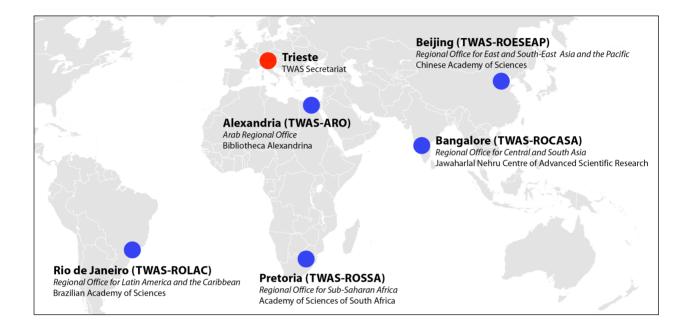


TWAS Young Affiliates 2016-2020

Since 2007, each year each of the five TWAS Regional Offices has elected up to five excellent young scientists from their region as TWAS Young Affiliates for a period of five years. The Young Affiliates must be living and working in a developing country and have an excellent track record of at least 10 international publications. Here we present the biodata for the 10th selection of TWAS Young Affiliates.



Arab Region

TWAS Regional Office for the Arab Region (TWAS-ARO) at the *Bibliotheca Alexandrina* in Alexandria, Egypt

Murad A. AlDamen

Department of Chemistry, Faculty of Science, The University of Jordan, Amman, Jordan eMail: maldamen@ju.edu.jo, aldamen@gmail.com

Murad A. AlDamen is an associate professor at the University of Jordan, Amman, Jordan. He earned a BSc at the Jarash private university and a MSC from the University of Jordan. In 2008 he obtained his PhD in inorganic chemistry from the ICMol/Departamento de Química Inorgánica, Unversitat de Valencia, Comunidad Valenciana, Spain. He served as an assistant professor at the University of Jordan, Department of Chemistry (2009-2013). In 2013 he was appointed associate professor at University of Jordan. His scientific interests range from the use of polyoxometalates as catalytic molecules for water splitting, to lanthanide complexes with interest in many other physical disciplines.

AlDamen has authored more than 37 scientific articles in peer-reviewed journals. His technical experience has deepened several aspects, starting from managing single-crystal structure solution and mounting and theoretical studies using computational softwares. He has sound graduate and undergraduate teaching experience, has supervised two PhD students and two master students.

He worked as an assistant dean of quality and development in the University of Jordan, Faculty of Science for two years. He was awarded distinguished researcher award for 2011 and extraordinary certificate for the best publications in the University of Jordan at 2004. Based on scholar rankings, AlDamen has i10=13, h-index=10 and citation= 1172.

Ahmed Farag Ali

Department of Physics, Faculty of Science, Benha University, Benha, Qaliubiya, Egypt eMail: ahmed.ali@fsc.bu.edu.eg, afali@fsu.edu, ahmed.ali@alumni.uleth.ca

Ahmed Farag Ali is an assistant professor at Benha University, Egypt. He obtained his PhD from University of Lethbridge, Canada, in January 2012. He got his BSc with honors from Benha University, in 2003. In September 2006, he joined ICTP, Trieste, Italy and got the ICTP diploma in high energy physics (August 2007).

The research area of Ali is theoretical/mathematical physics and in particular gravitational physics. More specifically, he is interested in open problems in black holes, cosmology, quantum gravity, quantum gravity phenomenology and string phenomenology.

The primary goal of his current research is to try to extract potential experimental or cosmological observational signatures from various approaches to quantum gravity. Some of his papers have been cited in *Nature* journal, which says that his theoretical predictions may be measured using quantum optics techniques and gravitational waves techniques. Besides, he is interested in approaches which may resolve singularities in general theory of relativity. He is also interested in studying black holes in extra dimensions theories, and their phenomenological implications at tera electron volts. Ali got three national awards in physics

and an international honorable mention by the gravity research foundation in 2016. He is a reviewer for many reputed international physics journals and acted as a lead guest editor for special issues in high-energy physics and astrophysics.

Haikel Jelassi

Associate Professor of physics, National Centre for Nuclear Sciences and Technologies (CNSTN), Tunis, Tunisia eMail: haikel.jelassi@cnstn.rnrt.tn, haikel.jelassi@gmail.com

Haikel Jelassi received the BSc degree in physics from University of Tunis El Manar in 2002. Awarded as the first range student, he obtained the Tunisian government fellowship for master degrees and PhD studies in France. He obtained his master diploma in atomic physics and lasers in 2003, and then his PhD in 2007 from the University Of Paris XI (Orsay-Paris).

