International Postdoctoral Position Descriptions

Offered by: Beijing University of Chemical Technology

Contact:_____ Tel: _____ E-mail: _____

No.	Discipline(s)	Postdoctoral Research Position(s)	Primary Research Focus	Number of Positions & Duration	About the Principal Investigator (PI) and Research Team	Required Qualifications & Eligibility Criteria	Benefits and Support	Application Procedures
1	Environmental science and engineering/Environmental science	Research scientist in nano-micro scale process intensification	1. Research direction: in-situ observation and process intensification of nano-micro scale; 2. Core content: focusing on the fundamental scientific question of flow, transport, and reaction at nano-micro scales and their cross-scale synergistic mechanisms, this research employs in-situ observation and process intensification of nano-microfluidics as the core scientific approach. The aim is to establish a cross-scale theoretical framework that extends from the molecular and nano-micro scales to the macroscopic scale.	Number of positions: 1-2. Duration: 2 years.	**Chen JianFeng**, a chemical engineering expert, academician of Chinese Academy of Engineering, professor and doctoral supervisor at Beijing University of Chemical Technology, Member and Secretary-General of Party Leadership Group of Chinese Academy of Engineering.	1. The candidate should generally be under 35 years of age; 2. The candidate should possess an academic background in chemical engineering and technology, environmental science and engineering, electron microscopy, or a related interdisciplinary field; 3. The candidate must have published at least one relevant research article as the first author in a peer-reviewed SCI-indexed journal; 4. The candidate should demonstrate strong English	Salary and benefits will follow the standard regulations of the university. The pre-tax salary is divided into three grades: Grade A, Grade B and Grade C, with annual salaries of RMB 250,000, RMB 200,000 and RMB 180,000 respectively.	Contact: Yong Luo Tel: +86-13811248605 E-mail: luoyong@buct.edu.cn Applicants should first send their CV to the contact through email. Upon obtaining consent, the faculty/school will conduct eligibility reviews and admission assessments. Those who pass the assessment will be recommended by the faculty/school to the university for approval and recruitment.

						proficiency in listening, speaking, reading, and writing, and be capable of conducting scientific research independently; 5. The candidate must comply with Chinese laws and regulations as well as the institution's rules and policies.		
2	Materials Science and Engineering (First-level Discipline) / Non-metallic Functional Materials (Second-level Discipline)	Development of Lightweight Low-frequency Broadband Absorbing Materials	New non-metallic functional composite materials, including carbon-based absorber design and development, special carbon-based absorbing honeycomb design and research, ultra-broadband structural-functional integrated stealth material design and development, special polymer-based additive manufacturing material development and technical development.	1-2 persons, 2-3 years (subject to the research progress of projects).	**Yang Cheng**, Professor, Doctoral Supervisor, National High-level Talent, Chief Technical Expert of National Key Projects, Member of Expert Committee in Materials and Manufacturing Field, Deputy Director of Thermal Conductive Composite Materials Professional Committee of China Composite Materials Society, Member of China Materials and Testing Group Standardization Committee. She has published more than 40 papers as the first author or corresponding author, authorized more than 20 invention patents, 1 monograph, 2 translations, and 1 co-authored book. Sh	1. Generally under 35 years old; 2. Professional background in electromagnetic absorbing material preparation or simulation; 3. Published at least 4 relevant research papers as the first author or in SCI journals; 4. Good English listening, speaking, reading and writing skills, able to carry out scientific research independently; 5. Abide by Chinese laws and regulations	Salary and benefits will follow the standard regulations of the university. The pre-tax salary is divided into three grades: Grade A, Grade B and Grade C, with annual salaries of RMB 250,000, RMB 200,000 and RMB 180,000 respectively.	Contact: Cheng Yang E-mail: chengyang_78@buct.edu.cn Applicants should first send their CV to the contact through email. Upon obtaining consent, the faculty/school will conduct eligibility reviews and admission assessments. Those who pass the assessment will be recommended by the faculty/school to the university for approval and recruitment.

