



भारतीय विज्ञान शिक्षा एवं अनुसंधान संस्थान मोहाली

शिक्षा मंत्रालय, भारत सरकार द्वारा स्थापित

सैक्टर 81, नॉलेज सिटी, प० ओ० मनोली, एस० ए० एस० नगर, मोहाली, पंजाब - 140306

INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH MOHALI

(Estd. By Ministry of Education, Govt of India)

Sector-81, Knowledge city, PO-Manauli, SAS Nagar Mohali-140306, Punjab

Advt. No. IISER M/ F/ (01)/Regular/2026

30.09.2026

Advertisement for Faculty Positions

IISER Mohali currently has 21 vacant positions for direct recruitment of **Assistant Professor** in all areas of **Physics, Chemistry, Mathematics, Biology, Earth & Environmental Sciences and Humanities & Social Sciences, Data Science, Science Education, Artificial Intelligence**. We are looking for extremely motivated scientists with a high-profile research agenda and a flair for teaching (especially at the undergraduate level). The direct recruitments to these posts shall be as per the provisions of the Central Educational Institutions (Reservation in Teachers cadre) Act, 2019.

Essential Qualification for the post of Assistant Professor for all departments as per following:-

Applicants should have a Ph.D with first class or equivalent in the preceding degree in an appropriate branch with a very good academic record throughout and at least three years' industrial/research/teaching experience, excluding-however, the experience gained while pursuing Ph.D.

1. Department of Earth & Environmental Sciences:

i) Nos of positions - (UR-2, EWS-1. Total-3)

Sl. No	Research Area	Desirable Qualification & Experience
1.	Rare Earth and critical minerals	Candidates should have an M.Sc. in Geology/Geophysics or allied subjects, along with a Ph.D. in the area of economic geology/critical minerals/ore geology. Candidates should have a minimum of 2 peer-reviewed research articles as first author published in Q1 international journals in the relevant subject category. Candidates with expertise in critical mineral systems, ore deposit characterization, mineral resource assessment, geochemical prospecting, geophysical exploration techniques, and sustainable extraction approaches as evidenced by publication and relevant experience will be preferred. Experience in field-based geological investigations, analytical instrumentation, and industry-linked research projects will be an added advantage. Candidates should be acquainted with the basic and advanced concepts of economic geology, mineral exploration, and resource sustainability.
2.	Structural Geology	Candidates should have an M.Sc. in Geology or allied subjects, along with a Ph.D. in the area of Structural Geology/Tectonics. Candidates should have a minimum of 2 peer-reviewed research articles as first author published in Q1 international journals in the relevant subject category. Candidates with strong expertise as evidenced

		by publication and relevant experience in field-based structural mapping, deformation analysis, tectonic evolution, basin tectonics, and integration of structural data with geophysical or geospatial methods will be preferred. Experience in geological field training, structural data analysis, and multidisciplinary geoscience research will be an added advantage. Candidates should be able to contribute to teaching in structural geology, tectonics, field geology, and other allied courses.
3.	Environmental Impact and Risk Assessment/Solid Waste Management/Life Cycle Assessment	M.Sc. in Environmental Sciences or M.Tech. in Environmental Engineering, or an allied discipline, along with a Ph.D. in Environmental Impact Assessment/Solid Waste Management/Life Cycle Assessment/Environmental and Climate Risk Assessment or a related field. Candidates should have at least five peer-reviewed research articles (with at least three as first author) published in Q1 international journals in the relevant subject category. Preference will be given to candidates whose research demonstrates expertise as evidenced by publication and relevant experience in environmental impact and risk assessment/modelling, quantitative risk assessment, life cycle assessment/modelling, solid waste management, and sustainability assessment. Proficiency in statistical and numerical modelling, data analysis (Python/R), AI/ML tools, and environmental regulations and policy frameworks will be an added advantage. Candidates should be acquainted with the basic and advanced concepts of environmental chemistry, quantitative data analysis, and sustainable environmental management.