Between 2006 and 2009, he was in post doc positions in different French laboratories in Paris and Toulouse. In 2009, he became an assistant professor at CNSTN. He obtained its supervising diploma from the University of Tunis El Manar, in 2014. In 2015, he became an associate professor in nuclear and atomic physics.

Jelassi is interested in many research fields in fundamental as well in applied physics. He's interested also in the research reactors and plasma Tokomak reactors.

He has authored more than 15 scientific articles in peer-reviewed journals, as well as one patent. He has supervised two PhD students and four undergraduate students. He's also active through the Tunisian Physical Society, where he acts as a member of the national board. He organized several conferences and workshops probing several scoop for the North African and Arab regions.

Jelassi is a member of two editorial boards of two journals of physics. He's regularly invited to review papers for publications in peer-reviewed journals.

Central and South Asia

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

Mirabbos Hojamberdiev

School of Materials Science and Engineering, Xi'an University of Technology, Xi'an, China eMail: hmirabbos@gmail.com, abbos25@mail.ru

Mirabbos Hojamberdiev is currently serving as a visiting scientist at the School of Materials Science and Engineering, Xi'an University of Technology, China. He obtained his MSc and PhD in materials science from Tashkent Institute of Chemical Technology, Uzbekistan.

He has made several short- and long-term research visits to various laboratories in the world to develop advanced materials for energy and environmental applications and established an excellent international scientific network. His main research activity centers at the fabrication, characterization, and application of visible-light-active photocatalytic materials for energy and environmental applications.

More specifically, he is studying the effects of crystal facet, morphology, dimension, and size on visible-light-driven photocatalytic water splitting and removal of organic pollutants from contaminated water and air of oxide and non-oxide crystals. For his outstanding research work, he was awarded with the President's Award of the Republic of Uzbekistan in 2004, TWAS Prize for Young Scientists in Developing Countries in 2010 and Atta-ur-Rahman Prize in Chemistry for Young Scientists in 2015.

He is a member of various international professional societies, including the Sociedad Mexicana de Materiales, International Sol-Gel Society, Materials Research Society. He is a member of the Global Young Academy.

Farhana Khanam

Mucosal Immunology & Vaccinology Laboratory, International Centre for Diarrhoeal Disease Research, Bangladesh (icddr,b), Dhaka, Bangladesh eMail: farhank@icddrb.org

Farhana Khanam, deputy project coordinator, obtained her MBBS degree in 2003 from Sir Salimullah Medical College and then she earned her MPhil degree from the department of microbiology, Dhaka Medical College.

As part of MPhil degree, she completed her thesis under the supervision of Firdausi Qadri at icddr,b. While pursuing her career in the field of immunology, she is working to discover the pathogenesis of infectious organism and its interaction with host. In her research field, she is working in the studies on understanding of the systemic and mucosal immunology of diseases with the drive on natural infections and its application and extension to vaccine efficacy.

She is involved in studies on safety and immunogenicity of different vaccines. She has gained competence in different aspects of microbiological and advanced immunological and molecular techniques. She is involved in the evaluation of a novel diagnostic method, TPTest for early diagnosis of typhoid fever. She worked in the study of Interferon- γ and proliferation

responses to *Salmonella enterica* serotype typhi proteins in typhoid fever patients and also in cholera vaccine study, to evaluate their efficacy and safety in Bangladeshi people.

She worked to capture *in vivo* expressed genes of *Salmonella enterica* in typhoid fever patients by a new method called selective capture of transcribed sequences (SCOTS) and compared it with *in vitro* system, which led to the identification of a number of genes that might be involved in survival and evading the human immune system.

Currently she is working on immune responses in typhoid fever patients and in individuals with typhoid vaccine by using various high throughput techniques.

Sushila Maharjan

Research Institute for Bioscience and Biotechnology (RIBB), Kathmandu, Nepal eMail: ruma_sushila@hotmail.com

Sushila Maharjan is a research director and founding member at the Research Institute for Bioscience and Biotechnology (RIBB), Nepal. She is currently a research fellow at Brigham and Women's Hospital, Harvard Medical School, Boston, USA. She earned her MS in chemistry from Tribhuvan University, Nepal, in 2003 and her PhD in biochemistry from the department of life science and biochemical engineering at Sunmoon University, Korea, in 2011.

