

GIFT's Sustainable Energy Program and University-Industry Collaboration with CATL

Professor Jun Ni

Dean, Global Institute of Future Technology
Shanghai Jiao Tong University, China
CATL CMO

Abstract: Shanghai Jiao Tong University Global Institute of Future Technology (GIFT) is one of the first 12 Future Technology Institutes established by the Ministry of Education of China. Founded on August 19, 2021, GIFT is committed to building an internationally influential faculty, creating a cutting-edge interdisciplinary teaching and research platform, and cultivating innovative technology leaders who can respond to global challenges and contribute to future development. Focusing on sustainable energy, one of the two major directions of GIFT, a comprehensive program has been designed and implemented, making full use of resources from academia and industry. In particular, a unique new curriculum system has been developed to provide students with opportunities to learn and practice sustainable energy knowledge from all aspects of science, engineering, society and economics. A series of centers have also been established to focus on cutting-edge and impactful future research directions and to provide advanced platforms for educational purposes. In addition, long-term cooperation with leading industry partners such as CATL is essential for understanding practical challenges in the field of sustainable energy, generating advanced and implementable solutions, training students with the latest technology and equipment, and ultimately establishing a win-win relationship between universities and industries.

Bio: Professor Jun Ni is the Dean of Global Institute of Future Technology (GIFT) at Shanghai Jiao Tong University, China and Chief Manufacturing Officer of Contemporary Amperex Technology Co., Ltd (CATL). He is also the Shien-Ming (Sam) Wu Collegiate Professor Emeritus of Manufacturing Science and Professor Emeritus of Mechanical Engineering at the University of Michigan, USA. He served as the founding Dean of the University of Michigan – Shanghai Jiao Tong University Joint Institute located in Shanghai, China. He was also the director of the Wu Manufacturing Research Center and the co-director of a National Science Foundation sponsored Industry/University Cooperative Research Center for Intelligent Maintenance Systems at the University of Michigan. Professor Ni has published over 500 technical papers, and supervised 99 PhD graduates and 65 MS graduates. Selected honors and awards include 20 Most Influential Professors in Smart Manufacturing from Society of Manufacturing Engineers in 2020, Stephen Attwood Award from the University of Michigan in 2015, 2014 Alexander Schwarzkopf Award for Technology Innovation by NSF-IUCRC Association, 2013 International Science and Technology Cooperation Award from the People's Republic of China, 2013 Gold Medal from Society of Manufacturing Engineers, 2013 S. M. Wu Research Implementation Award from North American Manufacturing Research Institute, 2009 Ennor Manufacturing Technology Award from American Society of

Mechanical Engineering, and 1994 Presidential Faculty Fellows Award. He is an elected Fellow of International Society of Engineering Asset Management, International Society for Nanomanufacturing, American Society of Mechanical Engineers, and Society of Manufacturing Engineers.