

King Abdullah University of Science and Technology

FACULTY

RECOGNITION DINNER

Monday, November 06, 2023 Celebrating Excellence

Suzana Nunes

Vice Provost,
Faculty and Academic Affairs



The background is a solid purple color. There are decorative gold-colored curved lines in the corners: a single thick line in the top-left, multiple thin lines in the top-right, and multiple thin lines in the bottom-left.

Promotions 2023

BESE

Biological and
Environmental Science
and Engineering Division



Michael Berumen
Associate Dean of Students



Christian Froekjaer-Jensen

Promoted to Associate Professor
Bioscience

Christian Froekjaer-Jensen obtained his Ph.D. in Biomedical Science from the University of Copenhagen, Denmark, in 2008. He did postdoctoral research in the US at the Howard Hughes Medical Institute at the University of Utah and Stanford University. Since starting his laboratory, Dr. Froekjaer-Jensen has garnered recognition for his expertise in synthetic biology, particularly studying genome organization and epigenetic gene regulation using *C. elegans* as a model system. His contributions to education at KAUST include helping restructure the first-year Cell Biology course and establishing the Lab Rotation course, both vital components of the Bioscience program for incoming master's students. Furthermore, Dr. Froekjaer-Jensen's collaborative work with his students and researchers has resulted in groundbreaking research findings featured in prestigious scientific journals, such as *Nature Methods* and *Nature Communications*, thus solidifying their impact and influence within the scientific community.



Simon Krattinger

Promoted to Associate Professor
Plant Science

Simon Krattinger obtained his Ph.D. in Plant Biology at the University of Zurich, Switzerland, in 2009. Since joining KAUST in 2017, Dr. Krattinger has established a prominent research theme centered around molecular plant genetics and genomics in cereals. His research endeavors primarily revolve around unraveling the intricate genetic and molecular mechanisms underlying durable disease resistance in wheat and barley. Additionally, he delves into the genetics of cereal crop species and their wild crop relatives, providing valuable insights into population genetics, disease resistance, methods development, and neo-domestication. The impact of Dr. Krattinger's research is profound, with the potential to revolutionize the understanding of plant genetics and contribute significantly to addressing challenges in agriculture and food security. His collaborative efforts with students and fellow research scientists have been featured in prestigious scientific journals, including but not limited to Nature, Nature Genetics, and Nature Plants.



Manuel Aranda

**Promoted to Professor
Marine Science**

Manuel Aranda obtained his Ph.D. in Biology from the University of Cologne, Germany, in 2006. Dr. Aranda possesses expertise in evolutionary biology, with a strong foundation in functional genetics and coral reef genomics. He has been focusing on assisted evolution approaches to improve the thermal resilience of corals actively. He has developed a technological platform that facilitates the integration of assisted evolution approaches and reduces the costs of coral reef restoration. The Kingdom has recognized the potential of this technical platform, which led to the creation of the world's largest coral reef scape project at Shushah Island in NEOM. The Shushah Island reefscape project will serve as a testbed for said technologies and assisted evolution restoration approaches. His research group is dedicated to unraveling the molecular intricacies of the cnidarian-algal symbiosis and understanding how this delicate relationship can break down under environmental stress. They investigate the underlying mechanisms driving these processes by employing functional genomics and genetics approaches. Dr. Aranda's collaborative efforts with his students and fellow researchers have resulted in several papers published in prestigious scientific journals, including but not limited to Science Advances, Nature, Cell, Nature Genetics, Nature Communications, Nature Climate Change, and the Proceedings of the National Academy of Sciences.



Peiying Hong

Promoted to Professor

Environmental Science and Engineering

Peiying Hong obtained her Ph.D. in Environmental Science and Engineering at the National University of Singapore in 2009. Dr. Hong focuses on addressing water scarcity, with a strong emphasis on ensuring freshwater availability despite the severe challenges imposed by climate change. Her group identifies critical knowledge gaps and exploits new approaches to deliver novel insights that advance water reuse programs safely and sustainably. Dr. Hong's remarkable contributions to the "Antibiotic Resistome" field have earned her a position among the top 150 authors worldwide in this specialized area, as recognized by Scival. She is the sole scientist in Saudi Arabia to achieve this prestigious distinction. Her outstanding research accomplishments have significantly contributed to understanding antibiotic resistance in wastewater, paving the way for innovative approaches to tackle this global challenge. In addition to her research achievements, Dr. Hong's exemplary teaching skills have been acknowledged through her nomination as one of the two BESE faculty members for the 2021 Distinguished Teaching Award. Collaborating with her students and fellow researchers, Dr. Hong's work has garnered several awards. She is the recipient of the 2019 James J. Morgan Environmental Science and Technology Early Career Award and one of the four named Finalists of the Letten Prize 2023, awarded by the Letten Foundation and the Young Academy of Norway.



