

## Nai-Chang Yeh, PhD

Thomas W. Hogan Professor of Physics, California Institute of Technology

Mail Code 149-33, Condensed Matter Physics, Caltech 1200 E. California Blvd., Pasadena, CA 91125, USA. TEL: +1-626-395 4313 E-Mail: <u>ncyeh@caltech.edu</u> Web: <u>https://yehgroup.caltech.edu/</u> <u>http://kni.caltech.edu/</u> <u>http://www.iqim.caltech.edu/</u>

Nai-Chang Yeh is currently the Thomas W. Hogan Professor of Physics at the California Institute of Technology (Caltech). Her principal research field is experimental condensed matter physics, with special emphasis on quantum materials, quantum devices, nanoscience, and nanotechnology. Her research group currently engages in studies of the science and technology of correlated electrons, topological materials, low-dimensional systems, valleytronics, spintronics, optoelectronics, nanophotonics, nanoscience, nanotechnology, and energy research. To date she has over 160 papers published in refereed scientific journals and one book chapter published by *World Scientific Publishing Company*, has been awarded 9 patents, and has also published an autobiography (in Chinese) with *Business Weekly* in Taiwan.

Yeh received her BSc degree from the National Taiwan University in June of 1983 and her PhD degree in physics from the Massachusetts Institute of Technology in January of 1988. She was a visiting scientist at IBM Thomas J. Watson Research Center from 1988 to 1989 and joined the physics faculty of Caltech as an assistant professor in August of 1989. She was tenured as an associate professor in 1995 and promoted to full professorship in 1997. She is the first tenured woman professor in physics and also the first tenured Asian woman professor at Caltech. Her professional honors include: Highlight Yushan Scholar, Ministry of Education, Taiwan (2022-2025); Yushan Fellow Distinguished Professor, National Taiwan Normal University, Taipei, Taiwan (2022-2025); Distinguished Visiting Professor, Shanghai University, China (2019); Achievement Award, Tsien Excellence in Education Program, Tsinghua University, China (2019); Visiting Chair Professor, National Central University, Taiwan (2017-2018); Eminent Visiting Professor, Universiti Brunei Darussalam (UBD), Brunei (2014–2015); Visiting Chair Professor, Center for Nano and Micro Mechanics (CNMM), Tsinghua University, Beijing, China (2012-2014); Wu Chien-Shiung Distinguished Lectureship Award (吳健雄講座), National Central University & Wu Chien-Shiung Foundation (2012); Fellow, American Association for the Advancement of Science (2007); Fellow, American Physical Society (2004); Distinguished Alumni Award, Department of Physics, National Taiwan University (2003); Fellow, The Institute of Physics, UK (2001); Faculty Achievement Award, Southern California Chinese-American Faculty Association (2001); Outstanding Young Researcher Award, International Organization of Chinese Physicists and Astronomers (OCPA) (1998); Packard Fellowship for Science and Engineering (1992– 1997); and *Sloan Research Fellowship* (1990–1992). In 1991, the *Time* Magazine named her a scientific "rising star" in California. In 2016, BBC World News featured her research in one of the Horizon episodes "Abundant World".

Professor Yeh has also served on many national and international committees and professional activities. Some of her recent roles include: General Councilor, American Physical Society, USA (2022–2026); Member, Board of Directors, American Physical Society, USA (2024–2026); Member, National Academies Committee on The Current Status and Future Direction of High Magnetic Field Science in the United States, Phase II (2023-2024); Member, Academic Advisory Committee, Institute of Physics, Academia Sinica, Taiwan (2020-present); Member, Academic Advisory Committee, Research Center for Applied Sciences, Academia Sinica, Taiwan (2023-present); Member, Committee on Equal Opportunities in Science and Engineering (CEOSE), National Science Foundation, USA (2016 – 2023); Member, American Physical Society (APS) Development Committee & Task Force on International Collaborations (2016–2018); Fletcher Jones Foundation Co-Director of the Kavli Nanoscience Institute, California Institute of Technology (2013–2019); Handling Editor, Reviews in Physics, Elsevier, The Netherlands, (2015–2019); International Advisor, Physics Honor's Program, Shanghai Jiao Tong University, Shanghai, China (2015–present); International Advisor, Tsien Excellence in Education Program, Tsinghua University, Beijing, China (2014-present); President, International Organization of Chinese Physicists and Astronomers (2013–2014); Member, International Advisory Committee, Chinese High Magnetic Field Laboratory (2009-present); Member at Large, Division of Condensed Matter Physics, APS (2011-2014); Member, Presidential Science Prize Selection Committee (Physical Sciences), Taiwan (2011, 2013, 2015); Member, Presidential Search Committee, National Taiwan University (2012–2013); Member, Scientific Advisory Board, Center of Electronic Correlations and Magnetism, University of Augsburg, Germany (2008–2018); Member, Steering Committee, Keck Institute for Space Studies (KISS), USA (2008–2013); Member, External Advisory Committee, National High Magnetic Field Laboratory (NHMFL), USA, (2004-present).