ICTP2014 Time Schedule

Oct. 19 (Sunday)

Room	Reception Hall		G
13:30			Pre-conference Seminar
14:00	Registration (in front of Reception Hall)		
18:00		Welcome reception at Reception Hall	

Oct. 20 (Monday)

Room	Reception Hall						
9:00	Registration (2nd floor hall) ↓	Opening					
9:30		Plenary Keynotes K-01,K-02					
10:30	Coffee Break						
Room	A	B	C	D	E	F	G
11:00	M-A1 Rolling-1	M-B1 S2:Tribology -1	M-C1 Forging-1	M-D1 Material-1	M-E1 S3:Joining-1	M-F1 S1:Hot Stamping-1	M-G1 Sheet-1
12:40	Lunch						
14:00	M-A2 Rolling-2	M-B2 S2:Tribology-2	M-C2 Forging-2	M-D2 Material-2	M-E2 S3:Joining--2	M-F2 S1:Hot Stamping-2	M-G2 Sheet-2
16:00	Coffee Break						
16:30	M-A *3* Rolling-3	M-B *3* S2:Tribology-3	M-C *3* Forging-3	M-D *3* Material-3	M-E *3* S3:Joining--3	M-F *3* S1:Hot Stamping-3	M-G *3* Sheet-3
18:30							

Oct. 21 (Tuesday)

Room	Reception Hall						
9:00	Plenary Keynotes K-03, K-04						
10:00	Coffee Break						
Room	A	B	C	D	E	F	G
10:30	T-A1 Rolling-4	T-B1 S2:Tribology-4	T-C1 Forging-4	T-D1 Material-4	T-E1 S3:Joining--4	T-F1 S1:Hot Stamping−4	T-G1 Sheet-4
12:30	Lunch						
14:00	T-A2 Rolling-5	T-B2 S2:Tribology-5	T-C2 Forging-5	T-D2 Material-5	T-E2 S3:Joining--5	T-F2 Drawing-1	T-G2 Sheet-5
16:00							
16:40							
17:00							
19:00	Banquet at The Westin Nagoya Castle Hotel						

ICTP2014 Time Schedule

Oct. 22 (Wednesday)							
Room	Reception Hall						
9:00	Plenary Keynotes K-05, K-06						
10:00	Coffee Break						
Room	A	B	C	D	E	F	G
10:30	W-A1 Rolling-6	W-B1 Casting-1	W-C1 Forging-6	W-D1 Material-6	W-E1 S6:FEM-1	W-F1 S4:Tube Forming-1	W-G1 Sheet-6
12:30	Lunch						
14:00	W-A2 Rolling-7	W-B2 Casting-2	W-C2 Forging-7	W-D2 S5:Incremental -1	W-E2 S6:FEM-2	W-F2 S4:Tube Forming--2	W-G2 Sheet-7
16:00	Coffee Break						
16:30	W-A3 Powder-1	W-B3 FRP-1	W-C3 Extrusion-1	W-D3 S5:Incremental -2	W-E3 S6:FEM-3	W-F3 S4:Tube Forming--3	W-G3 Sheet-8
18:30							
18:50							

Oct. 23 (Thursday)							
Room	Reception Hall						
9:00	Plenary Keynotes K-07, K-08						
10:00	Coffee Break						
Room	A	B	C	D	E	F	G
10:30	Th-A1 Micro-1	Th-B1 S7:Control-1	Th-C1 Extrusion-2	Th-D1 S5:Incremental -3	Th-E1 Shearing-1	Th-F1 Press-1	Th-G1 Sheet-9
12:30	Lunch						
14:00	Th-A2 Micro-2	Th-B2 Severe Deformaton-1	Th-C2 Extrusion-3	Th-D2 S5:Incremental -4	Th-E2 Shearing-2		Th-G2 Sheet-10
15:40							
16:00							
16:20							
19:00	Farewell Party at Koyoen						

Preliminary schedule of the ICTP2014 Opening Ceremony
(Monday, October 20th, 2014)

09:00 Welcome Message, Organizing Committee

Prof. T. Ishikawa

09:05 Welcome Message, Dean of faculty of engineering, Nagoya University

Prof. Y. Matsushita

09:10 Opening Speech, President of the Japan Society for Technology of Plasticity

Mr. S. Kimura

09:15 Welcome Message, President of Standing Advisory Board

Prof. M. Kiuchi

09:20 Prize Ceremony, Japan Society for Technology of Plasticity

Dr. S. Fujikawa

Plenary Keynotes　Reception Hall　4th floor

Oct, 20 (Monday)　Manabu Kiuchi

K-01　9:30~10:0

Production engineering strategies and metalworking at Toyota Motor Corporation

Mr. T. Takami　Toyota Motor Corporation, Japan

K-02　10:00~10:30

Selected processes and modeling techniques for rolled products

Prof. G. Hirt　RWTH Aachen, Germany

Oct, 21 (Tuesday)　Gerhart Hirt

K-03　9:00~9:30

Forming of lightweight metal components: Need for new technologies

Prof. A. E. Tekkaya　Technishe Universität Dortmund, Germany

K-04　9:30~10:0

Numerical analysis for microstructure control in hot forming process

Prof. Jun Yanagimoto　University of Tokyo, Japan

Oct, 22 (Wednesday)　Jun Yanagimoto

K-05　9:00~9:30

Some advances in plastic forming technologies of titanium alloys

Prof. H. Yang　Norhwestern Polytechnical University, R.P. China

K-06　9:30~10:0

Current status of "Dieless" Amino's incremental forming

Mr. M. Amino　Amino Corporation, Japan

Oct, 23 (Thursday)　A. Erman Tekkaya

K-07　9:00~9:30

Semisolid forming of thin plates with microscale features

Prof. C. G. Kang　Pusan National University, South Korea

K-08　9:30~10:0

Friction stir welding as an effective alternative technique for light structural alloys mixed joints

Prof. F. Micari　University of Palermo, Italy

Oct, 20 (Monday) 11:00～

Room A — Rolling-1

M-A1 Zhengyi Jiang

11:00~11:20
Processing, microstructures and mechanical properties of ultra-high strength steel sheet
Liqing Chen, Jianguo Huang, Yang Zhao, Hongshuang Di, Fuxian Zhu

11:20~11:40
Process-structure-microstructure relationship in hot strip rolling of steels using statistical data mining
Kuldeep Agarwal, Rajiv Shivpuri, Venugopal Bonthapally

11:40~12:00
Advanced rolling technologies for producing ultrafine-grain/nanostructured alloys
Hailiang Yu, Kiet Tieu, Cheng Lu

12:00~12:20
Enhancing technologies of stabilization of mill vibration by mill stabilizing device in hot rolling
Hideaki Furumoto, Shinya Kanemori, Kanji Hayashi, Akira Sako, Tadashi Hiura, Hideki Tonaka, Sun Dale, Fan Qun, Wang Fuchen

12:20~12:40
Model of residual stresses in hot-rolled sheets with taking into account relaxation process and phase transformation
Andrzej Milenin, Piotr Kustra, Roman Kuziak, Maciej Pietrzyk

Room B — Tribology-1

M-B1 Niels Bay, Kazuhiko Kitamura, Ryo Matsumoto

11:00~11:40 Keynote
Off-Line Testing of Tribo-Systems for Sheet Metal Forming Production
Niels Bay

11:40~12:00
Thermal analysis of bending under tension test
Ermanno Ceron, Paulo A.F. Martins, Niels Bay

12:00~12:20
Draw bending method of seizure for pure titanium sheet
Takayuki Muranaka, Hideyo Miyoshi, Takeshi Kihara, Masaaki Otsu, Osamu Haraguchi

12:20~12:40
Effect of tool shape on galling behavior in plate shearing
Tomohiro Yamada, Zhigang Wang, Tomonori Sasa

Room C — Forging-1

M-C1 Tamotsu Nakamura

11:00~11:20
Optimum back-pressure forging using servo die cushion
Kiichiro Kawamoto, Takeshi Yoneyama, Masato Okada, Satoshi Kitayama, Junpei Chikahisa

11:20~11:40
Influence of forming conditions on loads in split-forging
Ayato Mizuno, Takashi Nomura, Kazuhiko Kitamura, Keiichi Matsunaga

11:40~12:00
Mechanism of crack initiation and propagation in single-side piercing process for hollow forged parts
Takahiro Ishiguro, Satoru Fujisaki, Eiji Abe, Nobuki Yukawa, Takashi Ishikawa

12:00~12:20
Estimation of work-hardening curve for large strain using friction-free compression test
Masaharu Usami, Tetsuo Oya

12:20~12:40
Influence of process chain on fold formation during flange upsetting of tubular cold forged parts
Thorben Schiemann, Mathias Liewald, Claudius Beiermeister, Michael Till

Room D — Material-1

M-D1 Frederic Barlat

11:00~11:20
Microstructure evolution and flow localization characteristics of 5A06 alloy in high strain rate forming process
Siliang Yan, He Yang, Hongwei Li, Xuan Yao

11:20~11:40
Constitutive model for multi-phase high strength steels
Wenjiao Dan, Weigang Zhang, Fei Liu

11:40~12:00
Material model based on non-associated flow rule with higher-order yield function for anisotropic metals
Tetsuo Oya, Jun Yanagimoto, Koichi Ito, Gen Uemura, Naomichi Mori

12:00~12:20
A model of anisotropy evolution of sheet metals
Fusahito Yoshida, Hiroshi Hamasaki, Takeshi Uemori

12:20~12:40
Influence of temper rolling on tensile property of low carbon steel sheets by application of Hill 48 anisotropic yield criterion
Davoud Jafarlou, Mohsen Hassan, Noor Azizi Mardi, Erfan Zalnezhad

Room E — Joining-1

M-E1 Wolfram Volk, Yohei Abe

11:00~11:20 Keynote
German project of joining by plastic deformation
Wolfram Volk

11:20~11:40
Steel-Aluminum knurled interference fits: joining process and load characteristics
Stefan Kleditzsch, Birgit Awiszus, Michael Lätzer, Erhard Leidich

11:40~12:20
Influence of internal hub profile on joining process of shaft-hub-connection by lateral extrusion
Florian Dörr, Michael Funk, Mathias Liewald, Hansgeorg Binz, Robin Köstlmeier

12:00~12:20
Basic property of high-precision metal flow joining method without need for any specialized punch
Masatoshi Usui, Atsushi Shirayori, Michiharu Narazaki, Hiroya Murakami, Nobuyuki Kawame, Yukinori Suzuki, Masashi Watabe

12:20~12:40
Temperature influence on bond formation in multi-material joining by forging
Simon Wohletz, Peter Groche

Room F — Hot Stamping-1

M-F1 Ken-ichiro Mori Marion Merklein, Paolo Francesco Bariani, Stefania Bruschi, Jun Yanagimoto

11:00~11:40 Keynote
Recent development of hot stamping technique
Ken-ichiro Mori, Marion Merklein, Paolo Francesco Bariani, Stefania Bruschi, Jun Yanagimoto

