

Centro de Electrónica Industrial (CEI)

Universidad Politécnica de Madrid (UPM)

Escuela Técnica Superior de Ingenieros Industriales

<http://www.cei.upm.es>



SUMMARY

Research in power supply systems for telecom, aerospace, automotive and medical applications for European companies (*Alcatel, Indra, Tecnobit, Siemens, Philips Hearing Implants, Crisa and Sener*), American companies (*Agere Systems, Enpirion, Ansoft, Boeing and General Electric*) and for *Cochlear* in Australia. Research includes low output voltage, magnetic components, piezoelectric transformers, transcutaneous energy transfer and dynamic power management.

The group cooperates regularly with IEEE and other professional associations.

KEY RESEARCH FIELDS & COMPETENCE AREAS

⚡ Power Electronics

- Ⓜ Digital Control
- Ⓜ Power Supplies: Power Factor Correction, DC/DC converters, Implants
- Ⓜ Modeling and Simulation: System modeling, Magnetic components

⚡ Digital systems

- Ⓜ Embedded digital systems
- Ⓜ Wireless sensor networks
- Ⓜ Reconfigurable systems
- Ⓜ Power estimation

⚡ Power quality

- Ⓜ Power electronics in power systems
- Ⓜ Harmonics, unbalance and flicker in power systems
- Ⓜ Measurement of power quality

INSTITUTE HIGHLIGHTS

- ⚡ 15 faculty, 10 doctoral students, 27 master students
- ⚡ Over 58 R&D projects for companies and 45 public funded R&D projects
- ⚡ Over 300 publications in journals and conferences

CONTACT INFORMATION

JOSÉ A. COBOS

Centro de Electrónica Industrial
Universidad Politécnica de Madrid
E.T.S. Ingenieros Industriales

ja.cobos@upm.es

<http://www.cei.upm.es>