



ThEC
THORIUM ENERGY
CONFERENCE 2012

Oct. 29 - Nov. 1

Shanghai
China

Turning Talk into
Action

THORIUM ENERGY CONFERENCE 2012 Turning Talk into Action!

October 29 – November 01, 2012

1. Program Schedule

Sunday	Monday	Tuesday	Wednesday	Thursday
Oct. 28	Oct. 29	Oct. 30	Oct. 31	Nov. 01
	08:45 – 10:30 Plenary 1	08:30 – 10:15 Plenary 5	08:30 – 10:15 Plenary 9	08:30 – 10:15 Plenary 11
10:30 – 20:30	Coffee Break (20 min.)			
On-Site Registration (Lobby)	10:50 – 12:35 Plenary 2	10:35 – 12:20 Plenary 6	10:35 – 12:20 Plenary 10	10:35 – Plenary 12
	Lunch (Buffet, 3rd Floor)			
	14:00 – 16:15 Plenary 3	14:00 – 15:45 Plenary 7	13:30 – 19:00 Excursion	Departure
	Coffee Break (20 min.)			
	16:35 – 18:45 Plenary 4	16:05 – 17:50 Plenary 8		
18:30 – 21:30 Reception		19:00 – 21:30 Banquet		

Reception, Conference, Banquet: 5th Floor, ChengGu Hall.

The ChengGu Hall • Hope Hotel • 500 ZhaoJiaBang Road • Shanghai 200031



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4. Scientific Program

Sunday, October 28

Arriving at Shanghai Hope Hotel

Registration at Lobby (10:30am – 20:30pm)

Reception (18:30 – 21:30, ChengGu Hall)

Monday, October 29

Morning: Plenary 1: Opening Session (8:45-10:30)

Chair: ZHU Zhiyuan

Welcome Address (30 min.)

XU Hongjie (*Conference Chair*) 10 min.

ZHAO Zhentang (*Director of SINAP*) 10 min.

Andreas Norlin (*Chairman of IThEO*) 10 min.

Opening Remark

JIANG Mianheng (*CAS-Shanghai Branch*) 30 min.

Thorium and the UK nuclear landscape

Baroness Worthington (*Weinberg Foundation*) 30+5 min.

Conference Photo 10 min.

Coffee Break (20 min.)

Morning: Plenary 2: (10:50-12:35)

Chair: Andreas Norlin

Thorium energy cheaper than coal

Robert Hargraves (*Dartmouth College*) 30+5 min.

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China, the center of world environment, resource and energy - using thorium as a key

Takashi Kamei (*Research Institute of Applied Sciences - Kyoto*) 30+5 min.

Hotter and Deeper Innovation

Simmons Matthew (*GNS Science*) 30+5 min.

Lunch

Afternoon: Plenary 3: (14:00-16:15)

Chair: XIA Xiaobin

The methodology of nuclear data evaluation and the next CENDL

GE Zhigang (*China Nuclear Data Center, CIAE*) 30+5 min.

Recovery and Separation of thorium from rare earth ores

Yanfeng Bi (*Changchun Institute of Applied Chemistry*) 30+5 min.

Utilization of Thorium Fuel in different reactor design

Ganglin Yu (*Tsinghua University*) 30+5 min.

Physical Design of 15MeV Electron-Neutron source at SINAP and Its Application on TMSR

Wang Hongwei (*SINAP, CAS*) 25+5 min.

Coffee Break (20 min.)

Afternoon: Plenary 4: (16:35-18:45)

Chair: GE Zhigang

Management of High Level Waste Derived in the Thorium Nuclear Fuel Cycle

Sergey Yudintsev (*Institute of geology of ore deposits, petrography, mineralogy and geochemistry*) 30+5 min.

Guidelines for MSR Accident Analysis

Ritsuo Yoshioka (*International Thorium Molten-Salt Forum*) 30+5 min.

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Preliminary consideration on safety criteria of TMSR

XIA Xiaobin (*SINAP, CAS*) 25+5 min.

Improve the compatibility between molten salts and alloy materials by electrochemical techniques

ZUO Yong (*SINAP, CAS*) 25+5 min.

Tuesday, October 30

Morning: Plenary 5: (8:30-10:15)

Chair: Yoichiro Shimazu

TMSR project and research activities

XU Hongjie (*SINAP, CAS*) 30+5 min.

