

# 2022-8th Researcher Recruitment for College of Natural Sciences

## I Candidates and Eligibility

No.	Position/Research field	Expected number of people	Main Task, Eligibility and preferences
CHM8-1	Post-Doctoral Researcher - 2D Materials (Pl. Hyeon Suk Shin)	1	<p><b>[main task]</b></p> <ul style="list-style-type: none"> <li>- Perform research project</li> </ul> <p><b>[Eligibility]</b></p> <ul style="list-style-type: none"> <li>- Ph.D. Degree (holders or prospective doctoral candidates until the appointment date)</li> <li>- must have more than 1 SCI(E) papers within recent 5 years</li> </ul> <p><b>[Preferential]</b></p> <ul style="list-style-type: none"> <li>- Related research experience</li> <li>- Preferential treatment for experienced researchers</li> </ul>
CHM8-2	Post-Doctoral Researcher - Organic materials and photochemistry (Pl. Tae-Hyuk Kwon)	1	<p><b>[main task]</b></p> <ul style="list-style-type: none"> <li>- Design and synthesis of organic photosensitizers for photodynamic therapy</li> <li>- Investigation of photophysical and photochemical properties of photosensitizers</li> </ul> <p><b>[Eligibility]</b></p> <ul style="list-style-type: none"> <li>- Ph.D. Degree (holders or prospective doctoral candidates until the appointment date)</li> </ul> <p><b>[Preferences]</b></p> <ul style="list-style-type: none"> <li>- Preferential treatment for experienced researchers</li> <li>- more than 2 SCI(E) papers within recent three years</li> <li>- Preferential for those who can speak English</li> </ul>
CHM8-3	Post-Doctoral Researcher - Laser spectroscopy (Pl. Yung Sam Kim)	1	<p><b>[main task]</b></p> <ul style="list-style-type: none"> <li>o Perform research project</li> <li>- ultrafast laser spectroscopy experiment (mainly 2D IR) on biomolecules and material-based molecular complexes</li> <li>- Interpretation of experimental data through modeling and diverse simulations</li> </ul> <p><b>[Eligibility]</b></p> <ul style="list-style-type: none"> <li>o Ph.D. Degree (holders or prospective doctoral candidates until the appointment date)</li> </ul> <p><b>[Preferences]</b></p> <ul style="list-style-type: none"> <li>o Preferential treatment for experienced researchers, especially for in the field of spectroscopy</li> <li>o more than 1 SCI(E) papers within recent three years (as a first or corresponding author)</li> <li>o Preferential for those who can speak English</li> </ul>
CHM8-4	Post-Doctoral Researcher - Chemistry (Pl. Myoung Soo Lah)	1	<p><b>[main task]</b></p> <ul style="list-style-type: none"> <li>o Perform research project</li> <li>- Synthesis of metal-organic framework (MOF)</li> <li>- Investigation of MOF as guest molecule separation &amp; Storage material and catalyst</li> </ul> <p><b>[Eligibility]</b></p> <ul style="list-style-type: none"> <li>o Ph.D. Degree (holders or prospective doctoral candidates until the appointment date)</li> </ul> <p><b>[Preferences]</b></p> <ul style="list-style-type: none"> <li>o Preferential treatment for experienced researchers</li> <li>o more than 1 SCI(E) papers within recent three years</li> <li>o Preferential for those who can speak English</li> </ul>
CHM8-5	Post-Doctoral Researcher - Chemistry (Pl. Seung Kyu Min)	1	<p><b>[main task]</b></p> <ul style="list-style-type: none"> <li>o Perform research project</li> <li>- Computational chemistry computer simulation</li> <li>- Material property calculation / Polariton chemistry</li> </ul>

