

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

Programme
(as of 30 July 2025)

Monday, 29 September 2025

08:30-10:30	45 th TWAS Council Meeting (closed session for TWAS Council Members)
10:30-11.00	Break
11.00-12.25	Opening ceremony Keynote address by Csaba Kőrösi, 77th President of the UNGA, Hungary (<i>video message</i>)
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"> • Helena B. Nader, President of Brazilian Academy of Sciences, Vice President of TWAS (Latin America and Caribbean) • M. Iqbal Choudhary, Coordinator General OIC-COMSTECH, Vice President of TWAS (Central and South Asia) Speakers <ol style="list-style-type: none"> 1. Lidia Brito, Assistant Director-General for Natural Sciences, UNESCO 2. Luis Fernandes, Deputy Minister of ST&I (Brazil) 3. Akissa Bahri, recipient of TWAS Medal 2025, former Minister of Agriculture, Tunisia 4. Prof. Mario Fresta, Director General of the Foundation for Scientific and Technological Development (FUNDECIT), Angola 5. Carlos Henrique de Brito Cruz, Senior VP of Research Networks, Elsevier, UK and professor emeritus, University of Campinas, Brazil

16.00-16.30	Coffee break
16.30-17.15	Keynote Lecture H.E. Karin Herrera Vice-President Guatemala
17:15-18:15	40 th TWAS Anniversary: Looking Ahead Co-chairs: <ul style="list-style-type: none"> • Quarraisha Abdool Karim, TWAS President • Mohamed Hassan, TWAS Immediate Past President Speakers: Aziza Rahman (nee Salam), USA Romain Murenzi, Former TWAS Executive Director, Rwanda/USA Ronald Leger, Canada Maria Domingues Vargas, Brazil <i>in memory of Prof. José Israel Vargas</i> Marcelo Miranda Viana da Silva, Brazil <i>in memory of Prof. Jacob Palis</i>
19.00	Welcome cocktail and 40 th TWAS Anniversary toast

Tuesday, 30 September 2025

08.30-10.30	32nd TWAS General Meeting (closed session for TWAS Members and Young Affiliates)
10.30-10.45	Coffee break
10.45-12.30	Symposium 1 Responsible Artificial Intelligence for and from the Global South: How to Mitigate Further Inequalities and Ethical Issues in Science Co-chairs: <ul style="list-style-type: none"> • Bolanle Ojokoh, Nigeria, TYAN • Co-chair to be announced Speakers:

	<ol style="list-style-type: none"> 1. Virgílio Augusto Fernandes Almeida, (TWAS Fellow), Universidade Federal de Minas Gerais, Coordinator TWAS LACREP, Brazil 2. Tshilidzi Marwala, Rector of the United Nations University and Under-Secretary-General of the United Nations, South Africa (TWAS Fellow) 3. Yaile Caballero Mota, Universidad de Camaguey, Cuba (TWAS Fellow) 4. Sunil Mukhi, Raja Ramanna Chair Professor of Physics, Indian Institute of Science Education and Research, Pune, India (TWAS Fellow)
12.30-14.00	Lunch
14.00-14.30	<p>TWAS Medal Lecture to scientist from host country International Year of Quantum Science and Technology Co-Chairs:</p> <ul style="list-style-type: none"> • Marcelo Knobel, TWAS Executive Director • Liliam Alvarez Diaz, TWAS Secretary General <p>Medal lecturer: Luiz Davidovich, Brazil (TWAS Fellow)</p>
14:30-16.30	<p>Symposium 2 Climate Change and Food Security Co-chairs:</p> <ul style="list-style-type: none"> • Mariangela Hungria, (TWAS Fellow) Brazil • Huadong-Guo, (TWAS Fellow), CBAS, China <p>Speakers:</p>

	<ol style="list-style-type: none"> 1. Carlos Nobre, Co-Chair, Science Panel for the Amazon, Sustainable Development Solutions Network, Brazil (TWAS Fellow) IPCC and SPA 2. Yêyinou Laura Estelle Loko, Benin, Director of the Ecole Nationale Supérieure des des Biosciences et Biotechnologies Appliquées, Head of the Laboratory of Applied Zoology and Plant Health (ZASVE)/ENSBBA, Vice-President of the Entomological Society, Benin 3. 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) 4. 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
16:30-17:00	Break
17.00-18.30	Induction Ceremony: TWAS Fellows elected in 2023, 2024 and 2025
19.00	Gala dinner and cultural event

