AISS

AUSTRALIA
INDONESIA
SCIENCE
SYMPOSIUM



28 NOVEMBER – 1 DECEMBER 2016
SHINE DOME, CANBERRA

Thursday 1 December **Public Event**

Australian Academy of Science

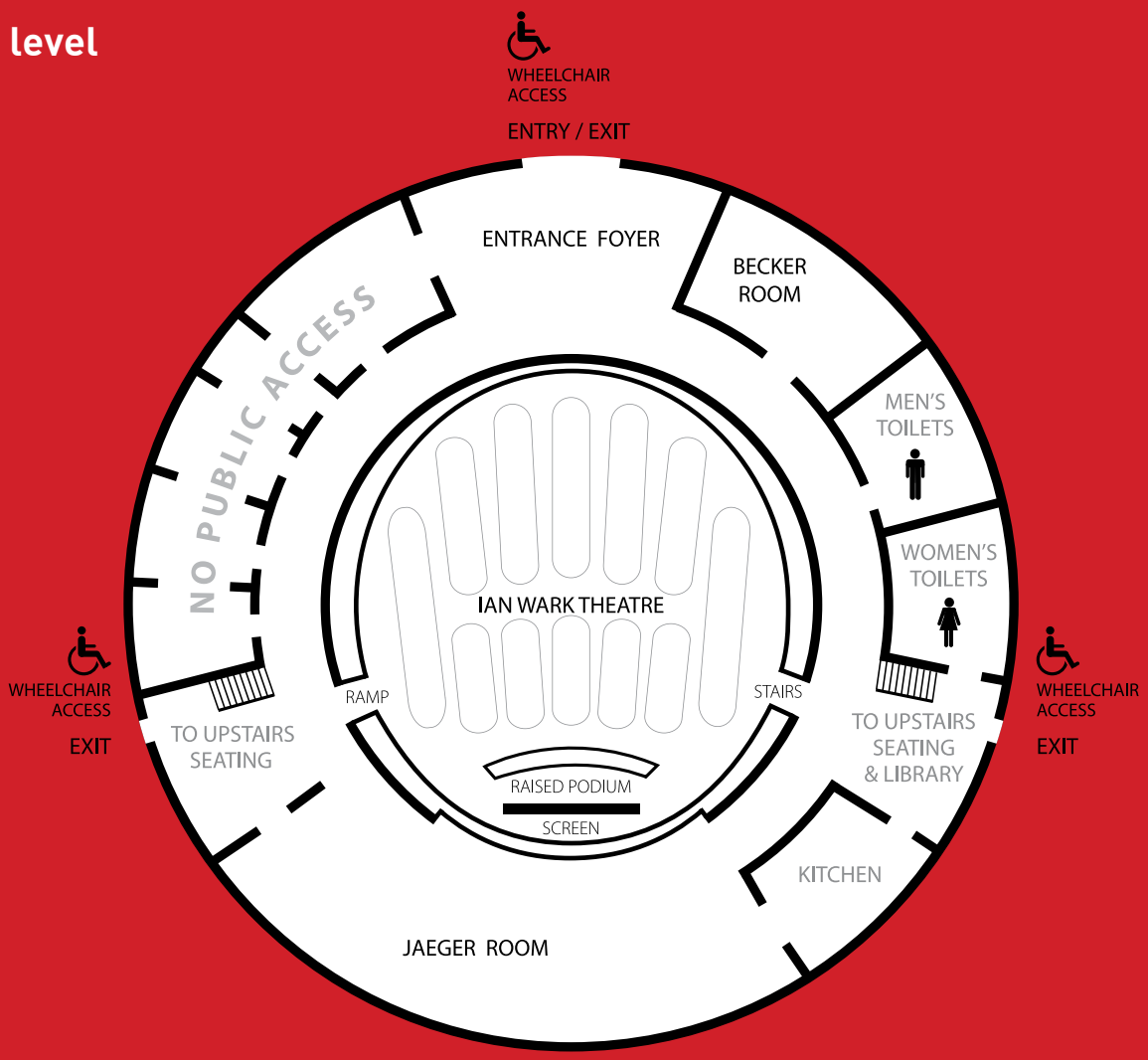
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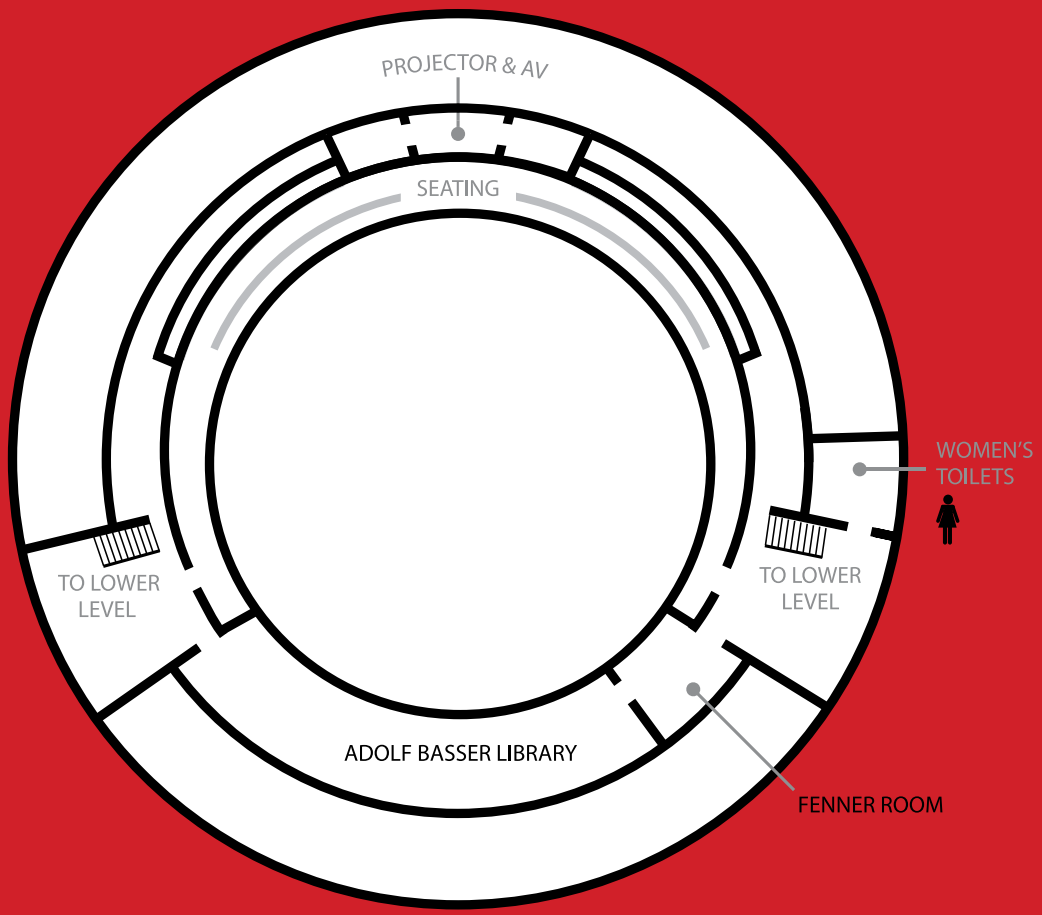
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KNOWLEDGE
SECTOR INITIATIVE

Ground level



Upper level



The Shine Dome

The Australian Academy of Science's Shine Dome was created to reflect the inquiring and innovative nature of science.

