THE EIGHTH INTERNATIONAL SYMPOSIUM ON MECHANICS, AEROSPACE AND INFORMATICS ENGINEERING 2013 (ISMAI-08 2013)
September 3-6, 2013
Dongbang Hotel, Jinju, KOREA

国際シンポジウム ISMAI-08 報告書

実施日：2013年9月3日～6日

場所：Dongbang Hotel, 晋州, 韓国

明治大学大学院理工学研究科機械工学専攻

国際シンポジウム　ISMAI-08　　報告書

明治大学大学院理工学研究科機械工学専攻
ISMAI-08 幹事　相澤　哲哉

実施日：2013 年 9 月 3 日～6 日
場　所：Dongbang Hotel，晋州，韓国
参加者数：日本側（合計 48 名）　大学院生　37 名，学部生 3 名，教員 8 名
　　韓国側（合計 96 名）　大学院生　66 名，教員 30 名

概要

ISMAI（International Symposium on Mechanics, Aerospace and Informatics Engineering）は 2007 年度より，明治大学大学院理工学研究科機械工学専攻と韓国慶尚大学校機械工学科の間で，国際交流シンポジウムとして開始され，今回で第 8 回目を迎えた。日韓で隔年おきにホストを担当し，今回は慶尚大学校側がホストとなり、韓国晋州市内のホテルにて開催された。当学からは教員，学生併せて 48 名（教員 8 名，学生 40 名）が 2013 年 9 月 3 日から 6 日までの 3 泊 4 日間の日程で渡韓した．

2 日目に韓国側参加者 96 名（学生 66 名，教員 30 名）と合同でシンポジウムを行った．シンポジウムでは，基調講演 2 件（明治大学，慶尚大学校各 1 名），口頭発表 30 件，ポスター発表 49 件，合計 81 件の発表が行われた．今回，シンポジウム開催場所と宿泊場所を同じホテルに設定したことで，時間を効果的に使うことができ，かつ会場も格調高く，快適であった。またポスターセッションでは各教員が定められた件数のポスターを担当して審査するという新しい試みが行われ，よりいっそう意見交換することができた．これまで当学が担当していたベストプレゼンの準備や評価を韓国側で統括されて，終始スムーズにシンポジウムを進行することができた．シンポジウム後のバンケットでは，ベストプレゼンテーション賞として厳正なる審査の結果，口頭発表，ポスター発表において日韓各 1 名の合計 4 名の学生が表彰された．

本学からの渡航に際しては，2013 年度　大学院学内ＧＰ（教育改革プログラム）「国際感覚を備えたものつくり工学人材育成プログラム」から 8 名，および大学院教育振興費から 22 名分の支援を受けることができた．国際交流を目的とした懇親会では，日韓の学生同士，教員を交えて，交流が図られた．

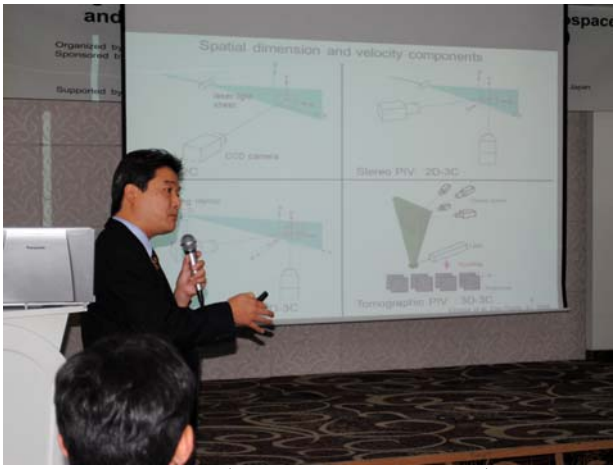
3 日目には柳先生の案内で慶尚大学校のキャンパス内にある歴史資料館を見学し，その後バスで移動して Korea Aerospace Industries（KAI）および斗山重工業を視察した．慶尚大学校では何よりもその広大さが印象的であった．加えて，KAI では日本でほとんど目にする機会のない戦闘機の組立工場を視察し，背後に某国を抱える隣国ならではの緊張感を学生も肌で感じ取ることができ，また斗山重工業の圧延工場では大迫力の１万４千トンプレス機が熱く焼けた鉄インゴットを鍛造するのを間近に見ることができ，学生らも感激すると共に，その活力に大変刺激を受けたようである．

今回のシンポジウムでは，日本側からは機械系の比較的若い教員の参加が多かった．このように，新たな運営形態を模索し続けることで，継続的な開催を期待したい．また，感想文からは，学生自らが英語で発表し議論を深めることで，研究に関することのみならず異文化，グローバルコミュニケーションを経験し，隣国学生同士の交流がより深めたことが分かる．このように，自発的な学部生の参加および大学院生の国際感覚に対する意識の高まりを背景として，質のみならず意識の向上が伺われた．慶尚大学校は BK21 PLUS(Brain Korea 21 Program for Leading Universities & Students）に新たに採択され，よりいっそう本会の重要性が問われている．次回 ISMAI-09 は日本での開催が検討されている．