			<p><b>[Eligibility]</b></p> <ul style="list-style-type: none"> <li>◦ Ph.D. Degree (holders or prospective doctoral candidates until the appointment date)</li> </ul> <p><b>[Preferences]</b></p> <ul style="list-style-type: none"> <li>◦ Preferential treatment for experienced researchers</li> <li>◦ more than 1 SCI(E) papers within recent three years</li> <li>◦ Preferential for those who can speak English</li> </ul>
CHM8-6	Post-Doctoral Researcher - Organic synthesis (Pl. Cheol-Min Park)	1	<p><b>[main task]</b></p> <ul style="list-style-type: none"> <li>- Perform drug discovery research project</li> <li>- Daily operation of synthesis of organic compounds</li> </ul> <p><b>[Eligibility]</b></p> <ul style="list-style-type: none"> <li>- Ph.D. Degree in organic synthesis field</li> <li>- must have more than 3 SCI publications in last 5 years</li> </ul> <p><b>[Preferential]</b></p> <ul style="list-style-type: none"> <li>- Related research experience</li> <li>- Fluent English Speakers, also with very good writing skills</li> </ul>
CHM8-7	Post-Doctoral Researcher - Organic chemistry (Pl. Cheol-Min Park)	1	<p><b>[main task]</b></p> <ul style="list-style-type: none"> <li>◦ Organic synthesis</li> </ul> <p><b>[Eligibility]</b></p> <ul style="list-style-type: none"> <li>◦ Ph.D. Degree (holders or prospective doctoral candidates until the appointment date)</li> </ul> <p><b>[Preferences]</b></p> <ul style="list-style-type: none"> <li>◦ Preferential treatment for experienced researchers</li> <li>◦ more than 1 SCI(E) papers within recent three years</li> <li>◦ Preferential for those who can speak English</li> </ul>
CHM8-8	Post-Doctoral Researcher - Material Chemistry (Pl. Hyunchul Oh)	1	<p><b>[main task]</b></p> <ul style="list-style-type: none"> <li>- Metal-organic frameworks (MOFs) synthesis and physical properties analysis</li> <li>- Analysis of gas adsorption for CO<sub>2</sub>, H<sub>2</sub>, CH<sub>4</sub> capture</li> <li>- Hydrogen isotope separation</li> <li>- Magneto-caloric effect study</li> </ul> <p><b>[Eligibility]</b></p> <ul style="list-style-type: none"> <li>- Ph.D. Degree (holders or prospective doctoral candidates until the appointment date)</li> </ul> <p><b>[Preferences]</b></p> <ul style="list-style-type: none"> <li>- Preferential treatment for experienced researchers</li> <li>- more than 3 SCI(E) papers within recent three years</li> <li>- Preferential for those who can speak English and Korean as well fluently</li> </ul>
CHM8-9	Post-Doctoral Researcher - Computational chemistry (Pl. Geunsik Lee)	1	<p><b>[main task]</b></p> <ul style="list-style-type: none"> <li>◦ Perform research project</li> <li>- first-principle and machine learning based research on energy materials discovery</li> </ul> <p><b>[Eligibility]</b></p> <ul style="list-style-type: none"> <li>◦ Ph.D. Degree (holders or prospective doctoral candidates until the appointment date)</li> </ul> <p><b>[Preferences]</b></p> <ul style="list-style-type: none"> <li>◦ Preferential treatment for experienced on first-principles and machine-learning calculations</li> <li>◦ more than 3 SCI(E) papers within recent three years</li> <li>◦ Preferential for those who can speak English</li> </ul>
CHM8-10	Post-Doctoral Researcher - Matter-wave optics (Pl. Bum Suk Zhao)	1	<p><b>[main task]</b></p> <ul style="list-style-type: none"> <li>◦ Perform research project</li> <li>- Research on physical chemistry and atomic/molecular physics</li> <li>- Research on molecule-surface scattering and molecule-surface</li> </ul> <p><b>[Eligibility]</b></p> <ul style="list-style-type: none"> <li>◦ Ph.D. Degree (holders or prospective doctoral candidates until the appointment date)</li> <li>◦ more than 1 papers higher than JCR ranking 7%</li> <li>◦ more than 5 SCI(E) papers (PRA, PCCP, JCP etc.) as first author</li> </ul> <p><b>[Preferences]</b></p> <ul style="list-style-type: none"> <li>◦ Related research experience</li> </ul>

