
|----------------------------------|--|
| Title (Prof/Dr/Mr/Mrs/Ms) | |
| Name | |
| Organization | |
| Address | |
| Postcode/Zip Code | |
| Country | |
| Telephone | |
| Fax | |
| e-mail | |

By completing this form, we understand that you are agreeable to receiving further information on this event. We will not disclose this information to third parties.

Conference Fees ICNX2009

| Category | | Early Bird Registration - Before 15 April 2009 | Late Registration - 15 April 2009 onwards | Walk-in Registration |
|----------------------|--|--|---|----------------------|
| Malaysian | Participant | RM1200 | RM1500 | RM1650 |
| | Student | RM750 | RM1050 | - |
| | MNS/MARPA members | RM1100 | RM1420 | - |
| | Group (2 or more from same organisation) | RM1100 | RM1430 | - |
| International | Participant | USD450 | USD600 | USD660 |
| | Student | USD250 | USD360 | - |
| | ANS/CNS/ENS* members | USD420 | USD570 | - |
| | Group (2 or more from same organisation) | USD400 | USD570 | - |

Note: Fees are per person

* *International cooperative partner of the Malaysian Nuclear Society (MNS)*

ANS - American Nuclear Society

CNS - Canadian Nuclear Society

ENS – European Nuclear Society

Note: Applicable also to AONSA, AsCA members

*Please mail a copy of your abstract with a completed Enquiry Form

For enquiry: Tel.: +603-8925-0510 (9.00 am - 5.00 pm; Mon - Fri); Fax.: +603-8925-0907 (any hours)

e-mail: icnx2009@nuclearmalaysia.gov.my