Completed in 1959, and reflecting some of the more adventurous architectural ideas of that time, the Shine Dome remains one of the most unusual buildings in Australia.

The dome (roof, walls and structure combined) dives down beneath the still water of its moat to give the sense that it is floating. From the walkway between the moat and the inner walls, the arches provide a 360° panoramic sequence of Canberra and the hills beyond.

The dome came about because the Australian Academy of Science needed a home. In the early 1950s, under the founding presidency of Sir Mark Oliphant, the new Academy and its 64 Fellows set about finding funds to create a building of its own. Once the Academy had found a suitable site, the next step was to select an architect, so six architects were invited to submit plans to a competitive process.

The committee wanted a building that would be of a very high order aesthetically, judged from a non-traditional standpoint, so they unanimously approved a radical design submitted by Australian architect Roy Grounds. At the time, Grounds was seen as one of Australia's most influential architects.

The radically different building created radically different problems for the architects and engineers involved. Some doubted it could be built. Nobody knew how to calculate the stresses created by a 710 tonne concrete dome perched on 16 slender supports. This was vital, because if they got it wrong the whole dome might collapse when the building supports were taken away. In the end they grappled with the problem by building a one-fortieth scale model to see if it would work.

Those who trusted the model were proved right. When the massive concrete dome was built and the forest of wooden formwork and supports removed, the top of the dome dropped less than a centimetre as it took its own weight. It was a triumph for those who worked on the calculations and the model.

The dome's foundation stone was laid on 2 May 1958 by Prime Minister Robert Menzies, and the Academy's founding Fellows Sir John Eccles and Sir Mark Oliphant. On 6 May 1959, luminaries of science and politics gathered to witness the Governor-General, Sir William Slim, officially open the dome.

For its unique architecture and status as a landmark, the Shine Dome was included in the National Heritage List on 21 September 2005. For many years the dome has been an iconic landmark of the national capital. It has featured in news backdrops, on posters, postcards, tea towels and even as a souvenir fridge magnet. The Shine Dome, which has won a number of national and international architecture awards and citations, continues to fascinate visitors to Canberra.



Credit: Adi Chopra



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Welcome message

The universal language of science plays an important role in building relationships across national borders. As close neighbours, Indonesia and Australia share many of the same interests and concerns regarding the human and environmental issues facing us in our rapidly changing world. Our two countries also have a long history of research collaboration between governments, public research agencies, and universities, spanning a wide array of topics.

The Australian Academy of Science and the Indonesian Academy of Sciences strive to promote a culture of scientific excellence in their respective countries. To this end, we are delighted to co-host the inaugural Australia–Indonesia Science Symposium. This seminal event will gather early- and mid-career researchers, established scientists, public and private sector organisations, and journalists from both countries, with the aim of generating vibrant scientific discussion and increased enthusiasm for scientific cooperation. It is our hope that this event will create a better understanding of the pivotal role of science in supporting both Indonesia and Australia to thrive and excel, and will foster existing links and build new ones which will help bring our nations closer together.



Andrew Holmes

President, Australian Academy of Science



Sangkot Marzuki

President, Indonesian Academy of Sciences

About the symposium

Australia and Indonesia are closely intertwined geographically, politically, economically and socially. The two countries share many of the same issues and challenges, including climate change, sustainable agriculture and infectious diseases. Australia and Indonesia stand to benefit from collaboration and exchange in developing solutions to these shared challenges and furthering their common interests.

The Australia–Indonesia Science Symposium seeks to promote scientific collaboration between Australia and Indonesia. The purpose is to enhance scientific cooperation and exchange, and strengthen people-to-people links between the two countries. The symposium builds on existing partnerships between Australian and Indonesian scientists, universities and public research institutions, many of which date back several decades.

The symposium focuses on science that is of mutual interest to Australia and Indonesia. The themes for 2016 are health, marine science and climate change, and agriculture. A cross-cutting theme is the uses and transformative potential of 'big data' and other emerging technologies.

The symposium will bring together members of the Australian and Indonesian scientific Academies, early- and mid-career researchers, and government agencies. In addition to public events showcasing scientific research from both countries, the event will include in-depth exchanges between Australian and Indonesian scientists working on questions of common concern. Researchers from both countries will also be able to explore opportunities for funding, discuss career pathways in science, and examine the challenges in linking science to policy in both countries.

The symposium is jointly organised by the Australian Academy of Science, the Indonesian Academy of Sciences (AIPI), the Australian Early- and Mid-Career Researcher Forum, and the Indonesian Young Academy of Sciences (ALMI) with the support of the Australian Department of Foreign Affairs and Trade and the Knowledge Sector Initiative.

Presidents



Professor Andrew Holmes

President,
Australian Academy of Science



Professor Andrew Holmes is a laureate professor of the School of Chemistry at the University of Melbourne. In October 2004 he was appointed ARC Federation Fellow and inaugural VESKI Fellow at the Bio21 Institute at the University of Melbourne and at CSIRO Molecular and Health Technologies. Professor Holmes has been recognised for his groundbreaking work on light-emitting polymers. He has also been the recipient of a long list of awards including the Royal Society's Royal Medal and the Descartes Prize. He was elected to the Academy in 2006 and served as Foreign Secretary from 2010 to 2014. He became President of the Academy in May 2014.

Professor Sangkot Marzuki

President,
Indonesian Academy of Sciences



Professor Sangkot Marzuki is President of the Indonesian Academy of Sciences. He graduated from the Faculty of Medicine at Universitas Indonesia in 1968, then continued his studies at Mahidol University in Bangkok, where he received an MSc in 1971. He received a PhD from Monash University in 1975. His scientific interests are in the biogenesis of energy transducing membranes and related human genetic disorders, an interest he developed during his 17 years at the Faculty of Medicine at Monash University. Between 1992 and 2014 he served as the director of the Eijkman Institute for Molecular Biology in Jakarta where he extended his interests to encompass human genome diversity and infectious diseases. He has held honorary appointments as Professor of Medicine at Monash University, Professor of Medical Sciences at Universitas Indonesia, Professor of Biochemistry and Molecular Biology at the University of Queensland, and Professor of Medicine at the University of Sydney. He has also served on the Indonesian National Research Council (1994-2004) and Higher Education Council (1996-2000; 2003-2008), as Governing Council Member of the Asia-Pacific International Molecular Biology Network (1998-2008), and as Chairman of the Asia Pacific Network of Human Geneticists (1995-2005). Professor Sangkot's contribution to science has been recognised by a number of awards, including a higher doctorate from Monash University in 1998, a Doctor Honoris Causa from Utrecht University in 2006, and Doctor of Science Honoris Causa from the University of Queensland in 2010. In 2010, Professor Marzuki received an Order of Australia for his ongoing service to Australia–Indonesia relations through scientific collaboration and the promotion of Australian tertiary education in Indonesia.

