Two UC Irvine faculty members elected to National Academy of Engineering

Kyriacos Athanasiou and Eric Rignot recognized for outstanding research leadership.
Wednesday, February 12, 2025
Brian Bell
UC Irvine News





Kyriacos Athanasiou, Distinguished Professor of biomedical engineering, left, and Eric Rignot, Distinguished Professor of Earth system science, have been elected new members of the National Academy of Engineering. They are among 128 new U.S.-based NAE members.

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UC Irvine

Irvine, Calif., Feb. 12, 2025 — Two University of California, Irvine faculty members have been elected to the National Academy of Engineering, one of the highest professional distinctions accorded to those pursuing research, education and applications in engineering and technical fields. Kyriacos Athanasiou, Distinguished Professor of biomedical engineering, and Eric Rignot, Distinguished Professor of Earth system science, are among 128 new U.S.-based NAE members.

NAE membership honors those who have made outstanding contributions to engineering research, practice or education, including significant contributions to the engineering literature. Election to membership also recognizes the "pioneering of new and developing fields of technology, making major advancements in traditional fields of engineering or developing/implementing innovative approaches to engineering education," according to an NAE statement.

"Congratulations to Professors Athanasiou and Rignot on this exceptional professional achievement," said Hal Stern, UC Irvine provost and executive vice chancellor. "Election to the academy is a recognition of their impactful scientific contributions to society, which are helping to provide bioengineering solutions for musculoskeletal afflictions and to advance our understanding of the effects of global climate change."

Athanasiou, who also holds the title of Henry Samueli Chair of biomedical engineering, was named by the NAE for his contributions to the understanding and treatment of musculoskeletal afflictions and for his leadership in bioengineering. Having established one of the world's most recognized research groups in tissue regeneration, Athanasiou explores the interface of engineering, medicine, surgery, veterinary surgery, life sciences and business. His functional, tissue-engineered cartilage replacements can be used all over the body – from nose and ears to shoulders, spine, hips and knees.

Athanasiou's groundbreaking work has significantly impacted health science and technology. He is a leading authority on translating engineering innovations into commercially available medical instruments, devices and biologics. Alongside his membership in the NAE, Athanasiou is an elected member of the National Academy of Medicine and the National Academy of Inventors, and he is a fellow of the American Association for the Advancement of Science.

“I am deeply honored by this recognition by my peers in the National Academy of Engineering,” said Athanasiou. “Helping people all over the world who suffer from the pain and debilitation of joint and musculoskeletal deficiencies is what guides my laboratory’s efforts each day, so I am glad to receive this recognition from my esteemed colleagues.”

Rignot was honored by the NAE electors for his contributions to modeling and analyzing the effects of global climate change on polar ice sheets. He utilizes a variety of technologies, including synthetic-aperture radar satellites, airborne laser and radio echo sounding sensors, and submersible robots to collect field data, alongside climate and ice sheet numerical models to comprehend the dynamics of glacier ice along the coasts of the Antarctic and Greenland ice sheets and their impact on sea level rise.

His research has documented a significant acceleration of ice loss due to climate change and has been featured by leading news outlets, including the *New York Times*, *Los Angeles Times, Washington Post*, BBC, CNN, *National Geographic* and many others.

Rignot was elected a Member of the National Academy of Sciences in 2018, and he is a fellow of the American Geophysical Union and the American Association for the Advancement of Science. He also received NASA’s Exceptional Scientific Achievement Medals and Outstanding Leadership Medals.

From 2014 to present, he has been named among the world’s most influential researchers in geoscience on the Thomson Reuters Highly Cited Researchers list. He is a co-author of the Fourth Intergovernmental Panel on Climate Change Report, which received the 2007 Nobel Peace Prize. In addition to his appointment at UC Irvine, he holds a position as a senior research scientist at NASA’s Jet Propulsion Laboratory.

“I am very thankful to have heard about this honor by the National Academy of Engineering while on expedition in East Antarctica,” said Rignot. “It means a lot to me, our research group at UC Irvine, and to our glaciological community that work to study the impacts of climate change on our amazing polar regions is important to our colleagues in the NAE. I am deeply grateful for the recognition.”

With the election of Athanasiou and Rignot, UC Irvine now has 17 members in the National Academy of Engineering.

UC Irvine's Brilliant Future campaign: Publicly launched on Oct. 4, 2019, the Brilliant Future campaign aims to raise awareness and support for the university. By engaging 75,000 alumni and garnering $2 billion in philanthropic investment, UC Irvine seeks to reach new heights of excellence in student success, health and wellness, research and more. The Henry Samueli School of Engineering and School of Physical Sciences play a vital role in the success of the campaign. Learn more at https://brilliantfuture.uci.edu/the-henry-samueli-school-of-engineering/ and https://brilliantfuture.uci.edu/uci-school-of-physical-sciences/.

About the University of California, Irvine: Founded in 1965, UC Irvine is a member of the prestigious Association of American Universities and is ranked among the nation's top 10 public universities by *U.S. News & World Report*. The campus has produced five Nobel laureates and is known for its academic achievement, premier research, innovation and anteater mascot. Led by Chancellor Howard Gillman, UC Irvine has more than 36,000 students and offers 224 degree programs. It's located in one of the world's safest and most economically vibrant communities and is Orange County's second-largest employer, contributing $7 billion annually to the local economy and $8 billion statewide. For more on UCI, visit www.uci.edu.

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