

CONFERENCE PROGRAMME

SUNDAY, SEPTEMBER 18, 2016

16:00 – 21:00 Registration
18:00 – 21:00 Reception

MONDAY, SEPTEMBER 19, 2016

08:00 – 14:00 Registration
08:30 – 09:00 Conference opening (Room A)

09:00 – 10:30	PLENARY LECTURES (ROOM A1+A2) CHAIR: Fabrizio Micari
09:00 – 09:45	Advanced Characterization for Quantifying and Modeling Deformation Due to Thermo-mechanical Processing in BCC metals <i>Ellen K. Cerreta</i>
09:45 – 10:30	The role of simulation in the production of ultra large components <i>JesusTalamantes-Silva</i>

10:30 – 11:00 Coffee break

11:00 – 13:00	MODELLING OF METAL FORMING TECHNOLOGIES I (ROOM A1) CHAIR: Bradley Wynne	FRICTION AND LUBRICATION (ROOM A2) CHAIR: Michal Krzyżanowski	POWDER FORMING (ROOM B) CHAIR: Kiyotaka Matsuura	TUBE AND HYDRO FORMING (ROOM C) CHAIR: Livan Fratini
11:00 – 11:20	Joining of Stepped Shaft and Disc by Forming <i>Kenji Hirota, Kazuhiko Kiamura, Yoshihiko Ukai, Keiichi Matsunaga</i>	Evaluation of Tribological Performance of Lubricants and Nitrided Die for Hot Forming of Steel Using Tapered-Plug Penetration Test <i>Kazuhito Asai, Kazuhiko Kitamura</i>	An Investigation of Direct Powder Forging of Nickel Superalloy FGH96 <i>Shuang Fang, Zhusheng Shi, Qian Bai, Jiaying Jiang, Shu Yun Wang, Jianguo Lin</i>	T-Shape Connector Hydroforming Process Analysis <i>Marek Pačko, Janusz Krawczyk, Pior Bala, Paweł Pačko, Tomasz Śleboda, Krzysztof Muszka, Marcin Hojny, Marek Wojtaszek, Grzegorz Cios, Józef Burdzy, Roman Wydra</i>
11:20 – 11:40	Analysis of Material Flow in Oval Upsetting Using Mild-Wedged Die <i>Takashi Nomura, Con Sinh Nguyen, Kazuhiko Kitamura, Keiichi Matsunaga</i>	Extended Conical Tube-Upsetting Test to Investigate the Evolution of Friction Conditions <i>Marco Teller, Alexej Klubakov, Martin Franzke, Johannes Lohmar, Gerhard Hirt</i>	Exploitation of Field-Assisted Sintering Technology (FAST) to Produce Pre-Forged Billets from Metastable Beta Titanium Alloy Powder <i>Emma Calvert, Bradley Wynne, Martin Jackson</i>	Investigation about the Oil Pressure Rate in the Warm Hydroforming of an Al-Mg Alloy Component <i>Gianfranco Palumbo, Antonio Piccininni, Pasquale Guglielmi, Vito Piglionico, Donato Sorgente, Luigi Tricarico</i>
11:40 – 12:00	Connection Strength of Additive Manufactured Tool Elements to the Substrate <i>Daniel Junker, Aleksandr Fedorov, Oliver Hentschel, Michael Schmidt, Marion Merklein</i>	Identification of Friction Coefficient in Forging Processes by Means T-Shape Tests in High Temperature <i>Ritanjali Sethy, Lander Galdos, Joseba Mendiguren, Eneko Sáenz de Argandoña</i>	Methodology for Modelling Diffusion Bonding in Powder Forging <i>Yi Wang, Idris K. Mohammed, Daniel S. Balint</i>	Production Technology for Precision Seamless Steel Tubes from the Perspective of Microhardness Changes <i>Milan Mojžiš, Martin Ridzoň, Peter Bella, Maroš Martinkovič, Ludovit Parilák</i>

