

UNIST Energy and Chemical Engineering Researcher Recruitment

I Candidates and Eligibility

| Recruitment Area & Position | | No. of persons recruited | Career level | Responsibility & Eligibility |
|--|------------------------------|--------------------------------------|--------------|---|
| Seawater Resources Technology Research Center | Researcher | B.S. M.S. | 3 | <ul style="list-style-type: none"> ○ Major in Material Development and Analysis based on the Organic / Inorganic Chemistry ○ Major in Prototyping and Evaluation of Startup/ Prototype ○ Major in Circuit and Electricity ○ (Researcher:B.S.) A B.S. degree in related field or B.S. candidate who is expected to graduate by February of 2020 ○ (Researcher:M.S.) A M.S. degree in related field or M.S. candidate who is expected to graduate by February of 2020 ○ (Post-Doc) A PhD degree in related field or PhD candidate who is expected to graduate by February of 2020 |
| | Post-Doc | | 3 | |
| | Research Assistant Professor | | 3 | |
| Energy Soft Materials Lab. | Post-Doc | | 1 | <ul style="list-style-type: none"> ○ Development of advanced materials for energy storage systems ○ A PhD degree in related field or PhD candidate who is expected to graduate by February of 2020 |
| Nanomaterials Synthesis and Functional Devices Lab | Post-Doc | solar cells | 2 | <ul style="list-style-type: none"> ○ Studies on Perovskite solar cells , Organic-Inorganic Hybrid solar cells, Organic solar cells ○ Studies on water oxidation, hydrogen evolution, CO₂ conversion/utilization ○ A PhD degree in related field or PhD candidate who is expected to graduate by February of 2020 |
| | | Electrochemistry., Electro catalysts | 1 | |
| Energy Materials Lab | Administrative researcher | | 1 | <ul style="list-style-type: none"> ○ Management of the research project ○ Major in Science and Engineering |
| Bioinspired Functional Materials Lab. | Post-Doc | | 1 | <ul style="list-style-type: none"> ○ Studies on the utilization of CO and CO₂ using enzymes and inorganic catalysts ○ A PhD degree in related field or PhD candidate who is expected to graduate by February of 2020 |
| Laboratory for energy harvesting materials and systems | Post-Doc | | 1 | <ul style="list-style-type: none"> ○ Studies on perovskite solar cells, Energy conversion thermoelectric, Development of piezoelectric materials/ devices ○ A PhD degree in related field or PhD candidate who is expected to graduate by February of 2020 |
| Eco-Friendly Catalysis & Energy Laboratory(ECOCAT) | Researcher (B.S.) | | 1 | <ul style="list-style-type: none"> ○ Experimental Assistant in ECOCAT ○ Research experience in a catalyst related field ○ A B.S. degree in related field |
| NCL | Researcher (B.S.) | | 2 | <ul style="list-style-type: none"> ○ Studies on Synthesis of Energy storage materials ○ A B.S. degree in related field or B.S. candidate |

| | | | |
|--|-------------------|---|---|
| Advanced Tech-Optoelectronic Materials Synthesis Lab | Post-Doc | 2 | who is expected to graduate by February of 2020 |
| Eclat | Researcher (B.S.) | 1 | <ul style="list-style-type: none"> Studies on solar cells materials/devices, Energy Engineering/ Chemistry A PhD degree in related field or PhD candidate who is expected to graduate by February of 2020 |
| | Post-Doc | 1 | <ul style="list-style-type: none"> Major in Electrochemistry/Energy Engineering/ Chemistry (Researcher:BS) A B.S. degree in related field (Post-Doc) A PhD degree in related field or PhD candidate who is expected to graduate by February of 2020 |
| Gunslab | Post-Doc | 1 | <ul style="list-style-type: none"> Major in Fuel Cells / Metal air battery Major in Chemical Engineering, Chemistry,,Materials Science, Mechanical engineering A PhD degree in related field or PhD candidate who is expected to graduate by February of 2020 <p>[Preferential]</p> <ul style="list-style-type: none"> Research experience in a closely related field |

