SINDH HIGHER EDUCATION COMMISSION Post-Doctoral Fellowship Program (National)

INTRODUCTION

Sindh Higher Education Commission (Sindh HEC) invites applications from faculty members (BPS / TTS) of public / private sector universities / HEIs, chartered by the Govt. of Sindh or located in Sindh for the award of 6-12 months Post-doctoral Scholarships within Pakistan in relevant leading institutions. This scheme covers all branches of higher learning, including natural sciences, health sciences, engineering, social sciences, languages, etc. 50 percent of fellowships slots are reserved for faculty members of public sector universities and HEIs in Sindh, private universities are given 20 percent slots, 15 percent of the slots are reserved for Ph.D. holders, who graduated from universities of Sindh province in the last three years, 15 percent of slots are allocated for public sector R&D organizations of Sindh (recognized by Pakistan Council of Science and Technology). Applications in emerging fields of science, technology, and innovation that are applied in nature, relevant to industries, and have an impact on society, are especially welcomed.

PREFERRED AREAS:

- a. Human nutrition
- b. Biomedical and Health Sciences
- c. Pharmaceutical
- d. Food processing and value addition
- e. Precision agriculture
- f. Solid waste management
- g. Urban planning
- h. Digital transformation
- i. Cybersecurity
- j. Infection prevention and treatment
- k. Conservation of cultural heritage
- l. AI Applications in various fields of national needs
- m. Quantum computing in various fields
- n. Nanotechnology
- o. Renewable/Alternate Energy
- p. Entrepreneurship

Projects in the other areas/fields of studies will also be considered.

ELIGIBILITY CRITERIA

The applicant must:

- i. Hold a Ph.D. degree from a HEC recognized university.
- ii. Be a regular faculty member (BPS/TTS) of public/private sector university/ HEIs/ and research officers R&D Institutions.
- iii. Must have a placement in public/private sector university/ HEIs/ R&D Institutions
- iv. Submit a clearly written research proposal, relevant to the academic field, industry/society, and needs of the province/country.
- v. Maximum 50 years of age on the closing date of application.

TERMS & CONDITIONS

Following are the terms & conditions of the award of Post-Doctoral Scholarship within the country, and the acceptance of the award is an acknowledgment of these obligations:

- i. A scholar will not change the course of the research study as specified in the letter of award.
- ii. A scholar will obtain commitment of study leave for this scholarship period (after shortlisting and before final selection).
- iii. A change of university/institute during the study will not be admissible.
- iv. The scholarship will be awarded for the specified period, as proposed on the acceptance letter (minimum for 6 months but not beyond 12 months).
- v. A scholar can stay outside the HEIs of study/research for a maximum period of 4 weeks (28 days) for research purpose or due to any other emergency, subject to prior approval from the SHEC. The stipend will be deducted for a period beyond the allowed limit.
- vi. The scholar shall be required to proceed to host institution within four months after issuance of the final award letter failing which his/her award will be canceled.
- vii. The postdoctoral scholarship application will be processed on the basis of information/data provided by the applicants and in case of any error/omission and misrepresentation, SINDH HEC reserves the right to reject the applicant at any stage.
- viii. An awardee shall sign an agreement with the Sindh Higher Education Commission (Sindh HEC) on non-judicial (Stamp) paper to the effect that in case the awardee fails to complete his / her post-Doc studies, he/ she will refund to the Sindh HEC the total amount spent on his/ her post-Doc studies by the Sindh HEC.
 - ix. In addition, a personal guarantee of a person of means on non-judicial (E-Stamp) paper to the effect of ensuring the recovery in case of default would need to be furnished.
 - x. An awardee is required to execute a bond with the Sindh Higher Education Commission that he shall complete his post-doc and serve his parent department/institution for 2 years subsequent to the completion of postdoc research, otherwise he shall have to return the amount disbursed by Sindh HEC (fully or partially to be decided by Sindh HEC) for post-doc.
 - xi. Every document i.e. Deed of Agreement, Guarantee to Sindh HEC and Surety Bond must be properly notarized, that means the document must be registered by the Notary Public maintained by him as notary register and the signatures of the