11:40~12:00
Materials modelling for selective heating and press hardening of boron steel panels with graded microstructures
Nan Li, Jianguo Lin, Trevor A. Dean, Damian Dry, D. Balint

12:00~12:20
Experimental and theoretical studies on formability of 22MnB5 at elevated temperatures by Gleeble simulator
Rong Shean Lee, Yi Kai Lin, Ta Wei Chien

12:20~12:40
A new test design for assessing formability of materials in hot stamping
Mohamed Mohamed, Jianguo Lin, Alistair Foster, Trevor Dean, John Dear

Room G — Sheet Metal-1

M-G1 Ken-ichi Manabe

11:00~11:20
Bending of high-strength low-alloyed steel with respect to edge crack sensitivity caused by shearing operations
Ioannis Tsoupis, Sven Hildering, Marion Merklein

11:20~11:40
Hole expansion characteristics of ultra high strength steels
Xinping Chen, Haoming Jiang, Zhenxiang Cui, Changwei Lian, Chao Lu

11:40~12:00
Numerical investigation of cut-edge effect using Gurson-Tvergaard-Needleman model
Xavier Lemoine, Tudor Balan, Anne-Marie Habraken

12:00~12:20
Influences of thickness ratio of base sheets on formability of tailor welded blanks
Yanli Song, Lin Hua

12:20~12:40
Predicting effect of temperature, strain rate and strain path changes on forming limit of lightweight sheet metal alloys
Omer El Fakir, Liliang Wang, Daniel Balint, John P. Dear, Jianguo Lin

Oct, 20 (Monday) 14:00～

Room A — Rolling-2

M-A2 — Shi-Hong Zhang

14:00~14:20
Optimization of mechanical properties of low carbon bainitic steel using TMCP and accelerated cooling
Xiangwei Kong, Liangyun Lan

14:20~14:40
Evaluation of deformation behavior of oxide scale in hot rolling process by vacuum hot rolling mill
Takuya Kurotsu, Akio Segawa

14:40~15:00
Finite element modeling of edge defect formation in plate rolling
Alexander Pesin, Denis Pustovoytov

15:00~15:20
Computer simulation of deformation behavior of non-metallic inclusion in hot-rolling
Nozomi Matsuoka, Motoki Terano, Takahiro Ishiguro, Eiji Abe, Nobuki Yukawa, Takashi Ishikawa, Yoshiyuki Ueshima, Kenichi Yamamoto, Kohichi Isobe

15:20~15:40
Understanding and modeling of void closure mechanisms in hot metal forming processes: a multiscale approach
Michel Saby, Marc Bernacki, Pierre-Olivier Bouchard

15:40~16:00
Dependence of grain size on mechanical properties and microstructures of high manganese austenitic steel
Xiaoyun Yuan, Liqing Chen, Yang Zhao, Hongshuang Di, Fuxian Zhu

Room B — Tribology-2

M-B2 — Niels Bay, Kazuhiko Kitamura, Ryo Matsumoto

14:00~14:20
Inverse analysis used to determine plastic flow and tribological characteristics for deep-drawing sheet
Adrian Pascu, Valentin Oleksik, Ioan Bondrea, Liviu Roşca

14:20~14:40
A prediction method of galling position in square cup drawing
Zhigang Wang, Mingxu Yang, Yasuharu Yoshikawa

14:40~15:00
Frictional properties of AZ80 and ZE10 magnesium alloys under dry and lubricated contact conditions
Maziar Ramezani, Thomas Neitzert, Timotius Pasang, Miguel Angel Sellés

15:00~15:20
Effects of contact pressure, plastic strain and sliding velocity on sticking in cold forging of aluminium billet
Laurent Dubar,Catalin I. Pruncu, André Dubois, Mirentxu Dubar

15:20~15:40
Effects of surface finish and die temperature on friction and lubrication in forging
Hyunok Kim, Taylan Altan

15:40~16:00
Identification of friction coefficient in high aspect ratio combined forward-backward extrusion with pulse ram motion on servo press
Ryo Matsumoto, Kazunori Hayashi, Hiroshi Utsunomiya

Room C — Forging-2

M-C2 — ManSoo Joun

14:00~14:20
Measurement of flow stress for pure aluminum up to 10 in strain
Yasuhiro Yogo, Masatoshi Sawamura, Masafumi Hosoya, Michiaki Kamiyama, Noritoshi Iwata,Takashi Ishikawa

14:20~14:40
Deformation behaviour in boss forming by sheet extrusion
Kenji Hirota, Kota Michitsuji

14:40~15:00
Analytical and FEM investigations on boss forming process by compression-drawing method
Wenzheng Dong, Qiquan Lin, Yantao Li, Zhigang Wang

15:00~15:20
A new forming method of triple cup by plate forging
Zhigang Wang, Yasuharu Yoshikawa

15:20~15:40
Investigations and approaches on material flow of non-uniform arranged cavities in sheet bulk metal forming processes
Daniel Gröbel, Johannes Koch, Hans Ulrich Vierzigmann, Ulf Engel, Marion Merklein

15:40~16:00
Multi-stage cold forging of thin-walled components
Atsuahi Danno, Sebastian Berner, Kai Soon Fong, Wai Tang Yap

Room D — Material-2

M-D2 — Hui Long

14:00~14:20
Material modelling and springback analysis for multi-stage rotary draw bending of thin-walled tube using homogeneous anisotropic hardening model
Juan Liao, Xin Xue, Frederic Barlat, Jose Gracio

14:20~14:40
A new model describing plastic distortion fully coupled with ductile damage
Zhenming Yue, Houssem Badreddine, Khemais Saanouni

14:40~15:00
Plastic deformation and metallurgical evolution modelling for defects reduction and quality optimization
Tommaso Coppola, Filippo Dionisi Vici, Arianna Gotti, Luigi Langellotto, Sandro Notargiacomo

15:00~15:20
Forming limit analyses of cold rolled IF steel sheet using differential work hardening model
Tomoyuki Hakoyama, Toshihiko Kuwabara

15:20~15:40
Analysis and experiment of 7075 aluminum alloy tensile test
Dyi-Cheng Chen, Ci-Syong You, Fu-Yuan Gao

15:40~16:00
Microstructure simulation of 2519 aluminum alloy in multi-pass hot compression process
Qiquan Lin, Wenzheng Dong, Yantao Li, Hui Zhang, Zhigang Wang

Room E — Joining-2

M-E2 — Wolfram Volk, Yohei Abe

14:00~14:20
Cold forge spot-bonding of high tensile strength steel and aluminum alloy sheets
Yuri Miwada, Takahiro Ishiguro, Eiji Abe, Nobuki Yukawa, Takashi Ishikawa, Tomoaki Suganuma

14:20~14:40
Wire joining by rotary swaging
Eric Moumi, Philipp Wilhelmi, Bernd Kuhfuss, Christian Schenck, Kirsten Tracht

14:40~15:00
Experimental and numerical analysis of electrical contact crimping to predict mechanical strength
Katia Mocellin, Matthieu Petitprez

15:00~15:20
An analytical model on spin-bonding of composite tube
Zhipeng Zhang, Wenchen Xu, Debin Shan

15:20~15:40
Analysis of elastic-plastic interference-fit joints
Hava Hüyük, Omer Music, Asuman Koç, Celalettin Karadoğan, Çağdaş Bayram

15:40~16:00
Mechanical property of Al alloy joints by friction stir blind riveting
Junying Min, Jingjing Li, Blair E. Carlson, Yongqiang Li, Jianping Lin

Room F — Hot Stamping-2

M-F2 — Ken-ichiro Mori, Marion Merklein, Paolo Francesco Bariani, Stefania Bruschi, Jun Yanagimoto

14:00~14:20
Investigations on austenitization parameters influencing wear behavior within hot stamping
Marion Merklein, Michael Wieland

14:20~14:40
Auxiliary current hot forming of high-strength steel for automobile parts
Guo-feng Wang,Xue-Song Wu, Chao Sun, Shu-fen Liu, Qi Liu, Hai-Shan Zhao

14:40~15:00
Effect of cooling path on phase transformation of boron steel 22MnB5
Fangfang Li, Mingwang Fu, Jianping Lin

15:00~15:20
Cracking behavior of Al-Si coating on hot stamping boron steel sheet
Kai Wang, Zhongxiang Gui, Peixing Liu, Yilin Wang, Yisheng Zhang

15:20~15:40
Improvement of cylindrical deep drawability in hot stamping
Kazuhisa Kusumi, Naruhiko Nomura, Shuji Yamamoto, Nasahiro Nakata, Masayuki Abe, Masayoshi Suehiro

15:40~16:00
Hot stamping of high strength steel with tailored properties by two methods
Zijian Wang, Peixing Liu, Ya Xu, Yilin Wang, Yisheng Zhang

Room G — Sheet Metal-2

M-G2 — Fusahito Yoshida

14:00~14:20
Effect of temperature on stretchability of anisotropic AZ31 magnesium alloy sheet
Izumi Fukuda, Yasunori Harada, Shunpei Ohtsuka

14:20~14:40
Formability and grain size of AZ31 sheet in gas blow forming process
Youngseon Lee, Jae-Jung Kim, Yong-Nam Kwon, Eun Yoo Yoon

14:40~15:00
Effects of deformation rate on ductility of Ti-6Al-4V material
Fenqiang Li□Jianhua Mo□JianJun Li□Liang Huang□Wei Fan, Jinxiu Fang

15:00~15:20
Effects of anisotropic yield functions on prediction of forming limit diagrams of DP600 advanced high strength steel
Fahrettin Ozturk, Serkan Toros, Suleyman Kilic

15:20~15:40
Failure mode and ductility of dual phase steel with edge crack
Xin-cun Zhuang, Cheng Xu, Tao Wang, Zhen Zhao

15:40~16:00
Effects of temperature and strain rate on the forming limit curves of AA5086 sheet
Cunsheng Zhang, Xingrong Chu, Dominique Guines, Lionel Leotoing, Jie Ding, Guoqun Zhao

Oct, 20 (Monday) 16:30～

Room A — Rolling-3

M-A3 Hiroshi Utsunomiya

16:30~16:50
High efficiency warm-cold rolling technology and texture of Fe-6.5wt%Si alloy sheets
Jianxin Xie, Hongjiang Pan, Huadong Fu, Zhihao Zhang

16:50~17:10
Flattening of surface grooves in cold flat rolling
Hiroshi Utsunomiya, Tsuyoshi Ito, Ryo Matsumoto

17:10~17:30
Prediction of surface roughness on rolled sheet by texture roll
Yasuyuki Fujii, Yasushi Maeda, Ryota Ifuku

17:30~17:50
Roughness and glossiness of SUS430 stainless steel in cold rolling
Chang-sheng Li, Bo Fu, Tao Zhu, You-yuan Li

17:50~18:10
Simulation of rolling process of AZ31 magnesium alloy sheet
Di Liu, Zuyan Liu , Lumeng Wang

