



INNOVATIVE ECONOMY
NATIONAL COHESION STRATEGY



EUROPEAN UNION
EUROPEAN REGIONAL
DEVELOPMENT FUND



Stipend offer nr 19/Team/2010

Position: PostDoc in the project "Semiconductor nanostructures for renewable energy, information processing and communication technologies" (theoretical modeling of semiconductor nanostructures)

Number of stipends: 1

Institution: Institute of Physics, Wrocław University of Technology

Maximum period of stipend agreement: till May 2014

Position starts on: August 1st, 2010

Stipend's amount: 5000 PLN

Pension insurance: YES (regular full-time employment)

Key responsibilities include:

1. Developing a kp description for electron-hole pairs in stacked self-assembled QD chains
2. Description of carrier transport in an inhomogeneous QD chain
3. Modeling of intra-subband and inter-subband thermalization of carriers
4. Modeling of carrier kinetics upon illumination
5. Full modeling of a photovoltaic cell based on a QD chain

Profile of candidates:

1. PhD in theoretical physics; a period of research carried out away from the home institution (during the PhD or after) will be an advantage;
2. Experience in numerical modeling of physical phenomena (diagonalization methods and kinetic simulations);
3. Positive attitude towards group work and supervision of MSc projects;
4. Fluency in English.

Required documents:

[See the project web page.](#) In short, the following documents are required:

1. Application letter;
2. CV containing the summary of scientific achievements;
3. List of publications and conference presentations;
4. PhD certificate;
5. A document confirming marks obtained during PhD studies or final marks from the PhD examination (if applicable); confirmation of the distinction *cum laude* if achieved;
6. Recommendation letters (at least from the PhD supervisor).

For more details about the position please visit:

www.if.pwr.wroc.pl/~machnik/TEAM

Principal Investigator: Paweł Machnikowski

Address for applications: Pawel.Machnikowski@pwr.wroc.pl

or the web form available from the project web page

Closing date: July 2nd, 2010.

Please include in your offer :

"In accordance with the personal data protection act from 29 th August 1997, I hereby agree to process and to store my personal data by the Institution for recruitment purposes".

The granting institution may seek to contact the best candidates only