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Education

- Feb. 2014 Ph.D., Materials Science and Engineering, Seoul National University, Seoul, Korea
(PI: Prof. Ji Young Chang)
- Feb. 2008 B.S., Environmental Materials Science (*minor in Materials Science and Engineering*), Seoul National University, Seoul, Korea
- Feb. 2003 Daeil Foreign Language High School, Seoul, Korea

Work Experience

- Apr. 2023–present Professor, Polymer Science and Engineering, Chonnam National University, Gwangju, Korea
- Apr. 2023–Jan. 2024 Visiting Scholar, Materials Science and Engineering, University of Michigan, Ann Arbor, MI
(with Prof. Abdon Pena-Francesch)
- Mar. 2020–Apr. 2023 Associate Professor, Polymer Science and Engineering, Chonnam National University, Gwangju, Korea
- Mar. 2017–Feb. 2020 Assistant Professor, Polymer Science and Engineering, Chonnam National University, Gwangju, Korea
- Mar. 2014–Jan. 2017 Postdoc, Chemistry, Pennsylvania State University, University Park, PA (PI: Prof. Scott T. Phillips)

Research Field

- **Keywords:** molecular design / organic synthesis / polymerization–depolymerization / self-degradable materials / sustainable materials / biomedical materials
- Design and synthesis of polymers for sustainable applications
- Development of chemical mechanisms for renewable/degradable plastics
- Functional polymers for biomedical or healthcare use

Publication

1. Ji Woo Kim,[†] Jin Hui Jo,[†] Songah Jeong, Won Seok Chi,* and **Hyungwoo Kim*** Covalent and Non-Covalent Approaches to Suppress Plasticization of Polymer Membranes for Gas Separation. *Chem. Commun.*, **2023**, 59, 6987–7003.
([†]contributed equally) (Feature article)
-highlighted on the back cover of Issue 46
2. Byeongjun Choi, Ji Woo Kim, Geunyoung Choi, Songah Jeong, Eunpyo Choi, and **Hyungwoo Kim*** Grafting Self-Immolative Poly(benzyl ether)s Toward Sustainable Adhesive Thermosets with Reversible Bonding and Triggered De-