12:00 – 12:20	Design of a Novel End-Effector for Kinematic Support in Incremental Sheet Forming <u>Jan Brüninghaus, Yan Volfson, Jobst Bickendorf, Sigrid Brell-Cokcan</u>	Investigation on Friction Conditions during a Severe Bending Deformation on a Thick Plate <u>Antonello D'Annibale, Mohamad El Mehtedi, Antonio Maria Di Ilio, Filippo Gabrielli, Lorenzo Panaccio</u>	Supercritical Debinding of Environmentally Friendly Inconel 718 Feedstock to Metal Injection Moulding Process <u>Alexandre Royer, Jean-Claude Gelin, Thierry Barriere</u>	Numerical and Experimental Study on Sheet Hydroforming of 2A12 Aluminum Alloy <u>Chu Wang, Min Wan, Wennan Yuan</u>
12:20 – 12:40	Determination of Processing Windows for the Hot Stamping of AA7075 <u>Ounli Zhang, Kang Ji, Omer El Fakir, Xiaochuan Liu, Liliang Wang</u>	Measurement of Coefficient of Friction in Hot Stamping by Hot Deep Drawing Test <u>Hironori Sasaki, Tomonori Mukai, Akira Yanagida</u>	Unconventional Methods of Sintering Inconel 718 MIM Samples <u>Olivier Dugauguez, Jose Manuel Torralba, Thierry Barrière, Jean-Claude Gelin</u>	Hydroforming of Thin Sheets of Light Alloys <u>Monika Hycza-Michalska</u>
12:40 – 13:00	Energy Efficient Servo Controlled Roll Levelling Machines <u>Eneko Sáenz de Argandoña, Elena Silvestre, Daniel Garcia, Joseba Mendiguren, Lander Galdos</u>	Relationship between Molecular Structures of Organic-Sulfur Compounds and Metal Forming Performance <u>Tomohiro Takaki, Shogo Ito, Kazuhiko Kitamura, Kazuhiro Yagishita, Junichi Shibata</u>	Exploitation of Spark Plasma Sintering and Subsequent Deformation for Producing Dissimilar Titanium Alloy Components from Powder <u>Jacob Pope, Martin Jackson, Bradley Wynne</u>	Effect of Multistage Deformation during the Pipe Processing on Mechanical Properties of Steels Strength Grade X70-X80 <u>Grigory E. Khadeev, Dmitrii Ringinen, Leonid Efron</u>

13:00 – 14:20 Lunch

14:20 – 16:20	MODELLING OF METAL FORMING TECHNOLOGIES 2 (ROOM A2)	NUMERICAL ANALYSIS AND MODELLING 1 (ROOM A2)	MICROSTRUCTURE AND PROPERTIES 1 (ROOM B)
	CHAIR: Eneko Sáenz de Argandoña	CHAIR: Mikhail A. Petrov	CHAIR: Edmilson Otoni Corrêa
14:20 – 14:40	Improvement of Fatigue Strength of Hole Edge of Ultra-High Strength Steel Sheet by Punching Process Including Thickening <u>Yohei Abe, Ken-ichiro Mori, Ruota Kosaka</u>	Feasibility Study of Complex Sheet Hydroforming Process Experimental and Modelling <u>Mohamed Mohamed, David Carty, John Storr, Nicola Zuelli, Paul Blackwell, David Savings</u>	A Method of Determining Unified Viscoplastic Constitutive Equations for Hot Forging Simulations <u>Nicholas J. Politis, Denis Politis, Catrin Davies, Jianguo Lin</u>
14:40 – 15:00	Influence of Burnishing Conditions on Burnishing Force and Application of Coated Roller in Inclined Roller Burnishing <u>Masato Okada, Takuma Hirokawa, Naoki Asakawa, Masaaki Otsu</u>	Prediction of Forming Limit Diagram for AA5754 Using Artificial Neural Network Modelling <u>Mohamed Mohamed, Sherif Elatriby, Zhusheng Shi, Jianguo Lin</u>	Deep Drawability and Bendability in Hot Stamping of Ultra-High Strength Steel Parts <u>Ken-ichiro Mori, Tomoyoshi Maeno, Yuzo Yanagita</u>
15:00 – 15:20	Influence of Cutting Processes on Edge Cracking Sensitivity of Bright Finishing Alloys <u>Marion Merklein, Tobias Gnihl, Ioannis Tsoupis, Martin Friedrichsen, Johannes Beck</u>	A New Approach for Void Closure in Bulk Metal Forming <u>Kai Kittner, Janine Wiesner, Rudolf Kawalla</u>	Effect of Different Quench Media on the Microstructure and Mechanical Properties of Large-Scale Low Alloy Steel Forgings <u>Edgar Saldana, Bradley Wynne, Rene Cerda-Rojas, Rafael David Mercado-Solis</u>
15:20 – 15:40	Investigation of the Relationship between Material Flow and Rollover in Double-Sided Shearing Using Image Processing <u>Masahiro Sasada, Jun Tamura</u>	A New Method Predicting Contact Length and Flattening in Temper Rolling <u>Joonas Ilmola, Aarne Pohjonen, Jari Larkiola, Jari Nylander</u>	Influence of Process Parameters on the Product Integrity in Friction Stir Extrusion of Magnesium Alloys <u>Dario Baffari, Gianluca Buffa, Livan Fratini</u>

