

Jean-Paul YONNET

Born on January 29th, 1953 in St Jean d'Angély (Charente Mar., France),
French nationality, married, 3 children



Education / Degrees

- 1975 **Electrical Engineer** from the National Electrical Engineering School of Grenoble (Ecole Nationale Supérieure d'Ingénieurs Electriciens de Grenoble, ENSIEG / INPG, France).
1980 **Docteur ès Sciences** thesis (Institut National Polytechnique de Grenoble et Université Scient. et Médicale de Grenoble, France).

Current position

- **Research Director at the CNRS** (Directeur de Recherche [DR1], Centre National de la Recherche Scientifique)
- Work place: **Electrical Engineering Laboratory** (UMR 5269 CNRS / INPG-UJF), ENSE3 / INPG (Ecole Nationale Supérieure d'Ingénieurs en Energie, Eau et Environnement / Institut Polytechnique de Grenoble), since 1975.
- Research team : MADEA / "Materials and Advanced Electromagnetic Devices" ("Matériaux et Dispositifs Electromagnétiques Avancés").

Research areas: *Magnetic Materials and their Applications in Electrical Engineering*

- Permanent Magnet (PM) measurement and PM System Design: Study of PM behavior under special conditions; analytical calculation of magnetic field, forces, energy, in PM systems.
 - Electromagnetic Applications: Development of PM motors for Electric and Hybrid Vehicles; design of special structures of electric machines; conception of innovative actuators for camless automobile motors.
 - Magneto-mechanical Applications: Design of mag. bearings for high rotation speed devices.
 - Field Source and Static Applications: Innovative design of different types of sensors (position, speed, force, torque, current) using magnetic properties variations; design of NMR system working in low magnetic field; PM source for magnetic refrigeration systems, magnetic studies of magnetic bacteria.
 - Applications for automotive industry: Development of components for Electric and Hybrid Vehicle; building of vehicle prototypes.
- Most of these studies have been conducted under industrial contracts (PSA, Renault, Alstom, Alcatel, etc), institutional contracts (French DoD, etc) and European contracts (MITHRA, MAGNET, HYCHAIN)

Publications (update 01/2010): -- Books and books chapters: 16, -- Publications in international journals: 50, -- Conference communications: 132, -- Patents: 33, -- Ph D thesis management: 29

Teaching area (mainly at ENSE3/INPG): Permanent Magnets and their Applications, Advanced Electromagnetic Devices, Electrical Engineering technology, Electric and Hybrid Vehicles

Others

- Expert and Consultant for private companies (PSA, Valeo, Ugimag)
- Member of the Scientific Council of INRETS (Institut National de Recherche sur les Transports et leur Sécurité) from September 1996 to December 2004.
- Vice-president of the Scientific Council of CEREVERH (Centre d'Etudes et de Recherche sur les Véhicules Electriques et Hybrides), and of the Competitiveness Pole MTA (Mobilité et Transports Avancés) from 1999 to 2009.

Contact

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