- Bonding Capabilities. *J. Mater. Chem. A*, **2023**, 11, 10538–10544.
- Jingzhe Sun, Dahye Ahn, Junseo Kim, Seunghye Han, Seokjun Cha, Jiwoo Lee, Hyeongsu Choi, Seongcheol Ahn, **Hyungwoo Kim**, Yoong Ahm Kim,* and Jong-Jin Park* Electrostatic Repulsion-Induced Highly Enhanced Dispersibility of Conductive Carbon Electrode with Shape Memory-Assisted Self-Healing Effect for Multi-Modal Sensing System. *Adv. Mater. Technol.*, **2023**, 2201978.
 - Geunyoung Choi, Yuree Oh, Songah Jeong, Mincheol Chang, and **Hyungwoo Kim*** Synthesis of Renewable, Recyclable, Degradable Thermosets Endowed with Highly Branched Polymeric Structures and Reinforced with Carbon Fibers. *Macromolecules*, **2023**, 56, 2526–2535.
 - Go Bong Choi,[†] Jieun Park,[†] Seungki Hong, Jueun Choi, Tae Hoon Seo, **Hyungwoo Kim,*** and Yoong Ahm Kim* Loops at Carbon Edges: Boron-Assisted Passivation and Tunable Surface Properties of Carbon Nanofibers. *Carbon*, **2023**, 204, 587–593. ([†]contributed equally)
 - Jieun Park,[†] Chang Oh Lee,[†] Ki Jung Kim, Won Seok Chi,* and **Hyungwoo Kim*** Tailoring 6FDA-Based Click Cross-Linked Membranes: Modular Synthesis and Tunable Gas Separation. *Mol. Syst. Des. Eng.*, **2023**, 8, 32–38. ([†]contributed equally)
-invited contribution to Emerging Investigator Series
 - Eunsol Wi, Seongmoon Go, Seo Young Shin, Hyeong Jun Cheon, Ganghoon Jeong, Hyeonseok Cheon, Jihwan Kim, Hong-Ryun Jung, **Hyungwoo Kim**, and Mincheol Chang* Highly Efficient and Selective Removal of Anionic Dyes from Aqueous Solutions Using Magneto-Responsive Fe-Aminoclay/Fe₂O₃/Polyvinyl Alcohol Composite Microgels. *Chem. Eng. J.*, **2023**, 454, 140309.
 - Yun-Jin Jeong,[†] Songah Jeong,[†] Seokjae Kim,[†] Hea Ji Kim, Juyeong Jo, Arunkumar Shanmugasundaram, **Hyungwoo Kim,*** Eunpyo Choi,* and Dong-Weon Lee* 3D-Printed Cardiovascular Polymer Scaffold Reinforced by Functional Nanofiber Additives for Tunable Mechanical Strength and Controlled Drug Release. *Chem. Eng. J.*, **2023**, 454, 140118. ([†]contributed equally)
 - Se Hoon Jung, Geunyoung Choi, Songah Jeong, Jieun Park, Hyeonseok Yoon, Jong-Jin Park, and **Hyungwoo Kim*** Synthesis of Stimuli-Responsive, Deep Eutectic Solvent-Based Polymer Thermosets for Debondable Adhesives. *ACS Sustainable Chem. Eng.*, **2022**, 10, 13816–13824.
 - Seonmyeong Noh, Seungmin Lee, Jisun Lee, Hyemi Jo, Haney Lee, Minjin Kim, **Hyungwoo Kim**, Yoong Ahm Kim, and Hyeonseok Yoon* All-Gas-Phase Synthesis of Heterolayered Two-Dimensional Nanohybrids Decorated with Metallic Nanocatalysts for Water Splitting. *Small*, **2022**, 2203633
 - Ji Woo Kim, Hea Ji Kim, Jieun Park, Ji Ae Chae, Hyeong-Woo Song, Eunpyo Choi, and **Hyungwoo Kim*** Self-Immolative and Amphiphilic Poly(benzyl ether)-Based Copolymers: Synthesis and Triggered Demicellization via Head-to-Tail Depolymerization. *Macromolecules*, **2022**, 55, 6140–6149.
 - Bobby Aditya Darmawan, Dohoon Gong, Hyeongyu Park, Songah Jeong, Gwangjun Go, Seokjae Kim, Kim Tien Nguyen, Shirong Zheng, Minghui Nan, Van Du Nguyen, Doyeon Bang, Chang-Sei Kim, **Hyungwoo Kim,*** Jong-Oh Park,* and Eunpyo Choi* Magnetically Controlled Reversible Shape-Morphing Microrobots with Real-Time X-Ray Imaging for Stomach Cancer Applications. *J. Mater. Chem. B*, **2022**, 10, 4509–4518.
 - Dahye Ahn, Jingzhe Sun, Seunghye Han, Jiwoo Lee, Seokjun Cha, Songah Jeong, Seungmin Noh, Hyeongsu Choi, Bingqi Ren, Hyeonseok Yoon, **Hyungwoo Kim**, and Jong-Jin Park* Controllable Physical Synergized Triboelectricity, Shape

