PAUL SCHERRER INSTITUT

The Paul Scherrer Institute (PSI) is the largest research institute for natural and engineering sciences in Switzerland. We perform cutting-edge research in the fields of matter and materials, energy and environment, and human health. By performing fundamental and applied research, we work on sustainable solutions for major challenges facing society, science and economy. PSI is committed to the training of future generations. Therefore, about one quarter of our staff are post-docs, post-graduates or apprentices. Altogether, PSI employs 2100 people.

The Paul Scherrer Institute PSI is expanding its focus areas and establishing a new research division: Scientific Computing, Theory and Data. In recognition of the importance and globally unique ensemble of large facilities at PSI, a key mission for the new division is supporting PSI operations and experiments with their increasing challenges and opportunities for a unique digital environment.

Within this division, we are establishing a number of laboratories dedicated to the development and application of the computational and data capabilities that can support and enhance the activities of PSI. The Laboratory for Materials Simulations, directed by Professor Nicola Marzari (EPFL and PSI), and in close collaboration with the Swiss National Center for Computational Design and Discovery of Novel Materials (NCCR MARVEL) will be hosting three groups ("Materials Software and Data", "Multiscale Simulations", and "Light-matter Interactions") aimed at developing, integrating and disseminating in the PSI community and the scientific community at large the computational capabilities required to understand, predict, and characterize materials studied at PSI with photons, neutrons, muons and electrons.

We are currently building a team of initially six scientists (one group leader, two tenure-track scientists, and three postdoctoral researchers) for the group on "Materials Software and Data".

Group Leader: Materials Software and Data

SCD Division / Laboratory for Materials Simulations

Your tasks

You will work in an interdisciplinary, multinational research environment and collaborate with your team members and the PSI scientific community. Part of your responsibilities will be

- to lead the Materials Software and Data group at PSI

- to contribute to the development, integration, and dissemination of the computational capabilities required to understand, predict, and characterize materials as studied at PSI with photons, neutrons, muons and electrons

- to provide support and access to these computational capabilities for the PSI science and user programs

- to curate the computational data for structures, properties and spectra required to discover or design materials with novel or enhanced properties and performance

- to perform your own research at the forefront of computational materials science

Your profile

- PhD in physics or a similar domain
- strong programming skills and capabilities in scientific languages, front-end web technologies, database systems
- team leader with proven management and communication skills and a track record in funds acquisition and in working or leading other academic or industrial partners
- capabilities to design new methods and tools
- good written and spoken English
- good written and spoken German or willingness to learn it

We offer

Our institution is based on an interdisciplinary, innovative and dynamic collaboration. You will profit from a systematic training on the job, in addition to personal development possibilities and our pronounced training culture. If you wish to optimally combine work and family life or other personal interests, we are able to support you with our modern employment conditions and the on-site infrastructure. The position is on a tenure-track basis, leading to a permanent position after a successful evaluation after a maximum of 5 years.

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Human Resources Management
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For further information, please contact Prof. Nicola Marzari, E-Mail: nicola.marzari@psi.ch.

Please submit your application online by 31 December 2021 for the position as a Group Leader Materials Software and Data (Index No. 7301-00, https://www.psi.ch/en/pa/job-opportunities/), including a CV, application letter, research plans, publication list, and contact information for 3 references.

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