

Job opening for researcher for study of electromagnetic exposure by wireless technology

The "Wireless & Cable" (WiCa) research group (www.wica.intec.ugent.be) is the expertise center of the Department of Information Technology of Ghent University/IBBT (Interdisciplinary Institute for BroadBand technology) in Belgium for physical-layer research in the field of wireless propagation and interaction of electromagnetic fields of wireless technology with the human body.

People and governments are concerned about human exposure to electromagnetic fields. Recently, there was a lot of commotion about the e-waves chip, which could be attached on the mobile phone to lower the absorption. In Brussels, limits for the radiation of GSM and UMTS transmitters are lowered to 3 V/m. A European guideline is issued to lower the permitted absorption in MRI-scanners (magnetic resonance imaging used in medicine); because of this some scanners could not be used anymore. The human exposure to wireless networks and MRI scanners is thus a "hot topic". Research in the following domains is important for WiCa:

- 1) Exposure and absorption to electromagnetic radiation in the body by new (LTE, WiMAX) and existing wireless networks.
- 2) Absorption of radiation in patients in MRI-scanners.
- 3) Personal studies with dosimeters: using portable dosimeters personal exposure can be assessed and one can determine when someone is mostly exposed.
- 4) Possible higher sensitivity of children to radiation of mobile phones and antennas.

We are looking for enthusiastic candidates to perform research in the domains above in international European projects. Candidates with a Master degree in Electronics, Computer Sciences, or Physics qualify for this research job. Experience is not necessary but interest in wireless communications and electromagnetism is an advantage.

What do we offer? We offer a pleasant work climate within a young dynamic team and the possibility for obtaining a PhD. If you are interested in this job offer, then you can address your application letter and curr. vitae to:

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