

**Resolution date July 31st 2020**

**Proposal for the assignement of the Recognised Post-doc Researcher – Energy in Buildings (NºRef.27/2020)**

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**Publish date June 29th 2020**

**NºRef. 27/2020Recognised / Post-doc Researcher – Energy in Buildings ECOS – Energy Efficiency in Systems, Buildings and Communities Group**

The applicant will work as a researcher in projects related to energy efficiency in buildings and communities, DER (Distributed Energy Resources) integration and energy management systems in buildings. He/she will report to Head of the Thermal Energy and Building Performance Group leading research projects related with Energy Efficiency in Buildings, Building Performance and Retrofitting in Buildings.

### **The Research Group**

The research will be embedded in the Thermal Energy and Building Performance Group which main research subject is the Integrated and Systemic approach for Zero Energy Buildings and Communities. The group's special focus is on the Mediterranean and other warm weather regions. The vision is to build an applied research group that contributes to accelerate the reduction of greenhouse gas emissions (GHG) through energy efficiency measures, production of clean energy, and integration of distributed renewable energy sources (RES). The research group is also managing the Semi-Virtual Energy Integration Laboratory (SEILAB) which provides advanced expertise to assess the development and integration of renewable energy solutions and innovative thermal and electrical equipment that are designed to improve energy efficiency in buildings and energy systems. The laboratory is provided with cutting-edge technology comprising systems for energy generation, heat and cool storage and state-of-the-art facilities for testing HVAC equipment and the interaction of energy systems with the grid. The laboratory operation is based on a semi-virtual testing approach, which allows for real equipment to be operated as a function of the behaviour of a dynamic virtual model. The laboratory is pioneer in addressing the smart integration of electrical and thermal components and is a leading experimental facility for improving the development of Net Zero Energy Buildings.

### **Description**

He /she will be involved in tasks such as managing, supervising and leading projects as well of performing research in projects related to energy in buildings and HVAC systems and integration of renewable energies in buildings, IEQ in Buildings and cost-benefit analysis. Integrated in a multi-disciplinary team, the candidate is expected to run research activities as part of international projects or projects with industrial partners. The candidate has to demonstrate extensive experience to plan resources and ensure deadlines as well of reporting and communication of technical / research results.

The candidate will coordinate the Efficient Buildings project. As a MED hub for Energy Efficiency (EE) innovative and shared solutions, the Efficient Buildings Community will anchor a MED community around energy issues that public organisations face in order to promote modular projects' outcomes and increase their impact on public policies. He also be coordinating activities in H2020 Project PLURAL about retrofitting solutions for buildings. Activities where he/she will be involved are networking activities with international partners, analysis of technical results, reporting and communication of results, as well of quality assurance.

### **Requirements**

We are looking for excellent and highly motivated candidates with a PhD degree in Mechanical Engineering and/or Building Physics Science, with experience in building performance, thermal renewable systems and generally speaking energy systems in buildings and/or cities, including business models and cost-benefit analysis.



Shaping Energy for a Sustainable Future

Knowledge in heat and mass transfer phenomena, renewable energy technologies and experience in computational energy systems and simulation tools is essential. Advanced knowledge of TRSNYS is highly valuable. We are looking for a methodical and rigorous person with a scientific spirit and results oriented. Teamwork and communication and management skills will also be a requirement. Extensive experience to plan resources and ensure deadlines as well of reporting and communication of technical / research results is essential. The candidate should also have experience in EU and international research projects and should show results in activating / managing funded projects both from competitive calls and private companies. Mastery of English on all levels is essential. Knowledge of other languages would be desirable.

### **We offer**

We offer the chance to become part of an exciting and consolidated team, with international recognition, for developing cross-cutting projects in science and technology, oriented towards excellence. We also offer a research environment comprised of highly qualified and motivated professionals. Salaries will be paid in accordance with the IREC's salary policy, depending on the candidate's qualification and professional experience.

Typology of contract will be a Tenure track contract.

Workplace. Barcelona

Application

Applicants should send a detailed CV and a letter of motivation to [irecjobs@irec.cat](mailto:irecjobs@irec.cat).

The application deadline is 20th July 2020

Please indicate "**2020 –Senior-Buildings - ECOS**" in the subject