- executants must be obtained on the register and the number of the registration must be mentioned along with the notarial stamp.
- xii. Post-Doctoral Fellowship applications are processed on the basis of online information/data provided by the applicants and in case of any error/omission and misrepresentation, the Sindh HEC reserves the right to reject the application at any stage or recover full amount with / without penalty (as the case may be) after award of the fellowship. However, the Sindh HEC will provide full justification of its decision.

Selection of Host Institutions/ Research Centers

- The host institutions / research centers from the given list (Annexure-I) will be preferred.
- Host institutions/ research centers should have required facilities (Laboratories, instrument facilities, well subscribed libraries, etc.). These facilities have to be listed on the institutional websites.
- Applicant has to provide the details of expertise (research publications, patents, monographs, etc.) of the host supervisor, with reference to the research proposal along with the application.

Note:

- Agreement/Undertaking, surety and guarantee format will be provided to the candidate upon final selection.
- The scholarship will cover host university bench fee (if any), return air-fare/travel cost, stipend, and settlement allowance as per actual or up to the ceiling mentioned below, whichever is less.

DOCUMENTS REQUIRED (IN ONE PDF FILE)

The complete application package includes the following:

- 1. A Cover Letter
- 2. Applicants are required to submit a clearly written research proposal as per format (Refer to the section "Outcome and deliverable").
- 3. Acceptance letter from the faculty supervisor at a public/private sector university/ HEIs/ R&D Institutions. The letter should clearly mention the duration of post-doc, commencement date and bench fee (if any).
- 4. NOC from the relevant government department/university authorities. (Required when applicant is shortlisted by Sindh HEC for further processing).
- 5. Appointment/regularization letter as a TTS/BPS faculty member of public/private sector university/ HEIs/ or a research officer in R&D Institutions of Sindh.
- 6. Copies of educational transcripts and degrees /Ph. D. notification in chronological order
- 7. Candidate CV/Resume

- 8. Supervisor CV/Resume
- 9. Photocopy of CNIC
- 10. Photocopy of employment letter/office order
- 11. Printed copy of the application.

Note:

- All the above documents should be tape bind in the same order as mentioned above.
- Incomplete applications or applications with missing documents will be rejected.

OUTCOME AND EVALUATION

Based on the research proposals, the applicant has to satisfy at least 3 of the 7 outcomes/deliverable identified below:

- Access to equipment and high-impact research collaborations not available in parent institution.
- Learn new advancement / areas which can benefit the parent institution, and Pakistan.
- Research proposal focusing on priority areas mentioned in page 1.
- Creation of funded research linkages and collaborations between Pakistani institutions.
- Creation and introduction of new programs and courses, in not available in parent institution.
- Publish manuscripts in peer-reviewed high impact factor journals/ international Patents.
- Production of Books/ Book Chapters/ Conference Proceedings (applies to Social Sciences, Arts, and Humanities only)

The Sindh HEC expert evaluation committee will review the quarterly and final progress reports in the light of above KPIs, and deliverables / outcomes mentioned in the research proposal.

PROGRESS REPORT SUBMISSION:

The scholar will be required to submit a quarterly report sharing progress on their research. A minimum of 3 reports will be required to be submitted during the 9-month post-Doc period (In case of extension, 4 reports will be required during the maximum 12-month period).

FINANCIAL SUPPORT

The maximum Fellowship amount per scholar for total duration of Fellowship (Including Living Allowance, Health Insurance, Research/Lab Cost, and Air Ticket (economy class)/travel cost).

