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PROGRAMME

10:00 Registration

10:40 Welcome and Introduction
Dr John Cullen (Rolls Royce) and Dr David Moule (TRW Conekt)

Session 1: Materials and magnet issues

Chairman – Dr John Cullen (Rolls Royce)

10:55 Rare Earth Sourcing Challenges for Permanent Magnets, from the Perspective of the Miner and Processor
Dave Kennedy (Less Common Metals)

11:25 Impact of Escalating Rare Earth prices on Electrical Machines
Dr Neil Brown, Salem Mebarki, Dr Param Anpalahan, Sridhar Narayanan, Krzysztof Wejrzanowski, Laxman Shah, and Saeed Ahmed (Cummins Generator Technologies)

Lunch

Session 2: Machine selection, design and optimisation

Chairman – Dr David Moule (TRW Conekt)

13:10 Novel permanent magnet machine topologies
Prof. Qiang Zhu (University of Sheffield)

13:40 Switched reluctance concepts for electric vehicle applications
Prof. Barrie Mecrow (University of Newcastle-upon-Tyne)

14:10 Flux Switching and Synchronous Reluctance Motors and Generators
Dr Charles Pollock and Dr Helen Pollock (Technelec Ltd.)

14:40 Refreshments

15:00 SR Machines - nothing rare about Reluctance
Paul Sykes (Nidec SR Drives Ltd.)

15:30 Design and comparison of an induction motor as a replacement for a PM motor in a hybrid electric vehicle application
Dr Mircea Popescu (Motor Design Ltd)

16:00 Close