

9.00 – 9.15 **Official Opening of the PCIM 2003 Conference**

9.15 – 10.00 **Key-Note Paper for all Participants**

Variable Speed Motion: A Key to Global Energy Savings - From the State of the Art to Future Trends

Ph. D. Alexander Lidow, CEO International Rectifier, USA
(see introduction page 30)

10.10 – 1.00 **Session IM 1**

Mechatronic Systems

Chairman: Helmut Knöll, University of Applied Sciences Würzburg-Schweinfurt, GERMANY

IM 1-1 **Increasing Control Performance of Parallel Kinematic Machines using a Direct Measuring System**

C. Hamm, Siemens Nürnberg, W. Papiernik, Siemens Erlangen, X. Zhang, Technical University Hamburg, GERMANY

IM 1-2 **Active Compensation of Transient Structural Oscillations of a Gantry Cross-Arm at the Tool Centre Point**

G. Stöppler, Siemens, GERMANY, S. Douglas, Liverpool John Moores University, UK

11.10 – 11.30 Coffee Break

IM 1-3 **Motion Control for Piezo Applications**
W.C.M. Pancras, Nyquist, THE NETHERLANDS

IM 1-4 **A Novel Design of a Magnetic Bearing Biased with Permanent Magnets**
M. Reisinger, W. Amrhein, S. Silber, LCM, Johannes Kepler University, AUSTRIA,
C. Redemann, P. Jenckel, Levitec, GERMANY

IM 1-5 **Robust Speed Control based on the Identification of Mechanical Parameters**
V. Wesselak, M. Köhler, Siemens, G. Schäfer, University Erlangen-Nürnberg, GERMANY

1.00 – 2.00 Lunch, Restaurant CCN West 1st floor

2.00 – 3.00 **Poster/Dialogue Sessions IM D-1 and IM D-2, CCN West 2nd floor**

Mechatronic Systems

Chairman: Dan Jones, Inccremotion, USA

IM D1-1 **Flat Linear Voice Coil Actuators with Planar Coils**
M. Godkin, BEI, USA

IM D1-2 **Low Noise Linear Power Amplifier for a Precision Active Magnetic Bearings Application**
M.H. El-Husseini, K. Slinkman, H. Polinder, J. Spronck, Technical Univeristy Delft,
THE NETHERLANDS

Drives and Control

Chairman : Dan Jones, Inccremotion, USA

IM D2-1 **Field Orientated Control and Thermal Management for Induction Motor Drives using the new TriCore Microcontroller**
U. Franke, P.G. Catania, G. Berger, J. Petzoldt, Technical University Ilmenau, GERMANY

IM D2-2 **A Signal Conditioning Board for Eliminating the Dead Time Effect in Standard Industrial Inverters**
C. Attaianesi, G. Tomasso, University of Cassino, ITALY

IM D2-3 **Asynchronous Machine Electrical Parameters Identification**
 P. Ph. Robet, B. Feuvrie, I.U.T. de Nantes, M. Gautier, Institut de Recherche en Cybernétique de Nantes, FRANCE

IM D2-4 **Control of the Induction Motor in the Field-Weakening Region based on the Multiscalar Model**
 Z. Krzeminski, M. Adamowicz, Gdansk University of Technology, POLAND

3.00 - 6.10 **Session IM 2**

Drives and Control - Industrial and Traction Drives

Chairman: J. M. Pacas, University Siegen, GERMANY

IM 2-1 **High Dynamic Rolling Mill Main Drives**
 H. Langlotz, ABB, GERMANY

IM 2-2 **Influence of Cable, Grounding Configuration and Filters on Bearing Currents - Investigations at Inverter-Fed Induction Motors up to 560 kW**
 A. Muetze, A. Binder, Darmstadt University of Technology

4.00 - 4.20 Coffee Break

IM 2-3 **EMI in Electric Vehicles**
 S. Guttowski, R. Saikly, S. Weber, E. Hoene,, W. John, H. Reichl, Fraunhofer Institut, GERMANY

IM 2-4 **The Implementation of a Three-Phase Indirect Matrix Converter with an Indirect Vector Modulation Method Applying a Microcontroller**
 M. Jussila, M. Salo, H. Tuusa, Tampere University of Technology, FINLAND

IM 2-5 **Fundamental Frequency Front End Converter (F3E) - a DC-Link Drive Converter without Electrolytic Capacitor**
 K. Göpfrich, C. Rebbereh, Siemens, L. Sack, University Erlangen-Nürnberg, GERMANY

IM 2-6 **High Performance Electric Scooter**
 P. Casasso, A. Fratta, P. Guglielmi, M. Pastorelli, A. Vagati, Politecnico di Torino, ITALY