15:40 – 16:00	Fabrication of Cu-C Composite containing Unidirectionally Oriented Graphite Fibers Using Hot Extrusion Process <i><u>Kiyotaka Matsuura, Hiroto Kontani, Toko Tokunaga, Munekazu Ohno</u></i>	An Analytical and Numerical Investigation on Flange Wrinkling Behavior in Warm Forming Process of AA5754 Using Macro-textured Tool Design <i><u>Kailun Zheng, Lei Zhu, Denis Politis, Jianguo Lin, Trevor Dean</u></i>	Microstructure and Mechanical Properties of Ti/Cu Clads Manufactured by Explosive Bonding at Different Stand-off Distances <i><u>Wojciech Skuza, Henryk Paul, Katarzyna Berent, Dariusz Prażmowski, Piotr Bobrowski</u></i>
16:00 – 16:20	Superplastic and anisotropic behaviors of Al-coated Mg alloy sheet <i><u>Toko Tokunaga, Kiyotaka Matsuura, Munekazu Ohno</u></i>	Numerical Analysis of Data Transfer Quality in the 3D Multi-scale Uncoupled Concurrent Model connected with DMR <i><u>Joanna Szyndler, Konrad Perzyński, Lukasz Madej</u></i>	

16:20 – 16:40 Coffee break

	MODELLING OF METAL FORMING TECHNOLOGIES 3 (ROOM A1)	NUMERICAL ANALYSIS AND MODELLING 2 (ROOM A2)	MICROSTRUCTURE AND PROPERTIES 2 (ROOM B)
	CHAIR: Lukasz Rauch	CHAIR: Thierry Barrière	CHAIR: Elena Pereloma
16:40 – 17:00	Optimized Cooling Strategies for Bainitic Forging Steels <i><u>Gernot Eggbauer, Bruno Buchmayr</u></i>	Computer Simulation of the Combined Process "Helical Rolling-Pressing" <i><u>Abdrakhman Naizabekov, Sergey Lezhnev, Alexandr Arbuz, Evgeniy Panin</u></i>	Investigation of Uniaxial Tensile Properties of AA6082 under HFQ® Conditions <i><u>Nan Li, Zhutao Shao, Jianguo Lin, Trevor Dean</u></i>
17:00 – 17:20	Prediction of Failure Mode in Hole Clinching of Al Alloy and Advanced High-Strength Steel <i><u>Guo Shen, Chan Juo Lee, Jeong-Min Lee, Gil-Seok Kang, Joon Hong Park, Byung-Min Kim, Dae-Cheol Ko</u></i>	Computer Simulation of Transformation during TRIP Steel Rod Drawing <i><u>Dmitriy Constantinov, Krzysztof Bzowski, Aleksey Korchunov, Maciej Pietrzyk, Roman Kuziak</u></i>	Microstructural Evolution of the Magnesium Alloy AZ31 with and without SiC Particles during Ultrasonic Melt Treatment <i><u>Kristina Neh, Madlen Ullmann, Rudolf Kawalla</u></i>
17:20 – 17:40	Prevention of Local Thinning and Springback in Hot Stamping of Thin Sheets <i><u>Yuki Nakagawa, Ken-ichiro Mori, Tomoyoshi Maeno</u></i>	Constitutive Equation Development to Model the Hot Forging of ZERON®100 Super Duplex Stainless Steel and Associated Microstructural Evolution <i><u>Jamie Pennington, Bradley Wynne, Glenn Byrne</u></i>	Hot Deformation and Microstructural Characteristics of Nitrogen Enhanced 316L Stainless Steel <i><u>Santosh Kumar, B. Aashrath, Dipti Samantaray, Marimuthu Arvinth Davinci, Utpal Borah, A. K. Bhaduri</u></i>
17:40 – 18:00	Process Effects in Short Cycle Stretch Forming of Tinplate Can Bodies <i><u>Matthias Schneider, Mathias Liewald</u></i>	Crack Formation and Propagation Mechanism in the Punching Process of High Tensile Strength Steel Sheet <i><u>Takehiro Okano, Kota Sakumoto, Kazuhiko Yamazaki, Shunsuke Toyoda, Shinsuke Suzuki</u></i>	Investigation of Tensile and Compressive Creep Behaviour of AA2050-T34 during Creep Age Forming Process <i><u>Yong Li, Z. Shi, Y-L. Yang, Jianguo Lin</u></i>
18:00 – 18:20	Production of Aluminium Based Interpenetrating Phase Composites Using Semi-Solid Forming <i><u>Christoph Seyboldt, Mathias Liewald, Daniel Heydt</u></i>	Development of a Process Map for Wire Drawing of Pearlitic Steel by Finite Element Analysis Coupled with Damage Evolution <i><u>Yong Shin Lee</u></i>	Investigation of the Unloading Yield Effect in Aluminum and Magnesium Sheet Metal Alloys at Room Temperature <i><u>Julia Degner, Sebastian Suttner, Marion Merklein</u></i>
18:20 – 18:40	The Effectiveness of Cold Rolling for Residual Stress Reduction in Quenched 7050 Aluminium Alloy Forgings <i><u>Ran Pan, Catrin Mair Davies, Wei Zhang, Zhusheng Shi, ThiloPirling, Jianguo Lin</u></i>	A Comparison of Input Data Used to Represent Phase Transformations during the Quenching of a Large Nuclear Forging <i><u>Michael Howson, Bradley Wynne, Peter Davies, Sinan Al.-Bermami, Jesus Talamantes-Silva</u></i>	