- Memory, Self-Healing and Optical Sensing with Rollable Form Factor by Zn cluster. *Adv. Sci.*, **2022**, 2200441.
14. Jieun Park,[†] Chang Oh Lee,[†] Ji Woo Kim, Jin Hui Jo, Won Seok Chi,* and **Hyungwoo Kim*** Poly(benzyl ether)-Type Additive to Engineer Glassy Polyimide Membranes for Enhanced Gas Separations. *Chem. Commun.*, **2022**, 58, 4364–4367. ([†]contributed equally)
 15. Seonmyeong Noh, Semin Kim, Thanh-Hai Le, Eunseo Heo, Saerona Kim, Go Bong Choi, **Hyungwoo Kim**, Yoong Ahm Kim, and Hyeonseok Yoon* Tuning the Microphase Behavior of Carbon-Precursor Polymer Blends with Surfactant-Like Nanotubes: Toward Catalyst Support for Water Splitting. *Chem. Eng. J.*, **2022**, 431, 134027.
 16. Jieun Park, Yuree Oh, Songah Jeong, Hyeong-Woo Song, Eunpyo Choi, and **Hyungwoo Kim*** Biobased Stimuli-Responsive Hydrogels That Comprise Supramolecular Interpenetrating Networks and Exhibit Programmed Behaviors. *Chem. Mater.*, **2021**, 33, 8124–8132.
-selected as a supplementary cover of Issue 20
 17. Songah Jeong, Su Woong Yoo, Hea Ji Kim, Jieun Park, Ji Woo Kim, Changho Lee,* and **Hyungwoo Kim*** Recent Progress on Molecular Photoacoustic Imaging with Carbon-Based Nanocomposites. *Materials*, **2021**, 14, 5643. (review)
 18. Songah Jeong, Ji Ae Chae, Hea Ji Kim, Doyoung Jung, Yoong Ahm Kim, Eunpyo Choi, and **Hyungwoo Kim*** Hierarchical Design of Functional, Fibrous, and Microporous Polymer Monoliths for the Molecular Recognition of Diethylstilbestrol. *Anal. Chem.*, **2021**, 93, 13513–13519.
 19. Hao Li, Bobby Aditya Darmawan, Gwangjun Go, Seok-Jae Kim, Minghui Nan, Byungjeon Kang, **Hyungwoo Kim**, Sang Bong Lee,* Doyeon Bang,* Jong-Oh Park,* and Eunpyo Choi* Single-Layer 4D Printing System Using Focused Light: A Tool for Untethered Microrobot Applications. *Chem. Mater.*, **2021**, 33, 7703–7712.
 20. Kyoung Min Lee,[†] Songah Jeong,[†] Jieun Park, and **Hyungwoo Kim*** MoS₂-Embedded, Interpenetrating Network Composite Hydrogels that Show Controlled Release of Dyes and Tunable Strength. *ACS Omega*, **2021**, 6, 25623–25630. ([†]contributed equally)
 21. Ji Ae Chae, Songah Jeong, Hea Ji Kim, Tomohiro Tojo, Yuree Oh, Won Seok Chi, Hyeonseok Yoon, and **Hyungwoo Kim*** Fibrous Mesoporous Polymer Monoliths: Macromolecular Design and Enhanced Photocatalytic Degradation of Aromatic Dyes. *Polym. Chem.*, **2021**, 2021, 12, 2464-2470.
 22. Doyeon Kim, Hea Ji Kim, **Hyungwoo Kim,*** and Ji Young Chang* Functional Hierarchical Pores in Polymer Monoliths: Macromolecular Synthesis and Selective Removal of Dyes. *ACS Appl. Polym. Mater.*, **2021**, 3, 1385–1394.
 23. Hea Ji Kim, Go Bong Choi, Jae-Hyung Wee, Seungki Hong, Jieun Park, Yoong Ahm Kim,* and **Hyungwoo Kim*** Microporous Organic Polymers: A Synthetic Platform for Engineering Heterogeneous Carbocatalysts. *ChemSusChem*, **2021**, 14, 624–631.
-highlighted on the cover feature of Issue 2.
 24. Yuree Oh, Jieun Park, Jong-Jin Park, Songah Jeong, and **Hyungwoo Kim*** Dual Cross-Linked, Polymer Thermosets: Modular Design, Reversible Transformation, and Triggered De-Bonding. *Chem. Mater.*, **2020**, 32, 6384–6391.
 25. **Hyungwoo Kim,*** Adam D. Brooks, Anthony M. DiLauro, and Scott T. Phillips* Poly(carboxypyrrole)s that Depolymerize from Head to Tail in the Solid State in Response to Specific Applied Signals. *J. Am. Chem. Soc.*, **2020**, 142, 9447–9452.
-highlighted in JACS Spotlights (J. Am. Chem. Soc., 2020, 142, 9081–9082).
-featured in: ACS Editors' Choice.