18:10~18:30
Deformation characterization of micro rolling for stainless steel foil
Haibo Xie, Ken-ichi Manabe, Tsuyoshi Furushima, Kazuo Tada, Zhengyi Jiang

Room B — Tribology-3

M-B3 Niels Bay, Kazuhiko Kitamura, Ryo Matsumoto

16:30~16:50
Prevention of seizure in inner spline backward extrusion by low-cycle oscillation using servo press
Tomoyoshi Maeno, Ken-ichiro Mori, Yuki Ichikawa, Minoru Sugawara

16:50~17:10
Measurement of friction coefficient by backward extrusion with rotating tool under severe forming conditions
Masatoshi Sawamura, Yasuhiro Yogo, Michiaki Kamiyama, Noritoshi Iwata

17:10~17:30
Effect of plastic deformation of bulk material on frictional behavior in dry metal forming
Tatsuhiro Suzuki, Zhigang Wang, Yasuharu Yoshikawa

17:30~17:50
Performance evaluation of lubricant for producing smooth surface product in cold extrusion of aluminum using tool with micro-groove arrays
Shunpei Kamitani, Kenji Nakanishi, Yong-Ming Guo

17:50~18:10
Micro-texturing of DLC thin film coatings and its tribological performance under dry sliding friction for microforming operation
Tetsuhide Shimizu, Tai Kakegawa, Ming Yang

18:10~18:30
Macro and micro structuring of deep drawing's tools for lubricant free forming
Ali Mousavi, Michael Schomäcker, Alexander Brosius

Room C — Forging-3

M-C3 Trevor Anthony Dean

16:30~16:50
Method of reducing residual stress generated by laser cutting by light indentation of sheet metal edge
Atsushi Maeda, Yingjun Jin, Takashi Kuboki

16:50~17:10
Distribution of plastic anisotropy in thickness direction for plate
Motoki Terano, Kazuhiko Kitamura, Shusaku Miyata, Masahiko Yoshino

17:10~17:30
Prediction of ductile fracture in cold forging
Atsuo Watanabe, Shinichirou Fujikawa, Akihiko Ikeda, Noriyuki Shiga

17:30~17:50
Generation of super smooth surface in compression test
Masahito Matsui, Kouhei Toda, Kenichi Murai, Yuichi Nakamura

17:50~18:10
Development of software for simulation of forming forgings
Konstantin Solomonov

18:10~18:30
Contact potential difference measurement of adhesion process during micro/meso-scale injection upsetting
Takehiko Makino, Toshinari Michimoto, Shinpei Moriyama, Tohru Kikuchi

Room D — Material-3

M-D3 Pierre-Olivier Bouchard

16:30~16:50
Simulation of composite hot extrusion with high reinforcing volumes
Martin Schwane, Teresa Citrea, Christoph Dahnke, Matthias Haase, Nooman Ben Khalifa, A. Erman Tekkaya

16:50~17:10
Formability of Sn-containing ferrite stainless steel sheet
Jing-Yuan Li, Fei Fang, Di-Xuan Su, Shuai Zhang, Yu-Lai Chen

17:10~17:30
Influence of pearlite interlamellar spacing on strain hardening behaviour in spring steel 60Si2MnA
Chao-lei Zhang, Xiang Liu, Le-yu Zhou, Ya-zheng Liu

17:30~17:50
High temperature deformation behavior and constitutive modelling for 05Cr17Ni4Cu4Nb stainless steel
Yanhong Xiao, Zhenshan Cui, Hongbin Yin, Cheng Guo

17:50~18:10
Identification of strain hardening phenomena in sheet metal at large plastic strains
Sam Coppietersa, Kazuhiro Ichikawa, Toshihiko Kuwabara

18:10~18:30
Features of unloading and re-loading processes of medium carbon steel after uniaxial plastic strain
Dongdong Li, Masayoshi Akiyama

Room E — Joining-3

M-E3 Wolfram Volk, Yohei Abe

16:30~16:50
Self-piercing riveting with inner flange pipe rivet
Zhichao Huang, Shuguang Xue, Jiamei Lai, Lingjun Xia, Jinqing Zhan

16:50~17:10
Joining process for plates using plastic deformation with rotating tool and pilot hole
Noboru Nakayama, Takayoshi Ikeda, Naoki. Kobayashi, Masaomi Horita

17:10~17:30
Improvement of joinability in mechanical clinching of ultra-high strength steel sheets using counter pressure with ring rubber
Yohei Abe, Shoma Nishino, Ken-ichiro Mori, Takato Saito

17:30~17:50
Effect of tool eccentricity on the joint strength in mechanical clinching process
Chan Chin Wang, Heng Keong Kam, Wen Chiet Cheong

17:50~18:10
Press forming process of closed-profile automotive parts without flange
Yuji Yamasaki, Kazuhiko Higai, Toyohisa Shinmiya

18:10~18:30
Joining technologies for future automobile multi-material modules
Yvan Chastel, Lucas Passemard

Room F — Hot Stamping-3

M-F3 Ken-ichiro Mori Marion Merklein, Paolo Francesco Bariani, Stefania Bruschi, Jun Yanagimoto

16:30~16:50
Hot stamping parts with tailored properties by local resistance heating
Weikang Liang, Liang Wang, Yong Liu, Yilin Wang, Yisheng Zhang

16:50~17:10
Application of hot stamping process by integrating quenching & partitioning heat treatment to improve mechanical properties
Xianhong Han, Yaoyao Zhong, Kun Yang, Zhenshan Cui, Jun Chen

17:10~17:30
Damage investigation of boron steel at hot stamping conditions
Nan Li,Chaoyang Sun, Ning Guo, Mohamed Mohamed, Jianguo Lin, M Takeki

17:30~17:50
Measurement of heat transfer coefficient of boron steel in hot stamping
Tzu-Hao Hung, Pei-Wu Tsai, Fuh-Kuo Chen, Tyng-Bin Huang, Wei-Liang Liu

17:50~18:10
Hot stamping of load adjusted structural parts
Bernd-Arno Behrens, Anas Bouguecha, Christoph Michael Gaebel, Jörn Moritz, Jens Schrödter

18:10~18:30
Hot semi-punching of quenchable steel sheet
Ken-ichiro Mori, Tomoyoshi Maeno, Takuya Suganami, Masato Sakagami

Room G — Sheet Metal-3

M-G3 Kaifeng Zhang

16:30~16:50
Forming limit curves of electrically conductive layers printed on sheet metal surfaces
Mesut Ibis, Peter Groche

16:50~17:10
Dynamic ductility and fragmentation for aluminum alloy using electromagnetic ring expansion
Huijuan Ma, Liang Huang, Mengqiu Wu, Jianjun Li

17:10~17:30
Electromagnetic forming processes: material behaviour and computational modelling
François Bay, Anne-Claire Jeanson, Jose Alves Zapata

17:30~17:50
Electromagnetic pulse assisted progressive deep drawing
Jinxiu Fang, Jianhua Mo, Jianjun Li, Xiaohui Cui , Suo Fan

17:50~18:10
Bulging of 1420 Al-Li alloy based on pulse current
Qi Xiong, Xiao-tao Han, Quan-liang Cao, Zhi-peng Lai, Qi Chen, Tao Niu, Zhong-yu Zhou, Hong-liang Hou, Liang Li

18:10~18:30
Deep drawing of cylindrical cup using incremental electromagnetic assisted stamping with radial magnetic pressure
Xiaohui Cui, Jianhua Mo, Jianjun Li, Jinxiu Fang

Oct, 21 (Tuesday) 10:30～

Room A — Rolling-4

T-A1 Yong-Hoon Moon

10:30~10:50
Damage prediction using several types of macro-scale damage models in different cold wire production lines
Trong-Son Cao, Pierre Montmitonnet, Pierre-Olivier Bouchard, Christian Bobadilla, Christophe Vachey

10:50~11:10
T-bar rolling process with universal and edger mills
Yukio Takashima, Naoki Nakata

11:10~11:30
Quantitative study on Mannesmann effect in roll piercing of hollow shaft
Man-soo Joun, Jangho Lee , Jae-min Cho, Seung-won Jeong, Ho-keun Moon

11:30~11:50
Effects of microalloying with lanthanum on recrystallization of cold rolled pure copper
Yan Chen, Shi-Hong Zhang, Ming Cheng, Hongwu Song, Jinsong Liu, Shuangkui Xiong

11:50~12:10
Rolling of AZ31 magnesium alloy strip using induction heating rolls
Ban Cai, Changsheng Li, Jian Zhang, Yanlei Song, Jianjun Zheng

12:10~12:30
Effects of intermediate annealing and cold-rolling on recrystallization texture in 1050 aluminum
Atsushi Yamamoto, Takuya Kajiura, Masaaki Tsukamoto, Daisuke Okai

Room B — Tribology-4

T-B1 Niels Bay, Kazuhiko Kitamura, Ryo Matsumoto

10:30~10:50
Improvement of formability in ironing of stainless steel drawn cups using low friction cermet dies
Yohei Abe, Tomohiro Fujita, Ken-ichiro Mori, Kozo Osakada, Takashi Shiba, Witthaya Daodon

10:50~11:10
Surface morphology of micro stepped components in micro cross wedge rolling
Dongbin Wei, Haina Lu, Zhengyi Jiang, Kenichi Manabe

11:10~11:30
Tribological characterization of boron nitride films against pure-titanium for microforming die application
Yong Jin, Shigeo Yasuhara, Tetsuhide Shimizu, Ming Yang

11:30~11:50
Friction effects during open-die micro-forging/extrusion processes: an upper bound approach
Ehsan Ghassemali, Ming-Jen Tan, Chua Beng Wah, Samuel C.V. Lim, Anders E.W. Jarfors

11:50~12:10
Analytical prediction of roughness after ball burnishing of thermally coated surfaces
Lars Hiegemann, Christian Weddeling, Nooman Ben Khalifa, A. Erman, Tekkaya

12:10~12:30
Estimation of roles of matrix and NbC particles dispersed in surface layer of tool by PTA welding
Yoshifumi Higashigawa, Taishi Kohara, Masaki Morita, Masayoshi Akiyama

Room C — Forging-4

T-C1 Taylan Altan

10:30~10:50
JSTP International Prize lecture
Software and hardware approaches for forming processes: Finite element method and new processes
Ken-ichiro Mori

10:50~11:10
Forging force analysis of truck knuckle and selection of forging equipment
Zeng Qi, Jiang Peng, Ren Xueping

11:10~11:30
Hot deformation behavior of Fe-Mn-Al light-weight steel
Fu-qiang Yang, Ren-bo Song, Lei-feng Zhang, Chao Zhao

11:30~11:50
Formation and mechanical properties of bimodal microstructures in 0.2% carbon steel by heavy-reduction hot/warm compression
Hyung-Won Park, Jun Yanagimoto

11:50~12:10
3D preform design in forging process based on quasi-quipotential field and response surface methods
Yanjin Guan, Xue Bai, Mujuan Liu, Guoqun Zhao

12:10~12:30
Prediction of surface crack in hot forging by numerical simulation
Hideki Kakimoto, Takefumi Arikawa

