

Recruitment for Research positions at College of Engineering, UNIST

I Recruitment Schedule

Process	Schedule	Remarks
Application Period	2022.1.10.~25.	~24:00 on 2022.1.25.
Documents review	2022.1.28.	Announcement of successful candidates: 2022.2.3.
Interview	2022.2.4.~7.	Announcement of successful candidates: 2022.2.8.
Appointment	2022.2.16. ~	

*Schedules are subject to change.

II Application and Screening

- Application period: 2022.1.10. ~ 25., 24:00 (*Korean time standard)
- How to apply
 - The submitted documents are converted into one PDF file (after scanning) and sent by e-mail(invitation-ns@unist.ac.kr)
 - File name: 「Position-Recruitment Area: OOO(Applicant name)」
 - Applications should be received by 24:00 on the due date(Korean time standard)
- Documents to be submitted

Position	Submission documents	Remarks
Post-doc researcher	1) Applicant Form 2) Research Plan 3) Self introduction 4) Agreement to provide personal information to third parties	- Required documents - Refer to attachment
Researcher /Research Assistant	1) Applicant Form 2) Job and research performance report 3) Self introduction 4) Agreement to provide personal information to third parties	

- When filling out the application form, the relevant documents must be prepared in advance. Successful applicants will be canceled due to erroneous input. All responsibility for harm lies with the applicant
- According to blind employment, there is to be no submission of photograph, school name, name of advisor, credit, family relationship, family name, date of birth, and physical condition.
- Selection: Document Screening, Interview Screening
 - If there is no qualified person, the original number of candidates may be reduced or not selected.
 - Those who are eligible for work protection are given additional points according to

related laws (5% or 10% of the perfect scores by stage)

- Additional points are granted to the disabled in order to promote employment of persons with disabilities (5% of perfect scores by stage)

○ **Final appointment**

- Under article 33 of the National Civil Service Act regarding the disqualification conditions of the appointment of national civil services, successful candidates who are applicable of the disqualification conditions or failed in physical examination will be excluded from appointment.
- Persons whose identity has been identified as a result of an inquiry and a survey of candidates for recruitment (final interview candidates) in accordance with the original rules may be canceled through discussion.
- If a person is found to have a final appointment and has been found to have submitted false information, application forgery, or fraudulent employment, the appointment may be canceled as per Article 33 of the Civil Service Act.
- If an unsuccessful candidate wishes to retrieve one's application document, request can be made within 2 weeks of announcement.

III Field and Eligibility

○ Mechanical Engineering

Position	Field	Quota	Detailed information	
Post-Doc Researcher	Robotics and Rehabilitation Engineering (Prof. Sang Hoon Kang)	1	Main Tasks	Conducting research on rehabilitation robots and/or neuromechanics, including tests with subjects
			Eligibility	A PhD degree in related field (Science & Engineering, and Health Science)
			Preferences	<ul style="list-style-type: none"> - Ph.D. degree holders in fields related to robotics, rehabilitation engineering, or neuromechanics such as science and engineering - Experience in conducting research on subjects with rehabilitation robots or engineering devices - At least one paper published as the first author in internationally well-known journals in the relevant fields
			Term	2022.02.16. ~ 2023.02.15.
			Working hours	<ul style="list-style-type: none"> - The five-day week - Working Hour 9:00~18:00 - Break 12:00~13:00
			Monthly wage	2,800,000 WON
Post-Doc Researcher	Nanotechnology / Soft Materials / Flexible devices (Prof. Hoon Eui Jeong)	1	Main Tasks	<ul style="list-style-type: none"> - Development of soft adhesive materials/actuators/sensors - Development of wearable devices and soft robots - 3D printing of soft materials, nanofabrication
			Eligibility	A PhD degree in related field
			Preferences	Research experience in closely related field
			Term	2022.03.01. ~ 2023.02.28.
			Working hours	<ul style="list-style-type: none"> - The five-day week - Working Hour 9:00~18:00 - Break 12:00 ~ 13:00
Monthly wage	2,700,000 won			