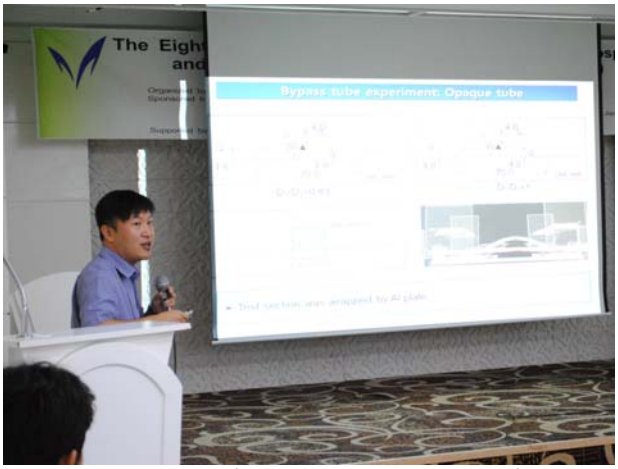
全体集合写真

会場（晋州 Dong Bang Hotel）

会場前



基調講演（Dr. Jun Sakakibara）



基調講演（Dr. Hyoung-bum Kim）

講演室（Room 1）

講演室（Room 2）

講演室（Room 3）

ポスターセッション

ベストプレゼン賞

バンケット

晋州城跡見学

慶尚大学校視察

Korea Aerospace Industries 視察

斗山重工業視察

CALL FOR PAPERS

THE EIGHTH INTERNATIONAL SYMPOSIUM ON MECHANICS, AEROSPACE AND INFORMATICS ENGINEERING 2013 (ISMAI-08 2013)

September 3-6, 2013
Gyeongsang National University
501 Jinju-Daero, Jinju, Gyeongnam, Korea

Organized by School of Science and Technology, Meiji University, Japan and Gyeongsang National University, Korea

Sponsored by Engineer Education Program for Affluent Manufacturing Technologies, Meiji University / Advanced Mechanical and Aerospace Engineers Education Program of Gyeongsang National University, Korea / Engineering Research Institute(ERI), Gyeongsang National University, Korea / Department of Mechanical Engineering, Graduate School of Meiji University, Japan

Supported by KSAE, KSME, KOSME, JSME, JSAE and JSDE

Purpose of ISMAI-08 2013

ISMAI-08 2013 will cover new research findings and developments on Advanced Mechanics, Aerospace and Informatics Engineering in the 21st century. Through oral / poster presentations, participants are encouraged to exchange the state-of-the-art technology information and discuss up-to-date trends in research and development. The topics and subjects include, but are not limited to, new research findings and developments in the area of; Thermal Fluid Energy and Power Engineering / Materials, Fracture, CAE and Applied Mechanics / Dynamics, Control and Mechatronics / Medical Engineering / Design, Production and Tribology / Aerospace Engineering.

Key Dates for Submission
Abstract Deadline : June 30, 2013
Final Paper Deadline : July 31, 2013

Abstract Submission, Selection, Paper Submission and Oral/Poster Presentation

Abstract (less than 300 words) should be submitted to the technical committee not later than June 30, 2013. The abstract should be with presentation type (oral or poster), title, name of author(s) (both in English and Japanese), grade(B4/M1/M2/D), gender and e-mail address. Limited number of papers will be accepted after selection by the technical committee. Final camera-ready paper for publication in the proceedings (A4 size up to 8 pages including figures and tables) must be received by the technical committee as PDF file not later than July 31, 2013. Oral presentation should last no longer than 15 minutes to allow 5 minutes for questions and changeover to the next speaker. The size of poster may be up to 841mm × 1189mm (A0 size). Abstract and paper should be e-mailed to the technical committee (ismai@meiji.ac.jp).

Executive Organization at Meiji University:

Chairperson:

Kazuo Tsuchiya, Professor, Department of Mechanical Engineering Informatics
e-mail: ktsuchi@isc.meiji.ac.jp

