



Condensed Matter National Laboratory (CMNL)

Post-doctoral Position in Data-Driven 2D Materials Engineering

The Condensed Matter National Laboratory (CMNL) at the Institute for Research in Fundamental Sciences (IPM) invites applications for postdoctoral researchers through various research schemes, with a maximum of five positions available. The main purpose of this post-doc fellowship is to cultivate new knowledge-based and data-driven methods to accelerate the early stages of discovery of new functional materials to bridge the gap between materials discovery to synthesis and practical commercial applications in the areas related to energy storage and quantum optics.

Important note:

For three of these positions, applicants must have completed their PhD within the past five years.

Required candidate profile based on qualifications, knowledge and, skills

PhD in Physics, Chemistry, Materials Science, Electrical Engineering, Chemical Engineering, Biophysics or related fields

Strong publication track record in related disciplines (With emphasis on the past 3 years)

Experience with 2D Materials Synthesis and characterization

Experience in manufacturing techniques

Desirable Skills

Experience with rheological characterization methods

Experience in computational modelling

Excellent verbal and written communication skills

Self-motivated and able to plan and prioritise workloads to meet deadlines

Ability to take initiative and undertake complex problem-solving activities

Ability to work in a multidisciplinary team environment

Excellence in record keeping/data management and presentations/updates of progress

Preferred fields of research:

- * Experimental condensed matter physics
- * Materials Genome
- * 2D Materials
- * Novel Functional Materials with specific applications in Energy Storage (MOFs, etc.)
- * Materials Science
- * Quantum Optics
- * Energy Materials
- * Nano Science
- * Surface Sciences
- * Condensed Matter Theory and Computational Physics

Starting date and duration

Starting immediately. The initial contract term is 1 year, which can be renewed up to 2 years based on annual evaluation.

Application

Please send a motivation letter describing your experience and research interests, a statement of research, and your CV with a complete list of publications and the email addresses of two references to cmnl@ipm.ir with the headline 'Postdoc-Data-Driven 2D Materials Engineering-your surname. The position will remain open until filled.

Selection process:

The selection will be made on the basis of originality and quality of the research proposal as well as the research achievements.