Program of Lectures and Oral Presentations

March 16, 2009:
Lecture by 2008 JSTP International Prize Winner
Chairman: S. Hamaya (Nichidai Corporation, Japan), N. Yukawa (Nagoya University, Japan)
10:15-11:00 What are the Global Challenges for the Future and Which Developments in Metal Forming are Necessary?
R. Kopp (RWTH Aachen, Germany)

Keynote Lectures
Chairman: S. Hamaya (Nichidai Corporation, Japan), N. Yukawa (Nagoya University, Japan)
11:00-11:30 Points for the Research and Development of Manufacturing Technology
K. Kondo (Toyota Technological Institute, Japan)
11:30-12:00 Development of Forging Technology in TOYOTA
H. Morishita (Toyota Motor Corp., Japan)

Keynote Lectures
Chairman: M. Shiomi (Kogakuin University, Japan), I. Takasu (Sanyo Special Steel Co., Ltd., Japan)
13:00-13:30 History and Future of Cold Forging in Japan
K. Osakada (Osaka University, Japan)
13:30-14:00 Introduction of Flow Control Forming (FCF) for Sheet Forging and New Presses
T. Nakano (Aida Engineering, Ltd., Japan)
14:00-14:30 Incremental Forging using Servo-Press and Robot
T. Ishikawa (Nagoya University, Japan)
14:30-15:00 Theoretical Prediction and Experimental Methods for Forgeability Evaluation and its Applications to Precision Forging
R-S. Lee (National Cheng Kung University, Taiwan)
15:00-15:30 Chevron Cracks in Extrusion: Modeling and Prevention
A.E. Tekkaya (Dortmund University, Germany)

Oral Presentations
Chairman: T.A. Dean (The University of Birmingham, UK)
16:00-16:20 Fully Finished Splines and Semi Finished Gears by Forging
T. Hofmann (Hirschvogel Umformtechnik GmbH, Germany)
16:20-16:40 Numerical Simulation and Optimization Analysis on Hot Die Forging Process of Titanium Alloy Compressor Disc
M. Cheng (Chinese Academy of Sciences, China)
16:40-17:00 Analysis of Cropping Operation in Cold Forging through Numerical and Experimental Techniques
M. Simionato (University of Padova, Italy)
17:00-17:20 FE Analysis of Shearing Process using Ductile Fracture Parameters Determined by Density Measurement Method
March 17, 2009:
Lecture by 2008 JSTP International Prize Winner
Chairman: K. Hayakawa (Shizuoka University, Japan), S. Enomae (Komatsu Industries Corp., Japan)
9:15-10:00 Added Value through Thermo-mechanical Processing
T.A. Dean (The University of Birmingham, UK)

Keynote Lectures
Chairman: K. Hayakawa (Shizuoka University, Japan), S. Enomae (Komatsu Industries Corp., Japan)
10:00-10:30 Tool Failure in Cold Forging - A Brief Survey
M. Haensel (Thyssenkrupp Presta AG, Liechtenstein)
10:30-11:00 The Single Process Lubricant for Cold Forming
M. Yoshida (Nihon Parkerizing Co., Ltd., Japan)
11:00-11:30 Some Comments on Friction Evaluation at Combined Backward Can-Forward Rod Cold Extrusion
K. Kuzman (University of Ljubljana, Slovenia)
11:30-12:00 Current Status and Future Trend of Controlled Forging Technology
S. Isogawa (Daido Steel Co., Ltd., Japan)

Oral Presentations
Chairman: A.E. Tekkaya (Dortmund University, Germany)
14:20-14:40 Reduction of Friction in Forging of Plates by Load Oscillation
T. Maeno (Toyohashi University of Technology, Japan)
14:40-15:00 Factors Affecting Calibration Curves for the Ring Test
Y-P. Lin (University of Birmingham, UK)
15:00-15:20 Bulk Deformation in Cube-and Ring-compression for Materials with Anisotropy
M. Terano (Nagoya Institute of Technology, Japan)
15:20-15:40 Physical Modeling of Surface Asperities for Basic Investigations on Tribology in Cold Forging
S. Weidel (University of Erlangen-Nuremberg, Germany)

Chairman: R. Kopp (RWTH Aachen, Germany)
16:00-16:20 Some Comments on Cold Finishing Operations of Hot Forging
J. Ravnican (Unior, d.d., Slovenia)
16:20-16:40 Defect Analysis and Preform Optimization in Precision Forging of Compressor Blade of TC11 Titanium Alloy
W. Xu (Harbin Institute of Technology, China)
16:40-17:00 Forgeability Analysis of Magnesium Alloy AZ31B and Hot Forging Experiments
J. Liu (Shanghai Jiao Tong University, China)
17:00-17:20 Prediction of Forming Limit by Cylinder Side Pressing and Energy Fracture Criterion in Cold Forging
Y-J. Chen (National Cheng Kung University, Taiwan)