

## ***Workshop in Memoriam of Prof. Alfio Consoli***

### **“Recent Advances on Electrical Machines, Drives and Power Electronics”**

*Aula Magna Facoltà di Ingegneria, Monday the 28th of January 2013*

#### ***Preliminary Program***

##### **09:00-10:30 Welcome and Commemoration**

*Prof. A. Recca – Rector of the University of Catania*

*Prof. V. Catania – Head of DIEEI of the University of Catania*

*Prof. D. Casadei – President of CMAEL*

*Ing. F. Pezzella – President of “AEIT sezione di Catania”*

*Ing. C. M. Grasso – President of “Ordine degli Ingegneri della provincia di Catania”*

*Prof. C. Cavallaro – University of Catania*

*Prof. O. Honorati – University of Rome, ‘Sapienza’*

*Prof. T. A. Lipo – University of Wisconsin – Madison, USA*

*Dott. C. Papa – STMicroelectronics*

*Prof. F. Profumo – Minister for Education, Universities and Scientific Research*

##### **10:30-10:45 Coffee Break**

##### **10:45-13:00 Morning Session**

**10:45-11:10 *Field Weakening in Permanent Magnet Machines*** (Prof. T. A. Lipo - University of Wisconsin – Madison, USA)

**11:10-11:35 *The Opportunity for Self-Sensing Control of Drives*** (Prof. R. D. Lorenz - University of Wisconsin Madison, USA)

**11:35-12:00 *Modelling and control of electrical machines during the last 30 years*** (Prof. G. A. Capolino - University of Picardie “Jules Verne”, France)

**12:00-12:25 *Interior PM Synchronous Machines: Past, Present, and Future*** (Prof. T. A. Jahns - University of Wisconsin – Madison, USA)

**12:25-12:45 *Advanced DC/AC Power Conversion for Automotive Applications*** (Prof. J. W. Kolar - Swiss Federal Institute of Technology (ETH) Zurich, Switzerland)

**12:45-13:00 *Position Sensing of PMSM Using HF Signal Applied to the Model of the Motor*** (Prof. P. Spanik, Prof. B. Dobrucky – University of Zilina, SK)

##### **13:00-14:30 Buffet**

##### **14:30-17:45 Afternoon Session**

**14:30-14:50 *Distributed control of smart micro-grids*** (Prof. P. Tenti - Università di Padova)

**14:50-15:10 *Smart metering integration in favour of the final users*** (Prof. F. Benzi - Università di Pavia)

**15:10-15:30 *Sensorless control using HF injection signals*** (Prof. S. Bolognani - Università di Padova)

**15:30-15:50 *Multilevel inverter for photovoltaic applications*** (Prof. F. Crescimbeni - Università di Roma Tre)

**15:50-16:10 *Supercapacitor-based energy storage in transportation systems*** (Prof. D. Iannuzzi - Univ. di Napoli ‘Federico II’)

##### **16:10-16:25 Coffee Break**

**16:25-16:45 *Development trends in high power voltage source conversion systems*** (Prof. M. Marchesoni - Università di Genova)

**16:45-17:05 *Ferrite assisted synchronous reluctance motors: a general design approach*** (Prof. A. Vagati – Politecnico di Torino)

**17:05-17:25 *Fault diagnosis in fault-tolerant inverters*** (Prof. R. Miceli - Università di Palermo)

**17:25-17:45 *Sensorless control of PMSMs under open-phase faults*** (Ing. G. Scelba - Università di Catania).

##### **17:45 Closing Remarks**