

Chien-Ho Ko

- Keynote Title:

Applications of Construction Safety Technologies: Work Zone Geo-Fencing Systems

- Biography:

Prof. Chien-Ho Ko is a Research Professor in the Department of Civil, Environmental & Architectural Engineering and a Director of the Craig and Diane Martin National Center for Construction Safety (NCCS) at the University of Kansas (KU), USA. He received a B.S. in Construction Engineering from National Taiwan Institute of Technology and an M.S. and Ph.D. in Construction Management from National Taiwan University of Science and Technology. He then pursued his postdoctoral research at the University of California at Berkeley, exploring lean construction with Dr. Iris D. Tommelein and Dr. Glenn Ballard. A Registered Professional Engineer of Fire Protection, he has previously served as a construction officer, second lieutenant, managing design—build projects for military dependents at the Ministry of National Defense.

Prof. Ko began his academic career as an Assistant Professor and was promoted to Associate and Full Professor of Civil Engineering at National Pingtung University of Science and Technology. He spent his sabbatical leave at the Massachusetts Institute of Technology (MIT) as a Visiting Scholar.

Chien-Ho has been conferred numerous academic awards, including best paper, outstanding professor, research, and teaching awards. He has published over 40 refereed journal papers and 70 conference papers. He also has participated as Principal Investigator in over 40 research projects funded e.g. by the National Science Council. Additionally, he is an inventor, with more than 30 patents. Dr. Ko is a reviewer for more than 30 different journals, serves on the editorial boards of 20 more, and is the current Editor-in-Chief of the Journal of Engineering, Project, and Production Management (Scopus and Ei indexed).

Dr. Ko is a pioneer in construction safety where he creates new knowledge and practical solutions to industry challenges. He has served as the Director of the NCCS at KU since 2021. Since 2022, he has organized an annual Construction Safety Conference (CSC) that provides a unique platform for disseminating construction safety knowledge and translating these research findings into practical applications. Through the KU endowment's permanent financial support, Dr. Ko organizes two roadway construction safety trainings per year. He also acts as the Editor-in-Chief to disseminate findings on construction safety by publishing a special issue on that same topic in the Journal of Engineering, Project, and Production Management every year. Finally, to attain real-world insight, Dr. Ko actively engages with the construction industry about modern safety challenges. He is currently working with more than 13 construction companies, providing innovative and practical solutions for improving construction safety in the workplace. His research results are announced at the annual NCCS Advisory Board Meetings and published in peer-reviewed journals and conferences. He also holds numerous patents for his research products and innovative ideas in improving construction safety.