Room D — Material-4

T-D1 Jean-Loup Chenot

10:30~10:50
Numerical simulation of the mechanical response during strain path change: application to Zn alloys
Marina Borodachenkova,Wei Wen, Frédéric Barlat, António Pereira, José Grácio

10:50~11:10
Microstructure development and mechanical properties of medium carbon carbide-free bainite steels
Mohamed Soliman, Heinz Palkowski

11:10~11:30
Modelling of uniform micron-sized metal particles production using harmonic mechanical excitation
Jun Luo, Fang Yang, Songyi Zhong, Lehua Qi

11:30~11:50
Prediction of transient hardening after strain path change by a multi-scale crystal plasticity model with anisotropic grain substructure
Philip Eyckens, Albert Van Bael, Jaap Moerman, Henk Vegter, Paul Van Houtte

11:50~12:10
Influence of repeated shear strain on recrystallization of iron sheet
Yuji Hirosawa, Motoki Terano, Masahiko Yoshino

12:10~12:30
Stress-strain response for twinning-induced plasticity steel with temperature
Fei Liu, Weigang Zhang, Wenjiao Dan

Room E — Joining-4

T-E1 Wolfram Volk, Yohei Abe

10:30~10:50
Evolution of microstructure and mechanical properties during friction stir welding of A5083 and A6082
Jae-Hyung Cho, Won-Jae Kim, Chang Gil Lee

10:50~11:10
Influence of joint geometry on micro and macro mechanical properties of friction stir spot welded joints
Gianluca Buffa, Pierluigi Fanelli, Livan Fratini, Francesco Vivio

11:10~11:30
Influence of tool shape on friction stir welded joint of aluminum and steel with circular weld line
Toshiaki Yasui, Hiroki Mizushima, Masami Tsubaki, Tomoyuki Fujita, Masahiro Fukumoto

11:30~11:50
Characterization of mechanical properties in processed friction stir welded high-strength aluminum alloy blanks
Tobias Gnibl, Marion Merklein

11:50~12:10
Hemming for joining high strength steel sheets
Zamzuri Hamedon, Ken-ichiro Mori, Yohei Abe

12:10~12:30
Joining of various kinds of metal plates using ultrasonic vibrations
Genki Nanaumi, Daisuke Mizushima, Naoto Ohtake

Room F — Hot Stamping-4

T-F1 Ken-ichiro Mori Marion Merklein, Paolo Francesco Bariani, Stefania Bruschi, Jun Yanagimoto

10:30~10:50
Non-destructive hardness measurement of hot-stamped high strength steel sheets based on magnetic barkhausen noise
Xiaoyu Luo, Liang Wang, Yilin Wang, Jun Xie, Yisheng Zhang

10:50~11:10
Investigation on mechanical properties distribution on hot stamped part
Ming-dong Huang, Bao-yu Wang, Jing Zhou, Xue-tao Li

11:10~11:30
Hot forming-quenching integrated process with cold-hot dies for 2A12 aluminum alloy sheet
Shi-jian Yuan, Xiao-bo Fan, Zhu-bin He

11:30~11:50
Hot stamping of door impact beam
Ming-Fu Li, Tzu-Shin Chiang, Jiun-Hau Tseng, Chia-Nung Tsai

11:50~12:10
Hot stretch bending and creep forming of titanium alloy profile
Tongsheng Deng, Dongsheng Li, Xiaoqiang Li, Pang Ding, Kai Zhao

12:10~12:30
Effect of pulse current pulse on bending behavior of Ti6Al4V alloy
Xifeng Li, Qiang Zhou, Shuangjun Zhao, Jun Chen

Room G — Sheet Metal-4

T-G1 Manfred Geiger

10:30~10:50
Improvement of formability for multistage deep drawing of Ti-15V-3Cr-3Sn-3Al alloy sheet
Yasunori Harada, Yutaro Maeda, Minoru Ueyama, Izumi Fukuda

10:50~11:10
Analysis of high speed bending operations as basis for integrating self-correcting components to increase process reliability
Ulf Damerow, Mikhail Borzykh, Dmitri Tabakajew, Waldemar Schaermann, Werner Homberg, Ansgar Trächtler

11:10~11:30
Multi-stage stamping including thickening of corners of drawn cup
Yohei Abe, Ken-ichiro Mori, Takumi Ito

11:30~11:50
Forming of ellipse heads of large-scale austenitic stainless steel pressure vessel
Hui Wang, Jie Zhou, Yan Luo, Peng Tang, Youliang Chen

11:50~12:10
Correction of eccentricity between punch and die in slight clearance punching of ultra-high strength steel sheets
Hasnulhadi Jaafar, Ken-ichiro Mori, Yohei Abe

12:10~12:30
Effect of two-layer simple die on braille embossability to boxboard
Norio Takatsuji, Koutarou Shiraishi□ Tetsuo Yanase

Oct, 21 (Tuesday) 14:00～

Room A — Rolling-5
T-A2 — Heinz Palkowski

14:00~14:20
Modelling of AA6082 ductile damage evolution under hot rolling conditions
Michele Francesco Novella, Andrea Ghiotti, Stefania Bruschi, Paolo Francesco Bariani

14:20~14:40
Investigation on forming precision of flexible rolling process for three-dimensional surface parts of different sheet materials
Daming Wang, Mingzhe Li, Zhongyi Cai

14:40~15:00
Straightening technology of round bars using 2-roll rotary straightener
Masakazu Kato, Atsushi Hasegawa, Shoji Sugyo, Hiroshi Nakamura, Masanori Kobayashi, Yoshio Morimoto

15:00~15:20
Residual stress around cut end of hat steel channel by roll forming
Siti Nadiah binti Mohd Saffe, Takuo Nagamachi, Hiroshi Ona

15:20~15:40
Flange wrinkling in flexible roll forming process
Mohammad Mehdi Kasaei, Hassan Moslemi Naeini, Behnam Abbaszadeh, Mehran Mohammadi, Mojtaba Ghodsi, Manabu Kiuchi, Reza Zolghadr, Gholamhosein Liaghat, Rohollah Azizi Tafti, Mehdi Salmani Tehrani

15:40~16:00
Numerical simulation and parameters analysis for roll forming of martensitic steel MS980
Wen.Kang, Yixi.Zhao, Wangwei.Yu, Shanshuai.Wang, Yuefeng.Ma, Peijie.Yan

16:00~16:20
Deriving position of bending roll in roll bending of titanium alloy wire for glasses frame
Yoshinori Sasaki, Masaaki Otsu, Masami Matsumura, Kazuyuki Morishita, Taiki Tanaka, Hideki Yagi, Yuichiro Sekine, Motoo Asakawa

16:20~16:40
Influence of reduction distribution on internal defects during cross-wedge-rolling process
Guihua Liu, Zhiping Zhong, Zhi Shen

Room B — Tribology-5
T-B2 — N. Bay, K.Kitamura, R. Matsumoto

14:00~14:20
Surface improvement of coining dies with DLC films
Hideaki Mori, Yukikazu Shibata,Shyunji Araki, Tadahiko Imanara, Katsumi Sakamoto, Yoshinori Yama

14:20~14:40
Surface modification of cold-working die steel by electron beam irradiation – formation of cemented carbide composite layer –
Takahiro Akao, Yuki Sakurai1, Tetsuhiko Onda, Kazutake Uehara, Zhong-Chun Chen

14:40~15:00
Surface integrity of tool steels multi-cut by wire electrical discharge machining
Chuanliang Cao, Xianglin Zhang, Xiang Zha, Chunfa Dong

15:00~15:20
Increasing of service times of nitrided and CrN coated dies for Al hot extrusion
Milan Terčelj, Peter Panjan, Peter Cvahte, Peter Fajfar, Goran Kugler

15:20~15:40
Initiation of sticking during hot rolling of stainless steel plate
André Dubois, Emilie Luc, Mirentxu Dubar, Laurent Dubar, Céline Thibaut, Jean-Michel Damasse

15:40~16:00
Warm and hot upsetting sliding test: tribology of metal processes at high temperature
André Dubois, Mirentxu Dubar, Laurent Dubar

16:00~16:20
Estimation of frictional property of lubricants for hot forging of steel using low-speed ring compression test
Kazuhito Asai, Kazuhiko Kitamura

16:20~16:40
Sliding characteristics in hot working tool steel at high pressure
Norio Takatsuji, Yoshiki Kakutani, Tetsuo Aida, Satoshi Murakami, Jin Shinmura, Hiroaki Matsui

Room C — Forging-5
T-C2 — Rong-Shean Lee

14:00~14:20
Influence of anvil shape of surface crack generation in large hot forging process
Takefumi Arikawa, Daisuke Yamabe, Hideki Kakimoto

14:20~14:40
Mathematical modeling of critical condition for dynamic recrystallization
Fei Chen, Guowei Feng, Zhenshan Cui

14:40~15:00
Modeling of heat transfer coefficient of oxide scale in hot forging
Nobuki Yukawa, Yoshihiro Nakashima, Takahiro Ishiguro, Eiji Abe, Takashi Ishikawa, Takashi Choda

15:00~15:20
Model of curvature of crankshaft blank during the heat treatment after forging
Andrzej Milenin, Tomasz Rec, Wojciech Walczyk, Maciej Pietrzyk

15:20~15:40
Improvement of part or tooling life prediction through simulation of whole manufacturing process
Richard Ducloux

15:40~16:00
Development of precise load prediction system for free forging of Ni-based superalloy having softening
Shingo Sakurai, Takuma Okajima, Masanao Fujiwara, Takuji Otake, Takashi Ishikawa

16:00~16:20
Influence of geometrical ratios in forgeability of complex shapes during hot forging of Ti-6Al-4V titanium alloy
Antonino Ducato, Gianluca Buffa, Livan Fratini, Rajiv Shivpuri

16:20~16:40
Microstructure control in local loading forming of large-scale complex titanium alloy component
XiaoGuang Fan, He Yang, PengFei Gao

Room D — Material-5
T-D2 — François J.T. Bay

14:00~14:20
Cold formability of 22SiMnCrB TRIP-aided martensitic sheet steel
Junya Kobayashi, Hiroki Tonegawa, Koh-ichi Sugimoto

14:20~14:40
Plane strain compression test and simple shear test of single crystal pure iron
Shintaro Yabe, Motoki Terano, Masahiko Yoshino

14:40~15:00
Application of gradient crystal plasticity model to the numerical analysis of metal part of nanoporous metal - polymer composites
Natalia Konchakova, Swantje Bargmann

15:00~15:20
Plastic micromechanical response of 2D cross ply magnesium matrix composites
Jiming Zhou, Zhe Chen, Lehua Qi

15:20~15:40
Construction of statistically similar representative volume elements – comparative study regarding different statistical descriptors
Lisa Scheunemann, Jörg Schröder, Daniel Balzani, Dominik Brands

15:40~16:00
Microstructure based description of deformation behavior of dual phase steel sheets
Thipwipa Sirinakorn, Vitoon Uthaisangsuk, Sompong Srimanosawapal

