

## OPENING ONE POSTDOCTORAL POSITION

Applications are invited for one Postdoctoral Research Fellow in the **Centre of Advanced Photovoltaics** CTU in Prague to work on the Building Integrated and Building Applied Photovoltaics (BIPV, BAPV).

### SHORT DESCRIPTION OF THE PROJECT:

The project combines theoretical approaches represented by advanced nanoscale simulations, laboratory design and fabrication of novel solar cells supported by simulations, and the exploration of complex impact of photovoltaics on urban systems and architecture. The project will link activities at the Czech Technical University in Prague with University of Southampton, UK, a world leader in **optoelectronics and photonics**.

### OBJECTIVES:

The applicant will work within the work package WP5 – Applications. The final goal here is to develop and experimentally verify a concept of smart microgrids for maximizing the local use of solar electricity within the built environment. The applicant's work will include studies on real energy performance, user behaviour, electricity consumption and available solar energy in buildings and urban settlements of various types, topologies and locations. The applicant's work will also focus on design of advanced building skins, materials and technologies for smart retrofits. Both numerical and experimental techniques will be used. The output is expected in form of scientific reports, computational algorithms, data sets and experimental prototypes of BIPV or BAPV.

### JOB REQUIREMENTS:

Successful candidates must have a PhD in Architectural/Building Engineering, Physics or closely related disciplines. Previous experience with photovoltaic technologies, building physics and building energy simulations is highly desired. Programming skills in Matlab/Simulink and Comsol are appreciated. Good knowledge of English, both written and oral, is compulsory. At least one accepted scientific paper in a journal listed in WoS is required.

### ABOUT THE GROUP:

The applicant will work within a small group including architects, building physicists and electrician specialists within the **University Centre for Energy Efficient Buildings (UCEEB)**.

### CONTRACT DETAILS:

The appointment will be for three years with probation period of one year. At the end of the three-year period, opportunities will exist for exceptional candidates to apply for longer-term posts (assistant professor). Starting salary will be within the range of Euro 1600 – 2000 per month depending on the qualifications and experience.

### HOW TO APPLY:

Interested candidates should apply, with an up-to-date CV, a brief statement of proposed research and the names and contact details of two referees to [cap@fel.cvut.cz](mailto:cap@fel.cvut.cz). The deadline for the first round of applications for Research Fellowships is **24th February 2017**. It is intended to hold interviews with the short listed candidates between 3rd and 5th April 2017; applicants from outside Europe will be interviewed by Skype. Further appointments will be made at approximately six-monthly intervals until all positions are filled.