Position	Field	Quota	Detailed information	
Post-Doc Researcher	Computational Mechanics (Prof. Hayoung Chung)	1	Main Tasks	Research on multiphysics topology optimization
			Eligibility	- Ph.D. degree - One or more publications in SCI journals as the first author within the past three years
			Preferences	- Proficiency in English - Three or more publications in SCI journals as the first author throughout the research career - Familiarity with stochastic topology optimization
			Term	2022.02.16. ~ 2023.02.15.
			Working hours	- Five-day in a week - Working hours: 9:00 ~ 18:00 - 1 hr break 12:00 ~ 13:00
			Monthly wage	2,800,000 KRW
Post-Doc Researcher	Autonomy, guidance and control of unmanned vehicles (Prof. Hyondong Oh)	1	Main Tasks	- Development of cooperative control methods using multiple unmanned vehicles for environmental monitoring - Development of autonomous search planning and estimation algorithms using various approaches including machine learning, optimization, information theory, and estimation theory - Algorithm verification through simulations or experiments
			Eligibility	Holding or expected to hold a PhD degree at the point of appointment
			Preferences	At least 4 paper published as the first author in internationally well-known journals in the relevant field
			Term	2022.03.01.~2023.02.28
			Working hours	- The five-day week - Working Hour 9:00~18:00 - Recess 12:00 ~ 13:00
			Monthly wage	₩2,900,000
Post-Doc Researcher	Tele-operation interface and robot (Prof. Joonbum Bae)	1	Main Tasks	Development of a control interface and a dual-arm robot for a tele-operated robot system
			Eligibility	- Ph.D. in mechanical engineering - Experience in the development of tele-operated robot systems
			Preferences	- Ph.D. in mechanical engineering - Experience in the development of tele-operated robot systems
			Term	2022.03.01. ~ 2023.02.28.
			Working hours	- The five-day week - Working 9:00~18:00 - Break 12:00 ~ 13:00
			Monthly wage	3,000,000 KRW
Post-Doc Researcher	Computational Fluid Dynamics (Prof. Jae Hwa Lee)	1	Main Tasks	Research on artificial neural networks-based wall-modeled large-eddy simulations
			Eligibility	A PhD degree in related field
			Preferences	Research experience in closely related field
			Term	2022.03.01. ~ 2023.02.28.
			Working hours	- The five-day week - Working Hour 9:00~18:00 - Break 12:00~13:00
			Monthly wage	2,000,000 WON

○ Urban and Environmental Engineering

Position	Field	Quota	Detailed information	
Post-Doc Researcher	Environmental engineering (Prof. Sung-Deuk Choi)	1	Main Tasks	<ul style="list-style-type: none"> - Comparison of high air pollution episodes and data analysis - Data analysis of surface monitoring
			Eligibility	Ph.D.(holders or prospective doctoral candidates until the appointment date)
			Preferences	<ul style="list-style-type: none"> - Preferential for those who can speak English fluently - Preferential treatment for experienced researchers - more than 5 SCI(E) papers as the first/corresponding author within recent three years - Those who are eligible for work protection are given - additional points according to related laws - In case of the disabled, additional points are granted to promote employment of persons with disabilities
			Term	2022.03.01. ~ 2023.02.28.
			Working hours	<ul style="list-style-type: none"> - The five-day week - Working 9:00~18:00 - Break 12:00~13:00
			Monthly wage	2.5 million won