Program

Thursday 1 December

8.30 - 9.25 — **Forging a career in science**

Moderator:

Dr Elizabeth New
Executive Board Member,
Australian Early- and Mid-Career Researcher Forum, University of Sydney

Speakers:

Professor Brian P Schmidt
Vice-Chancellor and President,
Australian National University and 2011 Nobel Laureate Physics (via video)

Dr Aiyen Tjoa
Member, Indonesian Young Academy of Sciences,
Universitas Tadulako

Associate Professor Drew Evans
Executive Board Member, Australian Early- and
Mid-Career Researcher Forum, University of South Australia

9.25 - 10.30 — **Advocating for a brighter future in science**

Moderator:

Dr Sudirman Nasir, Member, Indonesian Young Academy of Sciences,
Universitas Hasanuddin

Speakers:

Dr Hasnawati Saleh
SAINS45 Study Director and Secretary General,
Indonesian Young Academy of Sciences, Universitas Hasanuddin

Dr Nikola Bowden
Chair, Australian Early- and Mid-Career Researcher Forum,
University of Newcastle

Dr Aysha Fleming
Leader, 2016 Australian delegation to the Indonesian-American Kavli Frontiers of Science Symposium, Adaptive Social and Economic Systems Program, CSIRO

Dr Paul Mason
Member, Global Young Academy, University of Sydney

10.30 – 11.00 — Morning tea

11.00 - 12.00 — **Big data and disruptive technologies: opportunities for collaboration**

12.00 - 1.00 — Lunch

1.00 - 2.30

Opportunities and challenges for scientists, researchers and students in bilateral scientific collaboration

Moderator:

Professor James J Fox
College of Asia and the Pacific, Australian National University

Speakers:

Dr Ocky Karna Radjasa
Director, Research and Community Engagement,
Ministry of Research, Technology and Higher Education

Professor Satryo S Brodjonegoro
Member, Executive Committee and Science Steering Board,
Indonesian Science Fund and Vice-President, Indonesian Academy of Sciences

Lynda Worthaisong
Assistant Secretary, New Colombo Plan Secretariat,
Department of Foreign Affairs and Trade

Cherie Colyer-Morris
2014 New Colombo Plan Scholar

Rohan Nandan
Director, Australia Awards Delivery Section,
Department of Foreign Affairs and Trade

Justin Withers
Director, Policy and Integrity, Australian Research Council

Dr Julie Glover
Director, Priority Driven Research,
National Health and Medical Research Council

2.30 – 3.00 Afternoon tea

3.00 - 4.00

Bridging the divide in the knowledge sector

Moderator:

Petrarca C Karetji
Team Leader, Knowledge Sector Initiative (Indonesia),
RTI International and Principal Adviser, Bina Darma Foundation

Dr Jeffrey M Alexander
Senior Manager, Innovation Policy, Research Triangle Institute

Dr Subandi
Deputy Minister for Human Development,
Community and Culture, Ministry of National Development Planning

Panellists:

Yulia (Indri) Sari
PhD Candidate Crawford School of Public Policy, Australian National University

Chitra Retna S
PhD Candidate, Crawford School of Public Policy, Australian National University

4.00 – 5.00 ***The Conversation*** **wrap-up**

Moderator:

Prodita Sabarini
Jakarta Editor, *The Conversation*

Panellists:

Professor Sangkot Marzuki
President, Indonesian Academy of Sciences

Professor Andrew Holmes
President, Australian Academy of Science

Allaster Cox
First Assistant Secretary, South-East Asia Maritime Division,
Department of Foreign Affairs and Trade

Dr Nikola Bowden
Chair, Australian Early- and Mid-Career Researcher Forum,
University of Newcastle

Professor Jamaluddin Jompa
President, Indonesian Young Academy of Sciences and Dean,
Faculty of Marine Science and Fisheries, Universitas Hasanuddin

Dr Leonard VH Tampubolon
Deputy Minister for Economic Affairs, Ministry of National Development Planning

Forging a career in science

8.30 - 9.25

What pathways and prospects does a scientific career offer? What obstacles do early- and mid-career scientists face? Are there specific challenges that Indonesian and Australian scientists need to overcome in order to succeed? What common and different issues do men and women face in pursuing a career in science? This session will explore the opportunities and challenges of pursuing a career in science. Speakers will share their reflections on the perks and pitfalls of a scientific career and discuss some of the strategies that early- and mid-career scientists can use to improve their career prospects.



Speakers:

Professor Brian P Schmidt

Vice-Chancellor and President, Australian National University and 2011 Nobel Laureate Physics (via video)



Forging a career in science

Professor Brian P. Schmidt was appointed Vice-Chancellor and President of The Australian National University (ANU) in January 2016. Professor Schmidt is the 12th Vice-Chancellor of The Australian National University (ANU). Winner of the 2011 Nobel Prize in Physics, Professor Schmidt was an astrophysicist at the ANU Mount Stromlo Observatory and Research School of Astronomy and Astrophysics before becoming Vice-Chancellor. Professor Schmidt received undergraduate degrees in Astronomy and Physics from the University of Arizona in 1989, and completed his Astronomy Master's degree (1992) and PhD (1993) at Harvard University. Under his leadership, in 1998, the High-Z Supernova Search team made the startling discovery that the expansion rate of the Universe is accelerating. Fellow of the Australian Academy of Science, the United States Academy of Science, and the Royal Society, he was made a Companion of the Order of Australia in 2013.

Dr Aiyen Tjoa

Member, Indonesian Young Academy of Sciences, Universitas Tadulako



Doing science in Indonesia: the need for a scientific revolution

Aiyen Tjoa is a senior member of teaching staff at the Faculty of Agriculture, Tadulako University, Central Sulawesi. She earned her bachelor's degree at the Agriculture Faculty of Universitas Jambi (Jambi University), Indonesia; her Master of Science from the Royal Veterinary and Agricultural University (KVL) in Copenhagen, Denmark; and her PhD in soil chemistry and plant nutrition from the Hohenheim University, Stuttgart, Germany, working under Professor Volker Römheld. Dr Tjoa's main area of research is on hyperaccumulating heavy metal in plants. She is also working intensively on soil emissions in agriculture caused by fertilisation and changes in land use. Her group and international collaborators have produced several publications. Aside from her research activities, Dr Tjoa has been involved for some years in the early stages of developing proposals with partners at European universities for human capacity building and is coordinating several European Commission–funded projects. She is the Indonesia coordinator of a Deutsche Forschungsgemeinschaft (DFG) research fund for the University of Göttingen, Institut Pertanian Bogor (Bogor Agricultural University), Universitas Jambi and Tadulako University.

