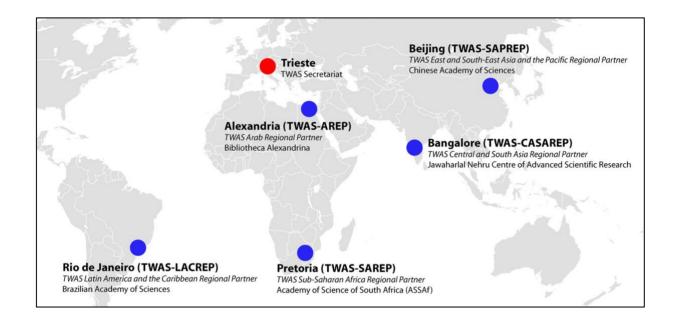


# Young Affiliates 2023-2028

# TWAS Young Affiliates 2023-2028

Since 2007, each year each of the five TWAS Regional Partners (formerly Regional Offices) has selected up to five excellent young scientists from their region as TWAS Young Affiliates for a period of six years (five years until 2019). The Young Affiliates must be living and working in a developing country at the time they are selected, and have an excellent track record of at least 10 international publications. Here we present the bio data for the 17th selection of TWAS Young Affiliates.



# **Arab Region**

TWAS Regional Partner for the Arab Region (TWAS-AREP) at the Bibliotheca Alexandrina in Alexandria, Egypt

# **Ayman Ahmed**

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Ayman Ahmed is a research fellow at the Institute of Endemic Diseases, University of Khartoum, the Sudan, and a Wellcome Trust master fellow of public health and tropical medicine at the Liverpool School of Tropical Medicine (United Kingdom of Great Britain and Northern Ireland). His scientific interests include the research and control of arboviral diseases and viral hemorrhagic fevers, with a particular interest in zoonotic arboviruses such as the Rift Valley Fever. He aims to develop a research career in arbovirology, establishing the first Centre of Arbovirology Research in the Sudan. A self-driven and passionate junior arbovirologist and senior medical entomologist, with expertise also as a vector biologist, he has more than 10 years of international field and lab work experience, which includes managing multi-country research projects. He is doing research also on tropical infectious diseases, genomics of arboviruses, and vaccine development for arboviral diseases. He wants to contribute to the reduction of the arbovirus burden in the Sudan, and globally. Currently, he teaches medical entomology and medical entomology techniques to undergraduate and postgraduate students.

#### **Ahlam Zaid Alkilani**

Faculty of Pharmacy, Zarqa University, Zarqa, Jordan eMail: ahlamk@zu.edu.jo, azaidalkilani01@qub.ac.uk

Ahlam Zaid Alkilani is an associate professor and dean of the Faculty of Pharmacy at Zarqa University, Jordan. She earned her Bachelor of Science and Master of Science in pharmaceutical sciences from the University of Jordan and her PhD in pharmaceutical technology from Queen's University Belfast, United Kingdom of Great Britain and Northern Ireland. An expert in polymeric and nanoparticle-based transdermal drug delivery systems, she has authored numerous high-impact publications, achieving an hindex of 20 and around 3,000 citations. Her pioneering work has earned prestigious honors, including the L'Oréal–UNESCO For Women in Science Award (Levant Region) in 2024. She has also received Best Poster Awards at leading international conferences. Through her leadership, research, and mentorship, Alkilani is advancing pharmaceutical innovation and inspiring the next generation of scientists.

## **Nadia Arrousse**

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Nadia Arrousse is a professor of chemistry with the School of Science and Engineering at Al Akhawayn University, in Ifrane, Morocco. Her career began with a bachelor's degree in analytical chemistry (2015) that she earned from Sidi Mohamed Ben Abdellah University, Faculty of Science Dhar el Mahraz. Then, she obtained a master's degree in organic chemistry (2017) from the Faculty of Sciences and Technology of Fez. In 2018, Arrousse started her PhD at Sidi Mohamed Ben Abdellah University, working at a doctoral project that merged three distinct disciplines, witnessing her interdisciplinary approach. She intertwined organic chemistry by synthesizing organic inhibitors, and theoretical chemistry through predicting synthesis reaction feasibility using density functional theory methods. She also employed Monte Carlo simulation to forecast the efficiency of these inhibitors against the corrosion of steel. With the third discipline, physical chemistry, she applied electrochemical methods to evaluate the inhibition efficiency of the synthesized products. As a postdoctoral researcher, she followed two industrial projects in Portugal, working at physical vapour deposition coatings and pitting corrosion in copper heat exchangers.

