

The University of Manchester has one of the longest continuously active university-based research centres in electrical power engineering. Together the Power Conversion and Power Systems Groups, comprise 16 academic staff with approximately 60 PhD students and 20 post-doctoral research staff.

Key Research Fields & Competence Areas:

Ø **Power Electronics**

Power dense and fault tolerant systems, modelling, behaviour in extreme environments

Ø **Utility Systems**

HVDC, FACTS, power quality, renewable energy integration, energy efficiency

Ø **More-Electric Vehicles**

Aerospace, marine, hybrids, vehicle-to-grid

Ø **Electromagnetic Systems**

Modelling, machines, superconductivity

Institute Highlights:

Ø **Rolls-Royce University Technology Centre**

Electrical Systems for Extreme Environments

Ø **100kW Intelligent Electrical Power Networks Evaluation Facility**

for future dc electric aircraft power systems

Ø **Extensive Laboratories**

Including dynamometers for multi-phase machines and traction drives, Microgrid test-rig, Schaffner Proflin 2115-400 Industrial Power Corrupter

Ø **National Grid Centre for High Voltage Research**

Contact Information:

Prof. Andrew Forsyth, Dr Mike Barnes

Power Conversion Group, School of Electrical and Electronic Engineering

University of Manchester, PO Box 88, Manchester, M60 1QD, United Kingdom

Tel +44 161 306 4675 email: andrew.forsyth@manchester.ac.uk, mike.barnes@manchester.ac.uk

<http://www.eee.manchester.ac.uk/research/groups/pc/>