Her research in biotechnology involves discovery of novel antibiotics/drugs from *Streptomyces*. Her scientific interests range from the development and application of engineered biomaterials for drug or vaccine delivery and tissue engineering. She has authored 25 scientific publications in peer-reviewed journal, two book chapters and two filed patents. She has sound teaching experience and has supervised graduate and undergraduate students.

Maharjan was awarded the Elsevier Foundation Awards for Early Career Women Scientists in the Developing World, 2016. She has also received the American Funds for Alternative to Animal Research (AFFAR) fellowship (2016), the Brain Korea 21 PLUS Postdoc fellowship by Korean government (2015), the TWAS Research Grants in Basic Sciences (Groups) in 2013, the Best Poster Award from Korean Society of Glycobiology (2011), the Korean Research Fund (KRF) Scholarship for PhD program by Korean government 2007- 2010 and the PhD fellowship from Graduate School of Sun Moon University, South Korea (2006).

Abha Misra

Instrumentation and Applied Physics, Indian Institute of Science, Bangalore, Karnataka, India eMail: abha@isu.iisc.ernet.in, abha.misra1@gmail.com

Abha Misra is currently an associate professor at the Indian Institute of Science, Bangalore. She has received her PhD degree in physics from IIT Bombay in 2007. Between the years 2007-2010, Misra was a postdoctoral fellow at the California Institute of Technology.

She joined the department of instrumentation and applied physics at the Indian Institute of Science, Bangalore as an assistant professor in November 2010. Her research interests center around a wide variety of problems at the interfaces between nanoscience and nanoengineering. Misra's research reveals interesting sensing capabilities of CNT structures, she correlated the actuation behaviour of these bulk structures with the infrared (IR) exposure, and reported an enhancement in the electro-actuation response of the IR treated

CNTs. In her lab, this phenomenon is now used to tune Bragg's Wavelength by placing a thin coating of CNTs on to the conventional fibre Bragg grating, resulting in highly sensitive IR detection system.

Through her innovative research, she has also harnessed the extraordinary sensor characteristics of CNTs for developing various large-area sensor arrays, e.g. flame sensors, gas detectors, etc., hydrogen storage facilities, and efficient impact absorber. Her research on the mechanical behaviour at small length scales has shown that CNT cellular structures exhibit viscoelastic behaviour in air, even at very high temperatures. She has been recipient of young scientist award by the Indian National Academy of Science (INSA) and elected as young affiliate by the Indian Academy of Sciences (IAS), Bangalore. She is also a member of the National Science Academy India (NASI).

Syed Ghulam Musharraf

H.E.J. Research Institute of Chemistry, International Center for Chemical and Biological Sciences (ICCBS), University of Karachi, Karachi, Pakistan eMail: musharraf1977@yahoo.com, musharraf@iccs.edu

Syed Ghulam Musharraf is among the most promising young chemist of Pakistan, working as an associate professor at the International Center for Chemical and Biological Sciences (ICCBS), University of Karachi, since 2007. He completed his PhD from HEJJ Research Institute of Chemistry, ICCBS, University of Karachi.

Musharraf has earned post-doctoral experience on mass spectrometry working in Austria and USA. He has extensive experience in new MS techniques such as electrospray ionization (ESI), matrix assisted laser desorption ionization (MALDI), and tandem mass spectrometry (MS/MS).

He is an established practitioner of hyphenated techniques, such as GC-MS/MS and LC-MS/MS in various applications of natural products chemistry. He is also working on the identification of proteomics and metabolomics biomarkers in cancer research. He has published over 100 research papers in reputed international journals. He has also patented his discoveries in a US patent. He has supervised several PhD and MPhil students.

He is the recipient of the Atta-ur-Rahman Gold Medal Award, based on his contribution in mass spectrometry from Pakistan Academy of Science. He has delivered invited and session lectures in several international and national conferences. Recipient of many international prestigious scholarships including European Erasmus Mundas Scholarship, OAD Austria, and Endeavor Scholarship, Australia and Charles Wallace Scholarship, UK. He has won several research grants from international and national funding agencies. He is also serving as editorial board members of many international journals including *Scientific Reports* (a journal of the *Nature* Publishing groups).