2. Department of Biological Sciences:

- In Plant Ecology/ System Biology/Translational Research in disease biology/ Metabolic Engineering.

i) Nos of positions: (UR-01, OBC-NCL-01, EWS-01. Total 3)

Sl. No	Research Area	Desirable Qualification & Experience
1.	Plant Ecology	The applicant should have demonstrable in-depth knowledge and expertise in any one of the following areas: plant-environment interactions, plant-microbe interactions, ecosystem dynamics, microbiome engineering for sustainable bioresource use, and resilience modeling for applications in climate-adaptive agriculture and bioresource sustainability. Applicants should possess an excellent publication record, must demonstrate evidence of noteworthy publications as first and or corresponding author, and the ability to design and teach undergraduate and postgraduate courses in the above mentioned areas.
2.	Synthetic Biology	The applicant should have demonstrable in-depth knowledge and expertise in any one of the following areas:

		design and assembly of genetic circuits and de novo pathway construction for novel biomolecule production, enabling sustainable bioengineering, AI/ML models for systems biology (e.g., deep learning for protein folding prediction, network inference), bioinformatics pipelines, and big data analytics using Python, R, TensorFlow, and AlphaFold derivatives. Applicants should possess an excellent publication record, must demonstrate evidence of noteworthy publications as first and or corresponding author, and the ability to design and teach undergraduate and postgraduate courses in the above mentioned areas
3.	Translational research in disease biology	The applicant should have demonstrable in-depth knowledge and expertise in any of the following areas: biomarker discovery, rational design of targeted therapeutics and precision medicine via multi- omics integration, AI-accelerated drug discovery. Experience in research using clinical samples and collaborations with clinicians, bioinformaticians, and Industry. Applicants should possess an excellent publication record, must demonstrate evidence of noteworthy publications as first and or corresponding author, and the ability to design and teach undergraduate and postgraduate courses in the above mentioned areas.
4.	Metabolic Engineering	The applicant should have demonstrable in-depth knowledge and expertise in any one of the following areas: high-throughput metabolomics, computational biology with integration of artificial intelligence and machine learning in metabolic pathway design, pathway flux analysis, enzyme optimization, high-throughput metabolomics, and engineering for enhanced yield in biofuels, pharmaceuticals, and nutraceuticals. Applicants should possess an excellent publication record, must demonstrate evidence of noteworthy publications as first and or corresponding author, and the ability to design and teach undergraduate and postgraduate courses in the in the above mentioned areas

3. Department of Mathematical Sciences

i) Nos of positions (UR-01, OBC-NCL-01, EWS-01. Total 3)

Sl. No	Research Area	Desirable Qualification & Experience
1.	Applied Probability Theory, Statistics, Theoretical Computer Science, Partial Differential Equations and its Applications	In addition to the common eligibility criteria mentioned in the advertisement, the prospective candidates must hold a PhD degree in any of the above -mentioned areas of research and have a track record that amply demonstrates ability to carry out independent research

		and teach courses in mathematics and area of expertise at the undergraduate and postgraduate level.
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4. Department of Humanities and Social Sciences

i) Nos of positions (SC-01, OBC-NCL-01, ST-01. Total 3)

Three posts are available in the Department of Humanities and Social Sciences in the following areas:

- History/Sociology/Philosophy of Science
- Science, Technology & Society Studies
- Economics/Development Studies/Policy Studies
- Indian Art & Aesthetics / Indian Philosophy