Associate Professor Drew Evans

Executive Board Member, Australian Early- and Mid-Career Researcher Forum, University of South Australia



Transitioning the academic-industry divide

Drew Evans is a research leader in Energy and Advanced Manufacturing at the University of South Australia, leading a group in the development and translation of materials research into commercial products. After completing his PhD at the Australian National University in 2006, he worked in the private R&D industry on new digital printing technology. Since 2010, he has been based at the University of South Australia. During this time, he has published numerous scientific papers,

and commercialised technology with industry, such as the world's first plastic automotive mirror. Associate Professor Evans currently sits on the South Australian Science Council, and on the Executive of the Australian Academy of Science's Early and Mid-Career Researcher Forum. He received a 2013 South Australian Young Tall Poppy Science Award, and 2016 BioSA Young Achiever Award.

Moderator:

Dr Elizabeth New

Executive Board Member, Australian Early- and Mid-Career Researcher Forum, University of Sydney



Elizabeth (Liz) New undertook her undergraduate and master's studies at the University of Sydney before completing her PhD in 2010 at the University of Durham, UK. Dr New was then a Royal Commission for the Exhibition of 1851 Research Fellow at the University of California, Berkeley. In 2012, she returned to the University of Sydney, holding an ARC Discovery Early Career Researcher Award from 2012 to 2014, and a Westpac Research Fellowship from 2016. Dr New's research interests lie in the development of fluorescent and magnetic resonance sensors for application in medical research, with a particular focus on oxidative stress and understanding the interactions of metal ions with biological systems. Her awards for research, engagement and teaching include the Royal Society of Chemistry Dalton Young Researchers Award (2011), a New South Wales Young Tall Poppy Science Award (2015), the OLT National Award for Teaching Excellence (2015) and the Premier's Award for NSW Early Career Researcher of the Year (2016).

Advocating for a brighter future in science

9.25 - 10.30

Today's young scientists are the scientific leaders of tomorrow. Organisations which bring together early- and mid-career scientists can play a critical role in promoting a research environment that supports scientific excellence, providing a voice for emerging scientists to engage on scientific issues of relevance to our global world, and supporting the promotion of science in society. In this session, Indonesian and Australian early- and mid-career researchers will discuss their experiences as part of an international movement of young scientists advocating for a brighter future for science, and explore how Indonesian and Australian young scientists can work together to secure the future of science.



Speakers:

Dr Hasnawati (Nana) Saleh

SAINS45 Study Director and Secretary General, Indonesian Young Academy of Sciences, Universitas Hasanuddin



SAINS45: the voice of Indonesian young scientists

Dr Hasnawati (Nana) Saleh is the Secretary General of the Indonesian Young Academy of Sciences. After obtaining her undergraduate degree in Medical Science from Universitas Hasanuddin in 1995, she spent a year as a Visiting Research Student at Kagoshima University in Japan. In 1998 she received a postgraduate diploma and in 2002 she was awarded an MSc in molecular biology, both from The University of Queensland. While completing her PhD research, she worked as a research assistant at the Bone Joint and Cancer Group at St Vincent's Institute for Medical Research at The University of Melbourne and later as a Postdoctoral Fellow at prince Henry's Institute, Melbourne, where she was a major contributor on a 3 year NHMRC grant on IL-33 and its role in bone metabolism. In the last few years, she has been involved in a number of the Indonesian Academy of Sciences' programs, including serving as the Study Director for the Indonesian Science Agenda (SAINS45) and helping to establish the Indonesian Young Academy of Sciences. In addition to her role as a lecturer and the Head of the Molecular and Cellular Biology Lab at Hasanuddin University Medical Research Center, she also helps manage the newly established Indonesian Science Fund.

Dr Nikola Bowden

Chair, Australian Early- and Mid-Career Researcher Forum, University of Newcastle



How do we secure the future of Australian science?

Nikola Bowden graduated from the University of Newcastle with a Bachelor of Biomedical Science (Honours) and a PhD in medical genetics. She was an NHMRC Early Career Fellow at the University of Newcastle and trained at the National Cancer Institute in Washington DC, USA. Dr Bowden is currently a Cancer Institute NSW Career Development Fellow and DNA Repair Group Leader at the Hunter Medical Research Institute/ University of Newcastle, New South Wales. Dr Bowden leads a team of researchers investigating the repair of DNA damage caused by sunlight and chemotherapy in melanoma and ovarian cancer. She leads a large collaboration of researchers and clinicians that are repurposing traditional chemotherapy for new cancer treatments. Dr Bowden is the current Chair of the Australian Academy of Science's Early and Mid-Career Researcher Forum.

Dr Aysha Fleming

Leader, 2016 Australian delegation to the Indonesian-American Kavli Frontiers of Science Symposium, Adaptive Social and Economic Systems Program, CSIRO



A brighter future for science through interdisciplinary networking

Aysha Fleming is a social scientist looking at language to understand values and decision making to facilitate change. Dr Fleming works across many areas, including agriculture, fisheries, forestry, health and technology, but focuses on environmental change, including climate change.

Dr Paul Mason

Member, Global Young Academy, University of Sydney



Reciprocity-building and the globalisation of science: developing capacity and constructive cultures of collaboration

Paul Mason is a cultural anthropologist who wants to live in a world free of the impoverished conditions that foster diseases such as tuberculosis. He has conducted field work with arts communities in Indonesia and Brazil, religious minorities in India and Brazil, and infectious disease patients in Australia and Vietnam. With an active profile of interdisciplinary and cross-cultural research in medical anthropology, Dr Mason conducts research on infectious disease, global biobanks and mental health. His research articles have been published in leading academic journals including the Journal of Bioethical Inquiry, the Journal of Biosocial Science, and the Proceedings of the Royal Society B. His educational children's book about tuberculosis has been published in 24 languages and was awarded the Centenary Institute Medical Innovation People's Choice Award. Dr Mason has lectured at six Australian universities and has consistently ranked highly in the Australian Lecturer of the Year Awards.

Moderator:

Dr Sudirman Nasir

Member, Indonesian Young Academy of Sciences, Universitas Hasanuddin



Dr Sudirman Nasir is a lecturer and researcher in the Department of Health Promotion and Behavioral Sciences in the Faculty of Public Health at Universitas Hasanuddin. He is an expert in HIV/AIDS prevention and care, drug use, and the impact of sexuality and masculinity in society. His research interests are in medical anthropology and medical sociology, specifically, the social determinants of health, including the social, cultural, and economic factors that influence young people's involvement in risk taking behaviors. Dr Nasir received his PhD from the University of Melbourne in 2011. His doctoral research on drug use among young people in slum areas in Makassar, Indonesia has contributed to the design of more targeted and more culturally sensitive drug use and HIV prevention programs in Makassar and other similar locales in Indonesia.

