

## Prof. Yoshiyuki Kawazoe

Name : Prof. Yoshiyuki Kawazoe  
Current Affiliation : New Industry Creation Hatchery Center, Tohoku University  
Ph.D : Tohoku University, Japan  
Research Interests :

- Basics in theoretical materials science
- First principles calculation formulation and software
- New nanocarbon allotropes
- Gas storage materials (Hydrogen, CO<sub>2</sub>, etc. in Clathrate and MOF)

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Brief CV :

Prof. Yoshiyuki Kawazoe is a distinguished computational materials scientist currently serving as a Senior Research Fellow at the New Industry Creation Hatchery Center (NICHe), Tohoku University, Japan. With a prolific academic career spanning several decades, he began as a Research Associate in 1975 and rose to become a Full Professor at the Institute for Materials Research, Tohoku University, in 1990. He has held visiting and distinguished professorships at international institutions such as SRM Institute of Science and Technology (India), Suranaree University of Technology (Thailand), and serves as Director of the ICT Centre in Vietnam. He is the founder of the Asian Consortium on Computational Materials Science (ACCMS) and has played a pivotal role in shaping the field across Asia. Prof. Kawazoe has authored over 1,200 peer-reviewed journal articles, published more than 50 books, and holds 10 patents. His work has been cited over 30,000 times, with an h-index exceeding 75, making him one of the most influential researchers in his field. He has developed advanced computational tools such as the Tohoku Mixed Basis Orbitals (TOMBO) simulation package and has contributed original insights challenging traditional models like the Hubbard model in solid-state physics. In addition to his research, he has mentored over 30 PhD scholars and 45 master's students from around the world, many of whom occupy prominent academic and industrial positions. His contributions to nanoscience, magnetism, superconductivity, and energy materials have earned him global recognition, including awards and memberships in prestigious scientific organizations.

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- Iyakutti, K., Rence P. Reji, K. Ajaijawahar, A. Karthigeyan, and Y. Kawazoe. "Exploring hydrogen storage properties of Graphene-MgH<sub>2</sub> systems: A combined computational and experimental study." *International Journal of Hydrogen Energy* 139 (2025): 740-752.
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