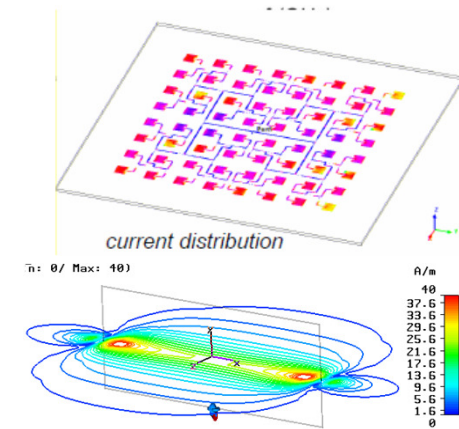
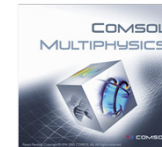
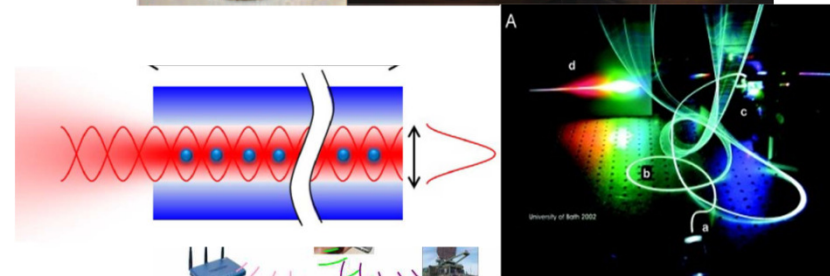
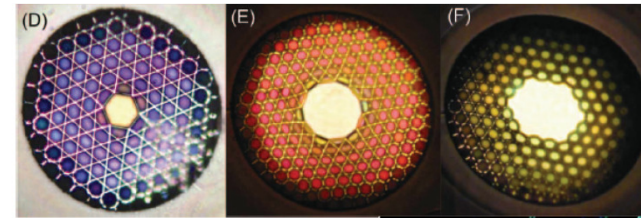


PhEm Lab

- **Topics:**
 - Photonics, Optics, and Lightwave Technology
 - Microwaves and RF systems
 - ElectroMagnetic Compatibility – EMC
 - RFID Technology
- **Activities:**
 - Electromagnetic simulations (CST Studio ©, Comsol Multiphysics ©)
 - Electromagnetic characterization
 - Electromagnetic design
 - Collaborations:
 - Xlim-Univ. Limoges (Fr), Drexel Univ. (USA), Univ. Sydney (Aus)



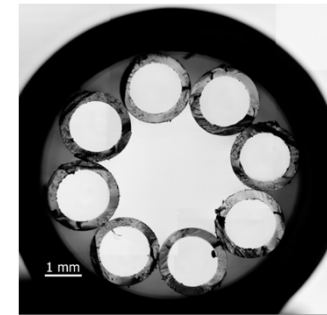
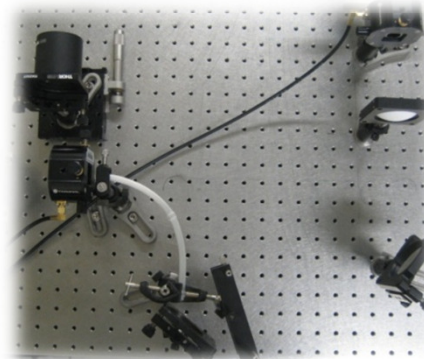
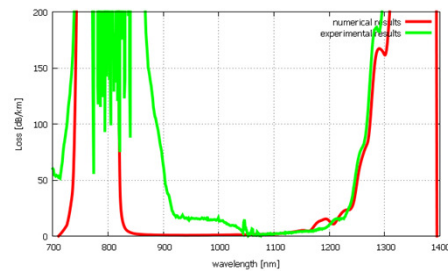
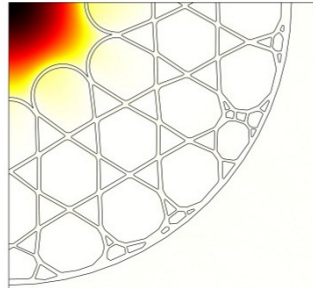
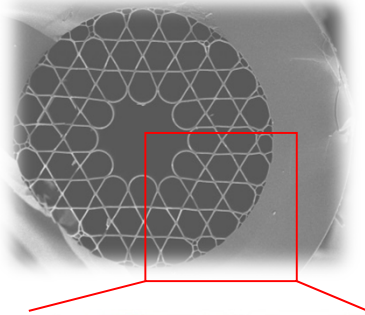
Photonics