MIH-8-1	Post-Doctoral Researcher - Mathematical Sciences (Pl. Bongsoo Jang)	1	<p><b>[main task]</b></p> <ul style="list-style-type: none"> <li>- Perform collaborative research on financial mathematics</li> <li>- Help organizing Seminars and Conferences</li> </ul> <p><b>[Eligibility]</b></p> <ul style="list-style-type: none"> <li>- Ph.D. degree holder (or to be obtained)</li> </ul> <p><b>[Preferential]</b></p> <ul style="list-style-type: none"> <li>- Strong background in financial mathematics</li> </ul>
MIH-8-2	Post-Doctoral Researcher - Mathematical Sciences (Pl. Kyudong Choi)	3	<p><b>[main task]</b></p> <ul style="list-style-type: none"> <li>- Collaborate with BRL Analysis group, Perform your own research</li> <li>- Help organizing Seminars and Conferences</li> </ul> <p><b>[Eligibility]</b></p> <ul style="list-style-type: none"> <li>- Ph.D. degree holder (or to be obtained) in Math</li> <li>- Publication: at least 1 article (including accepted ones) in SCI(E) for the last 3 years</li> </ul> <p><b>[Preferential]</b></p> <ul style="list-style-type: none"> <li>- Strong background in Partial Differential Equations or related fields (Differential geometry, Functional Analysis, Harmonic Analysis, and numerical analysis)</li> <li>- Salary is subject to change according to experience and consultation</li> </ul>
PHY-8-1	Post-Doctoral Researcher - Soft matter & Nonequilibrium statistical physics (Pl. Cheol-Min Ghim)	1	<p><b>[main task]</b></p> <ul style="list-style-type: none"> <li>o Perform research project</li> <li>- Nonequilibrium statistical physics of soft active matter</li> <li>- Developing machine learning tools for statistical physics research</li> </ul> <p><b>[Eligibility]</b></p> <ul style="list-style-type: none"> <li>o Ph.D. Degree (holders or prospective doctoral candidates until the appointment date)</li> </ul> <p><b>[Preferential]</b></p> <ul style="list-style-type: none"> <li>o Preferential treatment for experienced researchers</li> <li>o more than 1 SCI(E) papers within recent three years</li> <li>o Preferential for those who can speak English</li> </ul>
PHY-8-2	Post-Doctoral Researcher - Soft matter Theory Using Nonequilibrium Statistical Physics and Deep Learning (Pl. Jaeup Kim)	1	<p><b>[main task]</b></p> <ul style="list-style-type: none"> <li>o Perform research project</li> <li>- Perform nonequilibrium statistical physics calculation and simulation of soft matter</li> <li>- Developing bacteria tracking software using deep learning</li> </ul> <p><b>[Eligibility]</b></p> <ul style="list-style-type: none"> <li>o Ph.D. Degree (holders or prospective doctoral candidates until the appointment date)</li> </ul> <p><b>[Preferential]</b></p> <ul style="list-style-type: none"> <li>o Preferential treatment for experienced researchers</li> <li>o more than 1 SCI(E) papers within recent three years</li> <li>o Preferential for those who can speak English</li> </ul>
PHY-8-3	Post-Doctoral Researcher - Soft matter & Nonequilibrium statistical physics (Pl. Joonwoo Jeong)	1	<p><b>[main task]</b></p> <ul style="list-style-type: none"> <li>o Perform research project</li> <li>- Nonequilibrium statistical physics of soft active matter, e.g., microbial systems</li> </ul> <p><b>[Eligibility]</b></p> <ul style="list-style-type: none"> <li>o Ph.D. Degree (holders or prospective doctoral candidates until the appointment date)</li> </ul> <p><b>[Preferential]</b></p> <ul style="list-style-type: none"> <li>o Preferential treatment for experienced researchers</li> <li>o more than 1 SCI(E) papers within recent three years</li> <li>o Preferential for those who can speak English</li> </ul>
PHY-8-4	Post-Doctoral Researcher - Biophysics (Pl. Chae Un Kim)	1	<p><b>[main task]</b></p> <ul style="list-style-type: none"> <li>o Protein crystallography experiments and data analysis of enzymatic intermediate states using synchrotron and X-FEL</li> </ul> <p><b>[Eligibility]</b></p> <ul style="list-style-type: none"> <li>o Ph.D. Degree (holders or prospective doctoral candidates until the appointment date)</li> </ul> <p><b>[Preferential]</b></p> <ul style="list-style-type: none"> <li>o Preferential treatment for experienced researchers</li> <li>o more than 1 SCI(E) paper in Q1 level</li> <li>o Preferential for those who can speak English fluently</li> </ul>
PHY-8-5	Post-Doctoral Researcher - Astronomy (Pl. Dongsu Ryu)	2	<p><b>[main task]</b></p> <ul style="list-style-type: none"> <li>o Perform research project</li> <li>- Simulation of high-energy phenomena of radio galaxies and galaxy clusters</li> <li>- Analysis of simulation data and publication of the results</li> </ul> <p><b>[Eligibility]</b></p> <ul style="list-style-type: none"> <li>o Ph.D. in astronomy, physics, and related fields (Applicants must have a PhD at the time of appointment)</li> </ul> <p><b>[Preferential]</b></p> <ul style="list-style-type: none"> <li>o Preferential treatment for experienced researchers</li> <li>o more than 2 SCI(E) papers within recent three years</li> <li>o Preferential for those who can speak English</li> </ul>