					e has presided over more th an 10 national and ministeri al-level projects such as the National Natural Science F oundation, key projects of ministries, and national key R&D programs. She has w on honors such as the AVI C Young and Middle-aged Science and Technology In novation Pioneer Talent A ward and the Aviation Bao Guo Gold Award.	and the institution's r ules and regulations.		
3	Chemical Engineering and Technology (Primary Discipline) / Applied Chemistry (Secondary Discipline) Chemistry (Primary Discipline) / Analytical	Position for Research on Luminescence Characterization of Material Structure	1. Research direction: Characterization and mechanism study of luminescence in material aging; 2. Core research contents: Composite material construction and the phosphorescence mechanism of dynamic microstructure, early fluorescence detection and multi-dimensional reaction kinetics analysis for material aging, in-situ monitoring and regulation of radical behavior	1-2 persons, 2-4 years (subject to the research progress of the project)	**Tian Rui,** a professor and doctoral supervisor in the Department of Analytical Chemistry, College of Chemistry, Beijing University of Chemical Technology. She has published over 40 papers as the first or corresponding author in journals such as *Nat. Commun.*, *Sci. Adv.* *Angew. Chem. Int. Ed.*, and *Chem. Rev.* She has been granted 10 Chinese invention patents and	1. Generally aged no more than 35 years old; 2. Have background in Chemical Engineering and Technology, Chemistry, Material Science, or related fields; 3. Have published at least three research papers in SCI journals as the first author;	Salary and benefits will follow the standard regulations of the university. The pre-tax salary is divided into three grades: Grade A, Grade B and Grade C, with annual salaries of RMB	Contact: Tian Rui E-mail: tianrui@mail.buct.edu.cn. Applicants should first send their CV to the contact through email. Upon obtaining consent, the faculty/school will conduct eligibility reviews and admission assessments.

	Chemistry (Secondary Discipline)		chemiluminescence for material aging, etc		participated in the publication of 3 academic monographs. She was awarded the First Prize of the CAIA Award of the China Society for Testing and Analysis in 2020. Our research team relies on distinctive high-sensitivity fluorescence, phosphorescence and chemiluminescence characterization techniques, and possesses a material aging luminescence analysis platform. It is equipped with luminescence analysis instruments including a laser confocal fluorescence microscope and a steady-state transient fluorescence spectrometer, and has self-built an ultra-weak chemiluminescence instrument to meet research	4. Have good English listening, speaking, reading and writing skills, and be able to independently carry out scientific research work; 5. Comply with Chinese laws and regulations and the rules and regulations of the institution.	250,000, RMB 200,000 and RMB 180,000 respectively.	Those who pass the assessment will be recommended by the faculty/school to the university for approval and recruitment.

					requirements.			
4	Bioengineering / Synthetic Biology	Yeast Synthetic Biology Research Position	1. Research Direction: Synthetic Biology of Yeast Cell Factories; 2. Core Content: Screening and directed engineering of yeast chassis cells, development of natural-artificial hybrid efficient substance conversion systems.	1-2 persons, 2-4 years (subject to the research progress of the project)	**Liu Zihe**, Professor, PhD Supervisor. Long-term engagement in synthetic biology, dedicated to enhancing the atom economy of yeast cell factories. His research revolves around "developing efficient synthetic biology enabling tools to improve yeast chassis engineering efficiency, optimizing endogenous substance and energy metabolism in yeast to reduce carbon emissions, and analyzing the compatibility between yeast and carbon fixation metabolic networks." Has published over 50 high-level papers as first/corresponding author in journals such as *Cell*, *Cell Research*, *Nature Catalysis*, *Nature Communications*.	1. Generally under 35 years of age; 2. Possess or will soon obtain a Ph.D. in Bioengineering, Molecular Biology, Microbiology, or related fields; 3. Have published at least 1 relevant research article as first author in an SCI-indexed journal; 4. Possess good English or Chinese listening, speaking, reading, and writing skills, capable of conducting independent scientific research; 5. Abide by Chinese laws, regulations, and rules of the institution.	Salary and benefits will follow the standard regulations of the university. The pre-tax salary is divided into three grades: Grade A, Grade B and Grade C, with annual salaries of RMB 250,000, RMB 200,000 and RMB 180,000 respectively.	Interested applicants please send your CV to Contact: Liu Zihe E-mail: zihe@mail.buct.edu.cn Applicants should first send their CV to the contact through email. Upon obtaining consent, the faculty/school will conduct eligibility reviews and admission assessments. Those who pass the assessment will be recommended by the faculty/school to the university for approval and recruitment.
5	Bioengineering / Metabolic engineering	Biomanufacturing Research Position	1. Research Direction: Biomanufacturing based on Yeast Cell Factories; 2. Core Content:	1-2 persons, 2-4 years (subject to the	**Shi Shuobo**, Professor, PhD Supervisor. Mainly engaged in fundamental and applied research on	1. Generally under 35 years of age; 2. Possess or will soon obtain a Ph.D. in	Salary and benefits will follow the	Contact: Shi Shuobo

