

# 2020-06 Recruitment Announcement for Research Positions at the IBS Center for Multidimensional Carbon Materials

The Institute for Basic Science (IBS) is a national research institute established in accordance with Article 14 of the “Special Act on Establishment of and Support for International Science and Business Belts”. IBS aims to discover creative knowledge and secure original technologies through world-class basic science research. The IBS Center for Multidimensional Carbon Materials invites creative and dynamic candidates who will help us to achieve our goals.

## □ Recruitment Details

Work Position	Area No.	Area	Required Qualification	No. of Openings
Postdoctoral Research Associate	①	-Organic/synthetic chemistry	<b>-Degree:</b> Doctoral Degree (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 appointment) <b>-Major:</b> Organic/Synthetic Chemistry <b>-Preference:</b> Ph.D.-level researcher who majored in organic chemistry (and/or organometallic, and/or synthetic chemistry); synthesis and modification of organic molecules, polymer and macromolecules. Researchers with experience in synthesis of two-dimensional polymers, carbon materials, MOFs or COFs in solution or on a substrate. Expertise in all (or many) of: XRD, NMR, SEM, perhaps TEM, AFM, and various spectroscopies.	1
	②	-Electrochemical Synthesis, Materials/ Synthetic Chemistry	<b>-Degree:</b> Doctoral Degree (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 appointment) <b>-Major:</b> Chemistry (Electrochemistry/Materials Chemistry) <b>-Preference:</b> Ph.D.-level researcher who majored in electrochemical synthesis, with strengths in materials synthesis. Researchers with deep experience in electrochemical analysis and synthesis of materials by using electrochemical methods and also through deep knowledge of various (most of) electrochemical methods including redox reactions. Expertise in all or many of: electrochemistry and electrochemical methods, XRD, NMR, SEM, perhaps TEM, AFM, and various spectroscopies such as XPS, Raman, FTIR, UV-NIR, etc.	1
	③	-Physics, Materials Science, Chemistry	<b>-Degree:</b> Doctoral Degree (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 appointment) <b>-Major:</b> Physics / Materials Science / Chemistry <b>-Preference:</b> Has significant experience in use of AFM and perhaps also other SPM methods to study chemical and physical properties of materials: Researchers with deep experience in the physical and physical chemical methods of AFM (and SPM) and method development.	1
❖ Military Service Exemption Position Available (Total One Available for Research Areas of ①, ②, ③): Personnel already on the military exemption position and wishes to transfer to IBS, or a personnel wishing to newly start the military service exemption position.  <b>*전문연구요원 (총 1명) 지원 가능 (연구 분야 ①, ②, ③):</b> IBS로 전문연구요원 전직 가능한 자 또는 전문연구요원으로 신규 편입 가능한 자				

Researcher	④	-All areas that pertain to chemistry or chemical engineering (organic, inorganic, physical analytical, etc)	- <b>Degree:</b> Master's Degree - <b>Major:</b> Chemistry or Chemical Engineering - <b>Preference:</b> Experience with (1) basic chemical operations and techniques (e.g., chromatography, distillations, crystallizations), (2) basic characterization equipment (e.g., NMR, IR, UV-vis, etc.), and (3) working in a research group or as part of a research team	1
Senior Researcher	⑤	- Aberration-corrected TEM for Advanced Materials - in situ TEM	- <b>Degree:</b> Doctoral Degree - <b>Major:</b> Materials Science and Engineering, Physics, Chemistry, Chemical Engineering, and related field - <b>Preference:</b> Experience in aberration-corrected TEM for 2D materials, nanomaterials, and carbon materials; experience in in situ TEM; experience in HRTEM, HRSTEM, EELS, EDS, DF imaging, diffraction, and simulation is highly desired	2
Postdoctoral Research Associate	⑥		- <b>Degree:</b> Doctoral Degree (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 appointment) - <b>Major:</b> Materials Science and Engineering, Physics, Chemistry, Chemical Engineering, and related field - <b>Preference:</b> Experience in aberration-corrected TEM for 2D materials, nanomaterials, and carbon materials; experience in in situ TEM; experience in HRTEM, HRSTEM, EELS, EDS, DF imaging, diffraction, and simulation is highly desired	2
Researcher	⑦	- Aberration-corrected TEM for Advanced Materials	- <b>Degree:</b> Master's Degree - <b>Major:</b> Materials Science and Engineering, Physics, Chemistry, Chemical Engineering, and related field - <b>Preference:</b> Experience in TEM operation, TEM analysis, TEM specimen preparation for nanomaterials is desired	1

❖ Please note the attached information for required qualifications in detail.

