Monday, May 9

1:00 Registration
1:50 Introduction: Prof. Jafar Saniie, Illinois Institute of Technology
   Welcome: Dr. Erik Hilinski, U. S. Steel Corporation

Session 1: Soft Magnetic Composite Powders
   Session Chairman, Prof. Joe Bularzik, Purdue University—Calumet

2:00  “Linear Spin Valve Applications”
   J. Daughton, NVE Corporation, Eden Prairie, Minnesota, USA

2:25  “PM Materials and Processes for Soft Magnetic Applications”
   M. Dougan, AMES SA, Department of Research and Development, Barcelona, Spain

2:50  “Development of Improved Powder for Bonded Permanent Magnets in Vehicle Drive Motor Applications”
   W. McCallum, Iowa State University, Ames Laboratory, Ames, Iowa, USA

3:15 Coffee Break

3:45  “Development of High Frequency Soft Magnetic Materials”
   J. Xiao, University of Delaware, Department of Physics and Astronomy, Newark, Delaware, USA

4:10  “Magnetic Materials - Sintered and Composites For Electromagnetic Applications”
   K. Narasimhan, Hoeganaes Corporation, Cinnaminson, New Jersey, USA

4:35 Wine and Cheese Gathering

Tuesday, May 10

Session 2: Grain Oriented Electrical Steels
   Session Chairman, Dr. Erik Hilinski, U. S. Steel Corporation

8:50  “Measurement Techniques for Evaluation of the Surface Layers on Grain Oriented Electrical Steel”
   D. Poultnay (1), D. Snell (1), V. Randle (2), and K. Jenkins (1)
   (1) Cogent Power Ltd., Newport, South Wales
   (2) University of Wales in Swansea, Materials Engineering Department, Swansea, United Kingdom

9:15  “Magnetic Properties of EI Lamination Transformer Core Using Newly Developed Grain-Oriented Electrical Steel without Tension Coatings”
   Y. Hayakawa, T. Imamura, and M. Kurosawa, JFE Steel Corporation, Kurashiki, Japan

9:40 Coffee Break

9:55  “Progress in Manufacturing Grain Oriented Electrical Steel Products”
   K. Günther (1), G. Abbruzzese (2), and S. Fortunati (2)
   (1) ThyssenKrupp Electrical Steel GmbH, Gelsenkirchen, Germany
   (2) Centro Sviluppo Materiali S.p.A., Terni, Italy

10:20 “Magnetostriiction of Grain-Oriented Electrical Steel and Noise of Transformers”
   M. Mizokami, M. Yabumoto, H. Mogi, and T. Kubota, Nippon Steel Corporation, Futtsu, Japan

Session 3: Non-Oriented Electrical Steels
   Session Chairman, Dr. Ted Bloom, Ispat-Inland Steel Company

11:00 “Texture Evolution in Experimental Grades of High-Silicon Electrical Steel”
   T. Ros-Yanez, P. Calvillo, L. Kestens, and Y. Houbaert, Ghent University, Gent-Zwijnaarde, Belgium
11:25  “Influence of Chemistry and Hot Rolling Conditions on High Permeability Non-Oriented Silicon Steel”
J. Hunady (1), A. Magurova (1), M. Predmersky (2), and E. Hilinski (2)
(1) U. S. Steel – Kosice, Kosice, Slovak Republic
(2) U. S. Steel Corporation, Monroeville, Pennsylvania, USA

11:50  “Dynamo Line Simulation Using a Hot Dip Process Simulator”
E. Hilinski (1), G. Walters (1), J. Hunady (2), A. Magurova (2), and M. Predmersky (2)
(1) U. S. Steel Corporation, Monroeville, Pennsylvania, USA
(2) U. S. Steel – Kosice, Kosice, Slovak Republic

12:15  Lunch

1:25  Recognition of Outstanding Conference Supporters and Contributors
Prof. J. Sanie

1:30  Messinger Lecture - “Electric Motors and Drives in the Aerospace Industry”
Dr. Nicholas J. Nagel, MPC Product Corporation, Skokie, Illinois, USA

Session 4:  Steel Magnetic Measurement Considerations and Motor Technology
Session Chairman, Dr. Ali Emadi, Illinois Institute of Technology

2:40  “The Magnetic Monitoring of Retained Austenite in Steel”
P. Beckley and J. Mildoon, Cogent Power Ltd., Orb Works, Newport, UK

3:05  “Lamination Core Losses at High Frequencies and Flux Densities”
T. Mthombeni and P. Pillay, Clarkson University, Potsdam, New York, USA

3:30  Coffee Break

4:00  “Single-Phase Stepper Motors using Permanent Magnets in Thick Films”
C. Fermon (4), and P. Wendling (5)
(1) Cedrat Technologies – 10, chemin Pré Carré – ZIRST – 38246 Meylan Cedex - France
(2) NCSR Demokritos, Institute of Materials Science, Ag. Paraskevi, Athens, 15310 Greece
(3) DuPont Electronic Technologies, Research Triangle Park, North Carolina 27709 USA
(4) CEA Saclay–DRECAM/SPEC 91191 Gif-Sur-Yvette– France
(5) Magsoft Corporation – 20 prospect St. Ballston Spa. NY 12020– USA

4:25  “New Technology Reduces Eddy Current Dissipation in Windings”
V. Quinn, Tabtronics Inc., Geneseo, New York, USA

4:50  Wine and Cheese Gathering

Wednesday, May 11

Session 5:  Hard Magnetic Materials, Sensors, and Magnetic Applications
Session Chairman, Dr. Massimo Pasquale, Institute for Electrotechnical Research

9:00  “Modeling of Magnetostriction in Particulate Composite Materials”
Y. Zhou (1) and F. Shin (2)
(1) Hong Kong Polytechnic University, Department of Applied Physics, Hong Kong, China
(2) Materials Research Centre and Centre for Smart Materials, Hong Kong, China

9:25  “Biomedical Applications of Magnetic Nanomaterials”
D. Leslie-Pelecky, University of Nebraska, Dept. of Physics & Astronomy, Lincoln, Nebraska, USA

9:50  “Magnetic Field Induced Martensite Phase Transformation in Ni-Mn-Ga Ferromagnetic Shape Memory Alloys”
M. Mahendran (1) and A. Ramasubbu (2)
(1) Thiagarajar College of Engineering, Department of Physics, Madurai, India
(2) Thiagarajar College of Engineering, Department of Chemistry, Madurai, India
10:15  Coffee Break

10:45  “Microstructural and Substructural Analysis of High Strength Soft Magnetic FeCo-V Alloys”
R. Sundar, S. Deevi, and C. Oca, Philip Morris, Richmond, Virginia, USA

11:10  “Coercivity of the Double Doped Hexaferrites BaFe$_{12-x}$Co$_x$Sn$_x$O$_{19}$”
S. Nilpairach (1), W. Udomkichdaecha (2), and I.-M. Tang (3)
(1) Chulalongkorn University, Department of Materials Science, Bangkok, Thailand
(2) Chulalongkorn University, Metallurgy and Materials Science Institute, Bangkok, Thailand
(3) Mahidol University, Department of Physics, Bangkok, Thailand

11:35  Closing Remarks