#### Ridha Horchani

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Ridha Horchani is an associate professor in the Department of Physics at Sultan Qaboos University, in Oman, where he teaches physics to undergraduate and postgraduate students. Horchani holds a Bachelor of Science, a Master of Science and a PhD degree in physics from the Paris-Saclay University, in France. After his PhD studies, he went to the University of Aarhus, in Denmark as a postdoctoral research assistant. His research interests include atomic and molecular spectroscopy, atomic quantum gases, theoretical physics, and plasmonic nanostructures. In recognition of his contributions to science and development, Horchani received, in 2022, the Best Researcher Award from Sultan Qaboos University.

#### **Mohammed Kadhom**

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Mohammed Kadhom is an assistant professor in the Department of Environmental Sciences at Alkarkh University of Science in Baghdad, Iraq. He teaches courses on water and air pollution, basics in environmental pollution, and environmental awareness. He earned a Bachelor of Science and a Master of Science degree in chemical engineering

from the University of Baghdad, and a PhD in chemical engineering from the University of Missouri-Columbia, United States of America. Kadhom's research and contributions encompass chemical and environmental engineering, with a focus on water treatment, desalination, adsorption, thin films, and nanomaterials. He served as a guest editor with three journals and participated as a reviewer with others. In 2016, he earned a certificate of merit from the American Chemical Society, securing various grants during his presence at the University of Missouri-Columbia. In 2021, he was awarded the Green Chemistry Summer School grant from the Green Sciences for Sustainable Development Foundation, Venice, Italy, receiving the best poster award. For his research achievements, he was awarded the Top Researcher Golden Medal (2024) from Alain University, Iraq for his scientific production.

# Central and South Asia

TWAS Regional Partner for Central and South Asia (TWAS-CASAREP) at the Jawaharlal Nehru Centre for Advanced Scientific Research in Bangalore, India

#### **Evana Akhtar**

Immunobiology Nutrition and Toxicology Laboratory, Enteric and Respiratory Infections Unit, Infectious Diseases Division, icddr,b, Dhaka, Bangladesh

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Evana Akhtar is an assistant scientist who has been working since 2009 at icddr,b (formerly International Centre for Diarrhoeal Disease Research, Bangladesh), an international health research organisation based in Dhaka, Bangladesh. She earned a Bachelor of Science and a Master of Science degree from the Department of Biochemistry and Molecular Biology, University of Dhaka, Bangladesh. Then, from the same university, she obtained a PhD in biochemistry and molecular biology, in collaboration with the Universities of Calgary and Saskatchewan, in Canada. Her work is focused on food-based nutritional supplementation. Her research interests include the adverse effects on human health of nutritional deficiencies and exposure to environmental pollutants, such as toxic heavy metals and air pollution, in particular among children and women. She is also involved in studies that investigate the impact of enriched food, such as Selenium-rich lentils, or micronutrient—like Vitamin D and B12—supplementation. Her goal is to improve human health as well as immune responses by micronutrient supplementation and by mitigating toxic health effects of environmental pollution. During the COVID-19 pandemic, she was extensively involved in two large sero-surveillance studies.

# Faroha Liagat

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Faroha Liaqat is an assistant professor in the Department of Chemistry, at Quaid-i-Azam University, Islamabad, Pakistan, where she teaches physical chemistry to Bachelor of Science, Master of Philosophy and PhD students. She holds a Master of Science and a Master of Philosophy degree in chemistry from Quaid-i-Azam University, and received the Vice-Chancellor's Medal, in 2006 and 2008. She is an alumna of the Lindau Nobel Laureate meeting (2009). In 2014, she earned two PhDs in chemistry, one from Johannes Gutenberg University of Mainz, Germany and the other from Seoul National University, South Korea. In 2016, she completed her postdoctorate at the University of Glasgow, United Kingdom of Great Britain and Northern Ireland. Her research interests include biomass conversion and energy storage, electrochemical and fluorescent sensors, computational chemistry, conducting polymers and their composites, photonic/phononic Bragg stacks and layered hybrids. Her international fellowships include the Max Planck Fellowship (2010) and the

International Research Training Group Fellowship (2011). She is a member of scientific societies, including the Organization for Women in Science in the Developing World, and the Chemical Society of Pakistan.