16:00~16:20
Influence of mesostructure for deformation characteristics and formability in Dual Phase steels
Ryoji Kishi, Keiko Natori, Yoshihiko Arao, Tatsuya Tanaka

16:20~16:40
Prediction of DP600 flow surfaces at various strain-rates using Yld2004-18p yield function
Amir Hassannejadasl, Taamjeed Rahmaan, Daniel E. Green, Sergey F. Golovashchenko, Michael J. Worswick

16:40~17:00
Uniaxial tension simulation using real microstructure-based representative volume elements model of dual phase steel plate
Sheng Huang, ChunFeng He, Yixi Zhao, Shuhui Li, Zhongqi Yu, Liang Dong

Room E — Joining-5
T-E2 — Wolfram Volk, Yohei Abe

14:00~14:20
Thermal-mechanical analysis of ultrasonic spot welding considering acoustic softening effect
Kunkun Chen, Yansong Zhang

14:20~14:40
Adhesive–embossing hybrid joining process to fiber-reinforced thermosetting plastic and metallic thin sheets
Zhequn Huang, Sumio Sugiyama, Jun Yanagimoto

14:40~15:00
Vaporizing foil actuator: a versatile tool for high energy-rate metal working
Anupam Vivek, Glenn S. Daehn

15:00~15:20
Electromagnetic linked micro part processing
Bernd Kuhfuss, Christian Schenck, Philipp Wilhelmi, Lasse Langstädtler

15:20~15:40
Numerical and experimental analysis of resistance projection welding of square nuts to sheets
Chris Valentin Nielsen, Wenqi Zhang, Paulo Antonio Firme Martins, Niels Bay

15:40~16:00
Influence of diffusion mechanisms in aluminium solid-state welding processes
Daniel R Cooper, Julian M Allwood

16:00~16:20
Deformation properties and bending/diffusion bonding processing of a P/M Ti-22Al-25Nb alloy at elevated temperature
Kaifeng Zhang, Yuanxin Wang, Jianbo Jia, Baoyong Li

16:20~16:40
Nanoporous nickel fabricated by dealloying of rolled Ni-Mn sheet
Masataka Hakamada, Mamoru Mabuchi

Room F — Drawing-1
T-F2 — Kuldeep Agarwal

14:00~14:20
Recovery effect in drawing of steel bar for sizing
Alexey Korchunov, Gennadiy Gun, Marina Polyakova

14:20~14:40
Manufacturing of medium carbon steel wires with improved spheroidization by non-circular drawing sequence
Ho Seon Joo, Sun Kwang Hwang, Hyun Moo Baek, Yong-Taek Im, Il-Heon Son, Chul Min Bae

14:40~15:00
Optimum die design for single pass steel tube drawing with large strain deformation
Jinn-Jong Sheu, Su-Yi Lin, Cheng-Hsien Yu

15:00~15:20
Deformation profile in rotary laser dieless drawing process for metal microtubes
Tsuyoshi Furushima, Yusuke Imagawa, Shusaku Furusawa, Ken-ichi Manabe

15:20~15:40
Improvement of ductility of aluminum wire for automotive wiring harness by alternate drawing
Kazunari Yoshida, Kota Doi

15:40~16:00
Structural evolution of thin lamellar cementite during cold drawing of eutectoid steels
Gregory Gerstein, Florian Nürnberger, Włodzimierz Dudzinski, Dominika Grygier, Mirko Schaper, Andrzej Milenin

Room G — Sheet Metal-5
T-G2 — Miklós Tisza

14:00~14:20
Effect of thermoplastic binder on flow deformation behavior of wood
Masako Seki, Tsunehisa Miki, Soichi Tanaka, Ichinori Shigematsu, Kozo Kanayama

14:20~14:40
Change of hardness of copper sheet by spliting process
Akira Kurumada, Goroh Itoh, Masamichi Sugita, Takaaki Sakuma, Masakatsu Seki

14:40~15:00
Numerical simulation of stress peen forming with regular indentation
Xudong Xiao, Yongjun Wang, Wei Zhang, Junbiao Wang, Shengmin Wei

15:00~15:20
Deep drawing characteristics of square cups through conical dies
Mohsen Hassan, Labib Hezam, Mohamed El-Sebaie, Judha Purbolaksono

15:20~15:40
Formability of pure titanium sheet in square cup deep drawing
Yasunori Harada, Minoru Ueyama

15:40~16:00
Analysis of earring in circular-shell deep-drawing of bcc and hcp sheet metals
Tetsuro Ohwue, Yoshikazu Kobayashi

16:00~16:20
Deep drawing with high-pressured water jet using ditch-engraved die
Yuki Horikoshi , Takashi. Kuboki, Makoto Murata, Kazumi Matsui, Makoto Tsubokura

16:20~16:40
Elliptical redrawing from circular and elliptical cups
Heng-Sheng Lin, Jian-Min He

Oct, 22 (Wednesday) 10:30～

Room A — Rolling-6 W-A1 — Maciej Pietrzyk	Room B — Casting-1 W-B1 — He Yang	Room C — Forging-6 W-C1 — Kazuyoshi Kondo	Room D — Material-6 W-D1 — Xinyun Wang	Room E — FEM-1 W-E1 — Nobuki Yukawa, Kunio Hayakawa, Takayuki Hama	Room F — Tube Forming-1 W-F1 — Shijian Yuan, Tomoyoshi Maeno	Room G — Sheet Metal-6 W-G1 — Omer Music
10:30~10:50 Effects of initial forming temperature on primary alpha evolution during radial-axial ring rolling for TA15 titanium alloy Shuai Zhu, He Yang, Lianggang Guo, Weijia Di	10:30~10:50 Characterization of initial structures, texture and precipitates in strip-cast 3wt%Si steel sheet Yang Wang, Yunbo Xu, Yuanxiang Zhang, Zuyi He, Songjian Fu, Yongmei Yu, Guodong Wang	10:30~10:50 JSTP International Prize lecture The Mystery of Plastic Deformation A. Erman Tekkaya	10:30~10:50 Two-scale modeling of DP steel incorporating distributed properties inside micro-constituents Jörg Schröder, Ashutosh Gandhi, Daniel Balzani	10:30~11:10 Keynote Recent and future developments in finite element metal forming simulation Jean-Loup Chenot	10:30~10:50 Keynote Fundanmentals and development of hydroforming of light alloy tubes and complex components Shijian Yuan	10:30~10:50 Deep drawing with superimposed low-frequency vibrations on servo-screw presses Sebastian. Kriechenbauer, Reinhard. Mauermann, Peter. Muller
10:50~11:10 Comparison of semi-empirical and dislocation density basedmaterial equations for fast modelingof multistage hot working of steel Johannes Lohmar, Markus Bambach, Gerhard Hirt	10:50~11:10 Twin-Roll-Casting and hot rolling of magnesium alloy WE43 Kristina Neh, Madlen Ullmann, Rudolf Kawalla	10:50~11:10 Room-temperature multi-directional forging of AZ80Mg alloy to induce ultrafine grained structure and specific mechanical properties Hiromi Miura, Wataru Nakamura, Masakazu Kobayashi	10:50~11:10 Computer simulation of micro rebound hardness test Seijiro Maki, Takashi Yamamoto		10:50~11:10 Thermal influences during rotary draw bending of tubes from stainless steel Rainer Steinheimer, Bernd Engel	10:50~11:10 Deformation-induced martensitic transformation and workhardening of type 304 stainless steel sheet during draw-bending Eiichiro Ishimaru, Hiroshi Hamasaki, Fusahito Yoshida
11:10~11:30 Quantitative design methodology for flat ring rolling process Wujiao Xu, Qiaoli Wang, Xue Zhou, Xiaobing Yang	11:10~11:30 Metadynamic recrystallization kinetics of twin roll cast AZ31 alloy during hot deformation Madlen Ullmann, Matthias Schmidtchen, Marcel Graf, Rudolf Kawalla	11:10~11:30 Forging of Al-Mg compounds and characterization of interface Carolin Binotsch, Daniela Nickel, Andreas Feuerhack, Birgit Awiszus	11:10~11:30 Measurement of local strain path and identification of ductile damage limit based on simple tensile test Ninshu Ma, Kenji Takada, Kentaro Sato	11:10~11:30 FEM/BEM simulation of cold forging process considering press-tool-workpiece interaction Fabian Schongen, Fritz Klocke, Patrick Mattfeld, Sergej Rjasanow, Richards Grzhibovskis	11:10~11:30 Modelling of wrinkling in NC bending of thin-walled tubes with large diameters under multi-die constraints using hybrid method Nan Liu, He Yang, Heng Li, M. Zhan, Zhijun Tao, Xiao Hu	11:10~11:30 Improvement in prediction accuracy by finite element methods of stretch-formed aluminum alloy sheets with a large aspect ratio Sousuke Sasaki, Akira Kono, Susumu Takahashi
11:30~11:50 Effects of key simulation parameters on conical ring rolling process Wen Meng, Guoqun Zhao	11:30~11:50 Sandwich rolling of twin-roll cast aluminium-steel clad strips Mykhailo Stolbchenko, Olexandr Grydin, Florian Nuernberger, Andrii Samsonenko, Mirko Schaper	11:30~11:50 Quantitative analysis on contribution of extension twinning to plastic deformation of Mg alloy by in-situ tracking on grains orientation Guang-Sheng Song, Qiang-Qiang Chen, Shi-Hong Zhang, Yong Xu	11:30~11:50 Measurement of local plastic deformation in aluminum alloy by means of X-ray 3D imaging technique Masakazu Kobayashi, Yuuki Kawamura, Soutaro Ueno, Hiroyuki Toda, Hiromi Miura	11:30~11:50 Optimisation of size-controllable centroidal voronoi tessellation for FEM simulation of micro forming processes Liang Luo, Zhengyi Jiang, Haina Lu, Dongbin Wei, Kezhi Linghu, Xianming Zhao, Di Wu	11:30~11:50 Twist springback of asymmetric thin-walled tube in mandrel rotary draw bending process Xin Xue, Juan Liao, Gabriela Vincze, Jose Gracio	11:30~11:50 Effect of pre-bulging on wrinkling of curved surface part by hydromechanical deep drawing Wei Liu, Yongchao Xu, Shijian Yuan
11:50~12:10 Influence of feed rate on damage development in hot ring rolling Chao Wang, Ton van den Boogaard, Edin Omerspahic, Viktor Recina, Bert Geijselaers	11:50~12:10 Effect of casting parameters on roll separation force during twin roll casting Yun-Soo Lee, Hyoung-Wook Kim, Jae-Hyung Cho	11:50~12:10 Influence of initial state on forgeability and microstructure development of magnesium alloys Marcel Graf, Madlen Ullmann, Rudolf Kawalla	11:50~12:10 Measurement of material properties of steel sheets using laser ultrasonic technology Mitsuhiko Sano, Kazuhiro Ohara, Naoki Shimoda, Masashi Tsugeno	11:50~12:10 Effect of forming speed in precision forging process evaluated using CAE technology and high performance servo-press machine Soo-young Kim, Kaoru Tsuruoka, Tadashi Yamamoto	11:50~12:10 Stretch press bending of AZ31 magnesium alloy extruded square tube Osamu Hasegawa, Ken-ichi Manabe, Tsutomu Murai	11:50~12:10 Observations of cyclic deformation behaviors of aluminum sheet and constitutive modeling Takeshi Uemori, Satoshi, Sumikawa, Tetsuo Naka, Fusahito Yoshida
12:10~12:30 Formability estimation of ring rolling process by using deformation processing map Tae-Dong Kil, Jin-Mo Lee, Young-Hoon Moon	12:10~12:30 Deformation behavior of high-manganese TWIP steels produced by twin-roll strip casting Markus Daamen, Wiebke Nessen, Philipp T. Pinard, Silvia Richter, Alexander Schwedt, Gerhard Hirt	12:10~12:30 Prediction of folding defect in transitional region during local loading forming of titanium alloy large-scale rib-web component Pengfei Gao, He Yang, Xiaoguang Fan, Penghui Lei, Miao Meng	12:10~12:30 Effects of hydrogen on softening mechanism of Ti-45Al-5Nb-0.8Mo-0.3Y alloy deformed at high temperatures Yingying Zong, Daosheng Wen, Wenchen Xu, Danmei Yang, Debin Shan, Zuyan Liu	12:10~12:30 Electro-thermo-mechanical finite element analysis on DC pulse resistance pressure sintering process of zirconia part Yoshihiro Kubota, Kunio Hayakawa, Takumi Okada, Shigekazu Tanaka, Tamotsu Nakamura	12:10~12:30 Tube shear hydro-bending of titanium alloys Cong Han, Yong Wang, Yongchao Xu, Shijian Yuan	12:10~12:30 Properties and application of high-manganese TWIP-steels in sheet metal forming Christian Busch, Bernd Arno Behrens, Anas Bouguecha, Milan Vucetic, Christian Bonk, Stefan Huinink, Ansgar Hatscher, Manuel Otto