Sl. No	Research Area	Desirable Qualification & Experience
1.	History/Sociology/Philosophy of Science	The candidate's Ph.D. degree should be in a relevant Humanities or Social Sciences discipline—such as History, Philosophy, Sociology, or related fields—with a demonstrated research and teaching focus in the History and Philosophy of Science or the History and Sociology of Science. The candidate should have a demonstrated ability to teach the existing core course on 'History of Science' as evidenced by their doctoral and postdoctoral research, publications, and teaching experience. The candidate should have post-doctoral experience preferably from institutions such as IITs, IISERs, and/or top universities. The candidate should have the ability to teach at undergraduate and/or postgraduate levels. The candidate should have at least 2 publications in reputed journals such as Q1 and/or Q2 journals and a demonstrated ability to disseminate research results at national and/or international conferences.
2.	Science, Technology & Society Studies	The Ph.D. degree should be in a relevant humanities-and-social-science discipline or an interdisciplinary degree. The candidate's thematic research/teaching focus can be in science and society, technology, psychology, ethics in science, built environment studies and related areas. The candidate should have post-doctoral experience preferably from institutions such as IITs, IISERs, and/or top universities. The candidate should have the ability to teach at undergraduate and/or postgraduate levels. The candidate should have at least 2 publications in in reputed journals such as in Q1 and/or Q2 journals and a demonstrated ability to disseminate research results at national and/or international conferences.
3.	Economics/Development Studies/Policy Studies	The candidate's Ph.D. degree should be in Economics, Development Studies, Economic Geography, Policy studies and/or closely related fields. The candidate should have demonstrated research and teaching experience in one or more of the following areas: Development Economics, Agricultural and Rural Development, Technology and Innovation for Development, Digital Economy and Society, Environmental Economics, and Public Policy Studies. The

		candidate should have post-doctoral experience preferably from institutions such as IITs, IISERs, and/or top universities. The candidate should have the ability to teach at undergraduate and/or postgraduate levels. The candidate should have at least 2 publications in in reputed journals such as in Q1 and/or Q2 journals and a demonstrated ability to disseminate research results at national and/or international conferences.
4.	Indian Art & Aesthetics / Indian Philosophy	The candidate's Ph.D. degree should be in a relevant humanities-and-social-science discipline (e.g. Art History, Visual Studies, Architecture, Indology, Film/Cinema Studies, Theatre & Performance Studies, Aesthetics, Philosophy and Cultural Studies) or an interdisciplinary degree. Thematic research/teaching focus can also include heritage & culture studies. The candidate should have post-doctoral experience preferably from institutions such as IITs, IISERs, and/or top universities. The candidate should have the ability to teach at undergraduate and/or postgraduate levels. The candidate should have at least 2 publications in in reputed journals such as in Q1 and/or Q2 journals and a demonstrated ability to disseminate research results at national and/or international conferences.

5. Department of Chemical Sciences

i) Nos of positions (UR-01, OBC-NCL-01, EWS-01. Total 3)

Sl. No	Research Area	Desirable Qualification & Experience
1.	Synthetic Organic Chemistry (with Emphasis on Total Synthesis of Natural Products)	Candidates should possess an outstanding background in synthetic organic chemistry, with expertise in the total synthesis of natural products, as evidenced by high-quality publications in reputed peer-reviewed international journals and/or patents arising from their doctoral and postdoctoral research or independent research. Candidates with research accomplishments in synthetic methodology development, asymmetric synthesis, medicinal chemistry, chemical biology, or related areas that complement natural product synthesis are also encouraged to apply. Candidates should have the potential to establish an independent, internationally competitive research programme and contribute effectively to undergraduate and postgraduate teaching.
2.	Analytical Chemistry (with Translational/Industrial Focus)	Candidates should possess an outstanding background in analytical chemistry, preferably with expertise in advanced analytical instrumentation, demonstrated by high-quality publications in reputed international peer-reviewed journals and/or patents arising from their doctoral, postdoctoral, or independent research. Candidates should demonstrate expertise in advanced analytical methodologies, instrumentation, and applications. Preference will be given to candidates whose research has strong translational and societal impact, promotes academia–industry collaborations, and addresses contemporary challenges in healthcare,