# Nargiza Sataeva

Institute of Mountain Physiology and Medicine, National Academy of Sciences Kyrgyzstan, Bishkek City, Kyrgyzstan

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Nargiza Sataeva is a researcher with the Laboratory of Neurophysiology, Institute of Mountain Physiology and Medicine, National Academy of Sciences, Kyrgyzstan. Her scientific interests focus on the investigation of the functional state of the central nervous system, the features of bioelectrical activity, and the psychophysiological features of adolescents. She is currently working on the following dissertation: "Comparative analysis of the parameters of bioelectrical activity of the brain and psychophysiological characteristics in adolescents from low mountains and high mountains." More than 20 scientific publications have been published based on her research results. She was awarded a Certificate (2021) and a Certificate of Honor (2023) from the Presidium of the National Academy of Sciences of the Kyrgyz Republic; a first-degree diploma as the Best Young Scientist of the Year (2023) in the competition among young scientists of the Kyrgyz Republic, and has received a thank you letter (2023) from the advisor to the President of the Russian Federation, head of the interdepartmental working group, for organizing and managing the Congress of Young Scientists A. Kobyakov.

# **Prabhat Kumar Singh**

Radiation & Photochemistry Division, Chemistry Group, Bhabha Atomic Research Centre, Trombay Mumbai, India

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Prabhat K. Singh is an associate professor with the Radiation and Photochemistry Division of Bhabha Atomic Research Centre, Mumbai, India. He received his PhD from Homi Bhabha National Institute (2011) and pursued his postdoctoral work at the University of Pennsylvania, United States of America. His current research interests include ultrafast spectroscopy, supramolecular chemistry, and the use of self-assembled materials to design optical sensors for bio-sensing and chemo-sensing applications. He was honoured with the Young Scientist Award by the Department of Atomic Energy, India (2013), and by the National Academy of Science, India (2017). He served as a member of the Indian National Young Academy of Science (2017–2021) and the National Academy of Sciences, India (2017). He was a Young Associate of the Indian Academy of Sciences, India. He is also a member of the German Global Young Academy (2020). He has been selected as a Fellow of the Indian Chemical Society and Associate Fellow of the Indian National Science

Academy for the year 2023 and has been named a Fellow of the Royal Society of Chemistry and Biology (United Kingdom of Great Britain and Northern Ireland).

# Kaveesha Jayani Wijesinghe

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Kaveesha Wijesinghe is a lecturer at the Department of Chemistry, University of Colombo (UC), Sri Lanka, where she earned a Bachelor of Science with Honors (2013) in molecular biology and biochemistry. At UC, she teaches molecular biology, biochemistry, and chemical biology-related subjects. She obtained her PhD degree in biochemistry (2018) from the University of Notre Dame (United States of America), studying the lipid binding properties of the Marburg virus matrix protein-VP40. For her outstanding performance, she was bestowed the National Institutes of Health Ruth L. Kirschtein National Research Service Award from the Chemistry-Biochemistry-Biology Interface Program at the University of Notre Dame (2015–2017). After completing the doctoral degree, she joined Cambridge University (United Kingdom of Great Britain and Northern Ireland) as a postdoctoral research associate to study host protein interactions of HSV-1 tegument protein pUL21. Her research interests include molecular virology and pathogenesis of Dengue virus infection, dynamics of the membrane proteins, and development of fluorescence microscopy-based bio-imaging methods. She is currently a research grant awardee from UNESCO-TWAS, the International Centre for Genetic Engineering and Biotechnology (Italy), and the Nation Science Foundation (Sri Lanka).

