On February 3, 2012, the Ministry of Economy and Competitiveness has published the call for Predoctoral Research Training (FPI) grants (with a 4 years duration) associated with research projects of the national plan aimed at engineers or graduates interested in pursuing the doctoral thesis. Within this call it is offered a scholarship associated with the Research Project TEC2011-29006-C03-02 (GRE3N-LINK-MAC): "General Radio concepts for ENergy cogNizant mobile communicatioNs: LINK and MAC layer aspects".

FOCUS OF THE PROJECT: This project is focused on the development of algorithms for the link and medium access layers aimed at decreasing the energy spending associated to mobile terminals and, thus, increasing the lifetime of the batteries. In this project, theoretical advanced strategies will be developed taking explicitly into account information related with the energy-status of the batteries, channel state, and also harvesting capabilities of the terminals. More concisely, the project will cover aspects such as the design of proper feedback mechanisms for the transmission of information related not only to the channel state, but also of several energy-related parameters of the terminals, the development of energy-efficient transmission architectures with low computational complexity, the proposal of medium access control solutions that take into account the different energetic status of the users, and the analysis of cognitive radio strategies to assist the previously mentioned techniques in improving the energy efficiency.

CANDIDATE PROFILE: Degree in electrical and electronic engineering (telecommunications) with strong academic background in communications and signal processing and good academic record. Previous research experience will be evaluated positively.

DETAILED INFORMATION: Conditions for the submission of applications (from 8 Febr. until 23 Febr. 2012), full description of the characteristics of these grants (including duration and salary), description of the academic conditions that the candidates must fulfill, and procedure to apply are available in the following link (candidates are required to visit the webpage and make sure that they fulfill all the conditions and procedures defined in the call):

http://www.micinn.es - Ayudas y Convocatorias - LIA de Recursos Humanos - Subprograma de Formación de Personal Investigador - Formación de Personal Investigador (FPI) 2012

http://www.micinn.es/portal/site/MICINN/menuitem.dbc68b34d11ccbd5d52ffeb801432ea0/?vgnextoid=e962ae533a2c4310VgnVCMI000001d04140aRCRD&vgnextchannel=8da5b9746e160210VgnVCM1000001034e20aRCRD

The deadline for the submission of applications is 23 February 2012.

CONTACT DETAILS: For more details about this scholarship, please contact Antonio Pascual Iserte: <antonio.pascual@upc.edu>