

RSIS Roundtable on Nuclear Energy Development in Southeast Asia: Emerging Challenges and Opportunities

Programme Booklet

Tuesday, 11 December 2018

NTU@one-north, Auditorium 302, Level 3

11 Slim Barracks Rise (off North Buona Vista Road),

Singapore 138664

Organised by

Centre for Non-Traditional Security Studies (NTS Centre)

S. Rajaratnam School of International Studies (RSIS)

Nanyang Technological University

Singapore

Abstract

Several ASEAN Member States aspire to include nuclear energy in their future and long-term power generation sources to boost their energy security and reduce their greenhouse gas emissions from fossil fuels. Meanwhile, radioactive sources are already widely used for civilian non-power applications in medical, industrial, agricultural, and scientific research fields in Southeast Asia. ASEAN Member States have a shared interest in ensuring that future nuclear power plants constructed in the region as well as the use of radioactive materials are safe and secure. There is a need to examine the current gaps in nuclear energy governance in the region and how Southeast Asia, through the ASEAN Network of Regulatory Bodies on Atomic Energy (ASEANTOM), deepens cooperation on civilian nuclear energy, including radiological security, and on nuclear emergency preparedness and response.

This RSIS Roundtable will bring together nuclear experts from the region and beyond to discuss the opportunities and challenges associated with civilian nuclear energy development and the utilisation of radioactive materials in Southeast Asia. It will examine nuclear energy governance issues, national approaches, ASEANTOM's capacity-building initiatives, and lessons learnt from Japan and South Korea.

Time	Programme
9:00-9:30	Registration
9:30-9:40	<p><u>Welcome Remarks</u></p> <p>Ambassador Ong Keng Yong Executive Deputy Chairman, RSIS, NTU, Singapore</p>
09:40 – 11:10	<p><u>Panel Session 1: Nuclear energy development in Southeast Asia</u></p> <p><u>Chairperson</u> Ambassador Ong Keng Yong Executive Deputy Chairman, RSIS, NTU, Singapore</p> <p><u>Panellists</u> Dr Alvin Chew Adjunct Fellow, RSIS, NTU, Singapore</p> <p>Dr Sihana Assistant Professor Department of Nuclear Engineering Gadjah Mada University, Indonesia</p> <p>Dr Yutthana Tumnoi Head of Safety Research and Development Section Regulatory Technical Support Division Office of Atoms for Peace, Thailand</p> <p>Q&A forum</p>
11:10-11:30	Coffee Break
11:30-13:00	<p><u>Panel Session 2: Lessons learnt and best practices in nuclear energy governance</u></p> <p><u>Chairperson</u> Dr Mely Caballero-Anthony Professor of International Relations and Head of NTS Centre, RSIS, NTU, Singapore</p> <p><u>Panellists</u></p> <p>Dr Olli Heinonen Senior Advisor on Science and Nonproliferation Foundation for Defense of Democracies; and Former Deputy Director General International Atomic Energy Agency</p>

	<p>Dr Tatsujiro Suzuki Director Research Centre for Nuclear Weapons Abolition; and Former Vice Chair Japan Atomic Energy Commission</p> <p>Dr Sungyeol Choi Deputy Director Nuclear Nonproliferation Education and Research Center Korea Advanced Institute of Science and Technology</p> <p>Q&A Forum</p>
13:00	Closing remarks
13:00-1430	Lunch and Networking

About the Speakers



Dr Olli Heinonen

Olli Heinonen is Senior Advisor on Science and Nonproliferation at the Foundation for Defense of Democracies in Washington, DC. From 2010 to July 2017, he was a senior fellow at the Belfer Center for Science and International Affairs, Kennedy School of Government, Harvard University. Before joining the Belfer Center, Heinonen served for 27 years at the International Atomic Energy Agency (IAEA) in Vienna. He was the deputy director general of the IAEA, and head of its Department of Safeguards. Prior to that, he was director at the Agency's various operational divisions, and an inspector, including at the IAEA's overseas office in Tokyo, Japan. Prior to joining the IAEA, Heinonen was a senior research officer at the Technical Research Centre of Finland Reactor Laboratory, in charge of research and development related to nuclear waste solidification and disposal.



Dr Tatsujiro Suzuki

Tatsujiro SUZUKI is a Director, Professor of Research Center for Nuclear Weapons Abolition (RECNA) at Nagasaki University, Japan. Before joining RECNA, he was a Vice Chairman of Japan Atomic Energy Commission (JAEC) of the Cabinet office from January 2010 to April 2014. Until then, he was an Associate Vice President of the Central Research Institute of Electric Power Industry in Japan (1996-2009) and Visiting Professor at the Graduate School of Public Policy, University of Tokyo (2005-009), an Associate Director of MIT's International Program on Enhanced Nuclear Power Safety from 1988-1993 and a Research Associate at MIT's Center for International Studies (1993-95). He is now a member of Advisory Board of Parliament's Special Committee on Nuclear Energy since June 2017. He is also a Council Member of Pugwash Conferences on Science and World Affairs (2007-09 and from 2014~). Dr. Suzuki has a PhD in nuclear engineering from Tokyo University (1988).



Dr Sungyeol Choi

Sungyeol Choi is an Assistant Professor in Department of Nuclear and Quantum Engineering, and the Deputy Director of Nuclear Non-proliferation Education and Research Center, at Korea Advanced Institute of Science and Technology (KAIST). Prior to joining KAIST, he was a Research Fellow at Belfer Center for Science and International Affairs, Harvard University, and a Senior Researcher at Korea Atomic Energy Research Institute (KAERI). He specialises in nuclear fuel cycle and nuclear non-proliferation. He earned Ph.D. in Nuclear Engineering in 2012 and B.S. in Nuclear Engineering (summa cum laude) in 2008, from Seoul National University.



Dr Alvin Chew

Alvin Chew is an Adjunct Fellow at RSIS, whereby he was a faculty member of the school from 2007 to 2009. He was a Visiting Fellow at the Gulf Research Centre in 2010. He continues to research in the field of energy security, with a focus on nuclear energy. Trained in both disciplines of engineering and the social sciences, he is interested in the interface between technology development and policy issues.



Dr Yutthana Tumnoi

Yutthana Tumnoi is Head of Safety Research and Development Section, Regulatory Technical Support Division, Office of Atoms for Peace (OAP), Thailand. He received his Bachelor's Degree in Marine Science and Graduate Diploma in Nuclear Technology from Chulalongkorn University in 1997 and 2001, respectively. He was a Nuclear Scientist of OAP from 1997 to 2002. He was awarded a PhD degree in 2007 in Radiation Biology at the University of Portsmouth, UK. He then became a Radiation Biologist at OAP focusing on environmental radioactivity monitoring. Dr. Tumnoi has been the regional coordinator of the IAEA&EU-funded projects in Radiological and Nuclear Emergency.



Dr Sihana

Sihana has been a faculty member of the Department of Nuclear Engineering, Faculty of Engineering, Universitas Gadjah Mada since 1990, when he graduated from its Nuclear Engineering Bachelor Programme. He obtained PhD (Dr.-Ing.) degree in Energy Engineering from Technical University Berlin Germany in 2000. He teaches several undergraduate and graduate courses on nuclear engineering. His main research interests include safety, security and safeguard designs for nuclear energy system. He has been actively participating in several nuclear security activities in Indonesia and in Asia since 2011.