# East and Southeast Asia and the Pacific

TWAS Regional Partner for East and Southeast Asia and the Pacific (TWAS-SAPREP) at the Chinese Academy of Sciences in Beijing, China

#### Sri Fatmawati

Laboratory of Natural Products and Synthetic Chemistry, Department of Chemistry, Faculty of Science and Analytical Data, Institut Teknologi Sepuluh Nopember (ITS), Kampus ITS Sukolilo, Surabaya, East Java, Indonesia

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Sri Fatmawati completed her Bachelor of Science in chemistry at the Institut Teknologi Sepuluh Nopember, Indonesia, and obtained her master's and PhD degrees from Kyushu University, in Japan. Her research is primarily focused on the exploration of Indonesian natural products. For her significant contributions to science and development, she was a co-recipient of the 2013 International Rising Talents of L'Oréal-UNESCO For Women in Science. In 2016, she received the OWSD-Elsevier Foundation Award for Early-Career Women Scientists in the Developing World. She is also renowned for her leadership role within scientific organizations. In 2018, she founded the Indonesia National Chapter of the Organization for Women in Science in the Developing World, which she is currently chairing. She served as the president of the Indonesian Young Academy of Sciences (2020–2022) and serves in the Executive Committee of the Global Young Academy for the term 2022–2024. She attended the 2023 World Laureates Association International Forum in Shanghai, China.

#### **Paul Kuman**

Center for Climate Change and Sustainable Development, Division of Environmental Sciences and Geography, School of Natural and Physical Sciences, University of Papua New Guinea, Port Moresby, Papua New Guinea.

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Paul Kuman is a researcher and lead consultant at the Center for Climate Change and Sustainable Development, University of Papua New Guinea (UPNG), where he conducts research, and teaches marine geosciences, climate, and environmental sciences. He holds a Bachelor of Science majoring in chemistry at UPNG, and a Master of Environment (Advanced) majoring in environmental protection at Griffith University, Australia. His PhD research is in marine geoscience with the University of Queensland, Australia. He is involved in the Northwest Pacific Ocean and Climate Experiment programme initiated by the Institute of Oceanology, Chinese Academy of Sciences. He investigates marine sedimentary components and their impact on climate reconstruction in the Bismarck Sea. He is developing programmes and courses about chemical oceanography and paleoclimate studies to be taught at UPNG, providing technical advisory services to

various organizations, including the Government of Papua New Guinea newly established Ocean Office on strategic development plans, and policy formulation in coastal and deepsea governance and management. He received the Australian Award and European Union Scholarship award in 2014 and 2017, respectively.

#### Siu Yee New

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New is an associate professor with the School of Pharmacy, University of Nottingham Malaysia (UNM). She obtained a Bachelor of Science (Honours) in industrial chemistry from the Universiti Teknologi Malaysia, and earned her PhD degree from the National University of Singapore. She then worked as a research scientist at the Institute of Materials Research and Engineering, A\*Star, Singapore before taking up her current job at UNM. Her main research interest is in developing DNA-based nanosensors to detect different analytes, such as cancer biomarkers and viral DNA. With computational aid, her group designs DNA probes using simulation algorithm, and then tests them at the bench. Such an approach has reduced random ill-attempts and overall costs, easing sensors customization for different types of targets. She was a Highly Commended Finalist of Women of the Future Southeast Asia, Science, Technology & Digital Category (2020), and received the L'Oréal-UNESCO Fellowship for Women in Science (2021). New is a Young Scientist Network-Academy Science Malaysia affiliate, a member of the Malaysian Institute of Chemistry and of the Committee of Royal Society of Chemistry Malaysia Chapter.

## **Ugyen Penjor**

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Ugyen Penjor works as a technical specialist at Fauna & Flora, Cambridge, United Kingdom of Great Britain and Northern Ireland (UK). He looks after analytics tasks and supports field teams across Southeast Asia, Africa and Central America. He earned a Bachelor of Science at the University of Delhi (2008) and an Associate Diploma in forestry service at Indira Gandhi National Forest Academy, India (2011). He also earned a postgraduate diploma in international wildlife conservation practice (2016) and a PhD on the impact of land-use change on eastern Himalayan biodiversity (2022), both from the University of Oxford, UK. He worked for the Government of Bhutan as a forest management planner and head of a species conservation and monitoring section (2012–2022). He co-led the national forest inventory of Bhutan, the National Takin Survey, and managed Bhutan's first conservation-assured tiger standards project. He led and co-led the development of policy documents such as the National Forest Inventory Report (2017), Tiger Habitat Use

Report (2018), Takin Report (2019), Tiger Action Plan (2020), and Snow Leopard Report (2023). In recognition of his 10-year service, he was awarded a bronze medal by Bhutan's Royal Civil Service Commission in 2022.