Big data and disruptive technologies: opportunities for collaboration

11.00 - 12.00

In this session, data scientists from Pulse Lab Jakarta, CSIRO Data 61, and Australian and Indonesian universities will showcase their ideas on how big data and emerging technologies can help address some of Indonesia and Australia's shared challenges. Together with researchers working in health, marine science and climate change, and agriculture, the data scientists will develop initial concepts for three of the most promising ideas – one from each stream – which will be developed into a prototype in the months following the symposium.



Moderator:

Diastika Rahwidiati

Chief Technical Adviser, Pulse Lab Jakarta



Diastika Rahwidiati is passionate about grassroots innovation, and especially interested in the thinkers, doers and fixers that create positive change across Indonesia. As Chief Technical Adviser for Pulse Lab Jakarta she connects ethnographers, social activists and technologists to the lab's big data research projects to add local context and encourage the diffusion of the technologies they embody. With over 13 years' experience in development assistance she has delivered projects in education, policy-relevant research, and civil society support. She holds a Master in International Development and Environmental Analysis from Monash University, Australia.

Opportunities and challenges for scientists, researchers and students in bilateral scientific collaboration

1.00 - 2.30

Australia and Indonesia have a long history of research collaboration across a range of fields. CSIRO, for example, has been conducting joint research on agriculture, fisheries and forestry with Indonesian counterparts for over 40 years and there are currently over 250 institutional partnerships between Indonesian and Australian universities, some of which have been established for over 20 years. Educational exchange often provides the foundation for research cooperation. Many Indonesian students, including those who have undertaken masters and doctoral study with Australian or Indonesian Government scholarships, maintain links with their Australian alma maters. Likewise, many New Colombo Plan scholars forge lifelong connections with Indonesia. Speakers in this session will reflect on the rich history of scientific collaboration and engagement between Indonesia and Australia and discuss the range of funding mechanisms and opportunities for researchers and scientists interested in engaging in collaborative research.



Speakers:

Dr Ocky Karna Radjasa

Director, Research and Community Engagement, Ministry of Research, Technology and Higher Education

As Director for Research and Community Engagement at Indonesia's Ministry of Research, Technology and Higher Education, Dr Ocky Karna Radjasa manages grants to Indonesian universities of Rp1.6 trillion (A$160 million) annually. Dr Radjasa has a Bachelor of Science in environmental science from Universitas Soedirman and a Master of Science in biology from McMaster University, Canada. After receiving his PhD in aquatic biosciences from the Ocean Research Institute at the University of Tokyo in 2001, Dr Radjasa was awarded a postdoctoral fellowship by the German Academic Exchange Service to study at the Institute for Chemistry and Biology of the Marine Environment at the University of Oldenburg. He then joined the Leibniz Institute of Marine Sciences (IFM-GEOMAR) in Kiel, Germany as a Humboldt Research Fellow, before returning to Indonesia in 2005 to take on the role of Director of the Center for Tropical Coastal and Marine Studies at Diponegoro University, a position which he held until 2009. Dr Radjasa was subsequently appointed as a project leader at the Eijkman Institute for Molecular Biology in Jakarta, where he established a research group on marine microbiology. Dr Radjasa has received numerous awards including the 2006 Cipta Lestari Award from the Indonesian Biodiversity Foundation and the 2013 Biovision Catalyzer Award from Biovision World Life Science Forum. His research interests are in marine molecular microbial diversity and marine microbial natural products from marine microbial symbionts. He is also concerned with sustainable management of coral reefs.

Professor Satryo S Brodjonegoro

Member, Executive Committee and Science Steering Board, Indonesian Science Fund and Vice-President, Indonesian Academy of Sciences

Satryo S Brodjonegoro has a long and distinguished academic and public service career. He was a faculty member of the Department of Mechanical Engineering at Institut Teknologi Bandung (Bandung Institute of Technology) for almost 30 years, where he continues to lecture and supervise a number of research students. From 1999 to 2007 he served as Director General of Higher Education in Indonesia's Ministry of National Education. He has held a range of expert advisory roles on higher education and engineering for the World Bank, Asian Development Bank, Japan International Cooperation Agency (JICA), Toyohashi University of Technology, Japan, Binus University, and Gadjah Mada University. Professor Brodjonegoro has a Bachelor of Engineering in mechanical engineering from Institut Teknologi Bandung (Bandung Institute of Technology), and an MSc and PhD in mechanical engineering, both from the University of California at Berkeley. He is a Fellow of the Indonesian Academy of Sciences and currently serves as the Academy's Vice-President. Professor Brodjonegoro was instrumental in the establishment of the Indonesian Science Fund (Dana Ilmu Pengetahuan Indonesia, DIPI).

Lynda Worthaisong

Assistant Secretary, New Colombo Plan Secretariat, Department of Foreign Affairs and Trade

Lynda Worthaisong has worked with the New Colombo Plan Secretariat in the Department of Foreign Affairs and Trade (DFAT) since February 2014. The New Colombo Plan provides prestigious scholarships and flexible mobility grants to Australian undergraduates to study and undertake work-based learning in the Indo-Pacific region. Prior to joining the New Colombo Plan, Lynda was Australia's Ambassador to the Lao People's Democratic Republic, and has spent much of her career with DFAT working on or in South East Asia. Lynda has a Bachelor of Arts in Asian Studies from the Australian National University.

Cherie Colyer-Morris

2014 New Colombo Plan Scholar.

Cherie Colyer-Morris is one of the 2014 inaugural New Colombo Plan scholars and is a keen, young marine scientist currently completing her

honours year at the University of Newcastle. She is passionate about understanding marine and coastal environments and is particularly interested in marine sustainability projects in developing communities. In 2015, under the NCP scholarship, she completed a 6 month internship with PT Mars Symbioscience Indonesia in Makassar, South Sulawesi. Here, she worked on the world's largest coral reef restoration project, collaborating with local universities and NGOs to develop and implement a social research program to support and guide the project as a whole. She is excited to continue down the path of marine science research, and plans to return to the Indo-Pacific region to work on marine sustainability projects in the future.

Rohan Nandan

Director, Australia Awards Delivery Section, Department of Foreign Affairs and Trade

Rohan Nandan currently manages the delivery of Australia Award Scholarships and Fellowships at DFAT. The program provides funding for leaders from partner countries to undertake study in Australia to support development goals when they return home. Prior to this role, Rohan managed Australia's involvement in APEC trade and investment work. He has also been responsible for infrastructure development, water and environmental safeguards policy in the Australian aid program. Rohan has extensive experience across the public service, having worked in a number of departments and agencies. He has science and legal–related qualifications from the Australian National University and University of Canberra.