| Recruitment Area & Position | | No. of persons recruited | Career level | Responsibility & Eligibility |
|--|---------------------------|--------------------------------------|--------------|--|
| Seawater Resources Technology Research Center | Researcher | B.S. M.S. | 2 | <ul style="list-style-type: none"> Major in Material Development and Analysis based on the Organic / Inorganic Chemistry Major in Prototyping and Evaluation of Startup/ Prototype Major in Circuit and Electricity (Researcher:BS) A B.S. degree in related field (Researcher:M.S) A M.S. degree in related field (Post-Doc) A PhD degree in related field <p>[Preferential]</p> <ul style="list-style-type: none"> Research experience in a closely related field |
| | Post-Doc | | 1 | |
| Low-Dimensional Materials & Energy Conversion Lab | Post-Doc | solar cells | 1 | <ul style="list-style-type: none"> Studies on Perovskite solar cells , Organic-Inorganic Hybrid solar cells, Organic solar cells Studies on water oxidation, hydrogen evolution, CO₂ conversion/utilization A PhD degree in related field <p>[Preferential]</p> <ul style="list-style-type: none"> Research experience in a closely related field: Materials/Chemistry/Chemistry Engineering/Electrical Engineering/ Physics/Vacuum deposition |
| | | Electrochemistry., Electro catalysts | 1 | |
| Energy Materials Lab | Administrative researcher | | 1 | <ul style="list-style-type: none"> Management of the research project Major in Science and Engineering |
| Bio-inspired Functional Materials Lab. | Post- Doc | | 1 | <ul style="list-style-type: none"> Studies on the utilization of CO and CO₂ using enzymes and inorganic catalysts A PhD degree in related field <p>[Preferential]</p> <ul style="list-style-type: none"> Materials Science and Engineering, Chemical Engineering, Chemistry, Energy Engineering |
| Electrochemistry Lab for Energy and Environment (ELEE) | Researcher | | 1 | <ul style="list-style-type: none"> Electrocatalysis for CO₂ reduction, IC analysis A B.S. degree in related field |
| Gunslab | Researcher | | 1 | <ul style="list-style-type: none"> Major in Fuel Cells / Metal air battery Major in Chemical Engineering, Chemistry,,Materials Science, Mechanical engineering A B.S. degree in related field <p>[Preferential]</p> <ul style="list-style-type: none"> Research experience in a closely related field |
| Quantum Materials for Energy Conversion Lab | Post- Doc | | 1 | <ul style="list-style-type: none"> Research experience in the measure of In-situ X-ray, ARPES of Oxide Studies on DFT calculation, Oxide (about Ferroelectric, Battery) |

| | | | | |
|--|------------------------------|---|-------------------------|--|
| | Administrative researcher | 1 | | <ul style="list-style-type: none"> ○ A PhD degree in related field ○ Management of the research project [Preferential] ○ Research experience in a closely related field |
| Biochemical Engineering Lab | Research Professor | 1 | Experienced | <ul style="list-style-type: none"> ○ Biochemical Engineering ○ Industrial Organic Acid Producing Strains and process development ○ A PhD degree in related field and at least 10 years of verifiable experiences at the institute |
| Sustainable Process Analysis, Design and Engineering Lab | Post- Doc | 2 | Entry-level/experienced | <ul style="list-style-type: none"> ○ Process design/ Biz model ○ Catalyst/Reaction Engineering, Reactor design ○ Process analysis based on ML/AI/CPS ○ Comsol/Ansys/Barracuda ○ Prognostics and Health Management ○ (Post-Doc) A PhD degree in related field ○ (Research Assistant Professor) at least 2 years of verifiable experiences at the institute |
| | Research Assistant Professor | 1 | | <ul style="list-style-type: none"> [Preferential] ○ Research experience in a closely related field |
| Advanced Tech-Optoelectronic Materials Synthesis Lab | Post-Doc | 1 | Entry-level/experienced | <ul style="list-style-type: none"> ○ Studies on solar cells materials/devices, Energy Engineering/ Chemistry ○ A PhD degree in related field |

※ **Notice**

- 1) The number of applicants can be reduced if there is no qualified person
- 2) Candidates can be selected as candidates for employment, and candidates can be hired according to the candidates' rankings if the candidates for recruitment are found out or there are vacancies in the same field within six months of appointment.