# Xu Jiajun

Peking University, Beijing, China

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Xu Jiajun is the associate professor and principal investigator of the Public Development Finance Research Programme at Peking University, China. Xu earned a PhD from the University of Oxford (United Kingdom of Great Britain and Northern Ireland), and master's and bachelor's degrees from Tsinghua University. Her research focuses on public development finance, ageing finance, and global governance. She is the initiator of the first global database on public development financial institutions worldwide, and has published her original research in peer-reviewed journals. In recognition of her intellectual contributions to finance and development, she was invited to join the Executive Committee of the Finance in Common Summit as well as the International Commission of Experts on Financing for Development at the United Nations. She serves at the editorial board of the leading journal *World Development*. Her academic monograph *Beyond US Hegemony in International Development* was published by Cambridge University Press in 2017. The book won the 8<sup>th</sup> Peikang Chang Development Economics Outstanding Achievement Award in 2020, and was listed by the Bretton Woods Project's selection of the best books on the World Bank and International Monetary Fund from 2016.

# Latin America and the Caribbean

TWAS Regional Partner for Latin America and the Caribbean (TWAS-LACREP) at the Brazilian Academy of Sciences in Rio de Janeiro, Brazil

# María Eugenia Cabrera Catalán

Escuela de Ciencias Físicas y Matemáticas, Universidad de San Carlos de Guatemala, Guatemala City, Guatemala

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María Eugenia Cabrera Catalán is a professor with the School of Physical Sciences and Mathematics and a member of the Institute of Physical Sciences and Mathematics, at the University of San Carlos of Guatemala (USAC), in Guatemala City. She earned a bachelor's degree in physics from USAC, and a diploma in high energy physics from the Abdus Salam International Centre for Theoretical Physics, in Trieste, Italy. She earned a PhD degree in physics from the Autonomous University of Madrid, Spain. She was a postdoctoral researcher at the Gravitation and Astroparticle Physics Amsterdam, in the Kingdom of the Netherlands, and with the Institute of Physics, University of São Paulo, Brazil. Her research interests are in particle physics. She studies theory and phenomenology of physics beyond the Standard Model, collider phenomenology, theory and phenomenology of dark matter searches. In recognition of her contribution to science, Cabrera Catalán was awarded the 2021 OWSD-Elsevier Foundation Award for Early-Career Women Scientists in the Developing World in Physical Sciences for the Latin American and the Caribbean Region. She is a founding member of the Central American Network of High Energy Physics and Scientific Computing.

#### Nathalie Valeska Casanova Morales

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Nathalie Casanova-Morales is an assistant professor in the Faculty of Liberal Arts, Adolfo Ibáñez University in Santiago, Chile since 2020. She is specializing in experimental physics with an interdisciplinary approach, playing a pivotal role in establishing the local Interdisciplinary Physics Laboratory, easing and promoting access to physics tools from different areas. She holds a bachelor's degree in applied physics from the University of Santiago, Chile and a degree in engineering physics from the same institution. In 2012, she obtained a PhD from the University of Montpellier, France. She has implemented her academic competencies by working in several postdoctoral positions in Chile. Through the application of an interdisciplinary lens to physics, biology, and chemistry, she leverages her experimental expertise to employ physics techniques and innovative processes. This enables her to comprehend crucial parameters in bioprocesses within an interdisciplinary framework. Committed to expanding her expertise, she concentrates on

biophysics, microbiology, parasitology, nanotechnology, and biochemistry, all disciplines that are vital for interdisciplinary research.