Justin Withers

Director, Policy and Integrity, Australian Research Council

As Director of Policy and Integrity at the Australian Research Council, Justin is responsible for implementing the ARC's open access policy and developing a work agenda regarding open data. Justin's team also has carriage of the ARC's Research Integrity and Research Misconduct Policy and processes, the ARC's international engagement strategy and outreach, general policy advice, risk management and secretariat support for both the Australian Research Integrity Committee and the ARC Advisory Council. Within the ARC, Justin previously led the parliamentary team and contributed to policy around the Australian Government's successful Excellence in Research for Australia (ERA) initiative. Prior to joining the ARC, Justin worked at the Department of Innovation, Industry, Science and Research leading a small team that delivered over A$1.6 billion annually to eligible Australian higher education providers as block grants for research and research training, through a number of performance-based schemes. Justin has also led teams responsible for the management and delivery of Australian government international science support programs - International Science Linkages (A$95 million) and Australia-India Strategic Research Fund (A$70 million). Justin has also been responsible for providing secretariat support to the Chief Scientist of Australia and the Prime Minister's Science, Engineering and Innovation Council (PMSEIC) and a number of its working groups.

Dr Julie Glover

Director, Priority Driven Research, National Health and Medical Research Council

Dr Julie Glover joined the National Health and Medical Research Council (NHMRC) as a director in 2011. She currently works in the Priority Driven Research section which is responsible for delivering on a range of program and policy issues, including international collaborations. Julie completed a PhD in plant sciences at the Australian National University in 1996 and held research positions at ANU, Cambia, the Singapore Institute of Molecular Agrobiology and the French Seed company, Groupe Limagrain. Julie joined the Australian Bureau of Rural Sciences in 2002 to provide scientific advice for policy makers before moving to the Innovation Division within Australia's Department of Industry in 2007 where she spent the next four years developing innovation policies and supporting high profile reviews and committees.

Moderator:

Professor James J Fox

College of Asia and the Pacific, Australian National University

Professor James J Fox is an Emeritus Professor at the Australian National University. He was educated at Harvard and Oxford where he was a Rhodes Scholar. He has taught at various American Universities: Harvard, Cornell, Duke and Chicago and at various European Universities: Leiden, Bielefeld and the École des Hautes Études en Sciences Sociales. He is a Foreign Fellow of the Royal Dutch Academy of Sciences and a Fellow of the Academy of the Social Sciences in Australia where he currently serves as International Secretary. Professor Fox's area of primary interest is Indonesia, with special focus on Java and eastern Indonesia. Much of his research has been on development and ecological management. More generally, his interests are in comparative issues affecting the whole of the Asia Pacific region.

Bridging the divide in the knowledge sector

3.00 - 4.00

Knowledge, technology and innovation are key drivers of productivity and economic growth for both Australia and Indonesia. Addressing the complex social and economic challenges our two countries face also requires access to increasingly sophisticated data and nuanced analysis. What are the building blocks of a knowledge economy? In what ways can research support the development of effective policy responses to complex issues? How can researchers improve the way they communicate with policy makers? Speakers in this session will draw on their experiences in developing and evaluating science, technology and innovation policy, implementing a program to strengthen Indonesia's knowledge economy, and working at the intersection of research and policy making to reflect on how Indonesia and Australia can work together to generate economic value from knowledge and innovation and bridge the divide between research and public policy.



Speakers:

Dr Jeffrey M Alexander

Senior Manager, Innovation Policy, Research Triangle Institute

Developing a knowledge economy: international perspectives

Jeffrey M Alexander has 25 years of experience in science and technology policy analysis, strategy consulting, and research on innovation management. He is an expert in applying advanced analytics to administrative records and other types of "big data" to inform policy and management decisions. He has applied his knowledge of data science and innovation dynamics to studies in technology forecasting, tracking breakthrough innovations, R&D investment analysis, and the assessment of regional innovation clusters. He has also led projects in corporate innovation management, evaluation of public R&D programs, the design of institutions for research and technology commercialisation, and information visualisation. He has a BA in International Relations from Stanford University and a PhD in Management and Technology from The George Washington University School of Business.

Dr Subandi

Deputy Minister for Human Development, Community and Culture, Ministry of National Development Planning

Bridging the divide between knowledge and public policy: a policymaker's perspective

Dr Subandi has extensive experience in development policy and planning. During his 30 year career at Indonesia's Ministry of National Development Planning, he has held a range of positions across the areas of domestic trade, cooperatives, and enterprise development, food security, science and technology policy, culture and tourism development, and youth and sports. Prior to assuming his current role as Deputy Minister for Human Development, Community and Culture, he served as Director for Education and Director for Population, Women's Empowerment and Child Protection. He has a bachelor's degree in agribusiness from Institut Pertanian Bogor (Bogor Agricultural Institute), an MSc in policy science from Saitama University, Japan, and a PhD in Agricultural Science from Kyoto University, Japan.

Panellists:

Yulia (Indri) Sari

PhD Candidate, Crawford School of Public Policy, Australian National University

Yulia (Indri) Sari is currently conducting doctoral research on actors, accountability and power in community-driven development programs, using the implementation of Indonesia's National Program for Community Empowerment in Papua (PNPM RESPEK) as a case study. Between 2004 and 2007, she served as Executive Director of the AKATIGA Foundation in Bandung, Indonesia, a research-based advocacy organisation focusing on poverty reduction, agrarian reform, labour, micro-enterprises, and governance. At the AKATIGA Foundation, Indri led research evaluating the impact of PNPM RESPEK and PNPM Rural. She was also a lecturer in International Relations at Universitas Parahyangan. She currently serves as a member of AKATIGA's board.

Chitra Retna S

PhD Candidate, Crawford School of Public Policy, Australian National University

Chitra Retna S has been engaged in social research and non-government organisations since undertaking her degree in Environmental Engineering at Institut Teknologi Bandung. After completing a Masters in Planning and Public Policy at Universitas Indonesia, Chitra worked as a consultant leading research projects for various national and international organisations, including Indonesia's Ministry of National Development Planning, the World Bank, and the Canadian International Development Agency. In 2010 she worked for Revenue Watch Institute as Asia Pacific Senior Regional Associate, before returning to the organisation she founded – Article 33 Indonesia - serving as its Executive Director between 2012 and 2016. As Executive Director, Chitra oversaw Article 33 Indonesia's research programs on governance, accountability and transparency in the areas of social policy, extractive industries, climate change and forestry. In 2015 and 2016 she served as a member of the Ministry of State Apparatus and Empowerment

and Bureaucratic Reform's (MenPAN RB) Expert Team. She is currently conducting doctoral research at the Arndt-Corden Department of Economics in the Crawford School of Public Policy at the Australian National University on the quality of governance in Indonesia's natural resource sector.