○ Materials Science and Engineering

Position	Field	Quota	Detailed information	
Post-Doc Researcher	Biomaterials, Tissue Engineering (Prof. Chaenyung Cha)	1	Main Tasks	- Perform experiments: polymer synthesis, biomaterial (hydrogel, nanofiber, etc) fabrication, 3D cell culture, animal experiment - Write reports and papers - Mentor students
			Eligibility	PhD degree in chemistry, chemical engineering, material science, or any other related field
			Preferences	Research experience in closely related field, experience in both biomaterials and tissue engineering (cell culture and animal experiment) is preferred
			Term	2022.03.01. ~ 2023.02.28.
			Working hours	- The five-day week - Working 9:00~18:00 - Break 12:00 ~ 13:00
			Monthly wage	2,200,000 won
Post-Doc Researcher	Stretchable Transparent Electrode and Stretchable Solar Cell (Prof. Kyoung Jin Choi)	1	Main Tasks	Research on the development of stretchable transparent electrode technology and the application of stretchable solar cells
			Eligibility	A PhD degree in related field
			Preferences	- Research experience in closely related field - Related field majors
			Term	2022.03.01. ~ 2023.02.28.
			Working hours	- The five-day week - Working 9:00~18:00 - Break 12:00 ~ 13:00
			Monthly wage	KRW 2,500,000

○ Energy and Chemical Engineering

Position	Field	Quota	Detailed information	
Post-Doc Researcher	Establishment of a foundation for commercialization of marine specialized power supply devices (Prof. Yunseok Choi)	1	Main Tasks	Improving the design of lithium-based marine specialized cells
			Eligibility	Ph.D in related research field
			Preferences	Fluent in English
			Term	2022.03.01. ~ 2023.02.28.
			Working hours	- The five-days in a week - Working : 9:00~18:00 - Break : 12:00~13:00
			Monthly wage	2,100,000 won
Post-Doc Researcher	Center for Dimension Controllable Organic Framework (Prof. Jong-Beom Baek)	1	Main Tasks	Research on Analysis and Synthesis of porous organic network polymers
			Eligibility	A PhD degree in related field
			Preferences	Research experience in closely related field
			Term	2022.03.01. ~ 2023.02.28.
			Working hours	- The five-day week - Working 9:00~18:00 - Break 12:00 ~ 13:00
			Monthly wage	3,000,000won
Post-Doc Researcher	Next-generation solar cells (perovskite solar cells and organic solar cells) (Prof. Changduk Yang)	1	Main Tasks	Research on perovskite solar cells, organic solar cells, and organic flexible transistors.
			Eligibility	A Ph.D degree in related field
			Preferences	Research experience in closely related field
			Term	2022.02.16. ~ 2023.02.15
			Working hours	- The five-day week - Working 9:00~18:00 - Break 12:00 ~ 13:00
			Monthly wage	2,500,000 WON
Researcher	Establishment of a foundation for commercialization of marine specialized power supply devices (Prof. Yunseok Choi)	1	Main Tasks	- Design, synthesis and testing of organic / inorganic chemical-based battery materials - Analysis Test data
			Eligibility	- a bachelor's degree - Persons who meet E-3 VISA qualifications
			Preferences	- Science, engineering, preferential treatment - Preferential treatment for those who have experienced development.
			Term	2022.03.01. ~ 2023.02.28.
			Working hours	- The five-day week - Working 9:00~18:00 - Break 12:00 ~ 13:00
			Monthly wage	₩ 2,000,000 ~3,000,000 (negotiable)
Post-Doc Researcher	Energy (Prof. Ji-Hyun Jang)	1	Main Tasks	Simulation regarding OER, HER, and ORR
			Eligibility	A PhD degree in related field
			Preferences	Research experience in closely related field
			Term	2022.02.16 ~ 2023.02.15
			Working hours	- The five-day week - Working 9:00~18:00 - Break 12:00 ~ 13:00
			Monthly wage	2,500,000won/month *depending on the working experience