East and Southeast Asia and the Pacific

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

Hsu Yu-Chin

Institute of Economics, Academia Sinica, Nankang, Taipei, Taiwan, China eMail: ychsu@econ.sinica.edu.tw

Hsu Yu-Chin is an associate research fellow at Institute of Economics, Academia Sinica. He earned his PhD in economics in May 2010, under Stephen G. Donald's supervision from the department of economics, University of Texas at Austin.

Before joining the Institute of Economics, Academia Sinica, in September 2012, he served as an assistant professor in the department of economics, University of Missouri-Columbia for two years (2010-2012).

His research interest is econometric theory and its applications. Two of his main research areas are treatment effect models and testing involving inequality constraints. He was awarded the Junior Research Investigators Award, Academia Sinica (2015), the Career Development Award, Academia Sinica (2015-2019), the Ministry of Science and Technology Wu Ta-Yu Memorial Award (2014), the Young Faculty Award and Scholarship (5-year term) and the Foundation for the Advancement of Outstanding Scholarship (2012-2017).

Pham Hoang Hiep

Hanoi Institute of Mathematics, Vietnam Academy of Science and Technology, Hanoi, Vietnam eMail: phhiep@math.ac.vn

Pham Hoang Hiep is an associate professor at Hanoi Institute of Mathematics-VAST. He earned his bachelor's and master's degrees with professor Nguyen Van Khue in mathematics, at Hanoi National University of Education. In 2008 he completed his PhD in mathematics with professor Urban Cegrell, at Umea University, in Sweden. In 2013 he obtained the HDR diploma with professor Jean-Pierre Demailly and Andrei Teleman in France.

He served as an associate professor at Hanoi National University of Education from 2011 to 2015. His main research interests are in pluripotential theory, complex analysis and geometry. He and collaborators have had more than 35 scientific papers in peer-reviewed journals, as well as a monograph. He has sound graduate and undergraduate teaching experience, and has supervised three PhD students. He currently serves as an editorial board member for the *Acta Mathematica Vietnamica*. He was awarded the Ta Quang Buu prize in Vietnam for young scientists 2015.

Xiao Feng

State Key Laboratory of Environmental Aquatic Chemistry, Research Center for Eco-Environmental Sciences, Chinese Academy Sciences, Beijing, China eMail: fengxiao@rcees.ac.cn; xjtuxf@gmail.com

Xiao Feng is an associate professor at research center for eco-environmental sciences, Chinese Academy Sciences, Beijing. He earned his BSc and MSc degrees from Xian Jiaotong University, Xian, China. In 2009, he obtained his PhD in environmental engineering from the University of Hong Kong, Hong Kong. After graduation, he joined RCEES as an assistant professor (2010-2013).

From 2014, he has been appointed as an associate professor in this research institute. His scientific area is mainly focused on water and environmental issues. His scientific interests include particle transport in natural waters; coagulation and flocculation in water and wastewater treatment; membrane application and advanced oxidation processes (AOP) in water and wastewater treatment.

Xiao has published more than 40 SCI papers in peer-reviewed journals and has five Chinese patents related to water and wastewater treatment. As a principle investigator, his research funding is over six million CNY both from government and companies. He also is selected as a member of IWA Young Water Professionals (IWA-YWP) in China.

Latin America and the Caribbean

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

Pablo Bolaños-Villegas

Fabio Baudrit Agricultural Research Station, University of Costa Rica, Costa Rica eMail: Pablo.bolanosvillegas@ucr.ac.cr

Pablo Bolaños-Villegas is an adjunct researcher and lecturer at the University of Costa Rica, in Costa Rica, Central America. He obtained his BSc in plant science at the University of Costa Rica, and his MSc at the National Pingtung University of Science and Technology in Pingtung, Taiwan.

His doctoral work was guided by Guang-Yuh Jauh at the Taiwan International Graduate Program of the Academia Sinica, in Taipei. His work there dealt with how chromosomal cohesion during meiosis and mitosis is regulated by protein CTF7/ECO1 in *Arabidopsis thaliana*.

Currently he is trying to determine how homologous recombination protects maize from ionizing radiation, how cell fate is determined in papaya embryo sacs and how geographical isolation and habitat loss impacts the fertility of orchids from genus *Sobralia*.

He has published in the *Plant Journal*, *Plant Cell* and *Plant Signaling and Behavior*. He currently serves as reviewer in the journals *Scientia Horticulturae*, *Bioprotocol* and *Lankesteriana*, and is a member of the American Society of Plant Biologists, the American Society of Horticultural Science and the Cornell Alliance for Science. He is interested in the regulation of DNA repair and homologous recombination, and in the teaching of science to undergraduates.