II Contract

- Contract period: 2020. 03 – 2021. 02 (1 years)
 - ※ Contract period of Bio-inspired Functional Materials Lab. : 2020.5.1.~ 2021.4.30
 - ※ Contract period of Electrochemistry Lab for Energy and Environment (ELEE): 2020.4.16.~ 2021. 8.15
 - ※ Contract period of Gunslab: 2020.4.16.~ 2021. 8. 31
 - ※ Contract period of Biochemical Engineering Lab : 2020.5.16. ~ 2020.10.15
 - ※ Contract period of Sustainable Process Analysis, Design and Engineering Lab(Research Assistant Professor): 2020. 6. 1 ~ 2021. 5. 31
- Working hours: 5 days a week (Mon–Fri), 8 hours a day (9: 00 – 18: 00)
 - ※ Electrochemistry Lab for Energy and Environment (ELEE)' working hours : 5 days a week (Mon-Fri), 2 hours a day
- Salary: Negotiations after interview

III Reasons for Exclusion, Restriction of Support Age, and Others

- exclusion
 - Eligible physical examination or reasons for disqualification of employment under Article 33 of the National Civil Service Act. Those who have been rejected as a result are 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 be false, application forgery, or fraudulent employment is found, the appointment may be canceled if a reason for disqualification under Article 33 of the Civil Service is found.
- No age limit
- For men, military uniform or exemption
- Other
 - Photo registration, school name, credit, family relations, family name, date of birth, and physical condition are not allowed in the application form due to blind employment.
 - Those who are eligible for work protection are given additional points according to related laws (5% or 10% of the perfect scores by stage)
 - In case of the disabled, additional points are granted to promote employment of persons with disabilities (5% of perfect scores by stage)
 - You must be able to work immediately after appointment.

IV Document Receipt and Selection Method

- Recruitment notice and documents submission period
: 2020.03.05. (Thu) – 2020.03.19. (Thu) 24:00 (15 days)

○ Document Receipt Method

- Recruiter E-mail: alleysi@unist.ac.kr
- Documents to be submitted: Application form, self-introduction letter, personal information third party, research plan(only post-doc, research (assistant) professor), C.V.(only research (assistant) professor), career certificate
1 copy of each written offer agreement (see attached form)

※ How to apply

- The submitted documents are converted into PDF files (after scanning) and sent by e-mail.
- Subject: “Support for UNIST Energy and Chemical Engineering Researcher Recruitment_ Recruitment Area & Positoin: OOO”
- Note: Applications should be received by 24:00 on the due date

○ 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 no entry of photograph, school name, credit, family relationship, family name, date of birth, and physical condition.

○ The following contents and conditions are also prohibited from the application: Name of school, family relationship, date of birth, person, and body

○ Selection Method: Document Screening, Interview

| Type of screening | Description | No. of candidates to be selected |
|-----------------------|--|--|
| Document Screening | Screening of the Application Form and the Self Introduction | Within 3 times the number of persons to be recruited |
| Interview | Evaluation of the candidate's research performance and speciality in related field | 1 time the number of person to be recruited |
| Committe Deliberation | Deliberation of the final appointment | only Research (Assistant) Professor |
| Appointment | Completion/submission of documents required for appointment | |

- If there are no qualified candidates for the screening process, the applicants may be reduced or not selected.
- Employment protection subjects will be granted additional points according to the related laws (5% or 10% of the perfect scores)
- In case of disabled persons, granting points by type to promote employment of persons with disabilities (5% of total marks by type)

○ Recruitment candidate

- Job candidates are selected within the scope of the number of applicants in the order of the high score of the interview.
- If there is no qualified person as a result of the interview, the original number of candidates may be reduced or not selected.
- Criteria for Handling Successful Candidates by Ties
 - . In case of tie in each stage of the selection, (priority) veterans, (priority) persons with disabilities, (Priority 3) High school graduates, (Priority 4) Non- metropolitan area talents, (Priority 5) Higher English test scores (Priority 6)

※ If there is no qualified person, applicants may not be selected.

○ Final appointment

- If there are no special matters after conducting an identity check and hiring examination for public officials, hiring candidates will be finally hired.
- The appointment can be canceled if false facts are found in the documents submitted after the final appointment has been confirmed and appointed, or if the reason for disqualification under Article 33 of the National Civil Service Act is found.

V Recruitment Schedule

○ Schedule

- Application Submission: 2020.03.05. (Thu) – 2020.03.19. (Thu) 24:00 (15 days)
- Announcement of successful applicants: 24 Mar, 2020(Tue)
- Interview: 27 Mar, 2020(scheduled)
- Announcement of Candidates for Job Interview: 31 Mar, 2020(scheduled)
- Appointment scheduled for: 16 Apr, 2020(scheduled)

VI **Contact**

- Ulsan Institute of Science and Technology (UNIST) ECHE Administrative office
 - Tel: (052) 217-3545, alleysi@unist.ac.kr
 - Address: No. 50, 104-dong 401-10, Unist-gil, Eonyang-eup, Ulju-gun, Ulsan