Position	Field	Quota	Detailed information	
Post-Doc Researcher	Dopant-Free Optoelectronic Devices (Prof. Kwanyong Seo)	1	Main Tasks	- Design and Fabrication of Dopant-Free Solar Cells - Design and Fabrication of Dopant-Free Photodetector
			Eligibility	- Ph.D. in related research field - At least 1 SCI paper(1st author) in 3 years
			Preferences	- Fluent in transparent c-Si solar cells - Fluent in English
			Term	2022.03.01. ~ 2023.02.28.
			Working hours	- The five-day week - Working 9:00~18:00 - Break 12:00 ~ 13:00
			Monthly wage	2,500,000 WON
Post-Doc Researcher	Next-generation solar cells (perovskite solar cells and organic solar cells) (Prof. Changduk Yang)	1	Main Tasks	Research on perovskite solar cells, organic solar cells, and organic flexible transistors.
			Eligibility	A Ph.D degree in related field
			Preferences	Research experience in closely related field
			Term	2022.03.01. ~ 2023.02.28.
			Working hours	- The five-day week - Working 9:00~18:00 - Break 12:00 ~ 13:00
			Monthly wage	2,500,000 WON
Post-Doc Researcher	Perovskite, Oraganic Solar cells (Prof. Jin Young Kim)	2	Main Tasks	Research on Perovskite Photovoltaics, Oraganic Solar cells
			Eligibility	A PhD degree in related field
			Preferences	Research experience in related fields
			Term	2022.03.01. ~ 2023.02.28.
			Working hours	- The five-day week - Working 9:00~18:00 - Break 12:00 ~ 13:00
			Monthly wage	2,500,000 WON
Post-Doc Researcher	Sustainable Process Analysis, Design, and Engineering (Prof. Hankwon Lim)	2	Main Tasks	- CO2 capture system development/operation/optimization - Absorption solvent/adsorbent/membrane development
			Eligibility	A PhD degree in related field
			Preferences	Research experience in closely related field
			Term	2022.02.16. ~ 2023.02.15.
			Working hours	- The five-day week - Working 9:00~18:00 - Break 12:00 ~ 13:00
			Monthly wage	₩3,500,000
Researcher	Enzyme and Protein Engineering (Prof. YongHwan Kim)	1	Main Tasks	Purification of Enzyme and Protein
			Eligibility	- Engineering a Bachelor's and Master Degree in related field - Persons who meet E-3 VISA qualifications
			Preferences	Research experience in closely related field
			Term	2022.03.01.~2022.08.31.
			Working hours	- The five-day week - Working 9:00~18:00 - Break 12:00 ~ 13:00
			Monthly wage	₩2,000,000

Position	Field	Quota	Detailed information	
Post-Doc Researcher	Alkali-ion storage organic electroactive material (Prof. Kang Seok Ju)	1	Main Tasks	Design and electrochemical performance analysis of organic-based electroactive materials
			Eligibility	- Ph. D in related research field - At least 1 SCI paper (1st author) in 3 years
			Preferences	- Expert in organic electroactive materials - Fluent in English
			Term	2022.03.01.~2022.02.28
			Working hours	- The five-day week - Working 9:00~18:00 - Break 12:00 ~ 13:00
			Monthly wage	2,300,000 won
Post-Doc Researcher	Gunslab(1) (Prof. Guntae Kim)	1	Main Tasks	- perform the fabrication of non-precious metal-based electrocatalysts for water oxidation reactions - Development of metal-carbon dioxide system and related catalyst development
			Eligibility	Ph.D. degree in Energy Engineering, Chemical Engineering, Material
			Preferences	- Experience in Metal-CO2 battery techniques - more than 5 and 1 main-authored SCI papers in relevant fields within the recent three years - Experience in electrochemical characterization techniques (Voltammetric techniques/Scanning Electrochemical Microscopy (SECM)/Scanning Kelvin Probe (SKP) techniques).
			Term	2022.03.01.~2023.02.28
			Working hours	- The five-day week - Working 9:00~18:00 - Break 12:00 ~ 13:00
			Monthly wage	5,000,000won
Post-Doc Researcher	Gunslab(2) (Prof. Guntae Kim)	1	Main Tasks	- Synthesis of oxide-based electrolyte materials for all-solid-state batteries - design and develop efficient and low-cost membrane electrode assembly (MEA) for anion exchange membrane water electrolyzers developing SOFC and all solid state based materials
			Eligibility	- Ph.D. degree in Energy Engineering, Chemical Engineering, Material
			Preferences	- More than 5 years of SOFC experience or more than 3 years of all-solid techniques - more than 3 or 1 main-authored SCI papers in relevant fields within the recent three years - Experience in electrochemical characterization techniques (Voltammetric techniques/Scanning Electrochemical Microscopy (SECM)/Scanning Kelvin Probe (SKP) techniques).
			Term	2022.03.01.~2023.02.28
			Working hours	- The five-day week - Working 9:00~18:00 - Break 12:00 ~ 13:00
			Monthly wage	2,200,000won