Franco M. Cabrerizo

Instituto de Investigaciones Biotecnológicas, Instituto Tecnológico de Chascomús (IIB-INTECH), National University of San Martín (UNSAM), The National Scientific and Technical Research Council (CONICET), Chascomús, Argentina eMail: fcabrerizo@intech.gov.ar, fcabrerizo@hotmail.com

Franco M. Cabrerizo is a research member of CONICET (Argentina) and associate professor at UNSAM (Argentina). He earned a BSc in Chemistry (2002) at the National University of La Plata (UNLP). In 2005 he obtained his PhD degree in chemical science from the photochemistry division of The Research Institute of Theoretical and Applied Physical Chemistry (UNLP, Argentina).

He was a postdoctoral research fellow at the center for research in carbohydrates, at National University of Buenos Aires (2005–2006). He has carried out research stays in Germany, Japan and Denmark. Since 2006 he has been a research member of CONICET. In 2010 he took the position as the director of photochemistry and molecular photobiology research group at IIB-INTECH (CONICET-UNSAM). He served as an assistant professor at both UNLP and UNSAM (2011–2013). In 2013 he was appointed associate professor at UNSAM.

His current research focuses on understanding the molecular aspects of mechanisms underlying the photosensitized processes triggered by UVA and visible light. This knowledge provides valuable information for the development of different biotechnological applications that might contribute to attend unresolved or neglected socially relevant local and global problems related to some chronic and/or infectious diseases. Cabrerizo has authored more than 45 scientific articles in peer-reviewed journals.

He was awarded the: G. Cilento Award (The Inter-American Photochemical Society, 2006), R. Caputto Award (The National Academy of Science, Argentina, 2009), Dr. E. Gros Award (The Argentine Society of Research in Organic Chemistry, 2015) and Dr. E. Gros prize (The National Academy of Exact, Physics and Natural Sciences, Argentina, 2015).

Ronald Vargas

Chemistry Department, Simón Bolívar University, Caracas, Venezuela eMail: ronaldvargas@usb.ve

Ronald Eduardo Vargas Balda obtained first degree in chemical engineering from Simón Bolívar University (USB) in 2007, with a study on heterogeneous photocatalysis in biphasic media. In 2012 he obtained his PhD in chemistry at USB, after the presentation of a work on fundamental electrochemistry, specifically in the fields of thermodynamic and kinetics of electrocatalytic oxygen transfer reactions.

Both undergraduate and graduate researches were obtained with outstanding mention. In 2012, he joined the chemistry department at USB as an aggregate professor, starting new research lines in photo (electro) catalysis using non-metal modify TiO2 nanostructures and the development of new chemical sensors for glucose and insulin detection based on electrochemical oscillations.

He has published to date (2016) twenty-six scientific papers in refereed journals and a book in the field of heterogeneous catalysis induced by microwave radiation. He developed and delivered 11 technical courses in chemical technologies for several companies and academic institutions, and has received three national prizes for scientific contribution.

At USB he has supervised the work of 18 research students of chemistry and chemical engineering, and he has directed three institutional research projects in electrochemical energy conversion. He remains as an active member of the Venezuelan Society of Electrochemistry (2008-present) and the International Society of Electrochemistry (2012-present). He has been invited speaker in 12 conferences and has participated with 52 contributions to scientific meetings.

Christian A.M. Wilson

Department of Biochemistry and Molecular Biology, Faculty of Chemistry and Pharmaceutical Sciences, Universidad de Chile, Chile eMail: yitowilson@gmail.com

Christian A.M. Wilson is an assistant professor of the University of Chile, at the department of biochemistry and molecular biology. He holds a doctorate degree in biochemistry with a postdoctoral training at the University of California at Berkeley under the supervision of professors Carlos Bustamante and Susan Marqusee.

His group is focused, among others, on determining the importance of the force associated to the domain movements of different protein to perform their function.

He is a young scientist who has participated in several projects as principal investigator and director of the network of studies in biochemistry/biophysics of manipulation of individual molecules (U-redes from University of Chile), where Chilean and foreign scientists actively participate.