TUESDAY, SEPTEMBER 20, 2016

09:00 – 10:30	PLENARY LECTURES (ROOM A1+A2) CHAIR: Janguo Lin
09:00 – 09:45	Excellent Formability of Light Metals Sheets by Friction Stir Incremental Forming <i>Masaaki Otsu</i>
09:45 – 10:30	Effect of Processing Parameters on Microstructure and Mechanical Properties of Multiphase Steels Produced by Laboratory Simulated Strip Casting <i>Elena Pereloma</i>

10:30 – 11:00 **Coffee break**

11:00 – 13:00	MODELLING OF METAL FORMING TECHNOLOGIES 4 (ROOM A1)	NUMERICAL ANALYSIS AND MODELLING 3 (ROOM A2)	MICROSTRUCTURE AND PROPERTIES 3 (ROOM B)
	CHAIR: Ken-ichi Manabe	CHAIR: Piotr Bretkopf	CHAIR: Henryk Paul
11:00 – 11:20	Ultrasonic Wave Propagation Analysis for In-Process Monitoring of Stamping <i>Naoto Hagino, Seiji Komiya, Junichi Endou, Masao Ishihama</i>	Development of the Technology of Various Large Bodies Manufacturing Based on Combined Methods of Deformation <i>Alexander Pesin, Ernest Drigun, Denis Pustovoytov, Ilya Pesin</i>	Modelling Microstructure Evolution in ATI 718Plus® Alloy <i>Aleksey Reshetov, Olga Bylya, Michal Gzyl, Malgorzata Rosochowska, Paul Blackwell</i>
11:20 – 11:40	Ultrasonic-Assisted Metal Staking with 15 kHz Oscillation Frequency <i>Uwe Leicht, Marion Merklein, Sebastian Engler</i>	Elastic-Plastic Thermomechanical Fatigue Analysis of Forging Dies <i>Andrey Vlasov, Nikolay Biba, Sergei Stebunov</i>	Modelling of Flow Behaviour of Magnesium Alloys <i>Carlo Bruni</i>
11:40 – 12:00	Ultrasonic-Assisted Upsetting of Steel with 15 kHz Oscillation Frequency <i>Markus Michalski, Marion Merklein</i>	Extension of the Freiburger Model of Spread for the Calculation of Material Flow during Rolling of Long Products to a New Material Group of Mg Alloys AZ31, AZ81, WE43 <i>Pavel Adamyanets</i>	The Onset of the Austenite to Bainite Phase Transformation for Different Cooling Paths and Steel Compositions <i>Aarne Pohjonen, Mahesh Somani, Juha Pyykkönen, Joni Paananen, David Porter</i>
12:00 – 12:20	Towards Processing of Multilayered Metallic Materials – Constrained Compression Testing <i>Szymon Bajda, Michał Krzyżanowski, Marcin Kwiecień, Janusz Majta, Łukasz Lisiecki, Jakub Sroka</i>	Finite Element Simulation of Heat Transfer during Cryogenic Asymmetric Sheet Rolling of Aluminum Alloys <i>Alexander Pesin, Denis Pustovoytov</i>	Digital Image Correlation (DIC) System as a Verification Tool for Constitutive Models of Deformation with Complex Strain Path Changes <i>Paulina Graca, Krzysztof Muszka, Janusz Majta</i>
12:20 – 12:40	The Method of Production of Thin-walled Castings made of GX2CrNiMoN25-6-3 Cast Steel <i>Maciej Nadolski, Grzegorz Stradomski, Andrzej Zyska</i>	Finite Element Simulation of Shear Strain during High-Ratio Differential Speed Rolling of Aluminum Alloy 5083 <i>Alexander Pesin, Denis Pustovoytov</i>	Examination of the Effect of Variation in Stress Magnitude on the Amount of Transformed Retained Austenite in the Structure of TRIP Steel Wires <i>Marek Siemiński, Sylwia Wiewiórowska, Zbigniew Muskalski</i>
12:40 – 13:00	Advanced Solutions for Virtual Process Modelling: Application to Steel Ingot Manufacturing from Casting to Open-die Forging <i>Olivier Jaouen, Frédéric Costes, Ali Saad, Patrice Lasne, Richard Ducloux</i>	Influence of Die Geometry on Drawing Force in Cold Drawing of Steel Tubes Using Numerical Simulation <i>Peter Bella, Pavol Buček, Martin Ridžoň, Milan Mojžiš, Ludovit Parilák</i>	Numerical Model of Dynamic Recrystallization Based on the RCAFÉ Approach <i>Adam Legwand, Mateusz Sitko, Konrad Perzyński, Lukasz Madej</i>