# **Diego Marques Ferreira**

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Diego Marques is a professor in the Department of Mathematics at the University of Brasilia, Brazil. At the same university, he teaches elementary and advanced courses on number theory for undergraduate and graduate students. He earned a Bachelor in Mathematics and a Master in Mathematics from the Federal University of Ceara, Brazil, and his PhD in mathematics from the University of Brasilia. Then, he worked as a postdoctoral fellow at the University of British Columbia, in Canada. With over a decade of experience, Marques has supervised more than 10 doctoral theses, focusing mainly on transcendental number theory and its techniques. His research interests include transcendental number theory, the arithmetic behaviour of transcendental functions, Diophantine approximation, Diophantine equations, recurrence sequences, and elementary number theory. In 2010, for his contributions to research, he was bestowed the Young Researcher Award from the Federal District Research Support Foundation, in the Federal District, Brazil. In the same year, he was elected as the youngest affiliated member of the Brazilian Academy of Sciences, strengthening his position in the academic community.

# **Maria Cristina Romero Rodriguez**

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Cristina Romero-Rodríguez is a professor and head of the Department of Chemical Biology, at the National University of Asunción (UNA), in Paraguay, where she is also an assistant professor of biochemistry. She obtained a degree in biochemistry from the Faculty of Chemical Sciences (UNA). Then she earned a Master of Science in cellular, molecular, and genetic biotechnology, and a PhD in biosciences and agrifood sciences both from the University of Cordoba, Spain. Her research interests are in biological science and focus on the study of plant-microorganism interaction that she investigates through biochemical and proteomic approaches. Romero-Rodríguez is an active member of the National Incentive Programme for Researchers of the National Council of Science and Technology of Paraguay. In the last five years, she has participated in seven financed projects (three as principal investigator), which allowed the development of a master's thesis, and the building of capabilities to develop doctoral programmes in biological sciences in Paraguay. She serves as an associated editor for *Physiological and Molecular Plant Pathology* and is a member of the editorial board of other national journals.

# Fernando Jose Zorto Aguilera

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Fernando Zorto is a professor in the Department of Mechanical Engineering and director of the Research Institute of Applied Science and Technology, Faculty of Engineering at the National Autonomous University of Honduras (UNAH). At UNAH, he teaches heat transfer, design projects, and research methods to engineers. He holds a Bachelor of Science in mechanical engineering from UNAH and a Master of Science in project management from the Central American Technological University, also in Honduras. He is a PhD candidate in design, manufacturing, and managing industrial projects with Valencia Polytechnic University, in Spain. His research interests include atmospheric water harvesting, innovative projects, and aerospace systems. Since 2017, he has led the first satellite project in Honduras. He received the Honour of Merit of Engineering of the Pan-American Confederation of Mechanical, Electrical, and Other Fields of Engineering. In 2017, Zorto won the Best Essay about UNAH Scientific Research and Research Management at the XI Conference of Scientific Research UNAH.

# Sub-Saharan Africa

TWAS Regional Partner for Sub-Saharan Africa (TWAS-SAREP) at the Academy of Science of South Africa in Pretoria, South Africa

# **Mary Amoako**

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Mary Amoako (nee Adjepong) is a lecturer and dietician with the Department of Biochemistry and Biotechnology, Kwame Nkrumah University of Science and Technology (KNUST), in Kumasi, Ghana. At KNUST, she teaches metabolism in health and diseases, nutrition through the human life cycle, and nutrition in emergencies. She holds a Bachelor of Science in biochemistry and biotechnology and a Master of Philosophy in human nutrition and dietetics, both from KNUST. She earned a PhD in human nutrition from Michigan State University, East Lansing (United States of America) and a professional certification as a registered dietician with the Allied Health Professions Council, Ghana. She is interested in global nutrition, dietetics, child, and maternal nutrition. She received the Borlaug Higher Education in Agricultural Research Development (2014), and the Borlaug Leadership Enhancement in Agriculture Program (2016), both from United States Agency for International Development (USAID). She is an early-career fellow of the Organization for Women in Science for the Developing World. In 2023, she received the L'ORÉAL-UNESCO For Women in Science Young Talents Award, for Sub-Saharan Africa, and the Association of Commonwealth Universities Sustainable Development Goals grant.