He has had an outstanding role in the development of new methods for measuring enzyme activity, such as a method for measuring the glycogen synthase, enzyme involved in diabetes, which has been used by other investigators. Also, Wilson is a regional expert in the field of single molecule manipulation. One of his latest papers was published in *Nature*, showing a new way to understand enzyme catalysis and the relationship with the heat release from catalysis. He has participated in the organization of several events, such as workshops on single molecule and courses for a Latin American level. He has current collaborations and publications with Chilean, and foreign scientists. Wilson has assembled the first optical tweezers instrument to measure individual molecules in the country.

Patricia Zancan

Department of Pharmaceutical Biotechnology, Faculty of Pharmacy, Federal University of Rio de Janeiro (UFRJ), Brazil

eMail: pzancan@me.com, pzancan@ufrj.br

Patricia Zancan is associate professor at UFRJ, Brazil. She got her MSc in 2002 and her PhD, in 2005, in biological chemistry from the Institute of Medical Biochemistry Leopoldo de Meis, at UFRJ.

She served as an assistant professor in the department of pharmaceuticals, faculty of pharmacy at UFRJ (2007-2015). In 2015, she was appointed associate professor in the department of pharmaceutical biotechnology, faculty of pharmacy. In 2008, she established a novel laboratory devoted to the study of signalling in cancer biology aimed to control the development of cancer cells. During her professional career, she has supervised masters, PhD and post-doctoral fellows at high levels, contributing to the formation of qualified personnel. At the administrative level, she has acted as the head of the department (2012-2014), redimensioning the structure and the aims of the department, promoting its growth almost doubling the number of professors and researchers.

Due to these efforts, currently, the faculty of pharmacy presents a whole department (pharmaceutical biotechnology) devoted to the study of diseases and novel pharmaceutical approaches to control them.

Zancan has authored more than 30 scientific articles in peer-reviewed journals. During 2014-2015, she was in a sabbatical period at Université Laval, Quebec, Canada, where she served as invited professor working in projects related to diabetes molecular triggers.

Sub-Saharan Africa

TWAS Regional Office for Sub-Saharan Africa (TWAS-ROSSA) at the African Academy of Sciences in Nairobi, Kenya

Victorien Dougnon Tamègnon

Department of Human Biology, University of Abomey-Calavi, Abomey-Calavi, Benin eMail: victorien88@hotmail.com

Victorien Dougnon Tamègnon is a lecturer in microbiology at the Polytechnic School of Abomey. As prolific researcher, he has proven skills in applied microbiology to pharmacology. He holds a PhD in environment, health and development and has authored or coauthored many publications. A young and dynamic scientist, Dougnon has been invited around the world to present his results. He got some skills in biostatistics, which helps him to be one of the promised scientists of the Polytechnic School of Abomey-Calavi.

Tamègnon has been a student in biomedical sciences in the Polytechnic School of Abomey-Calavi, where he got a bachelor and a master as best student. Then, he got a PhD in environmental sciences and health. Fluency in French and English allows him to evolve within any team, as evidenced by his many stays in both Anglophone and Francophone countries.

His multidisciplinary career and his many experiences as a laboratory technician have given him excellent research capabilities and biological manipulations. These research activities are structured around two main axes namely the exploitation of microbiology techniques and toxicology at the service of hygiene on the one hand and exploring the flora of Benin for the development of enhanced traditional medicines. He also belongs to African and International Scientific Societies.

The work carried out in these various lines of research have contributed to:

- a better understanding of the microorganisms responsible for poisoning in Benin,
- improved laboratory practices to optimize the various microbiological diagnostics,
- an assessment of risks for gardeners regarding heavy metals and pathogenic bacteria,
- mastery of the mechanisms of action of some African plants

Olaniyi A. Fawole

South African Chair in Postharvest Technology, Department of Horticultural Sciences, Stellenbosch University, South Africa eMail: olaniyi@sun.ac.za

Olaniyi A. Fawole is a researcher in postharvest technology at Stellenbosch University (SU), South Africa. He earned a BSc at Obafemi Awolowo University in Nigeria and a MSc at the University of KwaZulu-Natal, in South Africa. In 2013 Olaniyi obtained a PhD in postharvest physiology and technology from SU. He then received the prestigious Claude Leon Foundation award to pursue a postdoctoral study at SU (2013 – 2015).

In 2016 he was appointed as a researcher in postharvest technology at Stellenbosch University. His research interests range from postharvest technology and functional properties of horticultural crops, to value-addition and strategies to utilise horticultural wastes.

Fawole's pioneering research on generating scientific knowledge to support the production and postharvest handling of pomegranates was the first such research in the Southern hemisphere. He developed science-based harvest index to assess pomegranate fruit readiness and postharvest protocols for cold storage of pomegranate fruit in South Africa.