SN	Item	Unit Cost (PKR)
1	Bench Fee (as justified in the acceptance letter) #	Rs. 150,000/ month for
		science and
		engineering/
		Rs. 50,000/ month for
		social sciences,
		mathematics, etc.
2	Stipend @ Rs. 150,000/month per scholar *	150,000/month
3	Travel (return airfare economy class/Train/Road)	As per actual
4	Accommodation Allowance (case to case)	30,000/ month
	Total	

[#] Applications with bench fee waiver will be preferred.

Application, complete in all respect, must reach the Sindh Higher Education Commission, at F-60/1 Shahrah-e-Attar, near Abdullah Shah Ghazi Shrine, Block 4 Clifton, Karachi on or before 20th May, 2024 through registered post and Email the same at ad.qa@sindhhec.gov.pk. The application submitted by hand will not be entertained.

Contact Details:

Assistant Director (Quality Assurance) Sindh Higher Education Commission Karachi.

Email: ad.qa@sindhhec.gov.pk

^{*} In case of unpaid study leave, scholarship will be equivalent to last salary drawn.

Annexure-I:

Institutes/Research Centers/Departments for National Post-Doctoral Fellowship Programme Phase-I

Sr. No	INSTITUTES/RESEARCH CENTERS/DEPARTMENTS
1	National Centre of Excellence in Geology, University of Peshawar, Peshawar.
2	National Centre of Excellence in Physical Chemistry, University of Peshawar,
	Peshawar.
3	Centre of Excellence in Solid State Physics, University of the Punjab, Lahore.
4	Centre of Excellence in Molecular Biology, University of the Punjab, Lahore.
5	Centre of Excellence in Water Resou <mark>rces En</mark> gineering, UET, Lahore, Lahore.
6	National Centre of Excellence in Analytical Chemistry, University of Sindh, Jamshoro
7	Centre of Excellence in Marine Biol <mark>og</mark> y, <mark>Unive</mark> rsity of Karachi, Karachi
8	National Institute of Psychology Centre of Excellence, Quaid-i-Azam University,
	Islamabad
9	National Institute of Historical and Cultural Research, Centre of Excellence, Quaid-i-
	Azam University, Islamabad
10	Centre of Excellence in Gender Studies, Quaid-i-Azam University, Islamabad
11	Centre of Excellence in Mineralogy, University of Balochistan, Quetta
12	Center of Clinical Psychology, University of the Punjab, Lahore
13	Institute of Clinical Psychology, University of Karachi, Karachi
14	Centers of Advanced Studies on Energy, UET, Peshawar, Peshawar
15	Centers of Advanced Studies on Energy, NUST, Islamabad
16	Centers of Advanced Studies on Agriculture and Food Security, University of
	Agriculture, Faisalabad
17	Centers of Advanced Studies on Water, Mehran University, Jamshoro
18	National Institute of Pakistan Studies, Quaid-i-Azam University, Islamabad.
19	Pakistan Study Center, University of the Punjab, Lahore
20	Pakistan Study Center, University of Sindh, University of Sindh, Jamshoro
21	Pakistan Study Center, University of Karachi, Karachi
22	Pakistan Study Center, University of Peshawar, Peshawar
23	Pakistan Study Center, University of Balochistan, Quetta
24	Area Study Center for Africa, North and South America, Quaid-i-Azam University,
	Islamabad
25	Area Center for South Asian Studies, University of the Punjab, Lahore
26	Area Study Center Far East and Southeast Asia, University of Sindh, Jamshoro
27	Area Study Center for Europe, University of Karachi, Karachi
28	Area Study Center, Russia China, and Central Asia, University of Peshawar, Peshawar
29	Area Study Center for Middle East & Arab Countries, University of Balochistan, Quetta
30	Sheikh Zayed Islamic Center, University of the Punjab, Lahore

