

General Conference on  
'Building a Sustainable Future: The role of science,  
technology and innovation for global  
development'

Rio de Janeiro, Brazil  
Windsor Barra Convention & Expo Center  
29 September - 2 October 2025

Draft Programme  
(as of 19 August 2025)

Monday, 29 September 2025

<i>Venue: Imperial</i>	
08:30-10:30	45 <sup>th</sup> TWAS Council Meeting (closed session for TWAS Council Members)
<i>Venue: Louvre</i>	
10:30-11.00	Coffee break

11.00-12.25	<p>Opening ceremony Chair: Quarraisha Abdool Karim, TWAS President</p> <p>Keynote address Amb. Csaba Kőrösi, 77th President of the United Nations General Assembly (<i>video message</i>)</p> <ul style="list-style-type: none"> <li>- Helena B. Nader, President Brazilian Academy of Sciences, TWAS Vice President (Latin America and Caribbean)</li> <li>- Sukhit Limpijumnong, President, Alliance of International Science Organizations (ANSO)</li> <li>- H.E. Amb. Mohammad Nafees Zakaria, Executive Director, Commission on Science and Technology for Sustainable Development in the South (COMSATS) (<i>video-message</i>)</li> <li>- Ylann Schemm, Executive Director Elsevier Foundation, The Netherlands</li> <li>- Edmondo Cirielli, Deputy Minister of Foreign Affairs and International Cooperation, Italy (<i>video-message</i>)</li> <li>- Lidia Brito, Assistant Director-General for Natural Sciences, Natural Sciences Sector, UNESCO</li> <li>- Luciana Barbosa de Oliveira Santos Minister of Science, Technology and Innovation in Brazil, Brazil, TBC</li> <li>- H.E. Luiz Inácio Lula da Silva, Presidente of Brazil, TBC</li> <li>- Luiz Antonio Elias, President of FINEP, Funding Authority for Studies and Projects (Financiadora de Estudos e Projetos)</li> <li>- Ricardo Magnus Osorio Galvão, President of CNPq, National Council for Scientific and Technological Development (Conselho Nacional de Desenvolvimento Científico e Tecnológico)</li> <li>- João Paulo Pieroni, Superintendent of the Productive</li> </ul>
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	Development and Innovation Area, BNDES, Brazilian Development Bank (Banco Nacional de Desenvolvimento Econômico e Social)
12.25-12.30	Presentation of gift to host country Quarraisha Abdool Karim, President of TWAS Helena B. Nader, President of Brazilian Academy of Sciences Representative of Brazilian Government
12.30-14.00	Lunch
14:00-16:00	Trends and perspectives on science in the global south Co-Chairs: <ul style="list-style-type: none"> <li>• Helena B. Nader, President of Brazilian Academy of Sciences, Vice President of TWAS (Latin America and Caribbean)</li> <li>• M. Iqbal Choudhary, Coordinator General OIC-COMSTECH, Vice President of TWAS (Central and South Asia)</li> </ul> Panellists: <ul style="list-style-type: none"> <li>• Carlos Henrique de Brito Cruz, Senior VP of Research Networks, Elsevier, UK and professor emeritus, University of Campinas, Brazil</li> <li>• Lidia Brito, Assistant Director-General for Natural Sciences, UNESCO</li> <li>• Luis Fernandes, Deputy Minister of ST&amp;I (Brazil)</li> <li>• Akissa Bahri, recipient of TWAS Medal 2025, former Minister of Agriculture, Tunisia</li> <li>• Prof. Mario Fresta, Director General of the Foundation for Scientific and Technological Development (FUNDECIT), Angola</li> </ul>
16.00-16.30	Break
16.30-17.15	Keynote Lecture H.E. Karin Herrera Vice-President Guatemala

17:15-18:15	40 <sup>th</sup> TWAS Anniversary: Looking Ahead <ul style="list-style-type: none"> <li>• Mohamed Hassan, TWAS Immediate Past President</li> <li>• Ronald Leger, Canada</li> <li>• Representative of Abdus Salam family: Dr. Aziza Rahman (nee Salam) <i>(video recorded message)</i></li> <li>• Maria Vargas in memory of Prof. Josè I. Vargas</li> <li>• C.N.R. Rao <i>(video recorded message)</i></li> <li>• Marcelo Viana in memory of Prof. Jacob Palis</li> <li>• Chunli Bai <i>(video recorded message)</i></li> <li>• Romain Murenzi, TWAS Executive Director 2011-2023</li> <li>• Looking ahead: Quarraisha Abdool Karim</li> </ul>
<i>Venue: Segovia</i>	
19.00	Welcome cocktail and 40 <sup>th</sup> TWAS Anniversary toast