○ Nuclear Engineering

Position	Field	Quota	Detailed information	
Post-Doc Researcher	Heat transfer and CFD (Prof. In Cheol Bang)	1	Main Tasks	Research on heat pipe technology for innovative small modular reactors
			Eligibility	A PhD degree in heat transfer and related field
			Preferences	Research experience in heat transfer and closely related field
			Term	2022.03.01. ~ 2023.02.28.
			Working hours	- The five-day week - Working 9:00~18:00 - Break 12:00 ~ 13:00
Monthly wage	3,000,000 WON			

○ Graduate School of Carbon Neutral Technology

Position	Field	Quota	Detailed information	
Post-Doc Researcher	Carbon Neutral, Environment(1) (Prof. Chang-Keun Song)	1	Main Tasks	Research on Carbon/Environmental Economy and Bussiness
			Eligibility	A PhD degree in Economy, Bussiness
			Preferences	Research Papers cited in SCI and SSCI in closely related field
			Term	2022.03.01. ~ 2023.02.28.
			Working hours	- The five-day week - Working 9:00~18:00 - Break 12:00 ~ 13:00
			Monthly wage	3,500,000 KRW
Post-Doc Researcher	Carbon Neutral, Environment(2) (Prof. Chang-Keun Song)	2	Main Tasks	Research on Carbon/Environmental Economy, Business, Global Environmental Science, Engineering
			Eligibility	A Ph.D. degree in Economy, Bussiness or Engineering, Science
			Preferences	Research Papers cited in SCI and SSCI in closely related field
			Term	2022.03.01. ~ 2023.02.28.
			Working hours	- The five-day week - Working 9:00~18:00 - Break 12:00 ~ 13:00
			Monthly wage	3,500,000 KRW
Researcher	Carbon Neutral, Environment(3) (Prof. Chang-Keun Song)	1	Main Tasks	Research on Carbon/Environmental Economy, Bussiness, Engineering and Science
			Eligibility	- A Master degree in Economy, Bussiness, or Engineering, Science - Persons who meet E-3 VISA qualifications
			Preferences	Research Papers cited in SCI and SSCI in closely related field
			Term	2022.03.01. ~ 2023.02.28.
			Working hours	- The five-day week - Working 9:00~18:00 - Break 12:00 ~ 13:00
			Monthly wage	2,200,000 KRW

※ Notice

- 1) No preference given to age or sex
- 2) A Ph.D. for Postdoctoral Researcher is required
- 3) Applicants can apply to only one field
- 4) Candidates may be selected for employment and may be hired according to their rankings if other vacancies in the same field become available within six months of appointment
- 5) Career or qualifications in each fields' requirement or preferred conditions must be supported with proofs such as certificates. In case submitted proofs are confirmed as false documents, acceptance can be cancelled.
- 6) Salary can be changed depending on experiences in the field through discussion. Extra payment may occur.
- 7) Details of the contract can be revised by mutual consent with the Project PI

IV Contact

- College of Engineering, Ulsan National Institute of Science and Technology (UNIST)
 - Tel: +82 052 217-1803, invitation-ns@unist.ac.kr
 - Address: U203, Bldg.108, Unist-gil 50, Eonyang-eup, Ulju-gun, Ulsan