



Institute for Energy Technology (IFE) is an independent international research foundation located in Norway at Kjeller and Halden. IFE is in the forefront of several fields within international energy research, safety, environmental-, petroleum- and nuclear technology. IFE develops new technological solutions for industry and public sector in more than 30 countries. IFE has a comprehensive activity in the field of nuclear medicine and the development of new radiopharmaceuticals. IFE is the host of the International OECD Halden Reactor Project. The number of employees is about 600 and the annual turnover is about NOK 950 Million.

The Physics Department

The Physics Department at IFE has as main goal to utilize the neutron beams from the JEEP II nuclear reactor at Kjeller. The research addresses hydrogen storage materials, battery materials, soft matter, magnetism and thermoelectric materials. The department has a broad collaboration with Norwegian universities and industries, and with many foreign universities and research institutes.

The Physics Department, IFE, Kjeller, Norway has a vacancy for:

Postdoctoral Fellowship for 3 years

The position is available through funding of the project LiMBAT from the EnergiX program of the Research Council of Norway. The aim of the project is to obtain detailed understanding of the correlation between morphology and electrochemical performance of conversion-type electrode based on metal hydrides for Li-ion batteries.

The project is a collaborative effort between the national partners IFE (project coordinator), University of Oslo and SINTEF and the international collaborators CNRS Thiais (France) and Hiroshima University (Japan).

The main tasks for the postdoctoral fellow are:

- Synthesize nanostructured conversion-type anode materials based on metal hydrides, primarily with ball milling techniques.
- Examine the composition and morphology of the materials with powder diffraction, scanning electron microscopy, small-angle scattering and other relevant techniques.
- Interact with national and international project partners with respect to electrochemical characterization, transition electron microscopy, in-situ diffraction and surface characterization.

Qualifications:

A successful candidate will have a PhD or similar in chemistry, physics, materials science or a closely related field. Prior knowledge to some of the relevant experimental techniques (above) is favorable.

The evaluation of candidates will be based on scientific qualifications and ability to communicate efficiently with others. Good knowledge of the English language is essential.

We can offer:

- Exciting and challenging research tasks
- Participation in an internationally leading research team
- Social benefits including pension, life insurance and accident insurance
- Salary according to agreement

Location: Physics Department at IFE, Kjeller.

Duration: 3 years

Start date: August 2015

For more information regarding the position, please contact:

Department Head Bjørn C. Hauback, bjorn.hauback@ife.no,

Senior Researcher Magnus H. Sørby, magnus.sorby@ife.no

To Apply:

Please forward by email: (i) a written application, (ii) a curriculum vitae with list of publications and professional activities, (iii) copies of certificates/transcripts in English or Norwegian, (iv) the names and email addresses of 3-5 references to: fysikk@ife.no

Closing date for applications is 15 May, 2015.

Applications with CV and certificates will not be returned.

Please identify the application with: “IFE-LiMBAT postdoctoral position”