



JSTP International Seminar on Precision Forging (7th ISPF)

9-12 March 2015

Mielparque nagoya, Nagoya, Japan

Seminar Program (detail, tentative)

March 8, 2015

17:00-19:00

Registration

March 9, 2015

9:00-09:30

Registration

9:30-09:45

Opening Ceremony

9:45-10:30

Lecture by 2014 JSTP International Prize Winner-1

Chair: *Prof. Isogawa, S., Daido University*

Utilizing Stress Superposition in Metal Forming

Prof. Tekkaya, A. E., Technische Universität Dortmund

10:30-12:00

Keynote Lectures-1

Chair: *Prof. Yoshida, Y., Gifu University*

10:30-11:00

Residual Stresses and Distortions in Heat Treated Rolled Ring

Prof. Altan, T., Ohio State University

11:00-11:30

Light-Weight Vehicles by Aluminum Application

Dr. Fujikawa, S., Nissan Motor Co., Ltd.

11:30-12:00

Piercing Extrusion for Long Hollow Component

Dr. Murai, E., Nichidai Corp.

12:00-13:00

Lunch

13:00-15:00

Keynote Lectures-2

Chair: *Prof. Kitamura, K., Nagoya Institute of Technology*

13:00-13:30

Influence of Elastic Deformation and Thermal Contraction on Accuracy of Cold Forged Product

Prof. Ishikawa, T., Nagoya University

13:30-14:00

FEM Analysis on Precision Forming of Dissimilar Materials

Dr. Lee, Y. S., Korea Institute of Machinery & Materials

14:00-14:30

Cold Forging Process Using AC Servo Press

Dr. Kawamoto, K., Komatsu Industries Corp.

14:30-15:00

Special Steels for Forging Applications

Dr. Inoue, K., Daido Steel Co., Ltd.

15:00-15:20

Coffee Break

15:20-16:20

Oral Presentations of Young Invited Researchers/Engineers-1

Chair: *Prof. Hayakawa, K., Shizuoka University*

15:20-15:35

A Study of Efficient Fabrication Method of Metal Dot Array Using the Micro Metal Forming by a Polymer Mold

Mr. Potejanasak, P., Tokyo Institute of Technology

15:35-15:50

Study of the Elastic Spring Back Reduction By Means of Finite Elements analysis

- Mr. Alves, J. R., PSL – Research University*
- 15:50-16:05 Enhanced Stretch Formability of Magnesium Alloy Sheet at Room Temperature by Texture Modification
Dr. Kim, S. J., Korea Institute of Materials Science
- 16:05-16:20 Developments in composite extrusion
Mr. Dahnke, C., Technische Universität Dortmund

16:20-16:30 Break

16:30-17:30 Oral Presentations of Young Invited Researchers/Engineers-2

Chair: *Prof. Matsumoto, R, Osaka University*

- 16:30-16:45 Inspection of Forging Product Surface Defect with 2.5D Image
Dr. Liu, H., Nissan Motor Co., Ltd.
- 16:45-17:00 Forging Process Layout Using Design of Experience (DoE) Combined with a Response Surface Model (RSM)
Mr. Dierdorf, J., RWTH Aachen University
- 17:00-17:15 Prevention of Seizure in Cold Extrusion of Aluminium Alloy Billet Using Die Having Textured Surface
Mr. Daodon, W., Toyohashi University of Technology
- 17:15-17:30 Influence of Forging Temperature on Solid Lubricants Behaviour in Cold Forging
Dr. Medea, F., University of Padova

18:00-20:00 Welcome Party

March 10, 2015

9:00-09:45 Lecture by 2014 JSTP International Prize Winner-2

Chair: *Prof. Wang, Z. G., Gifu University*

Development of New Forming Processes

Prof. Mori, K., Toyohashi Institute of Technology

9:45-11:45 Keynote Lectures-3

Chair: *Prof. Isogawa, S., Daido University*

- 9:45-10:15 A Brief View into the Future of Precision Cold Forging
Dr. Haensel, M., ThyssenKrupp AG
- 10:15-10:45 Tribology for Precision Forging
Prof. Kitamura, K., Nagoya Institute of Technology
- 10:45-11:15 Current State of Controlled Forging Processes
Prof. Isogawa, S., Daido University
- 11:15-11:45 Current State of Plate Forging
Prof. Wang, Z. G., Gifu University