## ※ Notice

### 1) Applicants can apply to only one field

- 2) 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.
- 3) The criteria for accreditation of official English grades are limited to those published with in 2 years of the application deadline
- 4) In the absence of suitable candidates, nobody can be selected.
- 5) There might be primary candidates, so they can be hired with rankings among them in cases such as one of them gives up on the recruitment or there being vacancy in the same field within 6 months.
- 6) UNIST discloses the number of relatives hired according to the government's recruitment system for public institutions.

## II

## Contract

No	Position	Principal Investigator	Term	Working hours	Monthly pay (Pre-tax basis)	working place
CHM-8-1	Post-Doctoral Researcher	Hyeon Suk Shin	2022.09.01. ~ 2023.08.31.	- The five day Week - Working Hour 09:00~18:00 - Recess 12:00 ~ 13:00	₩3,000,000	Bldg. 101 UNIST
CHM-8-2	Post-Doctoral Researcher	Tae-Hyuk Kwon	2022.09.01. ~ 2023.08.31.	- The five day Week - Working Hour 09:00~18:00 - Recess 12:00 ~ 13:00	₩2,900,000	Bldg. 108 UNIST
CHM-8-3	Post-Doctoral Researcher	Yung Sam Kim	2022.09.01. ~ 2023.08.31.	- The five day Week - Working Hour 09:00~18:00 - Recess 12:00 ~ 13:00	₩2,200,000	Bldg. 108 UNIST
CHM-8-4	Post-Doctoral Researcher	Myoung Soo Lah	2022.09.01. ~ 2023.08.31.	- The five day Week - Working Hour 09:00~18:00 - Recess 12:00 ~ 13:00	₩2,250,000	Bldg. 108 UNIST
CHM-8-5	Post-Doctoral Researcher	Seung Kyu Min	2022.09.16. ~ 2023.09.15.	- The five day Week - Working Hour 09:00~18:00 - Recess 12:00 ~ 13:00	₩2,500,000	Bldg. 108 UNIST
CHM-8-6	Post-Doctoral Researcher	Cheol-Min Park	2022.09.01. ~ 2023.08.31.	- The five day Week - Working Hour 09:00~18:00 - Recess 12:00 ~ 13:00	₩2,500,000	Bldg. 108 UNIST
CHM-8-7	Post-Doctoral Researcher	Cheol-Min Park	2022.09.01. ~ 2023.08.31.	- The five day Week - Working Hour 09:00~10:00 (Negotiable)	₩250,000	Bldg. 108 UNIST
CHM-8-8	Post-Doctoral Researcher	Hyunchul Oh	2022.09.01. ~ 2023.08.31.	- The five day Week - Working Hour 09:00~18:00 - Recess 12:00 ~ 13:00	₩2,780,000	Bldg. 103 UNIST
CHM-8-9	Post-Doctoral Researcher	Geunsik Lee	2022.09.01. ~ 2023.02.28.	- The five day Week - Working Hour 09:00~18:00 - Recess 12:00 ~ 13:00	₩1,950,000	Bldg. 103 UNIST
CHM-8-10	Post-Doctoral Researcher	Bum Suk Zhao	2022.09.01. ~ 2023.02.28.	- The five day Week - Working Hour 09:00~18:00 - Recess 12:00 ~ 13:00	₩3,000,000	Bldg. 103 UNIST
MIH-8-1	Post-Doctoral Researcher	Bongsoo Jang	2022.09.01. ~ 2023.08.31.	- The five day Week - Working Hour 09:00~18:00 - Recess 12:00 ~ 13:00	₩2,500,000	Bldg. 108 UNIST
MIH-8-2	Post-Doctoral Researcher	Kyudong Choi	2022.09.01. ~ 2023.08.31.	- The five day Week - Working Hour 09:00~18:00 - Recess 12:00 ~ 13:00	₩4,000,000	Bldg. 108 UNIST
PHY-8-1	Post-Doctoral Researcher	Cheol-Min Ghim	2022.09.01. ~ 2023.08.31.	- The five day Week - Working Hour 09:00~18:00 - Recess 12:00 ~ 13:00	₩4,000,000	Bldg. 108 UNIST