Oct, 22 (Wednesday) 14:00～

Room A — Rolling-7 W-A2 Alexander Pesin	Room B — Casting-2 W-B2 Chung Gil Kang	Room C — Forging-7 W-C2 Zhen Zhao	Room D — Incremental-1 W-D2 Dong-Yol Yang, Masaaki Otsu	Room E — FEM-2 W-E2 Nobuki Yukawa, Kunio Hayakawa, Takayuki Hama	Room F — Tube Forming-2 W-F2 Shijian Yuan, Tomoyoshi Maeno	Room G — Sheet Metal-7 W-G2 Yeong-Maw Hwang
14:00~14:20 Use of image processing to evaluate radial-axial rolled rings Tobias Husmann, Horst Meier	14:00~14:20 Modelling and simulation of die casting process for A356 semi-solid alloy Jinlong Fu, Kaikun Wang	14:00~14:20 Multi-objective optimization of process parameters for 7050 aluminum alloy rib-web forgings' precise forming based on Taguchi method Jiansheng Zhang, Daoxiang Wu, Jie Zhou, Jing Wang	14:00~14:40 Keynote Incremental forming as a Competitive 3D Printing Technology Dong-Yol Yang	14:00~14:20 Finite element simulation of multi material metal forming Jean-Loup Chenot, Christine Béraudo, Marc Bernacki, Lionel Fourment	14:00~14:20 Strength and formability designs of tube-hydroformed automotive front sub-frame Sin-Liang Lin, Bo-Hao Huang, Fuh-Kuo Chen	14:00~14:20 Effect of mesh size on calculation of strain non-uniformity index in drawn sheet metal parts Prashant P. Date
14:20~14:40 On the origin of specimen: load-adapted integral sheet metal products Wolfram Schmitt, Manuel Neuwirth, Felix Kretz, Peter Groche	14:20~14:40 Refinement of cast Cr-V-Mo steel by using recrystallization and partial melting method and post heat treatments Yi Meng, Sumio Sugiyama, Jun Yanagimoto	14:20~14:40 Deformation behavior in die forging of aluminum foam sandwich Isao Takekoshi, Yuji Kume, Makoto Kobashi, Naoyuki Kanetake		14:20~14:40 Effects of anisotropic yield functions on the accuracy of forming simulations of hole expansion Eiji Iizuka, Kazuma Hashimoto, Tshihiko Kuwabara	14:20~14:40 Application of pulsating hydroforming in manufacture of engine cradle of austenitic stainless steel Yong Xu, Shihong Zhang, Ming Cheng, Hongwu Song, Xiaosong Zhang	14:20~14:40 Energy absorption performance of press-formed shell Zubair Bin Khalil, Minoru Yamashita, Yusuke Kuno, Toshio Hattori
14:40~15:00 Three-dimensional complex tooth profile generated by surface rolling of sintered steel helical gears using special CNC form rolling machine Hiroshi Sasaki, Toshinaka Shinbutsu, Shuichi Amano, Teruie Takemasu, Shin-ichiro Sugimoto, Takao Koide, Satoshi Nishida	14:40~15:00 Tensile properties of 2D-Cf/Mg composite fabricated by liquid-solid extrusion following vacuum pressure infiltration Lehua Qi, Luyan Ju, Jiming Zhou	14:40~15:00 A method of forming oblique rings Andrzej Rosochowski, Malgorzata Rosochowska, Lech Olejnik	14:40~15:00 Influence of geometrical parameters, wall angle and part shape on thickness reduction of single point incremental forming Valentin Oleksik	14:40~15:00 Modeling mechanical properties of 21-Cr ferritic stainless steel with variation of stress ratio Hanyong Jung, Yangjin Chung, Myoung-gyu Lee, Kichul Park, Jaebok Nam	14:40~15:00 Bursting prediction of hydroforming aluminium alloy tube based on Gurson-Tvergaard-Needleman damage model Buang Teng, Weinian Wang, Yinquan Liu, Shijian Yuan	14:40~15:00 A novel technology to eliminate U-bending springback of high strength steel sheet by using additional bending with counter punch Komgrit Lawanwomg, Hiroshi Hamasaki, Ryutaro Hino, Fusahito Yoshida
15:00~15:20 Analysis of cross wedge rolling of spiral shaft parts Peng Wengfei, Yu Wenjing, Jiao Sijia, Shu Xuedao, Sun Baoshou, Liu Yuzhen, Zhan Lihua	15:00~15:20 Development and experimental research of aluminium alloy droplet generator based on mechanical vibration Songyi Zhong, Lehua Qi, Yong Tang, Jun Luo	15:00~15:20 Development of coiled springs with high rectangular ratio in cross-section Tsubasa Tsubouchi, Kazuhito Takahashi, Takashi Kuboki	15:00~15:20 Tool dynamics during single point incremental forming process Oscar Martínez-Romero, María Luisa García-Romeu, Daniel Olvera-Trejo, Isabel Bagudanch, Alex Elías-Zúñiga	15:00~15:20 Finite element simulation of multi-gripper flexible stretch forming You Wang, Mingzhe Li , Hongwei Liu, Jian Xing	15:00~15:20 Large-expansion hydroforming technology achieving three-times expanding Manabu Wada, Masaaki Mizumura, Keinosuke Iguchi, Hiromitsu Kaneda	15:00~15:20 Effect of punch speed on amount of springback in U-bending process of auto-body steel sheets Min Kuk Choi, Hoon Huh
15:20~15:40 Metal flow in rotary splitting of circular disk Ken-ichi Kawai, Satoshi Chaki, Yoshihiro Takayama, Yusuke Saito, Kazuhiro Ouchi, Yutaka Morishita	15:20~15:40 Surface roughness and size effect in dendrite arm spacing at preforms of AISI 304 (1.4301) generated by laser rod end melting Heiko Brüning, Marcel Teepe, Frank Vollertsen	15:20~15:40 Preparation of wood plastic composite sheets by lateral extrusion of solid woods using their fluidity Tsunehisa Miki, Masako Seki, Soichi Tanaka, Nobuo Sobue, Ichinori Shigematsu, Kozo Kanayama	15:20~15:40 Identifying polymeric constitutive equations for incremental sheet forming modelling Isabel Bagudanch, Oscar Martínez-Romero, Alex Elías-Zúñiga, Maria Luisa Garcia-Romeu	15:20~15:40 Comparison of analytical models for sheet rolling Christopher J. Cawthorn, Evripides G. Loukaides, Julian M. Allwood	15:20~15:40 Analytical and numerical modeling of thick tube hydroforging Bandar Alzahrani, Gracious Ngaile	15:20~15:40 Bauschinger effect during unloading of cold-rolled copper alloy sheet and its influence on springback deformation after U-bending Hiroshi Hamasaki, Yasuhiro Hattori, Kingo Furukawa, Fusahito Yoshida
15:40~16:00 Effect of surface rolling on load bearing capacity of pre-alloyed sintered steel gears with different densities Teruie Takemasu, Takao Koide, Toshinaka Shinbutsu, Hiroshi Sasaki, Yoshinobu Takeda, Satoshi Nishida	15:40~16:00 Dieless forming of carbon fibre reinforced plastic parts using 3D printer Ken-ichiro Mori, Tomoyoshi Maeno, Yuki Nakagawa	15:40~16:00 Development of bioactivity and pull-out torque control technology on Ti implant surface and its application for cold thread rolled bone screw Yoshinori Yoshida, Kensuke Kuroda, Ryoichi Ichino, Norishige Hayashi, Naofumi Ogihara, Yoshio Nonaka	15:40~16:00 Complex incremental sheet forming using back die support on aluminium 2024, 5083 and 7075 alloys Nagarajan Devarajan, Giribaskar Sivaswamy, Rahul Bhattacharya, David P Heck, Muhammad Amir Siddiq	15:40~16:00 Multi-objective optimization of die geometry in ingot forging Peter Christiansen, Paulo António Firme Martins, Niels Bay, Jesper Henri Hattel	15:40~16:00 Process parameter with high expansion rate of SUS304 tube hydroforming Yi-Chun Chen, Chih-Yu Chuang, Ming-Fu Lee	15:40~16:00 Springback analysis of high strength dual-phase steels Miklós Tisza, Zsolt Lukács

Oct, 22 (Wednesday) 16:30～

Room A — Powder-1
W-A3 Tatsuhiko Aizawa

16:30~16:50
Effect of powder shape and size on mechanical properties of Al thin plate formed by compression shearing method at room temperature
Noboru Nakayama, Masaomi Horita, Shota Sakagami, Hiroyuki Miki, Takamichi Miyazaki, Hiroyuku Takeishi

16:50~17:10
Consolidation of Cr-Cu/Cu powder laminated material by compressive torsion processing
Wataru Kimura, Yuji Kume, Makoto Kobashi, Naoyuki Kanetake

17:10~17:30
Densification behavior of different metal powders by compression and shear combined loading
Suguru Kondo, Yuji Kume, Makoto Kobashi, Naoyuki Kanetake