13:00 – 14:20 **Lunch**

14:20 – 16:20	MODELLING OF METAL FORMING TECHNOLOGIES 5 (ROOM A1)	NUMERICAL ANALYSIS AND MODELLING 4 (ROOM A2)	SHEET FORMING 1 (ROOM B)	MODELLING OF INNOVATIVE HOT STRIP ROLLING PROCESSES (ROOM C)
	CHAIR: Jari Larkiola	CHAIR: Tomoyoshi Maeno	CHAIR: Jan Kusiak	CHAIR: Maciej Pietrzyk
14:20 – 14:40	Modelling of Transient Temperature Field and Phase Transformation Change: a Way for Residual Stress Management in Large Size Forgings <u>Jakub Sroka</u>, <u>Jesus Talamantes-Silva</u>, <u>Michał Krzyżanowski</u>, <u>William Mark Rainforth</u>	Influence of Material and Tribological Modelling on the Prediction of Big Size Automotive Components Springback <u>Imanol Gil</u>, <u>Endika Mugarra</u>, <u>Julen Aguirre</u>, <u>Joseba Mendiguren</u>, <u>Eneko Sáenz de Argandoña</u>, <u>Lander Galdos</u>	Reducing Blanking Vibration with Active Vibration Control Using a Servo Press <u>Tomohiro Murakami</u>, <u>Ming Yang</u>, <u>Hiroshi Kishi</u>, <u>Sigeki Mori</u>, <u>Masahiro Ohkawa</u>, <u>Eiichi Fujino</u>	Web based Computer System for Flexible Design of Hot Rolling Processes <u>Krzysztof Bzowski</u>, <u>Lukasz Rauch</u>, <u>Maciej Pietrzyk</u>
14:40 – 15:00	Interpretation of a Physical Simulation of Hot Strip Rolling Schedules in Terms of Inhomogeneity of Strain and Temperature Fields and Microstructure Development <u>Grzegorz Smyk</u>, <u>Piotr Macioł</u>, <u>Danuta Szeliga</u>	Investigation into the Numerical Model Behaviour of Belleville Washers in Cold Roll Forming <u>Kwun Sing Tsang</u>, <u>Wiliam Ion</u>, <u>Martin English</u>	Deep Drawing of One-sided, Stiffness increasing Sheet Metal Composites <u>Dennis Hofmann</u>, <u>Mathias Liewald</u>	Data Farming Computing for Rolling Mill Simulations <u>Jacek Kitowski</u>, <u>Renata Słota</u>, <u>Dariusz Krol</u>, <u>Jakub Liput</u>
15:00 – 15:20	Thickness and Microstructure Analysis on Hot Gas Bulged Cup-Shaped Parts of Ti-22Al-24.5Nb-0.5Mo <u>Yong Wu</u>, <u>Gang Liu</u>, <u>Zhiqiang Liu</u>, <u>Beibei Kong</u>	Elaboration of Ductile Fracture Criteria Based on Punching Forgeability Test <u>Lukasz Lisiecki</u>, <u>Piotr Skubisz</u>	Effect of Plastic Deformation on Elastic and Plastic Recovery in CP-Titanium <u>Saber Khayatzadeh</u>, <u>Salah Rahimi</u>, <u>Paul Blackwell</u>	Metallurgical Models for Process/Product Hot Rolling Applications <u>Ronan Jacolot</u>, <u>Astrid Perlade</u>, <u>Huin Didier</u>
15:20 – 15:40	Process Control Path for High Accurate T-shape Hydroforming of Tube <u>Ken-ichi Manabe</u>, <u>Tomomasa Nakamori</u>, <u>Kazuo Tada</u>	Numerical Investigation of the Material Behaviour during Compression Tests for Samples with Rough Surfaces Represented in Different Geometry Scale Factors <u>Mikhail A. Petrov</u>, <u>Alexander N. Petrov</u>, <u>Pavel A. Petrov</u>	Fabrication of Deep Cup with Flange by In-Plane Stretch Forming Applying Compressive Force in Thickness Direction <u>Shohei Kajikawa</u>, <u>Takashi Iizuka</u>, <u>Takashi Kuboki</u>	Effect of the Time between Last Deformation Pass and Accelerated Cooling on the Mechanical Properties in Nb and Nb-Mo Microalloyed Steels <u>Gorka Larzabal</u>, <u>Nerea Isasti</u>, <u>Jose M. Rodriguez-Ibabe</u>, <u>Isabel Gutiérrez</u>, <u>Pello Uranga</u>
15:40 – 16:00	Development of Computationally Efficient Cellular Automata Static Recrystallization Model <u>Mateusz Sitko</u>, <u>Lukasz Madej</u>	Numerical Modelling of AISi7 Tubular Components Flowformed at Elevated Temperature <u>Michele Novella</u>, <u>Andrea Ghiotti</u>, <u>Stefania Bruschi</u>, <u>Riccardo Capuzzo</u>	Forming Limit of Titanium Alloy Sheet Using Single-Point Incremental Forming Technique with Varying Tool Paths <u>Cho Pei Jiang</u>, <u>Tsung-Han Huang</u>, <u>Fedor Grechnikov</u>, <u>Iaroslav Erisov</u>	The Effect of Titanium Microalloying in Bainitic Steels <u>Roman Kuziak</u>
16:00 – 16:20	Influence of Hot Rolling Parameters on Properties of Rails After Heat Treatment <u>Monika Pernach</u>, <u>Andrij Milenin</u>, <u>Danuta Szeliga</u>, <u>Maciej Pietrzyk</u>	Parameters Design of Discontinuous Dot Indenter in Fine Blanking Process with Different Thickness Workpiece <u>Fei Zhou</u>, <u>Huajie Mao</u>, <u>Yanxiong Liu</u>, <u>Lin Hua</u>	Friction Stir Welding of Copper Alloy CuETP Thickness 5 mm <u>Nikola Sibalic</u>, <u>Milan Vukcevic</u>, <u>Mileta Janjic</u>	Material Knowledge Management and Modelling for Hot Strip Rolling <u>Uwe Diekmann</u>, <u>Alex Miron</u>, <u>Andreea Trasca</u>, <u>Marcus Neuer</u>, <u>Volker Diegelmann</u>

