

# MinJae Kim

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## Education

### Korea Advanced Institute of Science and Technology (KAIST)

Daejeon, Korea

UNDERGRADUATE, DEPARTMENT OF MATERIALS SCIENCE AND ENGINEERING

Feb. 2019 - Present

- KAIST Presidential Fellowship (2021 - Present), Honor Student (Mar. 2021 - Present)
- Total GPA of 4.22/4.3 (99.11/100), Acquired credits: 134/136 (includes 21 graduate-level coursework credits)
- Dean's List (top 3% in the department): Awarded 5 times out of 6 available semesters
- Served Korean military duty (Mar. 2021 - Sep. 2022)

## Research Experience

### Wellman Center for Photomedicine, Massachusetts General Hospital

Boston, MA

RESEARCH INTERN (ADVISOR: PROF. CONOR L. EVANS)

Jun. 2023 - Aug. 2023

- Project title: Intrinsically stretchable pCO<sub>2</sub> sensor enabled by multi-functional block copolymer matrices
- Devised and synthesized novel block copolymer matrices for stretchable pCO<sub>2</sub> sensors with excellent stability and mechanical properties
- Awarded the People's Choice Award at the poster session of the Harvard-MIT Summer Institute at MGH

### Next-Generation Optoelectronic Nanomaterials Lab., KAIST

Daejeon, Korea

UNDERGRADUATE RESEARCHER (ADVISOR: PROF. HIMCHAN CHO)

Jul. 2022 - Present

- Project title: Development of highly luminescent and stable quasi-2D perovskites based on multi-functional asymmetric spacers
- Devised and validated geometrically and electronically asymmetric spacer for Dion-Jacobson phase quasi-2D perovskite
- Granted KAIST Undergraduate Research Program (KRW 5M)
- Awarded the Best Poster Presentation Award at the 2023 Spring Meeting of the Korean Institute of Materials and Metals (Apr. 2023)
- Awarded the Grand Prix at the 2023 Undergraduate Research Program Workshop (Aug. 2023)
- Project title: Effective passivation of quasi-2D perovskites enabled by  $\pi$ -conjugated planar molecules
- Delivered an oral presentation at the 7th International Conference on Advanced Electromaterials (ICAE 2023)

## Presentation

### ORAL

- |      |  |             |
|------|--|-------------|
| 2023 | <b>Effective Passivation of Quasi-2D Perovskites Enabled by <math>\pi</math>-conjugated Planar Molecules</b> , 7th International Conference on Advanced Electromaterials (ICAE 2023) | Jeju, Korea |
| 2020 | <b>Application of PEDOT:PSS Thin Film Fabricated via Hot-casting as Hole Transport Layer of Perovskite Solar Cell</b> , Stockholm International Youth Science Seminar (SIYSS)        | On-line     |

### POSTER

- |      |  |             |
|------|--|-------------|
| 2023 | <b>Intrinsically Stretchable pCO<sub>2</sub> Sensor Enabled by Multi-functional Block Copolymer Matrices</b> , Harvard-MIT Summer Institute at MGH                     | Boston, MA  |
| 2023 | <b>Highly Luminescent and Stable Quasi-2D Perovskites based on Multi-functional Asymmetric Spacer</b> , Spring Meeting of the Korean Institute of Metals and Materials | Jeju, Korea |

## Honor & Award (Selected)

### SCHOLARSHIP

- |      |   |                 |
|------|---|-----------------|
| 2023 | <b>Yeonghan Kim Global Leader Scholarship</b> , KAIST                                       | Daejeon, Korea  |
| 2023 | <b>Woonhae Scholarship (2023-2024)</b> , Woonhae Foundation                                 | Changwon, Korea |
| 2022 | <b>Dream Supporter Scholarship (2022-2024)</b> , Global Hansang Dream Foundation            | Ulsan, Korea    |
| 2021 | <b>KAIST Presidential Fellowship (2021-2024)</b> , KAIST                                    | Daejeon, Korea  |
| 2019 | <b>National Presidential Science Scholarship (2019-2024)</b> , Korea Student Aid Foundation | Seoul, Korea    |

## HONOR

2023	<b>Young Future Energy Leader</b> , Khalifa University	Abu Dhabi, UAE
2023	<b>Representative of KAIST, Young Engineers Honor Society</b> , National Academy of Engineering of Korea	Seoul, Korea
2022	<b>National Delegate</b> , Asian Students' Venture Forum	Seoul, Korea
2020	<b>National Delegate and Nobel Ceremony Guest</b> , Stockholm International Youth Science Seminar(SIYSS)	On-line
2020	<b>Cadet of Research Officer for National Defense (과학기술전문사관)</b> , Ministry of Science and ICT	Seoul, Korea

## AWARD

2023	<b>Grand Prix, Undergraduate Research Participation (URP) Workshop</b> , KAIST	Daejeon, Korea
2023	<b>CoE Leadership Award</b> , College of Engineering, KAIST	Daejeon, Korea
2023	<b>Global Leadership Award</b> , KAIST	Daejeon, Korea
2022	<b>Bronze Award, Asian Students' Venture Forum</b> , Korea Economic Daily	Seoul, Korea
2021	<b>Talent Award of Korea (대한민국 인재상)</b> , Ministry of Education	Seoul, Korea
2021	<b>Youth Hero Prize</b> , Korea Scout Association	Seoul, Korea
2020	<b>Excellence in Mentorship Award</b> , Samsung Welfare Foundation	Ansan, Korea

## Extracurricular Activity

### KAIST Center for Excellence in Learning and Teaching

Daejeon, Korea

#### SPECIAL LECTURER

Nov. 2022

- Delivered a special lecture at the KAIST Tip Talk program
- The video was shared on Youtube and the KAIST Learning Management System (KLMS)

### Young Engineers Honor Society, National Academy of Engineering of Korea

Seoul, Korea

#### REPRESENTATIVE OF KAIST, FULL MEMBER (REGISTRATION NO. Y34-14)

Sep. 2020 – Present

- Served representative of KAIST (Jan. 2023 - Present)
- Hosted Junior Engineering Classes for elementary and middle school students, and delivered lectures at Specialty Info Sessions for high school students