17:30~17:50
Finite element simulation of powder compaction via shock consolidation using gas-gun system
Wooyeol Kim, Dong-Hyun Ahn, Lee Ju Park, Hyoung Seop Kim

17:50~18:10
Injection molding using only 200 ° C steamed bamboo powder by controlling metal mold temperature
Shohei Kajikawa, Takashi Iizuka

18:10~18:30
Effect of process parameters on microstructure of TiAl alloy produced by electron beam selective melting
Wenjun Ge, Chao Guo, Feng Lin

18:30~18:50
Development and thermo-physical characterization of polymers/metallic powder mixtures for MIM application
Paul Tourneroche, Jean-Claude Gelin, Mohamed. Sahli, Thierry Barrière

Room B — FRP-1
W-B3 Frank-Thomas B. Vollertsen

16:30~16:50
Combination of carbon fibre sheet moulding compound and prepreg compression moulding in aerospace industry
Jens Wulfsberg, Axel Herrmann, Gerhard Ziegmann, Georg Lonsdorfer, Nicole Stöß, Marc Fette

16:50~17:10
Forming sheets of metal and fibre-reinforced plastics to hybrid parts in one deep drawing process
Bernd-Arno Behrens, Sven Hübner, André Neumann

17:10~17:30
Fiber deformation behavior during press forming of rectangle cup by using plane weave carbon fiber reinforced thermoplastic sheet
Shoji Hineno, Takeshi Yoneyama, Daichi Tatsuno, Masaki Kimura, Keisuke Shiozaki, Takashi Moriyasu, Masayuki Okamoto, Shigenori Nagashima

17:30~17:50
Isothermal forming of CFRTP sheet by penetration of hemispherical punch
Sachihiro Isogawa, Hidenori Aoki, Mashiro Tejima

17:50~18:10
Effect of process parameters on epoxy flow behavior and formability with CR340/CFRP composites by different laminating in deep drawing process
Min-Sik Lee, Sung-Jin Kim, Ok-Dong Lim, Chung-Gil Kang

18:10~18:30
Cold and warm V-bending test for carbon-fiber-reinforced plastic sheet
Yu Uriya, Katsuyoshi Ikeuchi, Jun Yanagimoto

Room C — Extrusion-1
W-C3 Wojciech Z. Misiolek

16:30~16:50
Microstructure evolution of friction boundary layer during extrusion of AA 6060
Vidal Sanabria, Soeren Mueller, Walter Reimers

16:50~17:10
Modeling of extrusion texture of AZ31 magnesium alloy with consideration of dynamic recrystallization
Yichuan Shao, Tao Tang, Weiqing Tang, Dayong Li

17:10~17:30
Microstructures and properties of extruded Al-0.6Mg-0.6Si aluminium alloy for high-speed vehicle
Shanglei Yang, Dongmei Zhang, Wenhai Tuo, Zhishui Yu

17:30~17:50
Approach for predicting formation of fine grain layers in metal forming
Sergei Alexandrov, Daria Grabko, Nguyen Minh Tuan

17:50~18:10
Effect of extrusion temperatures on microstructures and mechanical properties of Mg-3Zn-0.2Ca-0.5Y alloy
Cheng-jie Li, Hong-fei Sun, Wen-bin Fang

18:10~18:30
Extrusion behavior and thermoelectric properties of Bi2Te2.85Se0.15 thermoelectric materials
Zhi-Lei Wang, Kenji Matsuoka, Takehiro Araki, Takahiro Akao, Tetsuhiko Onda, Zhong-Chun Chen

Room D — Incremental-2
W-D3 Dong-Yol Yang, Masaaki Otsu

16:30~16:50
A new process design for performing hole-flanging operations by incremental sheet forming
Markus Bambach, Holger Voswinckel, Gerhard Hirt

16:50~17:10
New processing technologies of incremental sheet metal forming
Sebastian Härtel, Birgit Awiszus

17:10~17:30
Friction stir incremental forming of A2017 aluminum sheets
Masaaki Otsu, Mitsuteru Yasunaga, Mitsuhiro Matsuda, Kazuki Takashima

17:30~17:50
A comparative study on process potentials for frictional stir- and electric hot-assisted incremental sheet forming
Dongkai Xu, Bin Lu, Tingting Cao, Jun Chen, Hui Long, Jian Cao

17:50~18:10
Incremental forming with local heating by laser irradiation for magnesium alloy sheet
Ryutaro Hino, Keita Kawabata, Fusahito Yoshida

18:10~18:30
Rotary swaging forming process of tube workpieces
Qi Zhang, Kaiqiang Jin, Dong mu, Pengju Ma, Jie Tian

Room E — FEM-3
W-E3 Nobuki Yukawa, Kunio Hayakawa, Takayuki Hama

16:30~16:50
Finite element method analysis of micro cross wedge rolling of metals
Zhengyi Jiang, Haina Lu, Dongbin Wei, K.Z. Linghu, Xianming Zhao, Xiaoming Zhang, Di Wu

16:50~17:10
Finite element modeling of shear strain in asymmetric and symmetric rolling in multi roll calibers
Alexander Pesin, Mikhail Chukin, Aleksey Korchunov, Denis Pustovoytov

17:10~17:30
Finite element analysis model of rotary forging for assembling wheel hub bearing assembly
Chan-hee Nam, Min-cheol Lee, Jae-gun Eom, Moo-ho Choi, Man-soo Joun

17:30~17:50
Processing optimization for large spherical valve body based on FE simulation
Dongsheng Qian, Huajie Mao, Jiadong Deng, Jinshan Yue

17:50~18:10
Three-dimensional finite element analysis for flying shearing of X100 hot-rolled steel plate
Lingyun Qian, Gang Fang, Pan Zeng

18:10~18:30
Finite element analysis of deep piercing process
Mansoo Joun, Mincheol Kim, Jongho Kim, Wanjin Chung

Room F — Tube Forming-3
W-F3 Shijian Yuan, Tomoyoshi Maeno

16:30~16:50
Improvement of die filling by prevention of temperature drop in gas forming of aluminium alloy tube using air filled into sealed tube and resistance heating
Tomoyoshi Maeno, Ken-ichiro Mori, Chihiro Unou

16:50~17:10
Formability determination of titanium alloy tube for high pressure pneumatic forming at elevated temperature
Gang Liu, YongWu, JieZhao, Kai Wang, Shijian Yuan

17:10~17:30
Hot extrusion of hollow helical tubes of magnesium alloys
Yeong-Maw Hwang, Cheng-Nan Chang

17:30~17:50
Multi-objective optimization of medium frequency induction heating process for large diameter pipe bending
Wang Xun, Zhou Jie, Liang Qiang

17:50~18:10
Assessment of anisotropy of extruded tubes by ring hoop tension test
Christopher P. Dick, Yannis P. Korkolis

18:10~18:30
Development of three-dimensional hot bending and direct quench technology
Naoaki Shimada, Atsushi Tomizawa, Hiroaki Kubota, Hiroshi Mori, Mitsusato Hara, Shinjiro Kuwayama

18:30~18:50
Coupled thermo-mechanical FE simulation of unloading cooling springback in NC heating bending of large diameter thin-walled commercial pure titanium tube
Tao Zhijun, Yang He, Li Heng, Zhang Zhiyong, Chen Zemiao

Room G — Sheet Metal-8
W-G3 Paulo Martins

16:30~16:50
Springback of extruded 2196-T8511 and 2099-T83 Al-Li alloys in stretch bending
Tianjiao Liu, Yongjun Wang, Jianjun Wu, Xiaojiao Xia, Wei Wang, Shunhong Wang

16:50~17:10
U-draw bending of DP780 in non-conventional drawing mode using direct-drive digital servo-press
Omid Majidi, Myoung-Gyu Lee, Frederic Barlat

17:10~17:30
Analytical approach of springback of arced thin plates bending
Tian-xia Zou, Ji-yuan Xin, Da-yong Li, Qiang Ren

17:30~17:50
Springback analysis in air bending process through experiment based artificial neural networks
Özgü Şenol, Volkan Esat, Haluk Darendeliler

17:50~18:10
Springback prediction of high-strength steels in large radius air bending using finite element modeling approach
Vitalii Vorkov, Richard Aerens, Dirk Vandepitte, Joost R. Duflou

18:10~18:30
Numerical study on springback with size effect in micro V-bending
Zhi Fang, Haina Lu, Dongbin Wei, Zhengyi Jiang, Xiangming Zhao, Xiaoming Zhang, Di Wu

Oct, 23 (Thursday) 10:30～

Room A — Micro Forming-1
Th-A1 — Ming Yang

10:30~10:50
Large area micro-texture imprinting onto metallic sheet via CNC stamping
Tatstuhiko Aizawa, Masahiro Tamaki, Tatsuya Fukuda

10:50~11:10
Micrometer-scale imprinting process for ceramic sheet from powder compound material
Fujio Tsumori, Yang Xu, Yuki Tanaka, Toshiko Osada, Hideshi Miura

11:10~11:30
Effect of rubber forming process parameters on micro-patterning of thin metallic plates
Chul Kyu Jin, Min Geun Jeong, Chung Gil Kang

11:30~11:50
Towards mass production by high performance transfer press in micro bulk forming
Rasoul Mahshid, Hans Nørgaard Hansen, Mogens Arentoft

11:50~12:10
Strain rate dependent flow stress characterization using piezo-actuated micropress
Muhammad Taureza, Sylvie Castagne, Tegoeh Tjahjowidodo, Peng Hu

12:10~12:30
Micro deep drawing of C1100 conical-cylindrical cups
Feng Gong, Qiang Chen, Zhi Yang, Dayu Shu, Shun Zhang

Room B — Control-1
Th-B1 — Julian Mark Allwood

10:30~10:50
Support roller control and springback compensation in flexible spinning
James Alexander Polyblank, Julian Mark Allwood

10:50~11:10
Radial-axial force controlled electromagnetic sheet deep drawing: electromagnetic analysis
Zhipeng Lai, Quanliang Cao, Xiaotao Han, Zhongyu Zhou, Qi Xiong, Xiao Zhang, Qi Chen, Liang Li

11:10~11:30
Shear surface control in blanking by adaptronic systems
Andrea Ghiotti, Stefania Bruschi, Paolo Regazzo

11:30~11:50
Development of in-process fuzzy control system for T-shape tube hydroforming
Ken-ichi Manabe, Xu Chen, Dai Kobayashi, Kazuo Tada

11:50~12:10
Forging process control: Influence of key parameters variation on product specifications deviations
Zakaria Alliam, Eric Becker, Cyrille Baudouin, Régis Bigot, Pierre Krumpipe

Room C — Extrusion-2
Th-C1 — HongFei Sun

10:30~10:50
Non-symmetric hollow extrusion of high strength 7075 aluminum alloy
Quang-Cherng Hsu, Yu-Liang Chen, Tsung-Hsien Lee

10:50~11:10
Effect of die design in microchannel tube extrusion
Ding Tang, Wenli Fang, Xiaohui Fan, Dayong Li, Yinghong Peng