Lukasz Jaremko

Promoted to the rank of
Associate Professor
Bioscience

Lukasz Jaremko obtained his Ph.D. in Physical Chemistry from the University of Warsaw, Poland, in 2012. He then moved to the Max Plank Institute for Biophysical Chemistry in Goettingen, Germany, where he worked as a post-doc fellow until 2017. Since joining KAUST in 2017, he has established a research program to develop methods, particularly in biomolecular NMR spectroscopy, and used them to tackle molecular mechanisms of gene expression miss-regulation in cancer and to develop drug candidates against identified oncogenes. His research focuses on understanding the structural dynamics of biomolecules and how they relate to health and disease. His work with his students and research scientists resulted in several publications in recognized conferences in his field, and he made numerous contributions that have been published in prestigious scientific journals, such as Nature, Nature Chemical Biology, Nature Genetics, Nature Communications, and Molecular Cell.

CEMSE

Computer, Electrical, and
Mathematical Science and
Engineering Division



Gianluca Setti

Dean



Andrea Fratalocchi

Promoted to Professor

Effective January 1, 2023

Electrical and Computer Engineering

Andrea Fratalocchi joined KAUST in January 2011. Before joining KAUST, Andrea Fratalocchi was a Research Fellow at the Sapienza University of Rome. From 2007 to 2009, Andrea Fratalocchi worked as a post-doctoral researcher at Sapienza University under a "New Talent" Award from the research center "Enrico Fermi." In 2019, he was elected a Fellow of the Institute of Physics and Optica (former OSA). Andrea Fratalocchi's research translates sustainable technologies that tackle the contemporary problems of global interest, ranging from energy harvesting, digital healthcare, information security, and global warming. Collaborating with his students and fellow researchers, Dr. Fratalocchi has garnered several prestigious accolades, including multiple awards at recognized conferences within his field. Moreover, his significant contributions have been published in esteemed scientific journals such as Nature, Advanced Materials, Physical Review Letters, Nanophotonics, and Applied Physics Letters. According to the standardized citations index collected by PLOS, Dr. Fratalocchi is among the top 2% of scientists in Photonics worldwide. Andrea Fratalocchi co-founded Pixeltra, a startup company implementing artificial intelligent hardware and software hyperspectral technology for security, food safety, remote sensing, environmental and medical applications.



Basem Shihada

**Promoted to Professor
Effective January 1, 2023
Computer Science**

Basem Shihada obtained his Ph.D. in Computer Science from the University of Waterloo, Canada, in 2007. Shortly after completing his studies, Dr. Shihada joined KAUST as a Founding Faculty member in 2008. His expertise lies in developing cutting-edge wireless systems, where he has made groundbreaking contributions across various domains, including intelligent wireless systems, wireless underwater systems, molecular communication systems, and non-terrestrial systems. Dr. Shihada's notable achievements are the creation and successful demonstration of Aqua-Fi, the world's first underwater Wi-Fi. This pioneering work represents a significant breakthrough, enabling high-speed internet connectivity in aquatic environments. Collaborating closely with his students and fellow researchers, Dr. Shihada's work has been recognized with several best paper awards at renowned conferences within his field. His invaluable contributions have also been published in prestigious scientific journals such as Nature Electronics, IEEE Transactions on Communications, and IEEE Transactions on Wireless Communications.

PSE

Physical Science
and Engineering Division



Chak Chan

Dean



Hussein Hoteit

**Promoted to Professor
Energy Resources and Petroleum
Engineering**

Hussein Hoteit obtained his Ph.D. at INRIA, a renowned French institution for computational sciences, in 2002. Since joining KAUST in 2016, Dr. Hoteit has been focusing on numerical modeling and related experimental investigations of complex mechanisms of hydrocarbon recovery from subsurface reservoirs and underground storage of carbon dioxide. His work involves developing numerical methods to model coupled hydro-thermo-chemo-mechanical processes and conducting problem-driven experiments at micro and macro scales. Dr. Hoteit successfully established one of the largest and most accomplished multidisciplinary research groups at KAUST. His dedication and expertise have been widely recognized, earning him the prestigious SPE Outstanding Service Award in 2022. Furthermore, Dr. Hoteit is highly regarded as an educator and was honored with the KAUST Distinguished Teaching Award in 2021. Dr. Hoteit's commitment to the scientific community extends beyond his research and teaching roles. He has made substantial contributions to the Society of Petroleum Engineers, serving in various capacities and acting as an associate editor for three esteemed SPE journals, including the flagship Journal of Petroleum Technology.



Gaetano Magnotti

Promoted to the rank of Associate
Professor
Mechanical Engineering

Gaetano Magnotti obtained his Ph.D. in Mechanical and Aerospace Engineering at George Washington University, United States 2012. Since joining KAUST in 2016, Dr. Magnotti has focused on understanding the fundamental physics underlying sustainable combustion solutions to decarbonize the energy and the heavy-duty transportation sector. His approach combines developing and applying novel, laser-based diagnostics with carefully designed canonical configurations that maintain the relevant physics but offer extensive optical access and well-defined boundary conditions. Dr. Magnotti's work, conducted in collaboration with his students and research scientists, has garnered significant recognition and has been published in prestigious conferences and journals such as Optics Letters, Fuel, Combustion, and Flame. Their collective efforts led to the prestigious Silver Medal from the Combustion Institute for the best paper at the 39th International Symposium.

