Permanent position of scientist
in materials-oriented data science and programming

The IRIG, "Interdisciplinary Research Institute of Grenoble" (https://www.cea.fr/drf/Irig), is a large department (~ 1000 people) within the direction of fundamental research of the French Alternative Energies and Atomic Energy Commission (CEA). It main objective is basic research in the fields of physics, chemistry, biology, and materials sciences. It brings together 10 laboratories in Grenoble working in close networks with partners from the academic world (in particular the University of Grenoble Alpes) and with industry.

The MEM laboratory is a specialist in simulation at the atomic level (ab initio, DFT, force fields), but is mainly composed of experimental teams using and developing analytical methods for neutrons, X-rays, nuclear magnetic resonance and high resolution electron microscopy. The analysis and processing of data from these techniques has become a major challenge.

We are looking for an expert in data science, mainly experimental data science, including data analysis and processing in materials science in connection with the platform of nano-characterisation (PFNC) and the large instruments (ESRF).

Your responsibilities will include:

- being one of the lead data scientist of the Institute, helping to shape and develop our digital and programming activity at IRIG in the areas of energy (battery) and digital science;
- assist in the development of data processing modules in conjunction with the experimental teams ;
- coordinating this development and planning their use and dissemination ;
- assist in the drafting of scientific projects on the digital part.

Your expected qualifications:

- a PhD in physics, materials science or related fields, followed by at least a first research experience;
- a clear track record of data science publications, demonstrated by excellent publications;
- experience in programming (python required) combined with development tools;
- fluent written and spoken English (knowledge of French would be a plus but not required);
- willingness to cooperate with other groups, with good communication and information behaviour;
- initiative and commitment to help develop the digital activities of the laboratory.

What we offer:

- Our institute is part of CEA-Grenoble, which brings together characterisation and simulation resources with a strong link to both fundamental and industrial research. This center, unique in France in the field of materials science, is located in the stimulating"Polygone Scientifique" (https://en.wikipedia.org/wiki/Polygone_Scientifique), just near the city centre of Grenoble

- The opportunity to work on national and international projects with universities, research institutes and industrial companies
- A flexible working environment, with a lot of freedom to define and organize your activities
- Finally, Grenoble offers a fantastic quality of life, in the heart of the French Alps, surrounded by magnificent regional and national parks.

Questions regarding this position can be addressed to Dr. Thierry Deutsch (thierry.deutsch@cea.fr), head of the MEM laboratory (Laboratory for Modelling and Exploration of Materials, https://www.mem-lab.fr/en)

Applications, including a cover letter (with a brief summary of previous research activities), your CV and two references or reference letters, are expected by email. **Application Deadline:** 01/11/2022