		environmental, energy, or industrial sectors. Candidates should have the potential to establish an independent, internationally competitive research programme and contribute effectively to undergraduate and postgraduate teaching.
3.	Materials Chemistry (Semiconductors and Device-Oriented Research)	Candidates should possess an outstanding background in materials chemistry, with expertise in semiconductor materials, including their design, synthesis, characterization, and integration into functional devices, as evidenced by high-quality publications in reputed peer-reviewed international journals and/or patents arising from their doctoral and postdoctoral research or independent research. Candidates with research experience spanning chemistry, materials science, physics, or engineering, particularly in interdisciplinary, device-oriented, or application-driven research, are especially encouraged to apply. Candidates should have the potential to establish an independent, internationally competitive research programme and contribute effectively to undergraduate and postgraduate teaching.

6. Department of Physical Sciences

i) Nos of positions (UR-01, SC-01, EWS-01. Total 3)

Sl. No	Research Area	Desirable Qualification & Experience
1.	<u>Condensed Matter Physics</u> including quantum materials, semiconductor physics, electronic materials, materials growth and characterization, devices, theoretical condensed matter physics and data-driven/ML approaches/ <u>Quantum Physics</u> including quantum foundations, quantum information, quantum computing, quantum optics theory and experiments, quantum sensing, experimental quantum Computing on various platforms like superconductors, ion traps, photons and NMR/ <u>Photonics, Atomic Molecular and Optical Physics, and Ultrafast Science/</u> <u>Nuclear and Particle Physics</u> including experimental and theoretical high-energy and nuclear physics, detector development and	A strong publication record in reputed peer-reviewed journals in one or more of the broad specialization areas listed; evidence of research independence through lead/corresponding authorship where applicable, publications arising from post-PhD research, leadership roles in collaborative research, competitive fellowships or research grants, and/or a distinct and coherent research programme; and the ability to contribute effectively to the Department's teaching and research activities.

	instrumentation, accelerator-based physics, nuclear medicine and related applications, data-intensive analysis, large-scale simulations, and AI/ML-driven approaches to event reconstruction, detector simulation, anomaly detection, phenomenology, and physics discovery/ <u>Astrophysics, Astronomy, Cosmology, and Gravity</u> including observations, instrumentation, theory, simulations and data analysis, data-driven/ML based approaches in simulations and data analysis for enhanced performance, and inter-disciplinary areas like planetary sciences, astrochemistry and astrobiology/ <u>Interdisciplinary Physics</u> including soft matter, biological physics, complex systems, statistical physics, nonlinear dynamics, and AI/ML approaches to physical systems.	
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7. Area of Science Education

i) Nos of positions (UR 01= Total 01)

Sl. No	Research Area	Desirable Qualification & Experience
1.	Science Education	Demonstrated research excellence in one or more of the following areas: science/mathematics pedagogy (preferably undergraduate pedagogy), discipline-based education research, curriculum and textbook development, assessment and evaluation, science communication, science and society. Experience in teaching, mentoring, or designing learning experiences for undergraduate students in science, preferably in a research-intensive environment. Good record of research publications in Science Education or closely related areas. Experience in teacher professional development, educational policy, curriculum reform, outreach

		programmes, or externally funded projects in science education will be an added advantage.
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8. Area of Data Science

i) Nos of positions (UR 01= Total 01)

Sl. No	Research Area	Desirable Qualification & Experience
1.	Data Science	Demonstrated research excellence in one or more of the following areas: machine learning, artificial intelligence, statistical learning, data mining, optimization, data visualization, scientific computing, high-performance computing, natural language processing, computer vision, network science, computational statistics, or other emerging areas of Data Science. Evidence of developing novel computational or data-driven methodologies or tools and their application to problems in the natural sciences, healthcare, environmental sciences, or other interdisciplinary domains. Strong record of high-quality publications in reputed journals and/or conferences. Ability to develop and teach undergraduate and postgraduate courses in Data Science, including foundational and advanced topics. Experience in securing externally funded research projects, establishing computational research facilities, or collaborating with industry, national laboratories, or interdisciplinary research groups will be an added advantage.