16:20 – 16:40 Coffee break

16:40 – 18:40	MICRO- AND NANO- FORMING 1 (ROOM A1) CHAIR: Ellen K. Cerreta	NUMERICAL ANALYSIS AND MODELLING 5 (ROOM A2) CHAIR: Pello Uranga	SHEET FORMING 2 (ROOM B) CHAIR: Monika Hycza-Michalska
16:40 – 17:00	Effect of Microstructure and Mechanical Properties Formation of Medium Carbon Steel Wire through Continuous Combined Deformation <i>Marina Polyakova, Irene Calliari, Alexander Gulin</i>	Identification of Phase Transformation Models for Steels by Using Nature Inspired Optimization Algorithms <i>Daniel Bachniak, Łukasz Rauch, Maciej Pietrzyk, Jan Kusiak</i>	Hot Stamping of Titanium Alloy Sheets into U Shape with Concave Bottom and Joggle Using Resistance Heating <i>Tomoyoshi Maeno, Yuya Yamashita, Ken-ichiro Mori</i>
17:00 – 17:20	Influence of Servo Motion on Forming Limit of Thin Metallic Foils Using Micro Bulge Test <i>Ryo Yamaguchi, Tetsuhide Shimizu, Ming Yang</i>	Prediction of Localized Necking Based on Crystal Plasticity: Comparison of Bifurcation and Imperfection Approaches <i>Holanyo K. Akpama, Mohamed Ben Bettaieb, Farid Abed-Meraim</i>	Influence of Geometrical Shapes and Sheet Thicknesses on the Dimensional Accuracy of Single and Assembled Parts <i>Tobias Konrad, Steffen Schöllhammer, Karl Roll, Marion Merklein</i>
17:20 – 17:40	Influence of Strain Gradient on Springback of Thin Pure Titanium Foils in Microbending Assisted by Resistance Heating <i>Qui Zheng, Tetsuhide Shimizu, Ming Yang</i>	Modelling Central Consolidation during Hot Rolling of Cast Products <i>Didier Farrugia</i>	Stability of a Suppression Method of Dent and Spring-Back in Zigzag Bending of Sheet Metal/Plate <i>Takashi Kuboki, Takuma Yamada, Shohei Kajikawa, Hiroyuki Abe</i>
17:40 – 18:00	Metallic Multilayered Materials Produced by Constrained Compression <i>Marcin Kwiecień, Łukasz Lisiecki, Szymon Bajda, Janusz Majta, Michał Krzyżanowski</i>	Analysis of Void Closure during Open Die Forging Process of Large Size Steel Ingots <i>Nathan Harris, Davood Shahriari, Mohammad Jahazi</i>	Studies on the Hot Forming and Cold-Die Quenching of AA6082 Tailor Welded Blanks <i>Jun Liu, Ailing Wang, Haoxiang Gao, Omer E. Fakir, Xi Luan, Li-Liang Wang, Jainguo Lin</i>
18:00 – 18:20	Microstructure and Mechanical Properties of WC-Ni-Mo ₂ C Cemented Carbide Developed by Powder Metallurgy <i>Nádia Alves Nery Balbino, Edmilson Otoni Corrêa, Líviode Carvalho Valeriano, Júlio Navarro Santos</i>	Identification of Material Parameters Using Indentation Test and Manifold Learning Approach <i>L. Meng, Piotr Breilkopf, B. Raghavan, G. Mauvoisin, O. Bartier, X. Hernot</i>	The Influence of Strain Rate and Strain on the Behavior of Stress Relaxation in 980 MPa-Grade Dual Phase Steel Sheets <i>Kodai Murasawa, Hayato Komine, Yoshie Otake, Hideyuki Sunaga, Masato Takamura, Yoshimasa Ikeda, Shinsuke Suzuki</i>
