

Ph.D. position on Nano-Communications

We are looking for an enthusiastic Ph.D. researcher, who wants to make his/her carrier in the emerging area of nano-communications: the communication with and within a large ensemble of nano-devices. The position is open from now.

Job description: The International Research Centre for Telecommunications and Radar (IRCTR) of Delft University of Technology performs internationally recognized research in the areas of radar, remote sensing and telecommunications. Nano-technology in electronics and mechanics aims at the development of very small devices, e.g. mm³ scale and smaller, which are computational powerful and able to perform a wide variety of tasks, e.g. environment sensing and actuation, information extraction and communication. Wireless communications between such devices is an emerging and challenging area of research, and will be the topic of this Ph.D. investigation. The research will focus on the physical layer aspects of communication for nano-devices based on the transmission and reception of electromagnetic (EM) fields, processing of the received signals and to extract information from them.

Demands: the researcher should have an M.Sc. degree in electrical engineering or physics and experience in the field of electromagnetics and statistical signal detection. Preference is given to those who have both theoretical knowledge and practical experience. The candidate should have capabilities of performing both independent research and working in a team on research projects. The *duties* include:

- Development of a detailed research programme on pre-defined issues,
- Realization of the developed research programme,
- Preparation of project reports and scientific publications and presenting results at scientific conferences;
- Preparing and defending the PhD thesis;
- Supervision of M.Sc. students.

The researcher should have an open personality and good English language skills in order to closely cooperate with colleagues and students as well as write project documents.

Job conditions: the PhD researcher will be paid according to the salary scale for AIOs of the Dutch Universities. In addition to the regular salary, an accepted candidate will receive a standard package of financial benefits according to CAO of Dutch Universities.

If you are interested in this job please send your application (covering letter, curriculum vitae, supporting documents and references) at the latest by 15th November to Dr.ir. Gerard Janssen, tel: +31-15-2786736, e-mail:

G.Janssen@ewi.tudelft.nl, or D. Sc. Alex Yarovoy, tel: +31-15-2782496, e-mail: A.Yarovoy@ewi.tudelft.nl