8. Area of Artificial Intelligence

i) Nos of positions (UR 01= Total 01)

Sl. No	Research Area	Desirable Qualification & Experience
1.	Artificial Intelligence	- A PhD in Computer Science, Artificial Intelligence, Machine Learning, Data Science, Mathematics, Statistics, Electrical Engineering, or other relevant science or engineering disciplines, with a demonstrated research specialization in Artificial Intelligence or Machine Learning. - A strong record of original research, evidenced by high-quality peer-reviewed publications in reputed journals and/or conferences, in one or more areas of AI, including but not limited to: foundations of machine learning; deep and generative models; reinforcement learning and decision-making; natural

		language and speech processing; computer vision and robotics; trustworthy, explainable and responsible AI; and scientific machine learning or AI applications in the natural sciences. • Evidence of significant contribution to use of AI/ML tools and their application to problems in the natural sciences, healthcare, environmental sciences, or other interdisciplinary domains. • Evidence of the ability to establish an independent and coherent research program, contribute to interdisciplinary research, and develop and teach undergraduate and postgraduate courses in AI, machine learning, data science and related areas. The areas listed above are indicative and not exhaustive, and outstanding candidates working in other emerging areas of AI are encouraged to apply
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01 Post are reserved for person with benchmark disability (as per Govt of India rules) and the post shall be filled from SC/ST/OBC-NCL/EWS candidates through horizontal reservation.

General Conditions:

1. A candidate applying for the above faculty positions must be a citizen of India or an Overseas Citizen of India (OCI).
2. The appointment is in the IISER Mohali, which is an Institute of National Importance under the Ministry of Education, Government of India.
3. All applicants must fulfil the essential requirements of the post and other conditions stipulated in the advertisement before the date of advertisement i.e. 30.09.2026. They are advised to ensure their eligibility before applying for a post. No enquiry asking for advice as to eligibility will be entertained.
4. It will be mandatory for all the applicants to apply online and to upload all supporting certificates and documents. Online applications not in prescribed format and/or not accompanied supporting by required information/documents shall be liable to be rejected. The documents uploaded with the online application, will be verified with original testimonials at the time of interview, if the applicants called for the same.
5. The prescribed educational qualifications and experience are the minimum. Mere fulfilling of the minimum advertised qualification and experience requirements does not automatically entitle an applicant to be called for seminar presentation at the Institute and /or for interview.
6. The Institute reserves the right to devise its criteria for shortlisting for all the positions advertised. The duly constituted Screening Committee will shortlist the candidates adopting such criteria. Candidates are advised to mention in the online application all the qualifications and experience in the relevant area over and above the minimum prescribed qualification, supported with documents and ensure that all details are complete, accurate and correct.
7. The period of experience rendered by a candidate on part-time basis, daily wages, etc. will not be counted while calculating the requisite experience for shortlisting the candidates for interview.
8. The decision of the Institute in all matters relating to eligibility, acceptance or rejection of any/all applications, fixing the eligibility criteria, equivalence of qualifications, mode of screening/selection, conduct test/examination/interview, will be final and binding on the candidates. Of
9. No interim correspondence or personal enquiries shall be entertained by the Institute.
10. Persons already working in Central/State Government/Public Sector Undertakings/Autonomous organization etc. should send their applications through proper channel.
11. All candidates called for interview shall be required to furnish 'No Objection Certificate' from their current employer at the time of interview.
12. During the process of selection/post selection, the Institute reserves the right to seek any other certificate including vigilance clearance in respect of the candidates already in service at any time.
13. The reservation for candidates belongs to SC/ST/OBC/EWS/ PwBD category/ies shall be as per Government of India instructions for which applicants must upload/attach the requisite necessary certificates at the time of application for consideration.
14. The OBC-NCL and EWS certificate should be issued during the current financial year.
15. PwBD candidates, who suffer from not less than 40% of relevant disability, should possess disability certificate issued by the Medical Board duly constituted by Central or State Government issued on or before last date of submission of application
16. Reservations for those belongs to SC/ST/OBC-NCL/EWS/ PwBD category will be as per Govt. of India norms. Candidates belongs to reserved category SC/ST/OBC-NCL/EWS/PwBD should submit the valid certificate (kindly refer the provided Proforma/s below) issued by the appropriate authorities applicable for jobs under Government of India. In the absence of such certificate the candidate will be treated under Unreserved Category.
17. The candidates are required to submit the caste/category/disability certificate issued by the Competent Authority in the format prescribed by the Government of India for this purpose.

