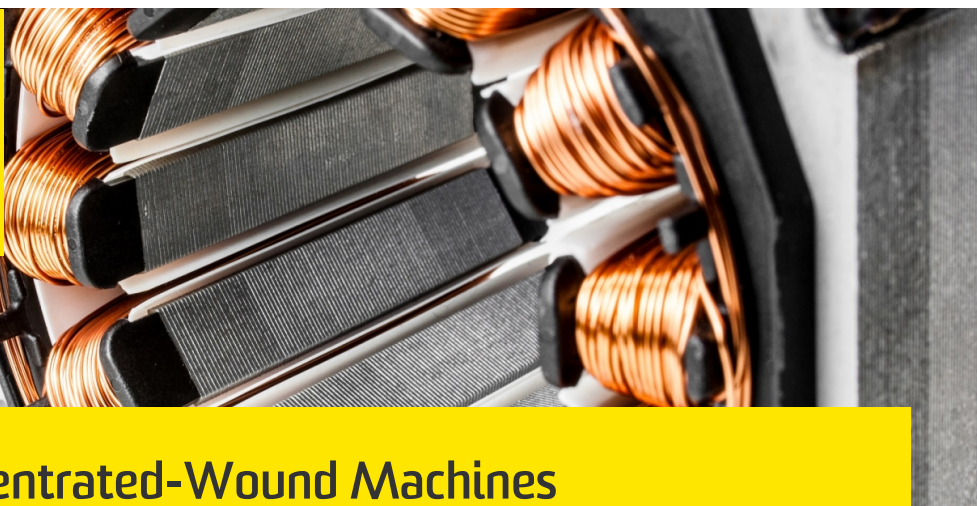




UNSW
SYDNEY



Application of Concentrated-Wound Machines

As the world endeavours to electrify transportation through electrical powertrains, electrical machines and drives will become even more prevalent. Concentrated-wound machine technology offers improved machine performance in these applications, reducing the risk of faults propagating through the machine.

Competitive advantage

- Many years' experience in the research and development of concentrated-wound and fractional slot machines, particularly permanent-magnet machines
- Leading winding techniques that improve machine performance
- Ability to mass-manufacture windings
- Patented technology

Impact

- Increased efficiency through reduced rotor losses and lower torque ripple
- Improves the performance of electric vehicles and other powertrains
- Improved operation under machine faults

Successful applications

- Applications in powertrains, electric vehicles and aerospace

Capabilities and facilities

- Electrical machine design software
- Advanced machine control algorithms to improve torque ripple, speed range and efficiency
- Prototypes ready for commercialisation

Our partners

- Motorica

More Information

Professor John Fletcher

School of Electrical Engineering and Telecommunications

T: +61 (0) 2 9385 6007

E: john.fletcher@unsw.edu.au

UNSW Knowledge Exchange

knowledge.exchange@unsw.edu.au

www.capabilities.unsw.edu.au

+61 (2) 9385 5008