



Marie Curie Early Stage Researcher (ESR) – UWB IC Transceiver Researcher

We are looking for a highly motivated and talented early stage researcher to complement our team in design of low-cost and energy efficient environmental monitoring system related to the SENSEIVER-ITN experiment and sustainable healthy environment.

Sixteen PhD positions are offered in a Marie Curie Initial Training Network “Low-cost and energy-efficient LTCC sensor/IR-UWB transceiver solutions for sustainable healthy environment” (SENSEIVER-ITN). SENSEIVER-ITN is a multi-site Training & Research Program funded by the European Commission (Program People, FP7) and organized by research institutions from the public and private sector in six European countries. The aim is to develop and design all the components of the environmental monitoring system (LTCC sensing materials, LTCC sensors, transceivers and data acquisition system) that will provide sustainable healthy environment.

Description

In case of monitoring industrial point pollutant sources, usually in very toxic, hazardous area, battery lifetime of the measuring nodes is of the utmost importance. The radio technology, that provides low cost, low complexity and low power consumption for peripheral and data collecting nodes, is IR-UWB (Impulse-Radio Ultra Wideband), usually used in short-range sensor networks (IEEE 802.15.4a). Thus, the project will aim at the design of power-efficient wireless IR-UWB solution that complements commercial ZigBee transmitter in environmental monitoring system. The objectives are: 1. to develop an energy efficient IR-UWB transmitter compatible with designed LTCC sensors 2. to develop dislocated IR-UWB receiver compatible with commercial ZigBee transmitter 3. to characterize the IR-UWB transmitter and receiver.

The project involves telecommunication electronics, analogue electronics, wireless sensor networks, EDA tools (Cadence, Mentor Graphics Calibre), IR-UWB IC characterization...

Qualifications

Candidates applying for a PhD position (Early Stage Researcher, ESR) must hold a Master/Diploma degree obtained not longer than four years ago at the time of appointment.

All applicants must not have resided or carried out their main activity (work, studies, etc.) in the country of their host organisation for more than 12 months within the last 3 years prior to the starting date of the employment. Researchers can be nationals of any country within or outside of the EU. Good knowledge of the English language (fluently speaking and writing) is essential.



How to apply

For application send:

- Your CV
- Copies of your university degree(s) or academic transcript (list of module marks)
- A cover letter (1 page) outlining your qualification for the project
A list of publications (if available)
- Other documents to demonstrate specific experiences (if available).

Application deadline: 28/01/2012

Applications have to be addressed to the coordinator, Prof. Dr. Goran Stojanović and either sent via email to sgoran@uns.ac.rs (documents attached as PDF-files) or via mail to:

Dr. Goran Stojanović, Faculty of Technical Sciences, University of Novi Sad, Trg Dositeja Obradovića 6, Novi Sad, 21000, Serbia, phone: +381 (0)21 4852552.

Job Position No.: 1

Research Fields

Electrical Engineering

Career Stage

Early stage researcher or 0-4 yrs (Post graduate)

Research Profile

First Stage Researcher (R1)

Benefits

Successful candidates will be employed from **March 2012** for **36 months** (PhD students). Besides the payment for the full-time employment, a mobility fee will be granted.

Host institution

The host institution is the University of Novi Sad, Faculty of Technical Sciences, Department of Electronics, Novi Sad, Serbia.