18. The Institute solely reserves the right to accept or reject all or any of the applications received without assigning any reason thereof. The Institute also reserves the right not to fill any or all of the advertised positions without assigning any reason. The number of vacant positions to be filled may be increased or decreased at the institute's discretion.

19. All the above positions require full 24x7 commitment to the Institute. Therefore, candidates willing to dedicate themselves fully to the Institute are expected to apply. Appointment orders issued by the Institute to the finally selected candidates, shall be provisional. The Institute shall verify the antecedents or documents (verification of character & antecedents /Police verification, verification of all original documents, experience certificate and other relevant documents) at the time of interview and the appointment. In case later on if it is found at any time that any of the facts/documents submitted by the candidate are falsified or tampered with or the candidate has doubtful antecedents / background and has suppressed the said information, then his/her candidature shall stand cancelled and services may be terminated.

20. All appointments, shall be subjected to satisfactory completion of probation period of one year or as applicable. Further, in case of any inadvertent mistake in the process of selection, which may be detected at any stage even after the issue of appointment order, the Institute reserves the right to modify/withdraw/cancel any communication made to the candidates.

21. Addendum/cancellation/corrigendum (if any) shall be posted on the Institute Website only.

22. Canvassing of any nature and/or bringing any influence/pressure from any quarter will be treated as a disqualification for the post.

23. Correspondence, if any, from the Institute including interview call letter to the short-listed candidates/offer letter to the selected candidates shall be sent to the e-mail ID provided by the applicant. Click here to fill Online Recruitment Application Form

24. Please note that only Online Applications will be entertained. Applications through email will not be considered.

25. The following category shall be eligible against bench mark disability a) Blind, Low Vision b) Deaf, Hard of Hearing d) Autism Spectrum Disorder (Mild), Special Learning Disability, Mental Illness e) Multiple Disabilities involving (a) to (d) above

26. Last date to submit the Online Application is **20.11.2026** till 05:00 PM through the following link:-

<https://erp.iisermohali.ac.in/OnlineRecruitmentApplicationIISERM.action>

27. Applicants must disclose whether any of their close relations are employees or applicants for employment in IISER (including parent/child/sibling or equivalent relation by marriage/ spouse/ or those who could be termed as blood relation)

28. Point of Contact: recruitment@iisermohali.ac.in deanfaculty@iisermohali.ac.in (0172- 2240086 & 2240266).

29. Reimbursement to the candidates selected to appear for the interview will be made as per details given below:

By railways: AC II Tier;

By Airways:

< 1000 km	-	Rs. 12000/-	} (or actual fare, whichever is less)
- 1001 to 1500 km	-	Rs. 18000/-	
> 1500 km -	-	Rs.24,000/-	

The air / rail fare will be reimbursed to the candidates only on production of authentic tickets/boarding passes booked at authorized travel agents as mentioned in OM No. 31011/12/2022-Estt.A-IV dated 29th August, 2022 issued by DoPT. Kindly note, in case tickets are not booked via authorized travel agents as

mentioned in OM No. 31011/12/2022-Estt.A-IV dated 29th August, 2022, it will not be reimbursed under any circumstances.

REGISTRAR IISER MOHALI