Tuesday, 30 September 2025

<i>Venue: Louvre</i>	
08.30-10.30	32 <sup>nd</sup> TWAS General Meeting (closed session for TWAS Members and Young Affiliates)
10.30-10.45	Break
10.45-12.30	<p>Symposium 1</p> <p>Responsible Artificial Intelligence for and from the Global South: How to Mitigate Further Inequalities and Ethical Issues in Science</p> <p>Co-chairs:</p> <ul style="list-style-type: none"> <li>• Bolanle Ojokoh, Department of Information Systems, Federal University of Technology, Nigeria and TWAS Young Affiliates Network (TYAN)</li> <li>• Co-chair to be announced</li> </ul> <p>Panellists:</p> <ul style="list-style-type: none"> <li>• Virgílio Augusto Fernandes Almeida, (TWAS Fellow), Universidade Federal de Minas Gerais, Coordinator TWAS LACREP, Brazil</li> <li>• Tshilidzi Marwala, Rector of the United Nations University and Under-Secretary-General of the United Nations, South Africa (TWAS Fellow)</li> <li>• Yaile Caballero Mota, Universidad de Camaguey, Cuba (TWAS Fellow)</li> <li>• Sunil Mukhi, Raja Ramanna Chair Professor of Physics, Indian Institute of Science Education and Research, Pune, India (TWAS Fellow)</li> </ul>
12.30-14.00	Lunch
14:00-16.00	<p>Symposium 2</p> <p>Climate Change and Food Security</p> <p>Co-chairs:</p> <ul style="list-style-type: none"> <li>• Mariangela Hungria, Brazilian Agricultural Research Corporation (Embrapa), Brazil, (TWAS Fellow)</li> <li>• Huadong-Guo, International Research Center of Big Data for Sustainable Development Goals, China (TWAS Fellow)</li> </ul>

	<p>Panellists:</p> <ul style="list-style-type: none"> <li>• Carlos Nobre, Co-Chair, Science Panel for the Amazon, Sustainable Development Solutions Network, Brazil (TWAS Fellow) IPCC and SPA</li> <li>• Yêyinou Laura Estelle Loko, Benin, Director of the Ecole Nationale Supérieure des Biosciences et Biotechnologies Appliquées, Head of the Laboratory of Applied Zoology and Plant Health (ZASVE)/ENSBBA), Vice-President of the Entomological Society, Benin</li> <li>• Qu Dongyu, FAO Director-General represented by Kaveh Zahedi, Director, Office of Climate Change, Biodiversity and Environment, Food and Agriculture Organization of the United Nations (FAO)</li> <li>• Nana Ama Browne Klutse, Head of the Department of Physics, University of Ghana, the Vice Chair of Working Group 1 of the Intergovernmental Panel on Climate Change (IPCC), and a member of the Scientific Board of UNESCO's International Basic Sciences Programme</li> </ul>
16:00-16:30	Break
16.30-18.30	<p>Induction Ceremony:</p> <p>TWAS Fellows elected in 2023, 2024 and 2025</p>
<i>Venue: Segovia</i>	
19.00	Gala dinner and cultural event

Wednesday, 1 October 2025

<i>Venue: Imperial</i>	
08.00-09.00	TWAS Regional Partners Joint Meeting (closed session for the Coordinators of TWAS Regional Partners, TWAS Management Committee, Vice Presidents)
<i>Venue: Louvre</i>	
09:00-10:15	TWAS Medal Lectures Co – Chairs: <ul style="list-style-type: none"> <li>• Carolina Naveira Cotta, TYAN Brazil (F)</li> <li>• To be announced</li> </ul>
	Medal Lecture by TWAS Young Affiliate/Alumni Li Yin, China, Chief Scientist (Biomanufacturing), State Development and Investment Group Co., LTD., China ( <i>video-recorded</i> )
	Medal Lecture by TWAS Member from the South Akiça Bahri, Tunisia TWAS Fellow, agricultural sciences (water research management/former Minister of Agriculture Tunisia)
	Medal Lecture by TWAS Member from the North Anton Zeilinger, Nobel Laureate, University of Vienna and Institute for Quantum Optics and Quantum Information of the Austrian Academy of Sciences, Austria ( <i>video-recorded</i> )
	TWAS Medal for contributions to issues of inequalities in developing countries: Shirley Malcom, Senior Advisor to the CEO and Director of the SEA Change initiative, American Association for the Advancement of Science, AAAS, USA
10.15-10.30	Break
10.30-12.30	Special Session: Science in a complex geopolitical context

	<p>Co-Chairs:</p> <ul style="list-style-type: none"> <li>• Mohamed Hassan, TWAS Immediate Past President, Sudan</li> <li>• Elisa Reis, (TWAS Fellow), Chair of the Interdisciplinary Research Network for the Study of Social Inequality (NIED, Brazil);</li> </ul> <p>Panellists:</p> <ul style="list-style-type: none"> <li>• Saths Cooper, International Science Council ISC Committee for Freedom &amp; Responsibility in Science, Extraordinary Prof Universities of Pretoria &amp; Stellenbosch, South Africa</li> <li>• Zakri Abdul Hamid, Founding Director of the International Institute for Science Diplomacy and Sustainability, Malaysia (TWAS Fellow)</li> <li>• To be announced</li> </ul>
12.30-14.00	Lunch
<i>Poster session venues: Louvre IV</i>	
14:00-15:30	Networking and Poster Session with Flash Talks
	<p>Introduction and group photo of Young Affiliates selected in 2023</p> <p>Introduction and group photo of Young Affiliates selected in 2024</p> <p>Introduction and group photo of Young Affiliates selected in 2025</p>
<i>Venues: Imperial, Bandeirantes and Liberdade</i>	
15:30-17:00	Networking Session (parallel sessions)