Development of a New Nuclear Reactor Concept with Liquid Fuel Based on Molten Fluorides for Reducing the Amount and Hazard of Nuclear Waste and an Effective Changeover to Th-U233 Fuel Cycle in the Frame of the National Project in the Czech Republic

Milo J. HRON (*University of West Bohemia*) 30+5 min.

The role of accelerator driven systems in furthering the thorium energy program

Ganapati Rao Myneni (*Virginia ADS Consortium And*) 30+5 min.

International Symposium On Hydrogen In Matter)

Coffee Break (20 min.)

Morning: Plenary 6: (10:35-12:20)

Chair: Laurence O'Hagan

Strategy for large scale introduction of Th reactors harmonizing with current and future U-Pu reactors

Naoyuki Takaki (*Tokai University*) 30+5 min.

The Research and Development of Thorium Fuel for CANDU-6 Reactor in Baotou

Wang Jun (*China North Nuclear Fuel Corporation*) 30+5 min.

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Research on Thorium-Uranium Breeding Recycles for Thermal Reactors

BI Guangwen (*Shanghai Nuclear Engineering Research and Design Institute*) 30+5 min.

Lunch

Afternoon: Plenary 7: (14:00-15:45)

Chair: **Huai Ping**

Design study of a passive residual heat removal system for a Molten Salt Reactor System FUJI-II

Yoichiro Shimazu (*University of Fukui*) 30+5 min.

Analysis on characteristics of passive residual heat removal system used in 10MW molten salt reactor

Fa Dan (*Harbin Engineering University*) 30+5 min.

Primary scenario on fuel processing for TMSR

Li Qingnuan (*SINAP, CAS*) 30+5 min.

Coffee Break (20 min.)

Afternoon: Plenary 8: (16:05-17:50)

Chair: **Zhang Deliang**

Application of “Gas-Lift” in Nuclear Reactors and its Experimental Validation

Jiri Polansky (*University of West Bohemia*) 30+5 min.

Experimental study on performance of an off-gas removal bypass system involved molten salt reactor

Tang wencai (*Harbin Engineering University*) 30+5 min.

Materials Challenges for Thorium Molten Salt Reactor Nuclear Energy System

Huai ping (*SINAP, CAS*) 30+5 min.

Banquet (19:00 – 21:30, ChengGu Hall)

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Wednesday, October 31

Morning: Plenary 9: (8:30-10:15)

Chair: Milo J. HRON

Particle Accelerators and Thorium Energy

Robert Cywinski (*University of Huddersfield*) 30+5 min.

ADS Research Activities in Sungkyunkwan University

Seung-Woo Hong (*Sungkyunwan University*) 30+5 min.

Research activities of CAS ADS project

Wang Zhiguang (*Institute of Modern Physics, CAS*) 30+5 min.

Coffee Break (20 min.)

Morning: Plenary 10: (10:35-12:20)

Chair: Seung-Woo Hong

Dynamic meshing for multi-physics simulations in nuclear reactors

Mark HO (*Australian Nuclear Science and Technology Organisation*) 30+5 min.

Neutronic Analysis and Transmutation Performance of Th-based Molten Salt Fuels

Sang-In Bak (*Sungkyunwan University*) 30+5 min.

The code development for the analysis of molten salt reactor

ZHENG Youqi (*Xi'an Jiaotong University*) 30+5 min.

Lunch

Excursion (13:30 – 19:00)

Tour of SINAP – SSRF and Yu Garden.

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Thursday, November 01

Morning: Plenary 11: (8:30-10:15)

Chair: Robert Cywinski

IMMINENT: Physical Testing of a Thorium-based LWR Fuel

Julian F. KELLY (*Thor Energy*) 30+5 min.

Thorium: Fertile to Fissile Conversion with Spallation Neutrons

Roger Barlow (*Huddersfield University*) 30+5 min.

Small Sized Sub-critical Thorium Liquid-fuel Reactor for the Venezuelan

Laszlo Sajo-Bohus (*Universidad Simon Bolivar*) 30+5 min.

Coffee Break (20 min.)

Morning: Plenary 12: (10:35 -)

Chair: Cai Xiangzhou

Commercialization of a thorium fueled pebble bed modular reactor

Martin van Staden (*Steenkampskraal Thorium Limited*) 30+5 min.

The Advocacy of Thorium and Molten Salt Reactors - the work of the Weinberg Foundation

John Durham (Weinberg Foundation) 30+5 min.

Conference Closing

ThEC2012 Remark: Andreas Norlin (*Chairman of IThEO*)

Announcing ThEC2013

Closing Address: XU Hongjie (*Conference Chair*)

Lunch

Departure

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