Moderator:

Petrarca C Karetji

Team Leader, Knowledge Sector Initiative (Indonesia), RTI International and Principal Adviser, Bina Darma Foundation

Petrarca's expertise includes knowledge exchange, organisational network development, institutional analysis, program design and management, and troubleshooting of development projects. He has worked in a range of senior management positions in national and international organisations, including eight years as Director of PT Austraining Nusantara and four years with the World Bank in Indonesia. In 2010, he was appointed as the first locally employed director level executive for the Australian Agency for International Development (AusAID), where he managed a portfolio of over $500 million in grant funds covering rural development, decentralisation, bureaucratic reform, community development, social protection and women's leadership. Most recently, has served as a senior adviser to the Australian Department of Foreign Affairs and Trade. He is also a member of the Northern Institute Advisory Committee, Charles Darwin University. Petrarca has written for a number of international publications and produced analytical and research reports for development projects in Indonesia.

The Conversation wrap-up

Why scientific exchange matters

4.00 - 5.00

Over the last four days, Australian and Indonesian scientists from diverse fields have come together to share their knowledge and learn from each other. They have revealed the results of innovative research into some of our most critical public health issues and discussed the impact of human activities and climate change on our valuable marine and coastal environments and how we can conserve and manage them. They have told us about new breakthroughs that are helping to improve agricultural productivity and profitability and develop crops which are more nutritious, better able to resist diseases, and more tolerant to changing climatic conditions. And they have explored the potentially transformative social, economic and environmental impacts of new technologies. This session draws together the discussions of the last four days to reflect on why scientific exchange matters. How can scientific collaboration and exchange contribute to the future prosperity and growth of our two nations? What role does scientific cooperation play in the broader relationship between Indonesia and Australia?



Panellists:

Professor Sangkot Marzuki

President, Indonesian Academy of Sciences

Professor Sangkot Marzuki is the President of the Indonesian Academy of Sciences. He graduated from the Faculty of Medicine at Universitas Indonesia in 1968, then continued his studies at Mahidol University in Bangkok, where he received an MSc in 1971. He received a PhD from Monash University in 1975. His scientific interests are in the biogenesis of energy transducing membranes and related human genetic disorders, an interest he developed during his 17 years at the Faculty of Medicine at Monash University. Between 1992 and 2014 he served as the Director of the Eijkman Institute for Molecular Biology in Jakarta where he extended his interests to encompass human genome diversity and infectious diseases. He has held honorary appointments as a Professor of Medicine at Monash University, Professor of Medical Sciences at Universitas Indonesia, Professor of Biochemistry and Molecular Biology at The University of Queensland, and Professor of Medicine at The University of Sydney. He has also served on the Indonesian National Research Council (1994-2004) and Higher Education Council (1996-2000; 2003-2008), as Governing Council Member of the Asia-Pacific International Molecular Biology Network (1998-2008), and as Chairman of the Asia Pacific Network of Human Geneticists (1995-2005). Professor Sangkot's contribution to science has been recognised by a number of awards, including a higher doctorate from Monash University in 1998, a Doctor Honoris Causa from Utrecht University in 2006, and Doctor of Science Honoris Causa from the University of Queensland in 2010. In 2010, Professor Marzuki received an Order of Australia for his ongoing service to Australia-Indonesia relations through scientific collaboration and the promotion of Australian tertiary education in Indonesia.

Professor Andrew Holmes

President, Australian Academy of Science

Professor Andrew Holmes is a Laureate Professor of the School of Chemistry at The University of Melbourne. In October 2004 he was appointed ARC Federation Fellow and inaugural VESKI Fellow at the Bio21 Institute at The University of Melbourne and at CSIRO Molecular and Health Technologies. Professor Holmes has been recognised for his groundbreaking work on light-emitting polymers. He has also been the recipient of a long list of awards including the Royal Society's Royal Medal and the Descartes Prize. He was elected to the Academy in 2006 and served as Foreign Secretary from 2010 to 2014. He became President of the Academy in May 2014.

Allaster Cox

First Assistant Secretary, South-East Asia Maritime Division, Department of Foreign Affairs and Trade

Allaster Cox is currently First Assistant Secretary, Southeast Asia Maritime Division in the Department of Foreign Affairs in Canberra. Prior to this he was Assistant Secretary, Indonesia and Timor-Leste in 2012-13. He was Australian Ambassador to Vietnam from 2008 to 2012. Overseas, he has also served as High Commissioner in Brunei Darussalam (2001-03), Deputy Head of Mission in Kuala Lumpur (1998-2000), First Secretary and later Political Counselor in Jakarta (1992-96) and Second Secretary in Brunei Darussalam (1988-1990). In Canberra, Mr Cox has been Assistant Secretary, Policy Planning (2007-8) and Assistant Secretary, United States Branch (2006-07). Between 2004 and 2006 he was on secondment as Assistant Secretary, Asia, Americas and Trade Branch in the Department of the Prime Minister and Cabinet. Mr Cox holds Bachelor of Laws and Bachelor of Economics (Hons) degrees from the University of Sydney, where he was President of the University Union in 1984. He worked for Shell Australia as an industrial economist in teams negotiating workplace/manning level reforms from 1985-87.

Dr Nikola Bowden

Chair, Australian Early- and Mid-Career Researcher Forum, University of Newcastle

Nikola Bowden graduated from the University of Newcastle with a Bachelor of Biomedical Science (Honours) and a PhD in medical genetics. She was an NHMRC Early Career Fellow at the University of Newcastle and trained at the National Cancer Institute in Washington DC,

USA. Dr Bowden is currently a Cancer Institute NSW Career Development Fellow and DNA Repair Group Leader at the Hunter Medical Research Institute/University of Newcastle, New South Wales. Dr Bowden leads a team of researchers investigating the repair of DNA damage caused by sunlight and chemotherapy in melanoma and ovarian cancer. She leads a large collaboration of researchers and clinicians that are repurposing traditional chemotherapy for new cancer treatments. Dr Bowden is the current Chair of the Australian Academy of Science's Early and Mid-Career Researcher Forum.

Professor Jamaluddin Jompa

President, Indonesian Young Academy of Sciences and Dean, Faculty of Marine Science and Fisheries, Universitas Hasanuddin

Jamaluddin Jompa was born in South Sulawesi, Indonesia. He graduated from McMaster University, Canada, with a master's degree in 1996, and was awarded a PhD from James Cook University, Queensland in 2001. Professor Jompa is a senior lecturer and currently serves as Dean of the Faculty of Marine Sciences and Fisheries at Universitas Hasanuddin (Hasanuddin University). From 2004 to 2013, he served as Director of the Research and Development Centre for Marine, Coasts and Small Islands at Universitas Hasanuddin. In 2007, Professor Jompa was seconded to the Indonesian Ministry of Marine Affairs and Fisheries to manage the national Coral Reef Rehabilitation and Management Program Phase II (COREMAP-II). Professor Jompa is the President of the Indonesian Young Academy of Sciences, and chaired the study committee for Indonesian Science Agenda (SAINS45), which sets out the key questions facing Indonesia as it approaches its centenary of Independence in 2045. He is also Chairman of the South Sulawesi Sea Partnership Program, President of the Association of Diving School International—Indonesia, and a member of the National Fisheries Stock Assessment Committee.