♦ Senior Researcher: Research personnel with a doctoral degree, total appointment period available up to five years (e.g., 3+2years), may be promoted to senior research fellows through a separate evaluation.

♦ Postdoctoral Research Associate: A position to conduct research training and research for a certain period of time to deepen research expertise and abilities. Those who do not exceed 5 years after obtaining their doctoral degrees, or those who are expected to obtain their doctoral degree within 3 months by the time of appointment. Total appointment period available up to three years (e.g. 1+2 years)

♦ Researcher: A position with total appointment period available up to five years.

※ The employment contract will be maintained until the abolition of the Center, if the Center is determined to be abolished during the contract period.

## □ Qualifications and Preferences

### [General Qualifications]

- ♦ Those who have a required degree from domestic/overseas university
- ♦ Those who are qualified under Article 33 of the State Public Officials Act and IBS regulations
- ♦ Those who are permitted to travel aboard
- ♦ Those who completed mandatory military service or exempt from such service (except for those who wish to apply for the military service exemption positions)

### [Preference]

- ♦ Additional points for persons with disabilities under Article 3 and 4 of the Enforcement Decree of the Act on the Employment Promotion and Vocational Rehabilitation of Persons with Disabilities, or persons eligible for employment assistance under Article 29 of the Act on the Honorable Treatment of and Support for Persons, ETC. of Distinguished Service to the State.

- ♦ Those who are “women in science, engineering and technology” under Article 2 of the Act on Fostering and Supporting Women Scientists and Technicians.
- ♦ Fluency in English

## □ Screening

Stage	Review Criteria	Method	Required Documents
Stage 1 (Document Screening)	Relevance to the recruitment area, expertise, work capability, development potential, etc.	Select three times the number of candidates than the opening for the next screening stage. Select applicants with the highest average scores (minimum average score: 80)	(1) CV (2) List of Publications (3) Research Plan (free form, within 1 page) (4) Consent form for providing personal information (form attached) ※All needs to be written <b>in English</b> (5) Supporting documents for persons with disabilities or eligible for veterans' benefit, if necessary
Stage 2 (Interview Screening)	Expertise in the recruitment area, presentation skills, attitude, development potential, etc.	Select the final candidates with the highest average scores within the number of openings. (minimum average score: 80)	Separate notification for applicants who pass document screening

## □ Application Submission and Period

- ♦ Submission via E-mail to [inelee@ibs.re.kr](mailto:inelee@ibs.re.kr)

-Please state [**“Area No.” Application**] [**“Your Name”**] on the application e-mail title.

e.g.) if you are applying for the researcher position of TEM analysis: [⑦ Application] Peter Parker

- ♦ **Period: 2020.07.01 (Wed) ~ 23:00 2020.07.16 (Thurs, KST)**

※Please make sure that you state the **Area Number** that you wish to apply and provide the **consent form** for providing personal information

※ If wishing to apply for the military service exemption position, please state it in your application e-mail.

## □ Other Information

♦ Applicants take full responsibility for any consequences resulting from omissions and errors found in submitted documents, not submitting required documents, etc. If any information is proven false, the job offer will be withdrawn.

♦ If selected candidates are disqualified through a background check or a recruitment-related physical examination, the job offer will be withdrawn.

♦ If selected candidates are found dismissed according to the Article 82 of the Act on the Prevention of Corruption and the Establishment and Management of the Anti-Corruption and Civil Rights Commission, the appointment will be withdrawn.

♦ Submitted documents may be returned when such requests are made within three months from the announcement of recruitment results according to the Article 4 of the Enforcement Decree of the Fair Hiring Procedure Act.

♦ No candidates may be hired if all candidates are found unsuitable during the screening stages.

♦ If hired, the work level, annual salary, etc. will comply with IBS standards.

- ◆ Expected date of appointment is/or after September 1, 2020. (※Subject to change)
- ◆ Workplace: IBS Center for Multidimensional Carbon Materials, Ulsan
- ◆ Inquiries: Responsible staff at the IBS Center for Multidimensional Carbon Materials  
(Tel.: 052-217-5756; fax: 052-217-5759; e-mail: [inelee@ibs.re.kr](mailto:inelee@ibs.re.kr))