

Vacancies

Fully paid 4 years Ph.D. positions within the Electromagnetics Group

At present several fully paid 4 years Ph.D. positions are available within the Electromagnetics Group of the Dept. of Information Technology. Apart from a Master's degree in Electrical or Physical Engineering and good knowledge of English, basic (graduate) knowledge in Electromagnetics and high-frequency electronics is sufficient. The Ph.D. candidate will be provided with all guidance and hardware and software tools necessary to perform state-of-the art research in one of the following fields:

- High-frequency behavior of Integrated Circuits (ICs) with a special focus on ICs for the automotive industry. This research will be conducted in cooperation with Flemish industry partners, such as Melexis and ON Semiconductor, and also within a consortium of well-known European electronics manufacturers, such as Philips, NXP, Bosch, Infineon, ...
- Flexible and implantable antennas (in cooperation with Recticel and Flanders' Drive)
- Design and modeling of advanced submicron interconnect technologies of ICs (in cooperation with Agilent Technologies)
- Advanced time-domain (FDTD) and finite element (FE) techniques for the simulation of antennas for usage within the ADS-framework of Agilent Technologies
- Detection of concealed objects with millimeter waves (within a Strategic Basic Research project of the IWT) and early detection of breast tumors
- Fast Maxwell solvers for very large and complex structures in cooperation with foreign research groups in the USA, Finland, Italy, Turkey, and Israel.

As a researcher within the Electromagnetics Group, you will be part of a team that has reached the top of the international scientific community for more than 20 years and this will allow you to fully develop your creative abilities. During these four years, you will regularly take part in international congresses and upon your request an internship in a foreign research group can be arranged. The Ph.D. research itself can be focused on more fundamental investigations as well as on innovative applied research in close collaboration with industry.

Through intensive coaching by senior researchers and professors and through cooperation with the Electromagnetics Group's academic and industrial partners, the candidate will be trained as a highly skilled scientist and design engineer. Upon completion of the four years program, the Ph.D. graduate will be ready for a successful academic career or to hold an important position in a high-tech company.

Interested candidates are requested to send their curriculum to Dr. D. Vande Ginste (dries.vande.ginste@intec.UGent.be), Prof. H. Rogier (hendrik.rogier@UGent.be), or Prof. D. De Zutter (Fellow IEEE) (daniel.dezutter@UGent.be). Please provide sufficient details on the Electromagnetics and high-frequency electronics courses in your curriculum.