## **Recruitment for MANE researchers**

## Candidates and Eligibility

		Expected		
Position	Field	number of	Main Tasks, Eligibility and Preferences	
		people		
	micro- /nanofluidics ( <b>Prof. Taesung Kim</b> )	1	[Main Tasks]  - Development of Microfluidic Devices  - Experimental Study on Nanotransport Phenomena [Eligibility]  - Ph.D. or the prospective Ph.D. in August 2020  - One or more publications in SCI journals as the first author within the past three years  [Preferences]  - Fluent in English	
			- More than 5 SCI(E) papers within recent three years	
Researcher (Post-Doc)	Laser Materials Processing ( <b>Prof. Hyungson Ki</b> )	2	[Main Tasks]  - Application of deep learning to laser materials processing  - Numerical simulation and experiment of laser materials processing  [Eligibility]  - Ph.D. or the prospective Ph.D. in August 2020  - At least 3 SCI/E journal publications in the last three years  [Preferences]  - Major in laser materials processing  - Fluent in English	
	Composite Materials (Prof. Young-Bin Park)	1	[Main Tasks]  - R&D on rapid manufacturing of fiber-reinforced composites for smart mobility  - Al-based prognostics and health management of automotive parts, manufacturing process optimization, and quality improvement using sensing and real-time process monitoring [Eligibility]  - Ph.D. degree (Degree conferment expected by August 2020 also accepted)  - One or more publications in SCI journals in the field of Composite Materials as the first author within the past three years  [Preferences]  - Major in Composite Materials or related fields  - Experience related to job description  - High proficiency in English speaking and writing	

Field Exp	ected Main Tasks, Eligibility and Preferences	
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Position		number of people	
Researcher (Post-Doc)	Reactor Physics (Prof. Deokjung Lee)	1	[Main Tasks]  Research related to reactor physics  Development of computer codes for nuclear reactor core design  Core design of Gen-IV reactors  [Eligibility]  Ph.D. or the prospective Ph.D. in August 2020 in the nuclear field  More than 1 SCI journal publication in the nuclear field for recent 3 years  [Preferences]  Experience to develop neutronics codes
	Structural analysis and design based on computational mechanics (Prof. Hayoung Chung)	1	[Main Tasks]  - Carrying out research tasks (Select one among the below tasks, if not both)  - Multiscale simulation of multifunctional polymers  - Structural/system optimization considering multiphysics  [Eligibility]  - Ph.D. degree  - One or more publications in SCI journals as the first author within the past three years  [Preferences]  - Research experience of multiscale simulation (e.g., molecular dynamics) using HPC  - Programming experiences of scientific programming using C++ or Python  - Proficiency in English  - Five or more publications in SCI journals as the first author throughout the research career  - Research experiences in relation to 3D and 4D printing
	Liquid Metal Magnetohydrodynamics (Prof. Hee Reyoung Kim)	1	[Main Tasks]  - The analysis of the characteristics of a liquid metal electromagnetic pump  - Design, manufacturing and estimation of a liquid metal electromagnetic pump  [Eligibility]  - Ph.D. or the prospective Ph.D. in August 2020 in the nuclear field  - More than 1 SCI journal publication in the nuclear field for recent 3 years  [Preferences]  - More than 3 SCI journal publications in the nuclear field for recent 3 years  - The experienced in the national research project of the nuclear field  - English available candidate
Researcher (Master)	Electrochemical Biosensor (Prof. Jaesung Jang)	1	[Main Tasks] - Development of electrochemical biosensors [Eligibility] - Holding or expected to hold a master degree at the point of appointment [Preferences] - At least one international journal paper as a first author - Communication capability in English): PBT 550 이상 (paper-based TOEFL score >=550 or equivalents

- 1) No preference given to age or sex;
- 2) A Master's degree for Researcher and 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.

### Contract

Field	Term	Working hours	<b>Monthly Pay</b>	Remarks
Micro-/nanofluidics	2020.09.01 ~ 2021.08.31	-The five-day week -Working Hour 9:00~18:00 -Recess 12:00 ~ 13:00	₩2,000,000	* Workplace: UNIST School of Mechanical and Nuclear Engineering
Laser Materials Processing	2020.09.01 ~ 2021.08.31	The five-day week -Working Hour 9:00~18:00 -Recess 12:00 ~ 13:00	₩2,000,000	* Workplace: UNIST School of Mechanical and Nuclear Engineering
Composite Materials	2020.09.01 ~ 2021.08.31	The five-day week -Working Hour 9:00~18:00 -Recess 12:00 ~ 13:00	₩1,800,000	* Workplace: UNIST School of Mechanical and Nuclear Engineering
Reactor Physics	2020.09.01 ~ 2021.08.31	The five-day week -Working Hour 9:00~18:00 -Recess 12:00 ~ 13:00	₩2,500,000	* Workplace: UNIST School of Mechanical and Nuclear Engineering
Structural analysis and design based on computational mechanics	2020.09.01 ~ 2021.08.31	The five-day week -Working Hour 9:00~18:00 -Recess 12:00 ~ 13:00	₩3,300,000	* Workplace: UNIST School of Mechanical and Nuclear Engineering
Liquid Metal Magnetohydrodynamics	2020.09.01 ~ 2021.08.31	The five-day week -Working Hour 9:00~18:00 -Recess 12:00 ~ 13:00	₩2,800,000	* Workplace: UNIST School of Mechanical and Nuclear Engineering
Electrochemical Biosensor	2020.09.01 ~ 2021.02.28	The five-day week -Working Hour 13:00~17:30 -Recess 15:00 ~ 15:30	₩1,100,000	* Workplace: UNIST School of Mechanical and Nuclear Engineering

<sup>\*</sup> Contract will be made on a yearly basis and can be extended depending on the performance

### Document Receipt and Selection Method

- Recruitment notice and documents submission period
  - 1st July 2020 ~ 15th July 2020 @ 18:00
- Document Receipt Method: Recruiter E-mail(aloha@unist.ac.kr)

<sup>\*</sup> Salary can be changed depending on experiences in the field through discussion. Extra payment may occur.

<sup>\*</sup> Detail of contract can be revised by mutual consent with the Research PI.

#### **X** How to apply

- · The submitted documents are converted into PDF files (after scanning) and sent by e-mail.
- · Subject: 「Position-Recruitment Area: OOO(Applicant name)」
- · Note: Applications should be received by 18:00 on the due date

#### Documents to be submitted

Position	Submission documents	Remarks
Researcher (Post-doc)	Applicant Form, Research Plan, Agreement to provide personal information to third parties	Refer to attachment
Researcher (Master)	Applicant Form, Self introduction, Job and research performance report, Agreement to provide personal information to third parties	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, credit, family relationship, family name, date of birth, and physical condition.

#### O Selection Method: Document Screening, Interview

- 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.

### N Recruitment Schedule

Step	Schedule	Remarks	
Application Period	2020.07.01 ~ 2020.07.15	~18:00 on 15th July	
Documents review	2020.07.20 ~ 2020.07.22	Announcement of successful candidates: 2020.07.24	
Interview	2020.07.27 ~ 2020.07.29	Announcement of successful candidates: 2020.07.31	
Appointment	September on 2020		

<sup>\*</sup> Schedules are subject to change.

# V Contact

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   Aerospace and Unclear Engineering
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