Dr Leonard VH Tampubolon

Deputy Minister for Economic Affairs, Ministry of National Development Planning

Dr Leonard VH Tampubolon was appointed as Deputy Minister for Economic Affairs at Indonesia's Ministry of National Development Planning in 2015. His previous role was as Director for Macroeconomic Planning, a position which he held from 2012 to 2015. He has worked for the Ministry of National Development Planning since 1987. He obtained his undergraduate degree in 1985 from the Faculty of Industrial Engineering at Institut Teknologi Bandung, a master's degree in economic development in 1993 from Vanderbilt University, and a PhD in Economics in 2000 from Claremont Graduate University, USA.

Moderator:

Prodita Sabarini

Jakarta Editor, The Conversation

Before joining *The Conversation*, Prodita worked for 7 years as a reporter for the Jakarta-based English daily The Jakarta Post. In 2013-2014, she was the Elizabeth Neuffer Fellow at Massachusetts Institute of Technology Center for International Studies. As Neuffer fellow, Prodita also wrote for The Boston Globe and The New York Times.

Symposium organisers

Australian Academy of Science

The Australian Academy of Science is a not-for-profit organisation of individuals elected for their outstanding contributions to science and research. It was founded on 16 February 1954 by Australian Fellows of the Royal Society of London with the distinguished physicist Sir Mark Oliphant as founding President. It was granted a Royal Charter establishing the Academy as an independent body with government endorsement.

The Academy's Constitution was modelled on that of the Royal Society of London. It receives government grants towards some of its activities but has no statutory obligation to government.

The Academy strives to support and promote science through a range of programs and activities. It has four major program areas:

- championing, celebrating and supporting excellence in Australian science;
- promoting Australia's international scientific engagement;
- building public awareness and understanding of science; and
- providing independent, authoritative and influential scientific advice.

www.science.org.au

Akademi Ilmu Pengetahuan Indonesia (AIPI) The Indonesian Academy of Sciences

The Indonesian Academy of Sciences is an independent body established in October 1990 by an Act of the Republic of Indonesia. Its mandate is to:

provide opinions, advice, and recommendations on matters relating to science and technology to the government and the public; and encourage the development of scientific knowledge and excellence through scientific conferences and policy discussion forums, publications, and national and international connections.

AIPI's membership comprises leading Indonesian scientists selected on the basis of a strong track record of scientific excellence. Membership of the Academy is the highest form of recognition in the field of science and technology in Indonesia. New members must have the approval of at least two-thirds of the members, and membership is ratified by the President. The Academy currently has 61 members, divided into five commissions: Fundamental Research, Medicine, Engineering, Social Sciences, and Culture.

www.aipi.or.id

Early- and Mid-Career Researcher Forum (EMCR Forum)

The Australian Early- and Mid-Career Researcher Forum is the national voice of Australia's emerging scientists, representing researchers who are up to 15 years post-PhD (or other research higher degree), irrespective of their professional appointment.

It examines critical issues including career structure, job security, funding, education, training and gender equity. The forum engages with early- and mid-career researchers (EMCRs) from around Australia and advises the Academy on issues relevant to EMCRs, to help inform its policy recommendations to government and develop its EMCR activities. It also liaises with other national organisations to positively contribute to both Australia's scientific research and the future careers of emerging research experts. The forum provides a vital connection

between Australia's most eminent scientists and tomorrow's future scientific leaders.

The EMCR Forum's mission is to serve as the voice of Australia's early- and mid-career researchers, championing improvement in the national research environment through advocacy. It focuses on sustainable and transparent career structures, gender equity, stable funding policies, career development opportunities, and raising awareness of issues facing the future of science.

www.science.org.au/supporting-science/early-and-mid-career-researchers/emcr-forum

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Akademi Ilmuwan Muda Indonesia (ALMI) The Indonesian Young Academy of Sciences

The Indonesian Young Academy of Sciences is Indonesia's foremost organisation of young scientists. It was established on 20 May 2015 as an autonomous body under the Indonesian Academy of Sciences. ALMI's mission is to:

promote the role of young scientists in advancing scientific discovery and a culture of scientific excellence in Indonesia in order to improve Indonesia's competitiveness;

- encourage the advancement of science through interdisciplinary collaboration among young scientists;
- foster the development of a scientific disposition and a culture of scientific excellence in the younger generation;
- promote the use of scientific research in public policy; and
- contribute to the worldwide movement of academies of young scientists in responding to global challenges.
- ALMI currently has 40 members, divided into four interdisciplinary working groups: Frontiers of Science, Science and Society, Science and Policy, and Science and Education.

Australian Government

Australian Department of Foreign Affairs and Trade

The Department of Foreign Affairs and Trade's purpose is to help make Australia stronger, safer and more prosperous by promoting and protecting Australia's interests internationally and contributing to global stability and economic growth. The Department provides foreign, trade and development policy advice to the government and works with other government agencies to ensure that Australia's pursuit of its global, regional and bilateral interests is coordinated effectively.

www.dfat.gov.au

Kementerian PPN/ Bappenas

Indonesian Ministry of National Development Planning (Bappenas)

The Ministry of National Development Planning is an Indonesian central government institution which is responsible for national development planning and budgeting. The Ministry also coordinates international development cooperation.

www.bappenas.go.id

KNOWLEDGE SECTOR INITIATIVE

Knowledge Sector Initiative

The Knowledge Sector Initiative is a joint program between Indonesia's Ministry of National Development Planning (Bappenas) and the Australian Department of Foreign Affairs

and Trade that seeks to improve the lives of the Indonesian people through better quality public policies that make better use of research, analysis and evidence. The program works with a range of government agencies to build their capability to source and use evidence to inform policy decisions, collaborates with Indonesian universities and think tanks to improve the quality and relevance of policy research, and supports better communication of research results to inform public debate on key policy issues. The program is supporting the Indonesian Academy of Sciences to strengthen its role in developing scientific excellence.

www.ksi-indonesia.org

Event information



Registration desk

The registration desk in the main foyer of the Shine Dome will be staffed at all times should you have any questions.



Luggage

A luggage cabinet is located in the main foyer of the Shine Dome. Please drop your luggage at the registration desk.



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Parking

The forecourt area of the Shine Dome is 'set down and pick up' only.
Paid parking available on Gordon Street.



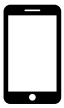
Disabled

The Theatre is equipped with wheelchair access and facilities:
please see the registration desk if you require more information.



Hearing loop

The Ian Wark Theatre is equipped with a hearing loop.
Please look for seats in the lower area of the theatre with a gold plaque indicating a hearing loop. An IR hearing loop is available for the first floor.
Please see reception staff to obtain a device.



Contacts

The following Academy staff will be available to assist you.

Shannon Owen 0438 339 078 Nancy Pritchard 0417 286 921