26. Doyeon Kim, Hyungwoo Kim,* and Ji Young Chang* Designing Internal Hierarchical Porous Networks in Polymer Monoliths that Exhibit Rapid Removal and Photocatalytic Degradation of Aromatic Pollutants. *Small*, **2020**, 16, 1907555.
27. Thanh-Hai Le, Yuree Oh, Hyungwoo Kim,* and Hyeonseok Yoon* Exfoliation of 2D Materials for Energy and Environmental Applications. *Chem. Eur. J.*, **2020**, 26, 6360–6401. (review)
-highlighted as a frontispiece of Issue 29.
28. Gyounglyul Jo, Seung Hyun Cho, Hyungwoo Kim, Hyeonseok Yoon, Sangil Han,* Mincheol Chang* Impacts of Secondary Solvents on Morphology and Charge Transport of Conjugated Polymer Thin Films. *Org. Electron.*, **2020**, 81, 105688.
29. Kyoung Min Lee, Yuree Oh, Hyeonseok Yoon, Mincheol Chang, and Hyungwoo Kim* Multifunctional Role of MoS₂ in Preparation of Composite Hydrogels: Radical Initiation and Cross-Linking. *ACS Appl. Mater. Interfaces*, **2020**, 12, 8642–8649.
30. Byullee Park,[†] Kyung Min Lee,[†] Suhyeon Park, Misun Yun, Hak-Jong Choi, Jeesu Kim, Changho Lee,* Hyungwoo Kim,* and Chulhong Kim* Deep Tissue Photoacoustic Imaging of Nickel(II) Dithiolene-Containing Polymeric Nanoparticles in the Second Near-Infrared Window. *Theranostics*, **2020**, 10, 2509–2521. ([†]contributed equally)
-highlighted on the back cover of Issue 6.
-featured in: 매일경제; 전자신문; 연합뉴스; EurekAlert! etc.
31. Thanh-Hai Le, Semin Kim, Subin Chae, Yunseok Choi, Chul Soon Park, Eunseo Heo, Unhan Lee, Hyungwoo Kim, Oh Seok Kwon,* Won Bin Im,* and Hyeonseok Yoon* Zero Reduction Luminescence of Aqueous-Phase Alloy Core/Shell Quantum Dots via Rapid Ambient-Condition Ligand Exchange. *J. Colloid Interface Sci.*, **2020**, 564, 88–98.
32. Hyunwoo Han, Seonmyeong Noh, Subin Chae, Semin Kim, Yunseok Choi, Thanh-Hai Le, Mincheol Chang, Hyungwoo Kim, and Hyeonseok Yoon* Pine Cone Mold: A Toolbox for Fabricating Unique Metal/Carbon Nanohybrid Electrocatalysts. *Nanoscale*, **2019**, 11, 23241–23250.
33. Doyoung Jung, Suhyeon Park, Changho Lee,* and Hyungwoo Kim* Recent Progress on Near-Infrared Photoacoustic Imaging: Imaging Modality and Organic Semiconducting Agents. *Polymers*, **2019**, 11, 1693. (review).
34. Ji Ae Chae, Yuree Oh, Hea Ji Kim, Go Bong Choi, Kyoung Min Lee, Doyoung Jung, Yoong Ahm Kim, and Hyungwoo Kim* Preparation of Compressible Polymer Monoliths that Contain Mesopores Capable of Rapid Oil–Water Separation. *Polym. Chem.*, **2019**, 10, 5142–5150.
35. Doyoung Jung, Kyoung Min Lee, Tomohiro Tojo, Yuree Oh, Hyeonseok Yoon, and Hyungwoo Kim* Dual Cross-Linked Hydrogels that Undergo Structural Transformation via Selective Triggered Depolymerization. *Chem. Mater.*, **2019**, 31, 6249–6256.
36. Kyoung Min Lee and Hyungwoo Kim* One-Step Preparation of Hydrogel Particles that Show Rapid Detection of Hydrogen Peroxide: The Dual Role of New Methylene Blue. *Dyes Pigments*, **2019**, 170, 107546.
37. Yuree Oh, Kyoung Min Lee, Doyoung Jung, Ji Ae Chae, Hea Ji Kim, Mincheol Chang, Jong-Jin Park, and Hyungwoo Kim* Sustainable, Naringenin-Based Thermosets Show Reversible Macroscopic Shape Changes and Enable Modular Recycling. *ACS Macro Lett.*, **2019**, 8, 239–244.
38. Geunsu Park, Semin Kim, Subin Chae, Hyunwoo Han, Thanh-Hai Le, Kap Seung Yang, Mincheol Chang, Hyungwoo Kim, and Hyeonseok Yoon* Combining SWNT and Graphene in Polymer Nanofibers: A Route to Unique Carbon Precursors