18:20 – 18:40		Optimization by Shape Manifold Based on Level Set Interpolation Applied to Deep Drawing Applications <i>Guénhaël Le Quilliec, Balaji Raghavan, Piotr Breilkopf</i>	A Fast Three-Dimensional Model for Strip Rolling <i>Christian Overhagen, Paul Josef Mauk</i>

19:30

Gala Dinner

WEDNESDAY, SEPTEMBER 21, 2016

08:30 – 09:15	PLENARY LECTURE (ROOM A1+A2) CHAIR: Ken-ichiro Mori
08:30 – 09:15	Forgings for Critical Applications; Past, Present and Future <i>Lee Shaw</i>

09:20 – 10:40	MICRO- AND NANO- FORMING 2 (ROOM A1)	EXTRUSION AND DRAWING 1 (ROOM A2)	FORMABILITY 1 (ROOM B)
	CHAIR: Masaaki Otsu	CHAIR: Tomasz Śleboda	CHAIR: Janusz Majta
09:20 – 09:40	Multi-Resolution Material Hardening Law for CPFE Micro-Forming Analysis <i>Ji Ling Feng, Shiwen Wang, Jianguo Lin</i>	Benefits of Using Diamond Dies for Cold Alternate Drawing of Magnesium Alloys <i>Vladimir Hristov, Kazunari Yoshida</i>	Evaluation of Press Formability of Pure Titanium Sheets <i>Quoc-Tuan Pham, Young-Suk Kim</i>
09:40 – 10:00	Shear Banding in Polycrystalline Aluminium and Copper Pre-Deformed by ECAP and Subsequently Plane Strain Compressed <i>Henryk Paul, Magdalena M. Miszczyk</i>	Ductility Improvement of High Carbon Steel Wire by Alternate Wire Drawing <i>Hidetoshi Nagashima, Kazunari Yoshida</i>	Formability and Surface Quality of Incrementally Formed Grade 1 Titanium Thin Sheets <i>Antonio Formisano, Luca Boccardo, Luigi Carrino, Massimo Durante, Antonio Langella, Fabrizio Memola Capece Minutolo, Antonio Squillace</i>
10:00 – 10:20	Novel Fabrication Method of Metal Microtube Laser Dieless Torsion Drawing Process <i>Tsuyoshi Furushima</i>	Improvement of Ductility with Maintaining Strength of Drawn High Carbon Steel Wire <i>Shiori Gondo, Shinsuke Suzuki, Motoo Asakawa, Kosuke Takemoto, Kenichi Tashima, Satoshi Kajino</i>	Formability of AA6082-T6 at Warm and Hot Stamping Conditions <i>Xi Luan, Omer El Fakir, Haoxiang Gao, Jun Liu, Liliang Wang</i>
10:20 – 10:40	The Scale Effect in the Design of Micro-dies for Microforming <i>Wojciech Presz</i>	Physical and Numerical Modeling of Manufacturing Magnesium Alloy Tubes by Dieless Drawing Process <i>Andrij Milenin, Piotr Kustra, Dorota Byrska-Wójcik, Tsuyoshi Furushima</i>	Formability of Explosive Welded Mg/Al Bimetallic Bar <i>Sebastian Mróz, Piotr Szota, Teresa Bajor, Andrzej Stefanik</i>