## **Gervais Mouthé Happi**

Department of Chemistry, Higher Teacher Training College Bambili, The University of Bamenda, Bambili, Cameroon

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Gervais Mouthé Happi is a senior lecturer of organic chemistry with the Department of Chemistry, The University of Bamenda, Cameroon, where he teaches general and organic chemistry. He earned his Bachelor of Science in chemistry (2008) and his Master of Science in organic chemistry (2011) from the University of Yaoundé I, Cameroon. Then, with a scholarship from the German Academic Exchange Service (DAAD) he pursued part of his thesis research at the Institute for Environmental Research (INFU), Technical University of Dortmund, Germany. In 2017, he obtained his PhD in organic chemistry from the University of Yaoundé I. In the same year, he attended the conference on infectious diseases orgnized by the TWAS Regional Partner for Central and South Asia, at Jawaharlal Nehru Centre for Advanced Scientific Research, in Bangalore, India. Another scholarship

from DAAD allowed him to continue his postdoctoral studies at Bielefeld University, Germany (2018–2019). Happi investigates bioactive secondary metabolites obtained from Cameroonian medicinal plants, which are promising against malaria, both at the parasitic level against *Plasmodium falciparum*, and at the vector level against *Anopheles gambiae*.

# **Abdourahmane Ndong**

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Abdourahmane Ndong is an assistant professor at Gaston Berger University, where he teaches general and laparoscopic surgery, and where he is currently completing a PhD in public health. He earned his Doctor of Medicine, his Master of Public Health and his general surgery diploma from Cheikh Anta Diop University, in Dakar, Senegal. Ndong holds a Master of Science in laparoscopic surgery and surgical skills from Queen Mary University of London, and he earned a postgraduate diploma in medical education from the University of Bordeaux, France. Ndong's research interests lie in global and minimally invasive surgery, and medical education. In 2018, he was awarded the Maternal and Child Health Scholarship by World Bank Africa Centers of Excellence project. In 2020, he was bestowed the Chevening Scholarship by the Foreign, Commonwealth & Development Office, receiving also an award from the Society of Surgical Simulation at the Surgical Education and Simulation International Conference. In 2021, he was the recipient of the Mandela Washington Fellowship from the United States of America Department of State.

# Lydia Rhyman

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Lydia Rhyman earned her PhD in computational chemistry (2013) from the University of Mauritius, where she is currently a research fellow in the Computational Chemistry Group. Her research interests lie in the use of computational chemistry methods, as a tool that provides insights into chemical systems at molecular levels, to complement experimental results and to solve chemistry-related problems that cannot be assessed at the experimental level. One such example is the characterization of molecular structures and the elucidation of reaction mechanisms. She actively promotes computational chemistry in Africa, as well as science education among girls in secondary schools and at tertiary level. She organises capacity-building activities to encourage students to orient their research toward tackling issues that the African continent is facing. She raises awareness of responsible research practices and integrity. She is an affiliate of the African Academy of Sciences, a member of the Royal Society of Chemistry (United Kingdom of

Great Britain and Northern Ireland), the Global Young Academy, and the Commonwealth Chemistry Early Career Network Committee representing the African region.

# Halima Sumaya Twabi

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Halima Twabi is an associate professor of statistics at the Department of Mathematical Sciences, University of Malawi. She holds a Bachelor of Science in statistics, as well as a Master of Science and a PhD, both in biostatistics from the University of Malawi. She studies causal inference for observational data, multivariate statistics, longitudinal and survival analysis, and statistical modelling and analysis of social and health data. Her recent work involves developing causal inference methods for non-experimental studies with multiple outcomes. In 2020, she received the L'Oréal-UNESCO for Women in Science Sub-Saharan Africa Young Talent Award for her work on applying causal inference to maternal and child health. In 2023, she was nominated treasurer of the International Biometric Society (IBS) Sub-Saharan Africa Network, and treasurer of the IBS Malawi region. She is a founding member of the Girls in Science, Technology, Engineering, Arts and Mathematics network in Malawi, and collaborates on the project "Strengthen Modelling and Analytics Capacity and Ecosystem for Women's Health" funded by the Bill and Melinda Gates Foundation.