- for Electrochemical Capacitor Electrodes. *Langmuir*, **2019**, 35, 3077–3086.
39. Kyoung Min Lee,[†] Hea Ji Kim,[†] Cheon-Soo Kang, Tomohiro Tojo, Ji Ae Chae, Yuree Oh, Min Chul Cha, Kap Seung Yang, Yoong Ahm Kim, and **Hyungwoo Kim*** Preparation of carbon-containing, compressible, microporous, polymeric monoliths that regulate macroscopic conductivity. *Polym. Chem.*, **2019**, 10, 852–859. ([†]contributed equally)
 40. Gyounglyul Jo, Jae Won Jeong, Solip Choi, **Hyungwoo Kim**, Jongjin Park, Jaehan Jung,* and Mincheol Chang* Large-Scale Alignment of Polymer Semiconductor Nanowires for Efficient Charge Transport via Controlled Evaporation of Confined Fluids. *ACS Appl. Mater. Interfaces*, **2019**, 11, 1135–1142.
 41. Doyoung Jung, Kyoung Min Lee, Ji Young Chang, Misun Yun, Hak-Jong Choi, Yoong Ahm Kim, Hyeonseok Yoon, and **Hyungwoo Kim*** Selective De-Cross-Linking of Transformable, Double-Network Hydrogels: Preparation, Structural Conversion and Controlled Release. *ACS Appl. Mater. Interfaces*, **2018**, 10, 42985–42991.
 42. Su Woong Yoo, Doyoung Jung, Jung-Joon Min, **Hyungwoo Kim,*** and Changho Lee* Biodegradable Contrast Agents for Photoacoustic Imaging. *Appl. Sci.*, **2018**, 8, 1567. (invited review)
 43. Kyoung Min Lee,[†] Kyungho Kim,[†] Hyeonseok Yoon,* and **Hyungwoo Kim*** Chemical Design of Functional Polymer Structures for Biosensors: from Nanoscale to Macroscale. *Polymers*, **2018**, 10, 551. (invited review) ([†]contributed equally)
 44. Kyoung Min Lee, Hea Ji Kim, Doyoung Jung, Yuree Oh, Hyemin Lee, Changsun Han, Ji Young Chang,* and **Hyungwoo Kim*** Rapid Accessible Fabrication and Engineering of Bilayered Hydrogels: Revisiting the Cross-Linking Effect on Superabsorbent Poly(acrylic acid). *ACS Omega*, **2018**, 3, 3096–3103.
 45. Kyoung Min Lee, Yuree Oh, Ji Young Chang,* and **Hyungwoo Kim*** Facile Fluorescent Labeling of a Polyacrylamide-Based Hydrogel Film via Radical Initiation Enables Selective and Reversible Detection of Al³⁺. *J. Mater. Chem. B*, **2018**, 6, 1244–1250.
 46. **Hyungwoo Kim,*** Jung Ho Ryu, Hwan Kyu Kim, and Ji Young Chang* A Versatile Platform for Lanthanide(III)-Containing Organogelators: Fabrication of the Er(III)-Incorporated Polymer Nanocomposite from an Organogel Template. *New J. Chem.*, **2017**, 41, 12366–12370.
-highlighted on the cover of Issue 21.
 47. Hemakesh Mohapatra,[†] **Hyungwoo Kim**,[†] and Scott T. Phillips* Stimuli-Responsive Polymer Film that Autonomously Translates a Molecular Detection Event into a Macroscopic Change in Its Optical Properties via a Continuous, Thiol-Mediated Self-Propagating Reaction. *J. Am. Chem. Soc.*, **2015**, 137, 12498–12501. ([†]contributed equally)
 48. **Hyungwoo Kim**, Hemakesh Mohapatra, and Scott T. Phillips* Rapid, On-Command Debonding of Stimuli-Responsive Cross-Linked Adhesives by Continuous, Sequential Quinone Methide Elimination Reactions. *Angew. Chem., Int. Ed.*, **2015**, 54, 13063–13067.
-designated as a Very Important Paper (VIP).
-highlighted in *Synfacts* 2015, 11, 1153.
 49. Matthew S. Baker, **Hyungwoo Kim**, Michael G. Olah, Gregory G. Lewis, and Scott T. Phillips* Depolymerizable Poly(benzyl ether)-Based Materials for Selective Room Temperature Recycling. *Green Chem.*, **2015**, 17, 4541–4545.
 50. **Hyungwoo Kim**,[†] Matthew S. Baker,[†] and Scott T. Phillips* Polymeric Materials that Convert Local Fleeting Signals into Global Macroscopic Responses. *Chem. Sci.*, **2015**, 6, 3388–3392. ([†]contributed equally)