11:45-12:00 Group Photograph

12:00-13:15 Lunch, (Preparing poster)

13:15-14:15 Poster Session of Young Invited Researchers/Engineers

Measurement of Friction Coefficient by Backward Extrusion with Rotating Tool

Mr. Kamiyama, M., Toyota central R&D

Simulation and Optimization the Hot Forging Process of IN718 Turbine Disk

Dr. Zhang, H., Ningbo University of Technology
 Study of an incremental forging process for a screwed pipe
Dr. Jin, J. S., Huazhong University of Science & Technology
 Hollow Lateral Extrusion without Lateral Mandrel
Mr. Napierala, O., Technische Universität Dortmund
 Successive forging of tailored blank having thickness distribution for hot stamping
Ms. Tajul, L., Toyohashi University of Technology
 Cold punching of high strength die-quenched steel sheets
Mr. Jaafar, H., Toyohashi University of Technology
 Light weight forging crankshaft process development
Mr. Miura, D., Honda Engineering Co., Ltd.
 (Title to be determined)
Mr. Taniguchi, M., Dijet Industrial Co., Ltd.

14:15-14:35 Coffee Break

14:35-14:35 Oral Presentations of Young Invited Researchers/Engineers-3

Chair: *Prof. Terano, M., Tokyo Institute of Technology*

14:35-14:50 Analysis of ingot forging using different simulation methods
Dr. Christiansen, P., Technical University of Denmark
 14:50-15:05 Numerical and Experimental Study of Hydro-Forging of a Water
 Pump Component
Dr. Xu, Y., Chinese Academy of Sciences
 15:05-15:20 Achievable Geometries in Flexible Near to Net Shape Ring Rolling
Mr. Cleaver, C. J., University of Cambridge
 15:20-15:35 (Title to be determined)
Mr. _____, UACJ Corp.

15:35-15:45 Break

15:45-16:35 Oral Presentations of Young Invited Researchers/Engineers-4

Chair: *Prof. Yoshikawa, Y., Gifu University*

15:45-16:00 Novel Extrusion Punch Design for Improved Lubrication Transport
 and Punch Ejection
Mr. Lowrie, J., North Carolina State University
 16:00-16:15 Cold Punching of High Strength Die-Quenched Steel Sheets
Mr. Narumiya, H., Nippon Steel & Sumitomo Metal Corp.
 16:15-16:30 Anisotropy and Fracture Modes I and III in Flange Test Specimen
Dr. Nielsen, C. V., Technical University of Denmark

16:30-16:40 Break

16:40-17:40 Discussion on Precision Forging

Moderator: *Prof. Kitamura, K., Nagoya Institute of Technology*

18:00-19:30 Dinner

March 11, 2015:

8:00-16:30	Plant tour
8:00	Departure
9:00-11:00	Toyota Motor Co., Ltd., Kinuura plant
11:00-13:30	Transfer & Lunch
13:30-15:30	Nippon Steel & Sumikin Precision Forge, Inc.
15:30-16:30	Return to Mielparque nagoya

March 12, 2015:

8:00-21:00	Plant tour and Visit to Nichidai Corporation
(Check out if leaving Nagoya on March 12)	
8:00	Departure
9:00-11:00	Aisin AW, Co., Ltd.
11:00-14:30	Transfer & Lunch
14:30-19:00	Nichidai Corporation (plant tour, farewell party)
19:00-21:00	Return to Mielparque nagoya