PH-Y-8-2	Post-Doctoral Researcher	Jaeup Kim	2022.09.01. ~ 2023.08.31.	- The five day Week - Working Hour 09:00~18:00 - Recess 12:00 ~ 13:00	₩3,000,000 (Negotiable)	Bldg. 108 UNIST
PH-Y-8-3	Post-Doctoral Researcher	Joonwoo Jeong	2022.09.01. ~ 2023.08.31.	- The five day Week - Working Hour 09:00~18:00 - Recess 12:00 ~ 13:00	₩3,000,000 (Negotiable)	Bldg. 108 UNIST
PH-Y-8-4	Post-Doctoral Researcher	Chae Un Kim	2022.09.01. ~ 2023.02.28.	- The five day Week - Working Hour 09:00~18:00 - Recess 12:00 ~ 13:00	₩3,500,000	Bldg. 108 UNIST
PH-Y-8-5	Post-Doctoral Researcher	Dongsu Ryu	2022.09.01. ~ 2023.08.31.	- The five day Week - Working Hour 09:00~18:00 - Recess 12:00 ~ 13:00	₩3,500,000	Bldg. 108 UNIST

- 1) Researchers are contracted for up to one year and can be re-signed through evaluation.
- 2) The place of work may be changed depending on internal circumstances
- 3) Salary can be changed depending on experiences in the field through discussion Extra payment may occur
- 4) Detail of contract can be revised by mutual consent with the Research PI.

## III Document Submission and Screening

### ○ Recruitment notice and documents submission period

- From 21 July, 2022 to 5 August, 2022 @ 24:00
- Only applications that arrived during the period are Valid.

### ○ Document Submission: Recruiter [E-mail\(inforam@unist.ac.kr\)](mailto:inforam@unist.ac.kr)

#### ※ How to apply

- The submitted documents are converted into one PDF file (after scanning) and sent by e-mail.
- Subject: 「Position-Recruitment Area: OOO(Applicant name)」
- Note: Applications should be received by 24:00 on the due date(Korean Time)

### ○ Documents to be submitted

Position	Submission documents	Remarks
Post-doc researcher	1) Applicant Form 2) Self introduction 3) Agreement to provide personal information to third parties	- Required documents - Refer to attachment

※ 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.

### ○ Screening & Other Information

Screening Stage	how to select
Document Screening	Evaluate the suitability of recruitment area, select 5 times the number of candidates that the opening in order of the highest total score.  ※ Evaluation Standard(Score) - Post-Doctoral Researcher: Self instruction(50), Job competencies(50)

Interview Screening	<p>Evaluation of research performance and specialties and job performance ability in recruitment area</p> <p>※ Evaluation Standard(Score)</p> <p>- Post-Doctoral Researcher: Job competencies(30), Development potential(30), Suitability for UNIST(20), Basic ability(20)</p>
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#### ○ 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, of 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
- **Police Clearance Certificate must be submitted before joining UNIST.**

## IV Recruitment Schedule

Step	Schedule	Remarks
Application Period	2022.07.21~ 2022.08.05	~24:00 on 2022.08.05
Documents review	2022.08.08 ~ 2022.08.16	Announcement of successful candidates: 2022.08.16
Interview	2022.08.17 ~ 2022.08.23	Announcement of successful candidates: 2022.08.23
Appointment	2022.09.~	

※ Schedules are subject to change.

## V Contact

#### ○ Ulsan Institute of Science and Technology(UNIST)

- Academic & Students Affairs Team, College of Natural Sciences  
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