

# 2021-05 Recruitment Announcement for Researcher 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	(a)	- Metallurgy, Physics, Solid State Chemistry, Inorganic Chemistry, single crystal metals, single crystal metal foils, Growth and characterization of materials using new types of metal foils	- Degree: Doctoral Degree - Major: Metallurgy, materials science, materials physics, solid state chemistry, physical chemistry, physics - Preference: Doctoral experience in study of single crystal metals, perhaps also in making and studying bimetallic alloys such as at surfaces of single crystal metals. Strong interest to invent new methods to convert metal foils to single crystal metal foils with many options for (hkl) surface orientation, and to synthesize carbon-based and related materials, such as films grown on such metal foils, and to study the basic science of growth and properties of foils and films and materials. Strong capability in materials characterization, including some or all of: X-ray diffraction, AFM/SPM, SEM, EDS, EBSD, TEM, EELS, Raman, IR, and UV-VIS spectroscopies, and others, is highly desired. Please refer to the information below for the detailed required qualifications	1

※ We seek candidates for a postdoctoral fellow position to tackle outstanding challenges making a wide variety of single crystal metal foils (Cu, Ni, Co, Pt, Pd, perhaps others) with different surface (hkl) orientations, and using such foils to explore new opportunities for bi and trimetallic alloys (by mixing metals onto surfaces or into the bulk, of such single crystal metal foils). The position also offers the possibility of contributing to fundamental studies of the synthesis of materials such as graphene, graphite, diamonds, diamond, graphdiyne, nanoporous carbon networks, and others. Ability to do structural analysis. Candidates should thus have deep experience with: (1) study of single crystal metals and/or an intense desire to make a wide variety of single crystal (hkl) metal foils for new studies; (2) structural analysis of metals and other materials; (3) analysis and use of phase diagrams; (4) various types of spectroscopies and microscopies and methods to characterize materials. Ideal candidates will (i) be fluent in English, (ii) have recently received a Ph.D., (iii) have experience writing manuscripts, (iv) exhibit a strong motivation to do *basic science research* in pioneering areas and to delve deeply into fundamental scientific issues, including as exemplified during his/her Ph.D. studies, (v) have experience and also a desire to mentor junior members of the team.

◆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)

※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

### [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
<b>Stage 1</b> (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 applicable
<b>Stage 2</b> (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)	Be individually informed 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.”] “Your Name” on the application e-mail title.  
e.g.) [②] Peter Parker
- ◆ **Period: 2021.06.08.~ 18:00, 2021.06.23. (KST)**

※Please kindly note that **submitting your application to only one recruitment area is doable**, if submitted to multiple areas, the first application delivered will only be considered as your application. If your application misses to submit a part of required documents, your application shall not be accepted. Please make sure that you provide the consent form.

## □ Other Information

- ♦ Blind hiring process will be implemented to reduce the risk of bias in the hiring decision and block out any and all identification details from candidate's resume and applications.
- ♦ 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 screening stages.
- ♦ If hired, the work level, annual salary, etc. will comply with IBS standards.
- ♦ Expected date of appointment is/or after September, 2021. (※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))