



Center for High-Frequency Technologies and Applications

# ***R&D of New Generation Planar Antennas and Interconnects***

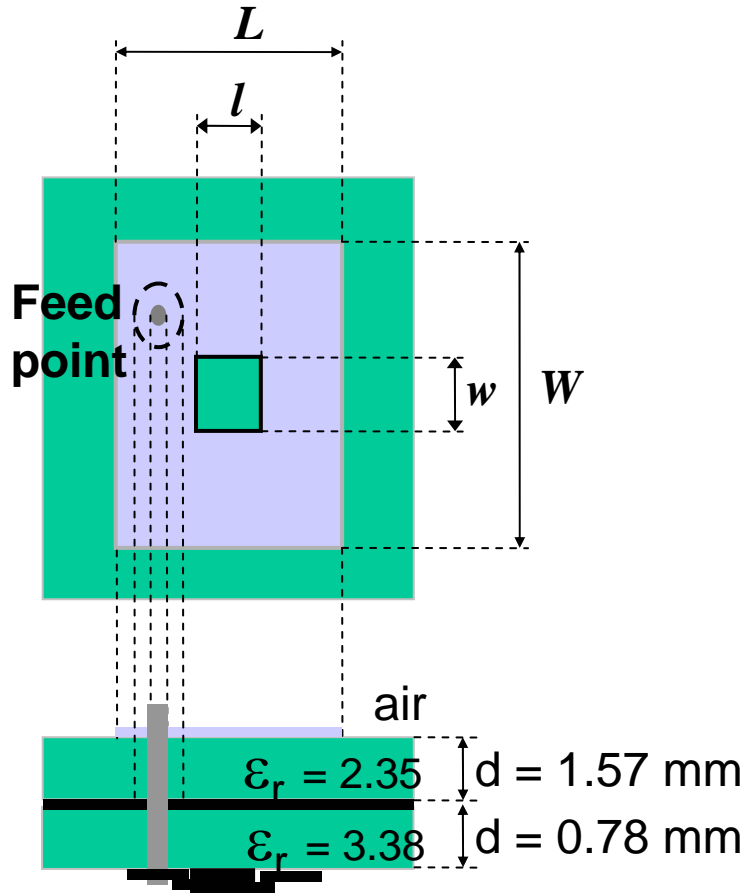
Dr. ir. Dries Vande Ginste  
Technology Developer

- **Design, modeling, optimization and experimental characterization of planar (active) antennas and smart antenna systems**
  - Use of special materials
    - ◆ **Flexible antennas (polyimide)**
    - ◆ **Textile garment antennas**

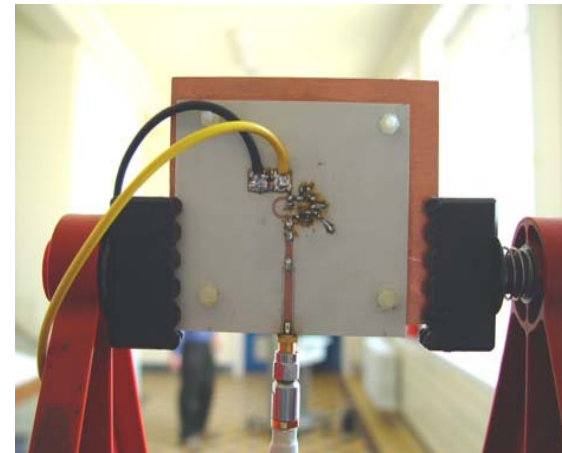
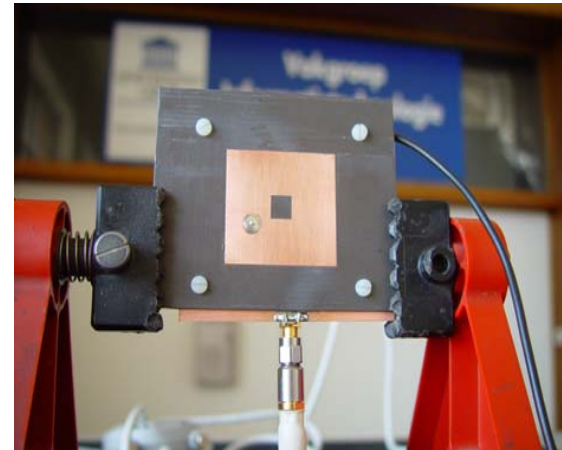
Patch antenna for the 2.45 GHz ISM band on a textile (fleece) substrate



- Co-optimization of (active) planar antennas

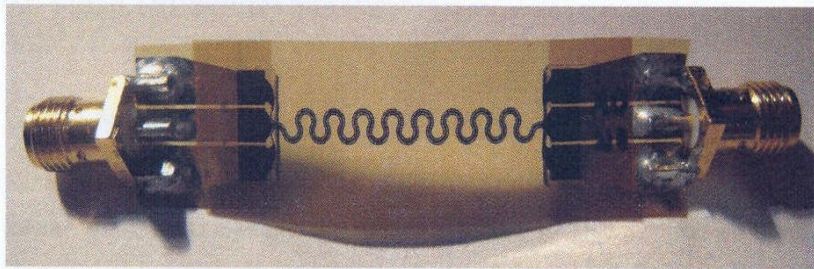


**Low-noise amplifier**

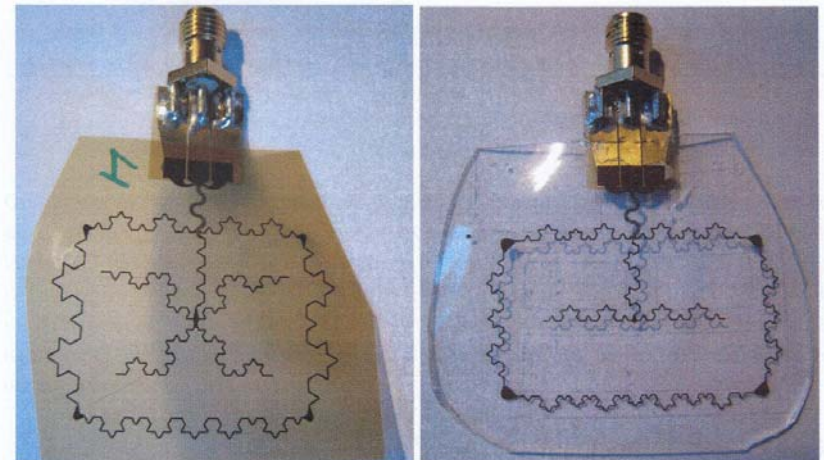


- **Design, modeling, optimization and experimental characterization of stretchable flexible high-frequency interconnects and antennas**

Interconnect on flex



Folded slot dipole antennas on flex and silicone substrates using fractal shapes



*From: B. Huyghe, "Ontwerp en realisatie van rekbare flexibele hoogfrequent structuren voor personal health toepassingen", Masterthesis, INTEC-Ghent University, 2006-2007*

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