51. Kimy Yeung, **Hyungwoo Kim**, Hemakesh Mohapatra, and Scott T. Phillips* Surface-Accessible Detection Units in Self-Immolative Polymers Enable Translation of Selective Molecular Detection Events into Amplified Responses in Macroscopic, Solid-State Plastics. *J. Am. Chem. Soc.*, **2015**, 137, 5324–5327.
-highlighted in *Nature Chem.* 2015, 7, 465.
52. Hyunpyo Lee, **Hyungwoo Kim**, Taejin Choi, Hyun Woo Park, and Ji Young Chang* Preparation of a Microporous Organic Polymer by the Thiol-Yne Addition Reaction and Formation of Au Nanoparticles Inside the Polymer. *Chem. Commun.*, **2015**, 51, 9805–9808.
53. **Hyungwoo Kim** and Ji Young Chang* Reversible Thermochromic Polymer Film Embedded with Fluorescent Organogel Nanofibers. *Langmuir*, **2014**, 30, 13673–13679.
54. Geo San Lim, **Hyungwoo Kim**, and Ji Young Chang* Laser Highlighting on a Flat Panel Display Coated with a Double-Layered Anti-Reflection Film Containing a Europium(III) Complex. *J. Mater. Chem. C*, **2014**, 2, 10184–10188.
55. **Hyungwoo Kim**, Youngdo Kim, and Ji Young Chang* Polymers for Luminescent Sensing Applications. *Macromol. Chem. Phys.*, **2014**, 215, 1274–1285. (mini review)
56. **Hyungwoo Kim**, Min Chul Cha, Hyun Woo Park, and Ji Young Chang* Preparation of a Yb(III)-Incorporated Porous Polymer by Post-Coordination: Enhancement of Gas Adsorption and Catalytic Activity. *J. Polym. Sci. Part A: Polym. Chem.*, **2013**, 51, 5291–5297.
57. **Hyungwoo Kim**, Taejin Choi, Min Chul Cha, and Ji Young Chang* Preparation of a Porous Polymer by a Catalyst-Free Diels-Alder Reaction and Its Structural Modification by Post-Reaction. *J. Polym. Sci. Part A: Polym. Chem.*, **2013**, 51, 3646–3653.
58. **Hyungwoo Kim** and Ji Young Chang* White Light Emission from a Mixed Organogel of Lanthanide(III)-Containing Organogelators. *RSC Adv.*, **2013**, 3, 1774–1780.
59. **Hyungwoo Kim**, Youngdo Kim, and Ji Young Chang* Preparation of a Molecularly Imprinted Polymer Containing Europium(III) Ions for Luminescent Sensing. *J. Polym. Sci. Part A: Polym. Chem.*, **2012**, 50, 4990–4994.
60. **Hyungwoo Kim** and Ji Young Chang* Synthesis of a Film-Forming Europium(III) Complex and Its Organogelation and Photoluminescent Properties. *Soft Matter*, **2011**, 7, 7952–7955.