11:10~11:30
Tube necking extrusion principle and forming process of trailer rear axle
Chunguo Xu, Guangsheng Ren, Yongqiang Guo, Weiwei Ren, Ya Zhang

11:30~11:50
Formability improvement by die-bearing grooves in tube extrusion with spiral inner projections
Taro Yagita, Takashi Kuboki, Makoto Murata

11:50~12:10
Flow characteristics of brass rod during continuous extrusion
Bing Li, Qi Wei, Jiu-yang Pei, Ying Zhao

12:10~12:30
Recycling of aluminum chips by hot extrusion with subsequent cold extrusion
Matthias Haase, A. Erman Tekkaya

Room D — Incremental-3
Th-D1 — Dong-Yol Yang, Masaaki Otsu

10:30~10:50
2D-simulation of material flow during infeed rotary swaging using finite element method
Eric Moumi, Svetlana Ishkina, Bernd Kuhfuss, Thomas Hochrainer, Adrian Struss, Martin Hunkel

10:50~11:10
Influence of eccentricity on movements of orbital head with double eccentric structure in orbital forging
Wencheng Feng, Wangui Yao, Peng Jiang

11:10~11:30
Microstructure and texture evolutions in AISI 1050 steel by flow forming
Vikram Bedekar, Praveen Pauskar, Rajiv Shivpuri, J. Howe

11:30~11:50
Successive forging of long plate having inclined cross-section
Liyana Tajul, Tomoyoshi Maeno, Ken-ichiro Mori

11:50~12:10
Micro parts processing using laser cutting and ultra-short-pulse laser peen forming
Yoshihiro Sagisaka, Kiyomitsu Yamashita, Wataru Yanagihara, Hiroyasu Ueta

12:10~12:30
Effect of pass-set shape on formability in synchronous multipass spinning
Yoshihiko Sugita, Hirohiko Arai

Room E — Shearing-1
Th-E1 — Livan Fratini

10:30~10:50
Numerical and experimental determination of cut-edge after blanking of thin steel sheet of DP1000 within use of stress based damage model
Bernd-Arno Behrens, Anas Bouguecha, Milan Vucetic, Richard Krimm, Tobias

10:50~11:10
Simulation of stationary crack during blanking using node separation method
Kazutake Komori

11:10~11:30
Finite element simulation of effect of part shape on forming quality in fine-blanking process
Yanxiong Liu, Lin Hua, Huajie Mao, Wei Feng

11:30~11:50
Precision piercing and blanking of ultrahigh-strength steel sheets
Masao Murakawa, Manabu Suzuki, Tomio Shionome, Fumitoshi Komuro, Akira Harai, Akira Matsumoto, Nobuhiro Koga

11:50~12:10
Compressive and shear responses of shaped-sheet pyramidal truss core for reinforced sandwich structure
Sung-Uk Lee, Dong-Hyo Lee, Eun-Ho Lee, Dong-Yol Yang

12:10~12:30
Influence of pre-hole shearing condition on formability in hole expansion utilizing simplified opposite die shearing process
Kohzoh Katoh, Kazuyoshi Kondo, Satoru Nakamura, Tohru Kakita, Tokiyasu Yogoh

Room F — Presses-1
Th-F1 — Kozo Osakada

10:30~10:50
Dimensional synthesis for multi-linkage of high-speed mechanical press
Ye-jian Li, Yu Sun, Shuan-hu Wang

10:50~11:10
Load spectrum testing and analysis for transmission system of closed high-speed press
Hao Chen, Yu Sun, Kai Wu

11:10~11:30
Dynamic characteristics analysis and experimental verification of high-speed precision punch press based on coupled thermal-mechanical model
Fengfeng Hu, Yu Sun, Binbin Peng

11:30~11:50
Thermo-mechanical coupling model and dynamical characteristics of press actuator
Yu Chen, Yu Sun, Wuxue Ding

11:50~12:10
Structural optimization of cylinder-crown integrated hydraulic press with hemispherical hydraulic cylinder
Weiwei Zhang, Xiaosong Wang, Zongren Wang, Shijian Yuan

12:10~12:30
Visualization of forming of 4-Axes direct drive digital servo press
Kazuhiro Ichikawa, Chikara Murata, Tatsuya Takahasi

Room G — Sheet Metal-9
Th-G1 — Werner Homberg

10:30~10:50
Determination of optimal conditions for gas forming of aluminum sheets
Sergey A. Aksenov, Eugene N. Chumachenko, Aleksey V. Kolesnikov, Sergey A. Osipov

10:50~11:10
Design optimization of sheet metal stamped parts by CAE simulation and back-propagation neural network
Suyang Li, Zhongning Guo, Siyuan Cheng, Xiaowei Zhang,Haidong Yanga

11:10~11:30
Variation of lubrication condition during sheet hydroforming
Takayuki Hama, Keisuke Kojima, Yoshihiko Nishimura, Hitoshi Fujimoto, Hirohiko Takuda

11:30~11:50
Blank hydroforming using granular material as medium- investigations on leakage
Martin Grüner, Tobias Gnibl, Marion Merklein

11:50~12:10
Evolution of microstructure and properties of 2196 Al-Li alloy induced by shot peening
Bao Long Sun, Yong Jun Wang, Jing Yi Xiao, Gao Qiong Gao, Ming Jie Qiao, Xu Dong Xiao

12:10~12:30
Flow behaviour of 2024 aluminium alloy sheet during hot tensile and compressive processes
Lei Deng, Ting Zhao, Junsong Jin, Xinyun Wang

Oct, 23 (Thursday) 14:00～

Room A Micro Forming-2 Th-A2 Bernd Engel	Room B Severe Deformation-1 Th-B2 Fabrizio Micari	Room C Extrusion-3 Th-C2 Jianguo Lin	Room D Incremental-4 Th-D2 Dong-Yol Yang, Masaaki Otsu	Room E Shearing-2 Th-E2 Lin Hua	Room F	Room G Sheet Metal-10 Th-G2 Fahrettin Ozturk
14:00~14:20 Formability of micro sheet hydroforming of ultra-fine grained stainless steel Hideki Sato, Ken-ichi Manabe, Daiki Kondo, Dongbin Wei, Zhengyi Jiang	14:00~14:20 Influence of combined process “rolling-pressing” on microstructure and mechanical properties of copper Lezhnev Sergey, Naizabekov Abdrakhman, Panin Evgeniy, Volokitina Irina	14:00~14:20 Analysis of extrusion welding in magnesium alloys – numerical predictions and metallurgical verification Nabeel Alharthi, Sedat Bingöl, Anthony Ventura, Wojciech Misiolek	14:00~14:20 Friction-spinning – Interesting approach to manufacture of complex sheet metal parts and tubes Benjamin Lossen, Werner Homberg	14:00~14:20 Flanging using step die for improving fatigue strength of punched high strength steel sheet Purwo Kadarno, Ken-ichiro Mori, Yohei Abe, Tatsuro Abe		14:00~14:20 Measurement of full-field ductile damage based on resistance method Zhang Saijun, Zhou Chi, Xia Qinxiang, Chen Songmao
14:20~14:40 Templated thermal dewetting process by utilizing nano plastic forming technology Takayuki Ueno, Motoki Terano, Masahiko Yoshino	14:20~14:40 New combined process "pressing-drawing" and impact on properties of deformable aluminum wire Lezhnev Sergey, Naizabekov Abdrakhman, Volokitin Andrey, Volokitina Irina	14:20~14:40 Forming of aluminum foams by using rotating mold Masanori Shiomi, Tomohiro Fukaya	14:20~14:40 Laser-assisted metal spinning of challenging materials Fritz Klocke, Christoph Martin Brummer	14:20~14:40 Measurement of rollover in double-sided shearing using image processing and influence of clearance Masahiro Sasada, Taiki Togashi		14:20~14:40 Sheet stamping formability test system based servo crank press Yanggen Cao, Xuelin Du, Yu Su, Wanpeng Dong, Peiran Deng, Qinchao Ruan
14:40~15:00 Influence of ultrasonic vibration on metal foils surface finishing with micro-forging Yang Bai, Ming Yang	14:40~15:00 Microstructure evolution of carbon steel by hot equal channel angular extrusion Akira Yanagida, Ryo Aoki, Sho Ishikawa, Masataka Kobayashi	14:40~15:00 Influence of processing parameters on molding process in microcellular injection molding Wei Guo, Huajie Mao, Bei Li, Xiangyu Guo	14:40~15:00 Wrinkling failure mechanics in metal spinning Michael Watson, Hui Long	14:40~15:00 Effect of mechanical conditions on cutting characteristics of polycarbonate sheet subjected to straight punch/die shearing Pusit Mitsomwang, Shigeru Nagasawa		14:40~15:00 Influence of axial length and cross-sectional shape on axially compressed aluminum polygonal tube Makoto Miyazaki, Masashi Yamaguchi
15:00~15:20 Experimental and numerical analysis of springback behavior under elevated temperatures in micro bending assisted by resistance heating Qiu Zheng, Tatsuya Aoyama, Tetsuhide Shimizu, Ming Yang	15:00~15:20 Improvement of ductility at room temperature of Mg-3Al-1Zn alloy sheets processed by equal channel angular pressing Joungsik Suh, Jose Victoria-Hernandez, Dietmar Letzig, Ronland Golle, Sangbong Yi, Jan Bohlen, Wolfram Volk		15:00~15:20 Metal flow model of cylindrical parts by counter-roller spinning Gangfeng Xiao, Qinxiang Xia, Xiuquan Cheng, Yujing Zhou	15:00~15:20 Non-uniform fracture in three-stage forming process of sheared protrusion for current collector of molten carbonate fuel cells Chang-Whan Lee, Dong-Yol Yang		15:00~15:20 Propagation behavior of ultrasonic wave around boundary surfaces of workpieces and dies Naoto Hagino, Junichi Endou, Masao Ishihama, Seiji Komiya, Shunji Katoh
15:20~15:40 Blank shape design for sheet metal forming based on geometrical resemblance Chen Yang, Peng Li, Li Xia Fan	15:20~15:40 Microstructures and mechanical properties of Ti-6Al-7Nb processed by high-pressure torsion Maki Ashida, Peng Chen, Hisashi Doi, Yusuke Tsutsumi, Takao Hanawa, Zenji Horita			15:20~15:40 Development of closed extruding fine blanking technology Ming Deng, Yi-long Ma, Lin Lv		15:20~15:40 Determination of biaxial flow stress using frictionless dome test Adam Groseclose, Hyun-Sung Son, Jim Dykeman, Taylan Altan
15:40~16:00 Effect of microshot peening on fatigue life of spring steel SUP9 Yasunori Harada, Syusei Tanaka, Manabu Itoh, Masanori Nakatani						15:40~16:00 Designing gas pressure profiles for AA5083 superplastic forming Firas Jarrar
						16:00~16:20 Microstructure evolution of Ti-6Al-4V during superplastic-like forming Mei-Ling Guo, Jun Liu, Ming-Jen Tan, Beng-Wah Chua