Stanford



Woongbi Cho

Postdoctoral Scholar, Mechanical Engineering

Bio

BIO

Woongbi Cho is a postdoctoral scholar in the Department of Mechanical Engineering at Stanford University. He received his B.S. in Polymer Science and Engineering from Inha University in February 2019 , and his Ph.D. in Organic and Nano Engineering from Hanyang University in February 2025. His doctoral research focused on developing next-generation polymer composites, emphasizing processing-structure-property-performance (PSPP) relationships in liquid crystalline and sulfur-rich polymers. Currently, Woongbi's research interests center on adaptive materials, electromagnetically (EM)-driven soft robotics, polymer assembly mechanisms, and active metamaterials for applications in soft robotics, optoelectronics, and energy harvesting.

HONORS AND AWARDS

- Prof. Choi Sam Kwon Ph.D. Dissertation Award, Polymer Society of Korea (PSK) (2025)
- Ph.D. Dissertation Award, Hanyang University (2025)
- Ph.D. Dissertation Award, The Research Institute of Industrial Science, Hanyang University (2025)
- Excellent Student Oral Presentation Award, The 7th International Conference on Active Materials and Soft Mechatronics (2024 AMSM) (2024)
- Excellent Oral Presentation Award, Polymer Society of Korea (PSK) (2024)
- Outstanding Discussant Award, The 24th Korea Liquid Crystal Conference (2024)
- Excellent Oral Presentation Award, The 23rd Korea Liquid Crystal Conference (2023)

PROFESSIONAL EDUCATION

- Ph.D., Hanyang University , Organic and Nano Engineering (2025)
- B.S., Inha University , Polymer Science and Engineering (2019)

STANFORD ADVISORS

- Renee Zhao, Postdoctoral Faculty Sponsor

LINKS

- Linkedin: https://www.linkedin.com/in/woongbi-cho-2461a8254
- Google Scholar: https://scholar.google.com/citations?user=oCeRWgoAAAAJ&hl=ko

Publications

PUBLICATIONS

- **Physically Intelligent Liquid Crystalline Polymers for Soft Robotics and Shape-Reconfigurable Devices** *ACS APPLIED OPTICAL MATERIALS*
  Hahm, M., Cho, W., Jeon, J., Yang, K., Wie, J.
  2026

- **Light-Fueled In-Operando Shape Reconfiguration, Fixation, and Recovery of Magnetically Actuated Microtextured Covalent Adaptable Networks** *ADVANCED MATERIALS*
  Yoon, Y., Moon, H., Cho, W., Lee, D., Jeong, S., Wie, J., Kim, C.
  2025; 37 (39): e2503161