10:40 – 11:00 **Coffee break**

11:00 – 12:40	ROLLING (ROOM A1)	EXTRUSION AND DRAWING 2 (ROOM A2)	FORMABILITY 2 (ROOM B)
	CHAIR: Didier Farrugia	CHAIR: Sebastian Mróz	CHAIR: Yohei Abe
11:00 – 11:20	Optimization of Reversal Hot Plate Rolling Technology of the Microalloyed Austenite <i>Krzysztof Muszka, Mateusz Sitko, Matthias Schmidtchen, Grzegorz Korpala, Katja Pranke, Eric Palmiere, Lukasz Madej</i>	Manufacture of Magnesium Tubes with Gradient Hardness Distribution Using a Two-Stage Porthole Extrusion Die <i>Yeong Maw Hwang, Yu Chen, Sergei Alexandrov</i>	Investigation on Hardening and Softening Behavior of Steel after Rapid Strain Rate Changes <i>Jens Dierdorf, Johannes Lohmar, Gerhard Hirt</i>
11:20 – 11:40	A Review of Microstructure and Microtexture of Tertiary Oxide Scale in a Hot Strip Mill <i>Xiang Long Yu, Zheng Yi Jiang, Jing Wei Zhao, Dong Bin Wei, Ji Zhou</i>	Numerical Optimization and Practical Implementation of the Tube Extrusion Process of Mg Alloys with Micromechanical Analysis of the Final Product <i>Andrij Milenin, Piotr Kustra, Dorota Byrska-Wójcik, Bartłomiej Płonka, Veronika Petráňová, Vladimír Hrbek, Jiří Němeček</i>	Investigation on the Mechanical Properties and Formability of Ti3Al2.5V Tubes Deformed at Elevated Temperatures <i>Enrico Simonetto, Giulia Venturato, Stefania Bruschi, Andrea Ghiotti</i>

11:40 – 12:00	Influence of the Deformation Method on the Microstructure Changes in AZ31 Magnesium Alloy Round Rods Obtained by the Rolling Process <i><u>Andrzej Stefanik</u>, <u>Piotr Szota</u>, <u>Sebastian Mróz</u>, <u>Teresa Bajor</u>, <u>Sonia Boczek</u></i>	Study on Wire Rod Drawing Process Using the Rotating Die <i><u>Gow Yi Tzou</u>, <u>Dyi-Cheng Chen</u>, <u>Shih-Hsien Lin</u></i>	The Influence of the Punch Shape and the Cutting Method on the Limit Strain in the Hole Expansion Test <i><u>Jakub Krawczyk</u>, <u>Zbigniew Gronostajski</u>, <u>Sławomir Polak</u>, <u>Karol Jaśkiewicz</u>, <u>Władysław Chorzępa</u>, <u>Ireneusz Pęcak</u></i>
12:00 – 12:20	Numerical Analysis of a Skew Rolling Process for Producing Axle Shafts <i><u>Zbigniew Pater</u>, <u>Janusz Tomczak</u>, <u>Tomasz Bulzak</u></i>	The Effect of Equivalent Strain on Punch Load for Cold Backward Extrusion of Copper Cans <i><u>Tomasz Milek</u></i>	
12:20 – 12:40		The High Speed Wire Drawing Process of Steel Wires under Fluid Frictions Conditions <i><u>Maciej Suliga</u></i>	

12:45 – 13:00 **Closing of the Conference (Room A1+A2)**

13:00 – 14:30 **Lunch**