

# SHORT CURRICULUM VITAE



## Personal Data:

ROUSSEAU Jean Jacques: married, 3 children Full Professor  
Date and place of birth: 24-12-1953 ROANNE  
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## Education:

1981: Engineer in Electrical Engineering  
1981: Agrégation (Electrical Engineering)  
1983: Doctor in Engineering/PHD  
1996: Habilitation to supervise research

## Teaching:

1981-1983: Professor in a technical High School  
1983-1988: Assistant professor at the INSA in Lyon  
1988-1998: Assistant professor at the IUT in Saint-Etienne (Applied Physics Department)  
From 1998: Full professor at the Electrical Engineering Department

## Research:

Supervisor for about 40 post graduate students (master students)  
PHD supervisor for 26 PHD, 3 now.  
More than 70 papers in review and 68 communications in international congress.  
Head of a research laboratory from 1998 until 2014  
Vice director of the Doctoral School EDSIS 488 (from 2015)

## International Relationships:

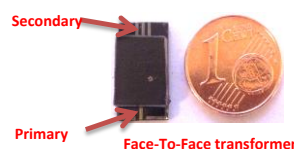
Involvement in numerous projects and collaborations in several countries (Lebanon, Haiti, Finland, Romania, Chad, Tunisia ...)  
Head of a co-graduated master between Chad and France

## In charge of numerous projects:

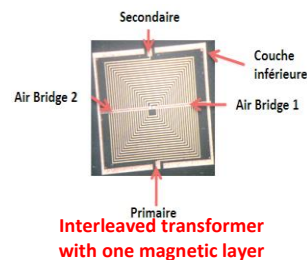
In the field of research related to magnetic devices.

## Research field:

I am currently working in the field of integration of magnetic components such as low power inductors and transformers. Our job in my research team concerns



studies (design and simulation), micro-fabrication of devices by using clean room technologies and characterization of the fabricated devices. Ferrites are classically used as magnetic material for frequencies that range from 100kHz to some



hundreds of MHz. Inductors and transformers with one or two magnetic layers have been fabricated and characterized. Layer thicknesses classically range from 50 $\mu\text{m}$  to 500 $\mu\text{m}$ . Others studies concern modeling of inductors and transformers, copper losses modeling, thermal behavior of integrated magnetic devices ..

For more information, see the attached list of papers related to these works.



Buried conductors using femto-second laser micromachining

### Teaching fields:

My skills in the field of teaching concerns:

- Electrical circuits and the main laws (Ohm's law, KVL, KCL, voltage divider ...)

- Frequency response (Bode diagram) and transient response

- Analog Electronics (Op Amp, analog integrated circuits ...)

- Basic digital electronics

- Data acquisition boards

- Magnetic material, magnetic devices

- Power electronics (Buck Boost converter ...)

- Sensors (temperature, force, acceleration ...)

- Digital signal processing (analysis spectrum)