- 31 Sheikh Zayed Islamic Center, University of Karachi, Karachi
- 32 Sheikh Zayed Islamic Center, University of Peshawar, Peshawar
- 33 Applied Economics Research Center, University of Karachi, Karachi
- 34 HEJ Research Institute of Chemistry, University of Karachi, Karachi
- Third World Center for Science & Technology at HEJ Research Institute of Chemistry, University of Karachi, Karachi
- 36 Dr. Panjwani Center for Molecular, Medicine and Drug Research, University of Karachi, Karachi
- 37 Dr. A.Q. Khan Institute of Biotechnology and Genetic Engineering, University of Karachi, Karachi
- 38 School of Mathematical Sciences, Govt. College University, Lahore
- 39 Al-Khwarizmi Institute of Computer Sciences, UET Lahore, Lahore
- 40 School of Biological Sciences, University, University of the Punjab, Lahore
- Water Management Research Center (WMRC), University of Agriculture, Faisalabad
- 42 National Center for Artificial Intelligence, NUST, Islamabad
- 43 National Center for Robotics and Automation, NUST, Islamabad
- 44 National Center for Cyber Security, Air University, Islamabad
- National Center for Big Data and Cloud Computing, LUMS, Lahore
- 46 National Center for GIS and Space Applications, IST, Islamabad
- 47 National Center for Livestock Breeding Genetics and Genomics, PMAS AARU, Rawalpindi
- National Center on Industrial Biotechnology to manufacture small scale Bioproducts, PMAS AARU, Rawalpindi
- 49 Data Driven Smart Decision-making platform for Agricultural Productivity, PMAS AARU, Rawalpindi
- 50 Jinnah Post Graduate Medical College (JPMC), Karachi.
- National Center for Physics, Quaid-I-Azam University, Islamabad
- 52 School of Chemical Engineering, NUST, Islamabad
- 53 Department of Pathology, University of Agriculture, Faisalabad
- 54 Centre of Excellence in Mineralogy, University of Balochistan, Quetta
- Petrographic Thin Section Forming Workshop, Centre of Excellence in Mineralogy, University of Balochistan, Quetta
- Powder X-Ray Diffractometer (XRD), Centre of Excellence in Mineralogy, University of Balochistan, Quetta
- 57 Center for Advanced Drug Research, COMSATS University, Abbottabad Campus
- 58 Electrical Machine and Power Lab, COMSATS University, Wah Campus
- 59 Department of Chemistry, Quaid-I-Azam University, Islamabad
- 60 Materials Chemistry Laboratory, Department of Chemistry, Govt. College University, Lahore
- Material and Surface Engineering Laboratory, University of Engineering & Technology, Peshawar
- 62 Metrology Laboratory, Department of Industrial Engineering, University of Engineering and Technology, Peshawar
- 63 Precision Manufacturing Laboratory, Department of Industrial Engineering,