Thursday, 2 October 2025

<i>Venue: Louvre</i>	
08.30–10.00	<p>Symposium 3</p> <p>Health Challenges in the Global South</p> <p>Co-Chairs:</p> <ul style="list-style-type: none"> <li>• Helena B. Nader, President of Brazilian Academy of Sciences</li> <li>• Sabah AlMomin, Kuwait Institute for Scientific Research, Kuwait, TWAS Vice President (Arab Region),</li> </ul> <p>Panellists</p> <ul style="list-style-type: none"> <li>• Nisia Trindade, Fundação Oswaldo Cruz, former Minister of Health of Brazil (TWAS Fellow)</li> <li>• Salim Abdool Karim, Director, Centre for the AIDS Programme of Research in South Africa, CAPRISA (TWAS Fellow) South Africa</li> <li>• George Fu Gao, Chinese Center for Disease Control and Prevention (China), (TWAS Fellow)</li> </ul>
10.00-10.30	Break
10.30-11:15	<p>Presentation of Awards and certificates</p> <p>TWAS Awards (13)</p> <ul style="list-style-type: none"> <li>• TWAS CAS Award (3)</li> <li>• Siwei Cheng Award (1)</li> <li>• Fellow-named Awards (12)</li> </ul> <p>Announcement of 2025 Award recipients</p> <p><i>Master of Ceremony: Giovanni Ortolani, TWAS Public Information Officer</i></p>
10.30-12:50	<p>International Year of Quantum Science and Technology- Special session</p> <p>Lecture by TWAS Apex award winner</p> <p>Co-chairs</p> <ul style="list-style-type: none"> <li>• Quarraisha Abdool Karim, TWAS President</li> <li>• Lê Tuân Hoa, Vietnamese Academy of Science and Technology, TWAS Council Member (East and South East Asia), tbc</li> </ul>

12.50-13:00	Closing ceremony
13:00-14.00	Lunch
	<p>Post conference skills building workshops on:</p> <ol style="list-style-type: none"> <li>1. Academic ethics</li> <li>2. The two sides of AI in science</li> </ol>
14.00-15.30	<p>Skills building workshop on ethics.</p> <p>10-12 minutes each by the Panel of TWAS Ethics Committee members followed by a participative 45-50 minute discussion. Questions and comments about the topics discussed as well as related topics will be invited from the audience</p> <ol style="list-style-type: none"> <li>1. Roula Abdel-Massih, Community Educator Clinical Professor, Central Michigan University, USA, (TYAN EC): "Fighting Misinformation to Rebuild Trust in Science."</li> <li>2. Claudia Bauzer-Medeiros, Professor, University of Campinas, UNICAMP, Brazil (TWAS Fellow) "Plagiarism in the Era of AI".</li> <li>3. Emmanuel Kasimbazi, Professor, School of Law, Makerere University, Uganda (TWAS Fellow): "Ethical and Legal Issues in Scientific Research".</li> <li>4. Sunil Mukhi, Raja Ramanna Chair Professor of Physics, Indian Institute of Science Education and Research, Pune, India (TWAS Fellow): "Varieties of Academic Misconduct and Redressal Mechanisms".</li> </ol>
15.30-15.45	Break

15.45-17.15

## Skills building workshop: The Two Sides of AI in Science

Artificial intelligence (AI) is experiencing an unprecedented surge in development and adoption across all fields of science and the humanities, with significant implications for research institutions, organizations, and individual careers. Its impact ranges from enhancing the efficiency, safety, and quality of research to potentially transforming how knowledge is discovered and complex problems are solved. Accelerating research productivity through AI could be one of its most valuable societal and economic applications. To unlock this potential, we need to invest in broad, multidisciplinary collaborations, dedicated public funding, and open access to high-performance computing and research data. Updated curricula, integrative AI training, and greater support for AI tools that use machine learning techniques, including generative AI and open benchmarking platforms, are also essential. Public R&D should foster bold, cross-disciplinary research, build open knowledge networks, and ensure that AI serves global challenges such as those outlined in the UN Sustainable Development Goals (SDGs).

While AI holds transformative promise, its deployment in science should be approached gradually and responsibly. To prevent setbacks like the reproducibility crisis, lack of transparency, and weak methodological standards, careful design and governance are essential. This short seminar will explore how AI can be used in research and will address key questions: Where can AI make the biggest impact? What are the current challenges? And what are the ethical and practical consequences? By examining the motivations behind AI use, the barriers it faces, and its broader implications, the seminar invites scientists, policymakers, and stakeholders to engage with this rapidly evolving frontier of research.

1. Virgílio Augusto Fernandes Almeida, (TWAS Fellow),  
Universidade Federal de Minas Gerais, Coordinator TWAS  
LACREP, Brazil
2. Mohamed Najim, (TWAS Fellow), University of Bordeaux, France
3. TBC