

Job Description [① Bartosz A. Grzybowski 연구단장 그룹, 박사후연구원, 7명]

Workplace	Center for Algorithmic and Robotized Synthesis (Ulsan, UNIST)	Job Category (Level)	Postdoctoral Research Associate	Area of Hiring	Research (Algorithmic and Robotized Synthesis, Organic Chemistry)
Work Duties	Research on Algorithmic and Robotized Synthesis				
Main business of IBS	Founded under the Special Act on Establishment of and Support for International Science and Business Belt, the Institute for Basic Science conducts fundamental research in the fields of basic science, contributing to developing and delivering scientific knowledge and innovative technology, as well as nurturing the next generation of scientists. • Basic science research • Interdisciplinary basic science research in science and technology • Convergence between basic science and humanities, social science and culture and arts • Polity research for setting the direction of basic science research • Programs for establishing and utilizing research facilities and equipment management, transfer, utilization and commercialization of research outcomes				
Research Area	Computer-assisted synthesis planning and robotics to enable fundamental discovery in chemistry and biochemistry				
Duties and Responsibilities	- AI Synthesis or Organic Chemistry - Multistep synthesis and synthesis design thorough knowledge of reaction mechanism - Automation, Fluidics/microfluidics, Physical analysis of mechanical/robotic/fluidic systems				
Knowledge Required	Interdisciplinary Research on Computerized synthesis and Artificial intelligence AI applied to organic chemistry, Complex chemical networks and catalytic systems, Self-assembly in non-equilibrium regimes, Nanomaterials for catalysis and nanomedicine.				
Competencies Required	Knowledge in related fields (Doctoral degree)				
Attitude Required	The candidate should be passionate about basic science and have a deep desire to pioneer new science.				
Basic skills Required	The candidate should have communication skills, problem-solving ability, interpersonal skills, technical competence, and professional ethics. The candidate should have a demonstrated history of thinking for themselves, having strong self-initiative, an excellent work ethic, working well at times individually and at times with others, and speak and write English well.				
Qualification	- Degree: Doctoral degree (Eligible to apply: those who do not exceed 5 years after obtaining doctoral degree or those who are expected to obtain a doctoral degree within 3 months by the time of expected appointment date) - Major: AI Synthesis or Organic Chemistry or Major related to the field of recruitment				
Screening	[Stage 1] Document Screening ▶ [Stage 2] Interview				

※This job description states major work duties of the hiring area. Work duties that are not stated here may need to be performed.

※This position will remain open until filled.

Job Description [② Bartosz A. Grzybowski 연구단장 그룹, 연구원, 3명]

Workplace	Center for Algorithmic and Robotized Synthesis (Ulsan, UNIST)	Job Category (Level)	Research Staff (Researcher)	Area of Hiring	Research (Algorithmic and Robotized Synthesis)
Work Duties	Research on Algorithmic and Robotized Synthesis				
Main Business of IBS	Founded under the Special Act on Establishment of and Support for International Science and Business Belt, the Institute for Basic Science conducts fundamental research in the fields of basic science, contributing to developing and delivering scientific knowledge and innovative technology, as well as nurturing the next generation of scientists. • Basic science research • Interdisciplinary basic science research in science and technology • Convergence between basic science and humanities, social science and culture and arts • Policy research for setting the direction of basic science research • Programs for establishing and utilizing research facilities and equipment management, transfer, utilization and commercialization of research outcomes				
Research Area	Computer-assisted synthesis planning and robotics to enable fundamental discovery in chemistry and biochemistry				
Duties and Responsibilities	<u>Research Assistance on AI-assisted Biochemical Synthesis</u> - Assist to develop and operate synthesis robotic system prototypes (evaluate their design, functionality, and performance) - Design, validate, and execute robotic assays for testing compounds regarding physicochemical characteristics, biological activity, etc. - Utilize advanced statistical and computational tools to interpret experimental data accurately in order to guide the project direction				
Knowledge Required	Interdisciplinary Research on Computerized synthesis and Artificial intelligence AI applied to organic chemistry, Complex chemical networks and catalytic systems, Self-assembly in non-equilibrium regimes, Nanomaterials for catalysis and nanomedicine.				
Competencies Required	Knowledge in related fields				
Attitude Required	The candidate should be passionate about basic science				
Basic Skills Required	The candidate should have communication skills, problem-solving ability, interpersonal skills, technical competence, and professional ethics. The candidate should have a demonstrated history of thinking for themselves, having strong self-initiative, an excellent work ethic, working well at times individually and at times with others, and speak and write English well.				
Qualification	- Degree : Bachelor's degree or above - Major : Electrochemistry, Chemistry, Material Science, Physics, Mathematics, Biochemistry, Biophysics or Biology				
Screening	[Stage 1] Document Screening ▶ [Stage 2] Interview				

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