8.30 – 9.15 **Key-Note Paper for all Participants**

Electronics for enabling distributed resources in electrical system - From the State of the Art to Future Trends
Benoit Jacquemin, Director System Innovations, Schneider Electric, FRANCE
(see introduction page 31)

9.20 – 1.10 **Session IM 3**

Control and Sensorless Drives and Stepper Drives

Chairman: Wolfgang Papiernik, Siemens, GERMANY

IM 3-1 **Comparison of Position-Control Algorithms for Industrial Applications**
G. Ellis, Danaher Motion, USA

IM 3-2 **Closed Loop Control of High Speed Permanent Magnet Synchronous Machines for Industrial Applications**
J. Kiel, U. Koch, Lust-Antriebstechnik, GERMANY

IM 3-3 **Starting of Position-Sensorless Permanent Magnet Synchronous Motors at any Speed**
T. Frenzke, University Erlangen-Nürnberg, GERMANY

10.50 – 11.10 Coffee Break

IM 3-4 **Identification of the PMSM Initial Rotor Position**
J. Zhang, University of Arkansas at Little Rock, USA, M. Schroff, Maxon Motor, SWITZERLAND

IM 3-5 **A Sensorless Multistage Linear Positioning Drive based on External Rotor Permanent Magnet Synchronous Machines**
U.-H. Rieder, M. Schroedl, A. Nemecek, Vienna University of Technology, AUSTRIA

IM 3-6 **Dynamic Performances Evaluation of Simplified Vector Controlled PM-Hybrid Stepping Motor**
C. Szasz, Technical University of Cluj, ROMANIA, P. T. Szemes, Tokyo University, JAPAN

IM 3-7 **Using Open Loop and Closed Loop Control for High Speed Short Stroke Moves**
A. Houda, Oriental Motor, JAPAN, D. Jones, Incremotion Associates, USA

1.10 – 2.10 Lunch, Restaurant CCN West 1st floor

2.10 – 3.10 **Poster/Dialogue Sessions IM D-3 and IM D-4, CCN West 2nd floor**

Control and Sensorless Drives

Chairman: Alfredo Vagati, University of Turin, ITALY

IM D3-1 **A Simple High Performance Control System of a PMSM without a Speed Sensor**
M. Eskola, A. Hannuksela, H. Tuusa, Tampere University of Technology, FINLAND

Embedded Controls and Software Tools

Chairman: Alfredo Vagati, University of Turin, ITALY

IM D4-1 **Holistic Modelling of Drives and Power Systems - A Novel Approach**
M. Cirstea, De Montfort University, UK

IM D4-2 **Novel Caspoc-Based Software for Multilevel Simulation of Switched Reluctance Drives**
A. Matveev, Technical University Moscow, RUSSIA, P. Van Duijsen, Simulation Research, THE NETHERLANDS

IM D4-3 **Integrated Control - Simulation Design Approach**
P. Konrondi, Budapest University, HUNGARY, P.Bauer, Delft University, P.J. van Duijsen, Simulation Research, THE NETHERLANDS

3.10 – 6.00 **Session IM 4**

Embedded Controls and Software Tools

Chairman: Ted Hopper, MACCON, GERMANY

IM 4-1 **System-On-A-Programmable-Chiop-Enhanced Solutions for High Performance Servo Drives**
J.O. Krah, Kollmorgen Seidel, GERMANY

IM 4-2 **A Design Platform optimized for Inner Loop Motor Control**
J. Goetz, J. Bonanno; International Rectifier, USA

4.10 – 4.30 Coffee Break

IM 4-3 **Current Vector Control for Multi-Machine Systems Entirely based on FPGA**
E. Monmasson, University de Cergy-Pontoise, J.P. Louis, ENS Cachan, FRANCE

IM 4-4 **Simulation as Appliance for Design and Analysis in the Motiv Engineering**
W. Kuhn, Stöber Antriebstechnik, T. Neidhold, ITI, GERMANY

IM 4-5 **Rapid Application Development Tool Tesla for Fast Prototyping of Electrical Machines**
P. van Duijsen, Simulation Research, THE NETHERLANDS, D. Gospodaric, TRIMERICS, GERMANY