His research outputs have included five postharvest short courses and workshops, 20 conference presentations and over 35 peer-reviewed research papers in impact factor journals with an H-Index of 14, i10-Index of 18 and 635 citations as of October 2016.

In recognition of his academic excellence, he was awarded the National Research Foundation Y1-rating (Young Promising Scientist) within two years post-PhD. He was also selected as a future global leader to participate in the Future Leaders Program of the Annual Meeting of the Science and Technology in Society Forum, Japan, 2016.

Michelle Greve

Department of Plant and Soil Sciences, University of Pretoria, Hatfield, South Africa eMail: michelle.greve@up.ac.za

Michelle Greve is a senior lecturer in the department of plant and soil sciences at the University of Pretoria. She completed her PhD on the patterns of diversity and distribution of African vegetation at macroecological scales at Aarhus University in Denmark, in 2011.

Thereafter, she took up a postdoctoral fellowship at Aarhus University until she was appointed in her current position, in 2013. Her research reflects her interest in biogeography, i.e. understanding how patterns of diversity and distribution of organisms have come about, what these patterns tell us about the evolutionary drivers of these patterns, and how we can use this information for conservation prioritisation, with a particular focus on the Southern Hemisphere.

Her work has made significant contributions to the understanding of the biogeography of the region, but has also advanced the field of biogeography conceptually.

Greve has published in journals such as *Nature Communications*, *Global Ecology and Biogeography* and *Journal of Biogeography*, and her work has been featured in *Science* and in the popular media. She has been awarded an Y1 (promising young researcher) rating from the South African National Research Foundation. She is a fellow of the Tuks Young Leadership Programme at the University of Pretoria.

Julius Kofi Hagan

Department of Animal Science, School of Agriculture, University of Cape Coast, Cape Coast, Ghana

eMail: jhagan1@ucc.edu.gh

Julius Hagan is a senior lecturer at the department of animal science, School of Agriculture, University of Cape Coast, Cape Coast, Ghana. He earned his BSc in agriculture at the University of Cape Coast in 2003, and a PhD in animal breeding and genetics at the Kwame Nkrumah University of Science and Technology, Ghana in 2010. He served as a senior research assistant at the University of Cape Coast in 2004 and was promoted to the position of principal research assistant in 2008. He became a lecturer in 2011 and was subsequently promoted to a senior lecturer in 2014. He is currently the head of department, department of animal science, School of Agriculture, University of Cape Coast.

His research interests range from the incorporation of heat-tolerant or thermo-regulatory genes in exotic layers for improved egg production under warm and humid environments in Ghana and the tropics; conservation of local animal genetic resources for food security; assessing the presence and frequency of useful mutant heat-tolerant genes in local livestock genetic resources.

He is also interested in assessing the growth and reproductive performance of local livestock species. Julius Hagan has authored more than 20 scientific articles in internationally reputable peer-reviewed journals, as well as several articles in local and international conference proceedings.

He has sound graduate and undergraduate teaching experience, and has supervised two MPhil and two PhD students and over 40 undergraduate students. He was awarded the 3rd best young professional scientist in Africa in 2013 by CTA and his innovation was selected as one of the top 20 innovations in the world by CTA, in 2014. He is a fellow of Science and Technology for Society (STS, Tokyo, 2016).

Hudaa Neetoo

Department of Agriculture and Food Science, Faculty of Agriculture, University of Mauritius, Reduit, Mauritius

eMail: s.neetoo@uom.ac.mu, hudaaneetoo@gmail.com

Hudaa Neetoo is currently a lecturer in microbiology in the faculty of agriculture of the University of Mauritius. She holds a BSc (Hons.) degree in biochemistry from Imperial College London and a Master and PhD in Food Science from the University of Delaware, U.S. Her scientific interests are in the field of food and environmental microbiology, spanning a wide range of topics. She has supervised more than 35 BSc students and has authored more than 40 scientific articles in peer-reviewed journals, as well as six book chapters. She has taught a wide range of courses, ranging from food and environmental microbiology, biochemistry, microbial ecology and epidemiology among others.

She is the reviewer of several international journals including *International Food Research*, *Innovative Food Science and Technology* and Food Hydrocolloids. She won the 2nd prize for the 2014 Best Young Mauritian Scientist Prize awarded by the Mauritius Research Council.