



Prof. WONHO CHOE

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Prof. Wonho Choe is a Professor in the Department of Nuclear and Quantum Engineering at the Korea Advanced Institute of Science and Technology (KAIST), with joint appointments in Physics, Aerospace Engineering, the Space Institute, and the Institute for Security Convergence. He earned his Ph.D. in Astrophysical Sciences (Plasma Physics) from Princeton University, following B.A. and M.S. degrees from Seoul National University.

His research encompasses low-temperature plasmas, nuclear fusion plasmas, ExB plasma physics, electric propulsion, and the development of advanced plasma imaging diagnostics. Among his recent research interests is the study of plasma–liquid systems, addressing fundamental scientific questions in the field. He has authored over 200 SCI(E) papers, including in *Nature* and *Nature Communications*, elucidating novel physical phenomenon occurring at the plasma–liquid interface. Beyond pioneering basic research, he regards the practical implementation of basic science results as the true completion of research and development, and has advanced the industrial relevance of plasma science through applied feasibility studies. Guided by this perspective, he has advanced the industrial relevance of plasma science through application feasibility studies, leading to the establishment of two startup companies with his graduate students, Plasmapp Co., Ltd. (listed on KOSDAQ) and Cosmo Bee Co., Ltd., both recognized as exemplary cases of translating fundamental science into industrial innovation.

Wonho Choe has held key leadership positions, including Director of two university fusion plasma research centers over 12 years, President of the KAIST Faculty Council, and editorial roles with *Journal of Physics D: Applied Physics*, *European Physical Journal D*, and *Journal of Plasma Physics*. He served on the ITER Science and Technology Advisory Committee for more than a decade. He chaired the Asian Joint Committee – Applied Plasma Science and Engineering (AJC-APSE) in 2022–2023, leading the 13th Asia–Europe International Conference on Plasma Surface Engineering (AEPSE 2023) as Conference Chair. He also served as Co-Chair of the 18th and 19th International Conference on Plasma Surface Engineering (PSE 2022 & 2024) and was the founding Chair of the International Fusion and Plasma Conference (iFPC 2022 & 2023). He will serve as Chair of the AAPPS Division of Plasma Physics for the 2025–2026 term.

His contributions have been recognized with Korea’s Order of Science and Technology Merit (2023), as well as national awards from the Prime Minister and the Minister of Education, Science and Technology, and the Academic Achievement Award from the Korean Vacuum Society.