- University of Engineering and Technology, Peshawar
- 64 Dr. Zafar H. Zaidi Center for Proteomics, University of Karachi, Karachi
- National Institute for Biotechnology and Genetic Engineering (NIBGE), Faisalabad,
- 66 Centralized Science Laboratory, University of Karachi, Karachi
- 67 Bioassay Lab, Department of Biochemistry, University of Agriculture, Faisalabad
- 68 Material Synthesis & Characterizations (MSC) Laboratory, Fatima Jinnah Women University, Rawalpindi
- 69 Central Lab, Mian Nawaz Shareef University of Agriculture, Multan
- 70 Mechanical Engineering Department, Mirpur University of Science & Technology, Mirpur
- 71 Translational Genomic Laboratory, Department of Biosciences, COMSATS University, Islamabad
- 72 Central Research Laboratory, Hazara University, Mansehra
- 73 Department of Fiber & Textile Technology, University of Agriculture, Faisalabad
- 74 Department of Theriogenology, University of Agriculture, Faisalabad
- 75 Department of Biochemistry, University of Agriculture, Faisalabad
- 76 Department of Clinical Medicine & Surgery, University of Agriculture, Faisalabad
- 77 National Institute of Food Science a<mark>nd</mark> Tec<mark>hn</mark>ology, University of Agriculture, Faisalabad
- 78 Central Hi-Tech Laboratory, University of Agriculture, Faisalabad
- 79 Teaching and Research Facilities, National University of Medical Sciences (NUMS), Rawalpindi
- 80 Pakistan Museum of Natural History, Islamabad
- 81 Aquatic Diagnostic & Research Center, Bahria University, Karachi
- Multidisciplinary Research Lab, Bahria University Medical & Dental College (BUMDC), , Bahria University, Karachi
- 83 Department of Environmental Sciences, Fatima Jinnah Women University, Rawalpindi
- 84 National Textile Research Centre (NTRC), National Textile University, Faisalabad
- 85 Geoscience Advance Research Laboratories, Islamabad,
- 86 Department of Horticulture, Bahauddin Zakariya University, Multan
- 87 Thin Films Characterization Laboratory, Bahauddin Zakariya University, Multan
- 88 Centre for Advanced Electronics & Photovoltaic Engineering (CAEPE), International Islamic University, Islamabad
- 89 Department of Physics, COMSATS University, Lahore Campus
- 90 Interdisciplinary Research Centre in Biomedical Materials (IRCBM), COMSATS University, Lahore Campus
- 91 MEMS Sensor Design and Test Lab, Department of Mechatronics and Biomedical Engineering, Air University, Islamabad
- 92 Bio Mechatronics Lab, Department of Mechatronics and Biomedical Engineering, Air University, Islamabad
- 93 Department of Mechanical & Aerospace Engineering, Air University, Islamabad
- 94 Neurorobotics Research Group, Department of Mechatronics and Biomedical Engineering, Air University, Islamabad
- 95 Functional Materials Lab, Department of Physics, Air University, Islamabad

- 96 MEMS Sensor Design and Test Lab, Department of Electrical Engineering, Kamra Campus, Air University, Kamra Campus
- 97 Embedded Systems lab, Department of Electrical Engineering, Kamra Campus, Air University, Kamra Campus
- 98 High Voltage Lab, Department of Electrical & Computer Engineering, Air University, Islamabad
- 99 Signal & Image Processing Lab, Department of Electrical & Computer Engineering, Air University, Islamabad
- 100 RF & Optical Lab, Department of Electrical & Computer Engineering, Air University, Islamabad
- 101 Communication Lab, Electrical & Computer Engineering, Air University, Islamabad
- 102 Hydrocarbon Development Institute of Pakistan (HDIP), Islamabad,
- 103 Molecular Parasitology Laboratory, Department of Veterinary Parasitology, Sindh Agriculture University, Tandojam
- 104 Milk and Meat Analytical Laboratory, Department of Animals Product Technology, Sindh Agriculture University, Tandojam
- 105 Institute of Metallurgy and Materials Engineering, University of the Punjab, Lahore
- 106 Electron Microscope Lab, National Centre of Excellence in Geology (NCEG), University of Peshawar, Peshawar
- 107 Petroleum Geochemistry and Environmental Soil Science Laboratory, National Centre of Excellence in Geology (NCEG), University of Peshawar, Peshawar
- 108 Hydro Geophysics Lab, National Centre of Excellence in Geology (NCEG), University of Peshawar, Peshawar
- 109 Geochemistry and Environmental Geochemistry Lab, National Centre of Excellence in Geology (NCEG), University of Peshawar, Peshawar
- 110 Cancer Genomics Lab, Punjab Institute of Nuclear Medicine, Faisalabad
- 111 NILOP Nanomedicines Research Laboratories, National Institute of Lasers and Optronics (NILOP), Islamabad
- 112 Advanced Characterization Lab (ACL), National Institute of Lasers and Optronics (NILOP), Islamabad
- 113 Materials Characterization Lab, Institute of Space Technology, Islamabad