Recruitment for MANE researchers

(Aerosol/Sensor/UAV/IoT/Control/Pollutant Monitoring)

I Candidates and Eligibility

Position	Field	Expected number of people	Main Tasks, Eligibility and Preferences
Researcher (Post-Doc)	Common Requirements		**[Eligibility]** - Holding or expected to hold a PhD degree at the point of appointment **[Preferences]** - At least one paper published as the first author in internationally well-known journals in relevant the field **[Main Tasks]** - Main tasks can be all or part of the job descriptions listed below
	IoT Sensor Modules/Systems or Readout Integrated Circuits **(Prof. Jae Joon Kim)**	1	**[Detail Description]** - Development of IoT-based smart sensor modules/systems/ platforms for environmental monitoring, including pattern recognition or neural network for hazardous gas sensors - Development of multi-sensor readout integrated circuits for environmental monitoring, including analog-to-digital converters and analog front ends
	Control System of Unmanned Aerial Vehicles and Mechatronics **(Prof. Hungsun Son)**	1	**[Detail Description]** - Development of operating software and control algorithm of Multicopter UAVs - Mechatronics and control applications - Embedded hardware design and software development
	Nanomaterial-based gas and environmental sensors **(Prof. Heungjoo Shin)**	1	**[Detail Description]** - Development of nanomaterial-based gas and environmental sensors - Synthesis and characterization of nanomaterials for use as sensors - Design and fabrication of micro/nano-sized sensors
	Autonomy, guidance and control of unmanned vehicles **(Prof. Hyondong Oh)**	1	**[Detail Description]** - 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
	Aerosol/Bioaerosol/Sensor **(Prof. Jaesung Jang)**	1	**[Detail Description]** - Development of aerosol/bioaerosol instruments or biosensors
	Monitoring of trace level organic pollutants **(Prof. Sung-Deuk Choi)**	1	**[Detail Description]** - Instrumental analysis of trace level organic pollutants for monitoring of chemical accidents and environmental pollution

※ **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; and

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.

Ⅱ Contract

Position	Term	Working hours	Monthly Pay	Remarks
Researcher (Post-Doc)	2020.09.01 ~ 2021.08.31	-The five-day week -Working Hour 9:00~18:00 -Recess 12:00 ~ 13:00	₩3,000,000	* Workplace: UNIST School of Mechanical and Nuclear Engineering

* Contract will be made on a yearly basis and can be extended until the end of research project period depending on the performance

* Salary can be changed depending on experiences in the field through discussion. Extra payment may occur.

* Details of the contract can be revised by mutual consent with the Project PI (Prof. Jaesung Jang).

Ⅲ Document Receipt and Selection Method

○ Recruitment notice and documents submission period

- 15th June 2020 – 5th July 2020 @ 18:00

○ **Document Receipt Method**: Recruiter E-mail(**invitation-ns@unist.ac.kr**)

※ 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

- 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.

○ **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.

Ⅳ Recruitment Schedule

Step	Schedule	Remarks
Application Period	2020.06.15 ~ 2020.07.05	~18:00 on 5th July
Documents review	2020.07.13 ~ 2020.07.15	Announcement of successful candidates: 2020.07.17
Interview	2020.07.20 ~ 2020.07.22	Announcement of successful candidates: 2020.07.24
Appointment	September on 2020	

* Schedules are subject to change.

Ⅴ Contact

○ Ulsan Institute of Science and Technology (UNIST) School of Mechanical, Aerospace and Unclear Engineering

- Tel: (052) 217-3502, **invitation-ns@unist.ac.kr**
- Address: 401-13, Bldg.112, Unist-gil 50, Eonyang-eup, Ulju-gun, Ulsan