Analysis

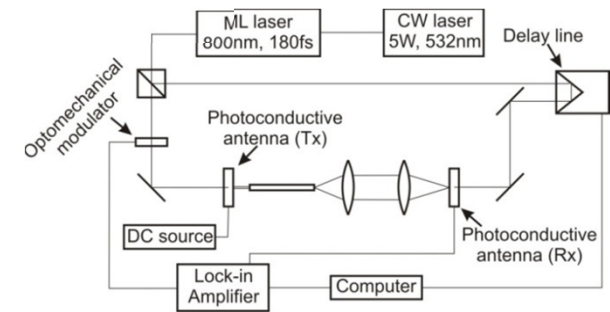
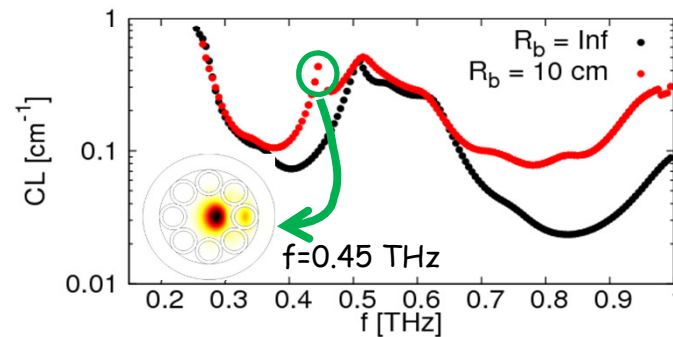
Design

Electromagnetic Simulations

Hollow core **optical fiber** for high power **laser beam delivery**



Hollow core **optical fiber** for **Terahertz imaging**



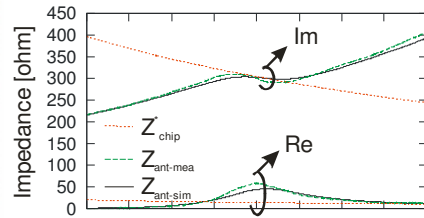
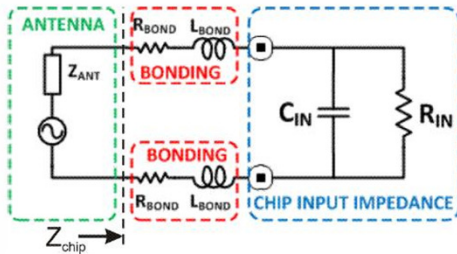
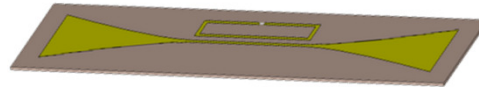
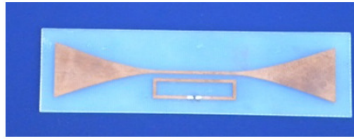
RFID Technology