Wednesday, 1 October 2025

08.00-09.00	TWAS Regional Partners Joint Meeting (closed session for the Coordinators of TWAS Regional Partners, TWAS Management Committee, Vice Presidents)
09.00-10:15	TWAS Medal Lectures
09.00-09.25	Medal Lecture by TWAS Member from the South Akiça Bahri, Tunisia TWAS Fellow, agricultural sciences (water research management/former Minister of Agriculture Tunisia)

09.25-09.50	Medal Lecture by TWAS Young Affiliate/Alumni: Li Yin, China Chief Scientist (Biomanufacturing), State Development and Investment Group Co., LTD., China
09:50-10.15	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	Coffee Break
10.30-12.30	Special Session: Science in a complex geopolitical context Co-Chairs: <ul style="list-style-type: none"> • Mohamed Hassan, TWAS Immediate Past President, Sudan • Elisa Reis, (TWAS Fellow), Chair of the Interdisciplinary Research Network for the Study of Social Inequality (NIED, Brazil); Panellists: <ol style="list-style-type: none"> 1. Saths Cooper, International Science Council ISC Committee for Freedom & Responsibility in Science, Extraordinary Prof Universities of Pretoria & Stellenbosch, South Africa 2. Zakri Abdul Hamid, Founding Director of the International Institute for Science Diplomacy and Sustainability, Malaysia (TWAS Fellow) 3. H.E. Ángela Yesenia Olaya Requene, Minister of Science, Technology, and Innovation, Colombia TBC 4. Zhang Linxiu, Director, UNEP-International Ecosystem Management Partnership (TWAS Fellow, China) TBC
12.30-14.00	Lunch
14:00-15:30	TYAN Network Poster Session with Flash Talks
	Introduction and group photo of Young Affiliates selected in 2023 Introduction and group photo of Young Affiliates selected in 2024 Introduction and group photo of Young Affiliates selected in 2025

15:30–17:00	Networking Session (parallel sessions)
19.00	Dinner (at Hotel)

Thursday, 2 October 2025

08.30 – 10.00 <i>Venue:</i> <i>Louvre</i>	<p>Symposium 3</p> <p>Health Challenges in the Global South</p> <p>Co-Chairs:</p> <ul style="list-style-type: none"> • Helena B. Nader, President of Brazilian Academy of Sciences • Sabah AlMomin, TWAS Vice President, Kuwait <ol style="list-style-type: none"> 1. Nisia Trindade, Former Minister of Health of Brazil (TWAS Fellow) 2. Salim Abdool Karim, Director, Centre for the AIDS Programme of Research in South Africa, CAPRISA (TWAS Fellow) South Africa 3. George Fu Gao, Chinese Center for Disease Control and Prevention (China), (TWAS Fellow)
10.00-10.30	Coffee break
10.30-12:50	<p>TWAS Apex award lecture Quantum Science and Technology</p> <p>Co-Chairs:</p> <ul style="list-style-type: none"> • Quarraisha Abdool Karim • co-chair to be announced <p>Speaker to be announced</p> <p>Presentations of Awards and certificates</p> <p>TWAS Awards (13)</p> <ul style="list-style-type: none"> • TWAS CAS Award (3) • Siwei Cheng Award (1) • Fellow-named Awards (12)
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"> 1. Academic ethics 2. The two sides of AI in science
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"> 1. Roula Abdel-Massih, Community Educator Clinical Professor, Central Michigan University, USA, (TYAN EC): "Fighting Misinformation to Rebuild Trust in Science." 2. Claudia Bauzer-Medeiros, Professor, University of Campinas, UNICAMP, Brazil (TWAS Fellow) "Plagiarism in the Era of AI". 3. Emmanuel Kasimbazi, Professor, School of Law, Makerere University, Uganda (TWAS Fellow): "Ethical and Legal Issues in Scientific Research". 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".
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