タイムテーブル

2015/3/8

From To 行動
 15:30 17:00 備品準備
 17:00 19:00 Early registration
 19:00 22:00 講師食事会

2015/3/9

No.	From	To	行動	Author(s)	Country	Title	Chairman
	8:30	9:00	会場設営				
	9:00		Registration, 参加者入場				
	9:30		セミナー開始				
	9:30	9:40	開会の挨拶	Sachihiro Isogawa			
1	9:40	9:45	開会の挨拶	ニチダイから			五十川
	9:45	10:30	Award1	A.E. Tekkaya	Germany	Utilizing Stress Superposition in Metal Forming	
2	10:30	11:00	Keynote1	Taylan Altan	USA	Residual Stresses and Distortions in Heat Treated Rolled Ring	
3	11:00	11:30	Keynote2	Shinichiro Fujikawa	Japan	Light-weight Vehicles by Aluminum Application	五十川
4	11:30	12:00	Keynote3	Eisuke Murai	Japan	Piercing Extrusion for Long Hollow Component	
	12:00	13:00	Lunch				
5	13:00	13:30	Keynote4	Takashi Ishikawa	Japan	Influence of Elastic Deformation and Thermal Contraction on Accuracy of C	
6	13:30	14:00	Keynote5	Young-Seon Lee	Korea	FEM Analysis on Precision Forming of Dissimilar Materials	北村
7	14:00	14:30	Keynote6	Kiichiro Kawamoto	Japan	Cold Forging Process Using AC Servo Press	
8	14:30	15:00	Keynote7	Tomotaka Nagashima	Japan	Special Steels for Forging Applications	
	15:00	15:20	Coffee break				
1	15:20	15:35	Young1	Jens Dierdorf	Germany	Forging Process Layout Using Design of Experiments Combined with a Resp	
2	15:35	15:50	Young2	Peter Christiansen	Denmark	Analysis of Ingot Forging Damage Evolution Using Different Simulation Meth	松本
3	15:50	16:05	Young3	James Lowrie	USA	Novel Extrusion Punch Design for Improved Punch Ejection	
4	16:05	16:20	Young4	Se-Jong Kim	Korea	Enhanced Stretch Formability of Magnesium Alloy Sheet at Room Temperat	
	16:20	16:30	break				
5	16:30	16:45	Young5	Francesco Medea	Italy	Influence of Forging Temperarute on Solid Lubricants Behaviour in Cold For	
6	16:45	17:00	Young6	Witthaya Daodon	Japan	Improvement of Seizure Resistance in Cold Extrusion of Aluminium Alloy Bille	早川
7	17:00	17:15	Young7	Hiroki Narumiya	Japan	Effect of Divided Flow Method on Cold Forging of Cylindrical Gears	
8	17:15	17:30	Young8	Yong Xu	China	Numerical and Experimental Study of Hydro-forging of a Water Pump Comp	
	18:00	20:00	Reception				

2015/3/10

No.	From	To	行動	Author(s)	Country	Title	
	8:30	9:00	会場設営・参加者入場				
9	9:00	9:45	Award2	Ken-ichiro Mori	Japan	Development of New Forming Processes	王
10	9:45	10:15	Keynote8	Kazuhiko Kitamura	Japan	Tribology for Precision Forging	
11	10:15	10:45	Keynote9	Sachihiro Isogawa	Japan	Current State of Controlled Forging Processes	吉田
12	10:45	11:15	Keynote10	Zhigang Wang	Japan	Current State of Plate Forging	
	11:15	11:20	break				
9	11:20	11:35	Young9	Christoph Dahnke	Germany	Developments in Composite Extrusion	
10	11:35	11:50	Young10	Jose Rodolfo Alves Zapata	France	Characterization of the Elastic Spring Back Reduction Due to High Speed L	寺野/吉川
	11:50	12:00	集合写真撮影				
	12:00	13:00	Lunch & ポスター準備				
	13:00	14:00	ポスターセッション&coffee break				
	14:00	14:15	ポスター撤去				
11	14:15	14:30	Young11	Potejana Potejanasak	Japan	A Study of Efficient Fabrication Method of Metal Dot Array Using the Micro	
12	14:30	14:45	Young12	Christopher John Cleaver	UK	Achievable Geometries in Flexible Radial Profile Ring Rolling	寺野/吉川
13	14:45	15:00	Young13	He Liu	Japan	Surface Defect Inspection of Forged Products Using Image Processing	
14	15:00	15:15	Young14	Chris Valentin Nielsen	Denmark	Anisotropy and Fracture Modes I and III in a Flange Test Specimen	
	15:15	15:35	Coffee break				
13	15:35	16:20	Keynote11	Matthias Hänsel	Liechtenstein	A Brief View Into the Future of Precision Cold Forging	北村
	16:20	18:30	Discussion hour				北村
	18:30	20:00	Dinner				
	20:00	20:30	撤収作業				