Analysis

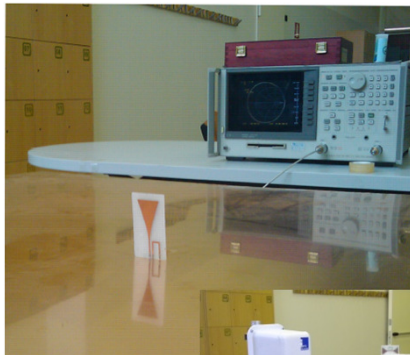
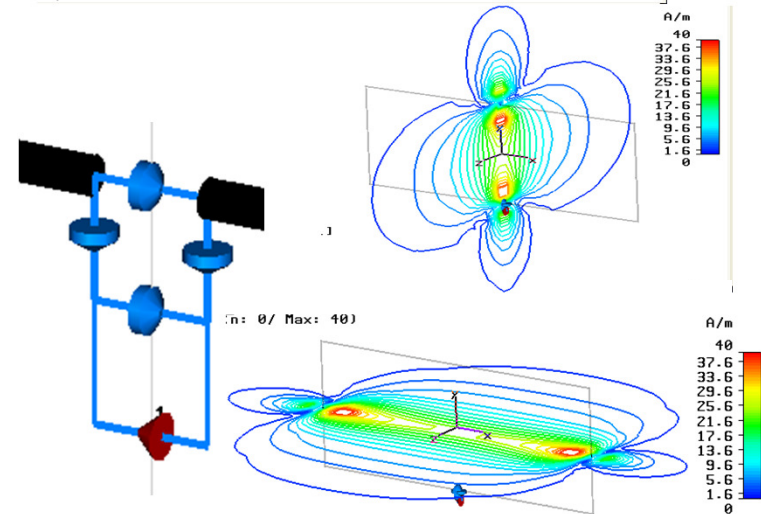
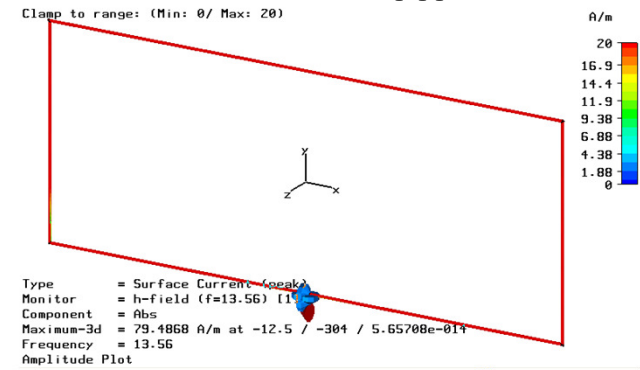
Design

Electromagnetic Simulations

UHF

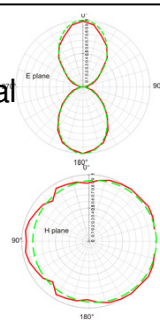
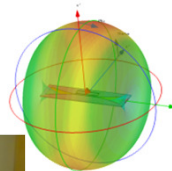


HF



Radiation pattern

- experimental
- - - simulated

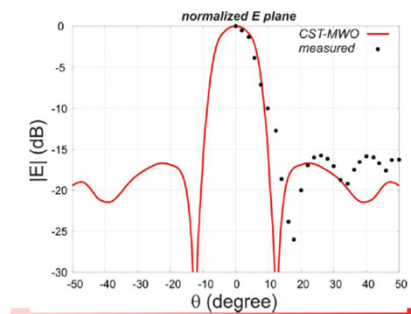
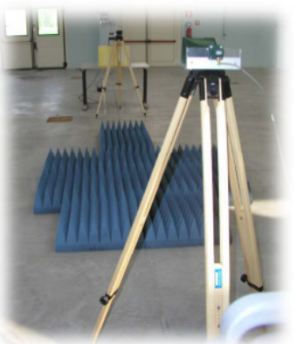
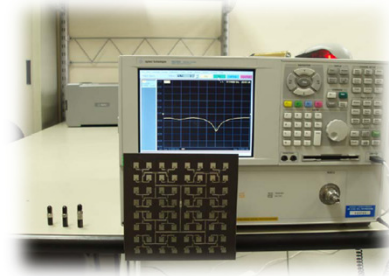
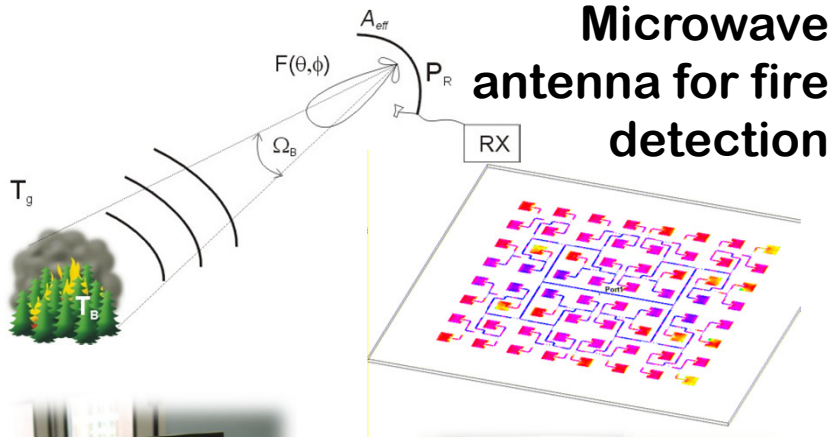


Antennas

Analysis

Design

Electromagnetic Simulations



Wearable patch antenna