Patent (granted)

1. Fibrous, porous, polymer monoliths capable of photocatalytic activity and manufacturing method thereof, KR Patent, 10-2443850, 09.13.2022
2. Recyclable, degradable polymer thermosets and synthetic method and application thereof. KR Patent, 10-2433610, 08.12.2022
3. Method of Preparing Inorganic Hydrogel Nanocomposites Capable of Self-Healing. KR Patent, 10-2290930, 08.11.2021
4. Naringenin Based Thermosets and Manufacturing Method of It. KR Patent, 10-2188113, 12.01.2020
5. A Hydrogel Film Capable of Selectively Detecting Aluminum Ions and Method of Manufacturing the Same. KR Patent, 10-2055043, 12.05.2019
6. Selective De-cross-Linking of Transformable Double-network Hydrogel and Fabricating Method Thereof. KR Patent, 10-

2058182, 11.15.2019

7. Hydrogel Actuator Having Acrylic Acid and Method for Fabricating Hydrogel Actuator. KR Patent, 10-2025864, 09.20.2019

Professional Service

1. Reviewers for SCI journals: Adv. Mater., JACS, Small, Chem. Mater., Biomacromolecules, Chem. Commun., Carbohydr. Polym., Polym. Chem., ACS sustainable Chem. Eng., ACS Appl. Mater. Interfaces, etc.
2. Guest editor, Applied Sciences, Special issue on "Recent Trends in Polymer Nanoscience and Nanotechnology" 2018.
3. Guest editor, Polymers, Special issue on "Conductive Polymers III" 2018–2019.
4. Guest editor, Materials, Special issue on "Polymeric Materials as Theranostic Agents" 2018–2019.
5. Guest editor, Materials, Special issue on "Functional Carbon-based Nanomaterials and Nanocomposites" 2019–2020.

Award

1. Excellence in Teaching Award, Chonnam National University, 2022.
2. 우수교수상 교육연구부문, 전남대학교 공과대학, 2022.

Teaching Experience

1. Organic chemistry 1, 2
2. Fiber assembly engineering
3. Energy materials
4. Instrumental analysis
5. Polymer science and technology
6. Fundamental design of convergence engineering
7. Advanced organic chemistry (graduate)

Student (advisee)

1. Graduates: Songah Jeong; Ji Woo Kim; Geunyoung Choi; Se Hoon Jung; Byungjun Choi; Seo Yoon Jeong; Seo Yeon Choi
2. Undergraduates:
3. Alumni: Kyoung Min Lee (Postdoc '20, Samsung Electro-Mechanics); Doyoung Jung (M.S. '20, SK Hynix); Hea Ji Kim (M.S. '21, Chonnam National University Hospital); Yuree Oh (M.S. '21, Dongjin); Ji Ae Chae (M.S. '21, Emtier); Doyeon Kim (Ph.D. '21 co-advising, Samsung Electronics); Jieun Park (M.S. '23, Samyang Corp.)