

Assistant Professor, applied microwave and millimeterwave technology

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1. Bachelor & Master's Degrees:

Université Catholique de Louvain (UCL), Belgium. Year of exam: 2006.

Subject area: Electrical Engineering (Microwave Engineering). Graduation: *magna cum laude*.

2. Doctoral degree:

Université Catholique de Louvain (UCL), Belgium. Date of diploma: 11 June 2011

Subject area: Engineering Sciences, Supervisor: Prof. Isabelle Huynen

Title: "MM-wave integrated RF-MEMS tunable cavity resonators, filters and ultra-low phase-noise oscillators"

3. Postdoctoral position:

2011-2012: Postdoctoral researcher in the field of RF power breakdown for space applications, Ecole Polytechnique, Université Catholique de Louvain (UCL), Belgium.

4. Current position: Oct. 2013 to date: Permanent employment as senior researcher in microwave group, engineering sciences, Uppsala University. Nov. 2014, time-limited tenure as associate senior lecturer in solid state electronics with specialization in microwave technology, Uppsala University.

5. Specialist Diploma or equivalent:

Université Libre de Bruxelles (ULB), Solvay Business School, Belgium Year of exam: 2008.

Subject area: Business Management, Entrepreneurship and Technology

6. Previous positions and periods of appointment

2014-2015: Development engineer, Ascilion AB. Developing non-invasive blood glucose sensors.

2012-2015: UU project leader for EU projects NANOTEC and NANOCOM. Contribution to: (1) design of circuits and antennas for applications in the field of beamsteering, reflectarray and adaptive antennas, (2) characterization of integrated antennas at 94 GHz and 140 GHz and (3) tunable filters design and characterization.

7. Funding attracted

- Principal investigator in Eurostars project "Energy Efficient PET Cancer Diagnostics: Novel RF Source for Radioisotope Production", awarded 3.5MSEK as part of a total 19.4MSEK
- Co-applicant in Vinnova project "60 GHz beam-steering solution with phased array systems", awarded 1.5MSEK as part of a total 8MSEK
- Applicant in Vinnova project "Development of an advanced millimetre-wave front-end circuitry for use in medical sensing", awarded 395kSEK as part of a total 800kSEK
- Co-applicant in project "Characterizing carbonaceous aerosols in northern Sweden snow", of the Swedish Society for Anthropology and Geography, grant 50kSEK
- Co-applicant in SSF framework grant "THz-MEMS systems", awarded 5.5MSEK as part of a total 32MSEK

8. Appointments, Distinctions and Awards

- Best Measurement Paper award, EUCAP 2013, for the paper entitled: "Micromachined Near-Field Millimetre-Wave Medical Sensor for Skin Cancer Diagnosis".
- Recipient of the FRIA Grant of the National Science Foundation (FNRS), Belgium. The Grant covered four-year PhD studies; PhD was performed at IMEC, Belgium.

9. Supervision of Master students:

- Mohamed Jaoua, 2018, 60 GHz multi Gbps nodes for CERN facilities and SG deployment, Phys-UU
- Stefan Book, 2017, Class E RF high power amplifiers, FREIA-UU.
- Madeleine Syk and Joakim Vollmer, 2017, Characterizing carbonaceous aerosols in northern Sweden snow, GEO-UU
- Lucile Soumah, 2015, Development, analysis and calibration methods for the dielectric characterization of biomaterials, nanomat-UU
- David Johansson and Jacob Fredriksson, 2015, RF high power amplifier for 100 MHz cyclotron, FREIA-UU.
- Linus Hapala and Aleksander Eriksson, 2014, RF high power amplifier at 352 MHz, FREIA-UU.
- Reza Moosavi, 2013, development of antennas on paper, UU.
- Paul Provokar, 2013, light spectroscopy, UU.

10. Supervision of PhD students (PS: principal supervisor; CS: co-supervisor):

- Long Hoang Duc, 2015 -, (PS), RF high power generation, FREIA-UU.
- Imran Aziz, 2016 -, (PS), wireless communications, UU.
- Mathias Grudén, 2010 - 2014, (CS), wireless sensors networks, UU.

11. Other academic and international activities

Visiting scientist:

- January 2014. COST Vista Grant for a Short Term Scientific Mission (STSM), topics: "Antenna interface for THz biomolecular analysis in Lab-on-a-Chip (LOC) and measurement methodology" and "Analytical model for beamsteering reflectarray element". Host: Prof. Andrea Neto, Tera-Hertz Sensing Group, Department of Microelectronics, Faculty of Electrical Engineering, Mathematics and Computer Sciences EEMCS), Delft University of Technology, The Netherlands.
- May 2017. Course "Antenna measurements at millimetre and submillimetre wavelengths", at Aalto University School of Electrical Engineering, Espoo, Finland.

Reviewer:

- Deputy Section Editor of IET The Journal of Engineering, since 2018.
- International Journal of Microwave Science and Technology, since 2017.
- IEEE Microwave and Wireless Components Letters, since 2015.
- IET Electronics Letters, since 2012.
- IEEE Transactions on Microwave Theory and Techniques, since 2010.
- Microwave and Optical Technology Letters, since 2010.

Session chaired at international conferences:

- 2013, The 7th European Conference on Antennas and Propagation (EUCAP '13), Gothenburg, Sweden, 8-12 April. Session chaired: Adaptive and reconfigurable antennas.

Conference organizer:

- 2013, TIARA Workshop on RF Power Generation for Accelerators, 17-19 June, Uppsala University, Uppsala, Sweden. Member of the local organising committee.
- 2012, COST IC0803 - RF/Microwave Communication Subsystems for Emerging Wireless Technologies, Oct. 4-5, Uppsala University, Uppsala, Sweden. Member of the local organiser committee.

Memberships:

- Member of the Institute of Electrical and Electronics Engineers (IEEE) and
- Bioelectromagnetics Society (BEMS).
- Board member of the department of engineering sciences, Uppsala University.