

POSTDOCTORAL RESEARCH FELLOW

Artificial Intelligence and Machine Learning for Energy Materials

ABOUT IKST

The Indo-Korea Science and Technology Centre (IKST), Bangalore, is the Indian branch of the Korea Institute of Science and Technology (KIST), Seoul, and is funded by the Government of Korea. Established in 2010, IKST promotes collaborative research between Indian and Korean scientists and institutions on problems of mutual interest and the development of advanced technologies.

IKST's current research programme spans computational materials science, data analytics, and AI/ML for materials research. The Centre collaborates with leading Indian institutions, including JNCASR, IIT Bombay, IISc Bangalore, IIT Bhubaneswar, and IIT Kharagpur. Its internal R&D division is developing AI-enabled materials-simulation methods and data platforms for energy applications, including batteries, fuel cells, and hydrogen storage.

THE POSITION

IKST invites applications for an immediate postdoctoral opening focused on the development and deployment of AI/ML methodologies for energy materials. The selected candidate will develop research-grade algorithms and software, construct and analyse materials datasets, validate models, prepare scientific publications, and collaborate with researchers in India and Korea.

ESSENTIAL QUALIFICATIONS

- PhD in Physics, Materials Science, Chemistry, or a closely related discipline.
- Demonstrated experience in developing machine-learning methods for materials science, chemistry, or physics.
- Strong programming and scientific-computing skills, preferably in Python and modern machine-learning frameworks.
- Evidence of method or software development through publicly accessible GitHub/GitLab repositories, released research software, documented packages, or reproducible project portfolios.
- Excellent oral and written communication skills, together with a publication record in reputable peer-reviewed journals.
- Ability to work effectively in interdisciplinary and international collaborations.

PREFERRED EXPERTISE

Experience in generative modelling, particularly diffusion models, variational autoencoders, generative adversarial networks, autoregressive models, normalizing flows, or graph-based generative models, will be highly valued. Experience in graph neural networks, inverse materials design, active learning, or materials informatics is also desirable.

HOW TO APPLY

Applicants should email the following materials to careers@ikst.res.in by **30 July 2026**:

- Curriculum vitae, including a publication list;
- Two letters of recommendations;
- A brief statement of research experience and interests; and
- Links to relevant code repositories, software releases, or project portfolios.

Only shortlisted candidates will be contacted by the HR team by email or telephone regarding the next steps.

Learn more about IKST and its activities: www.ikst.res.in