			Design and optimization of product synthesis pathways, development and integration of key enabling technologies.	research progress of the project)	metabolic engineering and biomanufacturing, constructing and engineering microbial cell factories. This prior research has not only accumulated a wealth of biological parts but also developed and established various new technologies and methods, aiding in the construction and optimization of microbial cell factories. Has published over 80 SCI papers in high-level journals in the field such as *PNAS*, *Nat. Commun.*, and *Trends Biotechnol.*	Bioengineering, Molecular Biology, Microbiology, or related fields; 3. Have published at least 1 relevant research article as first author in an SCI-indexed journal; 4. Possess good English or Chinese listening, speaking, reading, and writing skills, capable of conducting independent scientific research; 5. Abide by Chinese laws, regulations, and rules of the institution.	standard regulations of the university. The pre-tax salary is divided into three grades: Grade A, Grade B and Grade C, with annual salaries of RMB 250,000, RMB 200,000 and RMB 180,000 respectively.	E-mail: shishuobo@mail.buct.edu.cn Applicants should first send their CV to the contact through email. Upon obtaining consent, the faculty/school will conduct eligibility reviews and admission assessments. Those who pass the assessment will be recommended by the faculty/school to the university for approval and recruitment.

Unit Supplementary Instructions:

Beijing University of Chemical Technology (BUCT) has achieved rapid progress in scientific research and innovation, boasting a strong and comprehensive research platform to support academic exploration and talent cultivation. Currently, BUCT is home to 4 State Key Laboratories, 1 National Engineering Technology Research Center, 1 National Engineering Research Center, 1 National Engineering Laboratory, 16 Provincial/Ministerial Key Laboratories, 14 Provincial/Ministerial Engineering Technology Research Centers (Institutes), 2 Provincial and Ministerial-level Social Science Research Bases, and 1 Joint International Research Laboratory. These world-class and high-level research platforms provide our students and researchers with advanced facilities and a favorable environment for cutting-edge scientific research.

Since 2001, 33 research projects of BUCT have been awarded the Three Major National Science and Technology Awards, a testament to the university's outstanding research capabilities. Notably, BUCT was approved to establish the country's first Basic Science Center Project of the National Natural Science Foundation of China (NSFC) in the field of chemical engineering. The university also houses 4 Innovative Research Groups of NSFC and 1 Key Field Innovation Team under the Innovative Talent Promotion Program of the Ministry of Science and Technology, gathering a group of top-notch researchers and academic leaders. In terms of disciplinary strength, 11 disciplines of BUCT have been ranked

among the top 1% in the Essential Science Indicators (ESI) global rankings, including Chemistry, Materials Science, Engineering, Biology & Biochemistry, Environment/Ecology, Computer Science, Agricultural Sciences, Geosciences, Physics, Pharmacology & Toxicology, and Clinical Medicine. Among these, Chemistry, Materials Science, and Engineering have further advanced into the top 1‰ of the ESI global rankings, reflecting the university's leading position in these key fields worldwide.