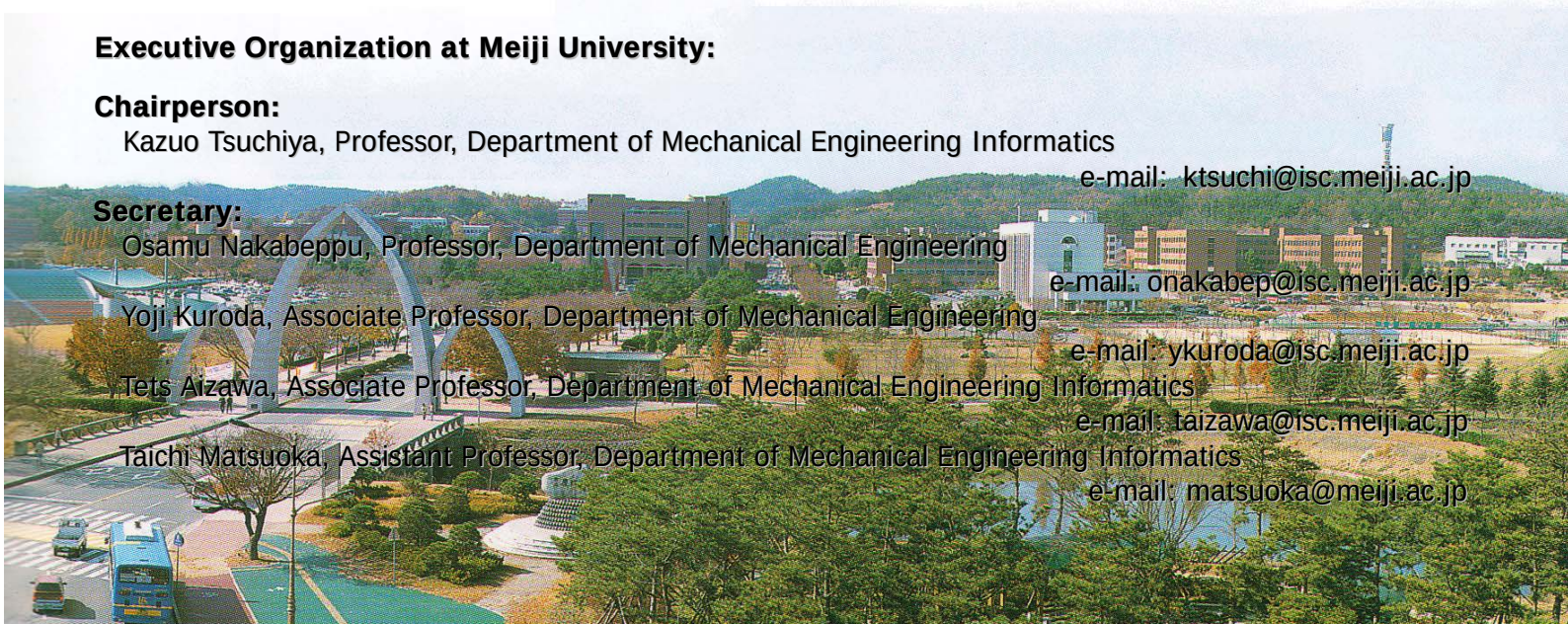
Secretary:

Osamu Nakabeppu, Professor, Department of Mechanical Engineering
e-mail: onakabep@isc.meiji.ac.jp

Yoji Kuroda, Associate Professor, Department of Mechanical Engineering
e-mail: ykuroda@isc.meiji.ac.jp

Tets Aizawa, Associate Professor, Department of Mechanical Engineering Informatics
e-mail: taizawa@isc.meiji.ac.jp

Taichi Matsuoka, Assistant Professor, Department of Mechanical Engineering Informatics
e-mail: matsuoka@meiji.ac.jp



2013.07.30

ISMAI-08 2013 参加者ガイダンス

1. ISMAI-08 の目的
   1） ISMAI-08 での発表・講演の聴講
   2） 慶尚大学校との交流
   3） 韓国企業の工場見学
   4） 韓国の歴史や文化、日本との歴史的な結びつきについて学ぶ

2. 参加者及び講演タイトル一覧（別紙参照）
   口頭発表プログラム等の詳細は別途メールにて配信の予定
   参加教員： 機械情報工学科： 石原、相澤、松岡、新藤
   機械工学科： 椎葉、小林(健)、榊原、加藤(恵)

3. スケジュール
   9 月 3 日(火) **成田空港集合 11:30 第 1 ターミナル南ウイング I～K カウンター**
   エアプサン BX111 便 成田 13：55 発→釜山 16：15 着
   貸切バスにて釜山から晋州へ移動、宿泊先ホテル(Dongbang Hotel)へチェックイン
   9 月 4 日(水) 終日 ISMAI-08 シンポジウム参加(Dongbang Hotel)及びレセプション参加
   9 月 5 日(木) 慶尚大学校、慶南航空宇宙博物館、韓国航空宇宙株式会社、
   Doosan 重工業株式会社 見学
   晋州から釜山へ移動、宿泊先ホテル(海雲台グランドホテル)へチェックイン
   9 月 6 日(金) エアプサン BX112 便 釜山 10：55 発→成田 12：55 着 解散

4. 緊急連絡先
   相澤哲哉 携帯 +81-90-6506-6067 taizawa@isc.meiji.ac.jp
   Myung-whan BAE（ベエ）教授 +82-55-751-6071 mwbae@gnu.ac.kr
   Song-Kee Lyu(リュウ)教授 +82-10-3564-6072 sklyu@gnu.ac.kr

5. 費用
   航空券、移動バス代、宿泊費、論文集代等、合計約８万円/1 名を明治大学大学院 GP、明治大学大学院教育振興費、明治大学理工学部機械系実験実習費より支出

6. 保険関連
   研修中の事故等に関しては学生教育研究災害傷害保険の対象となる。ただし、遺失物や個人的行動中の事故は対象外。必要に応じて各自、加入のこと。

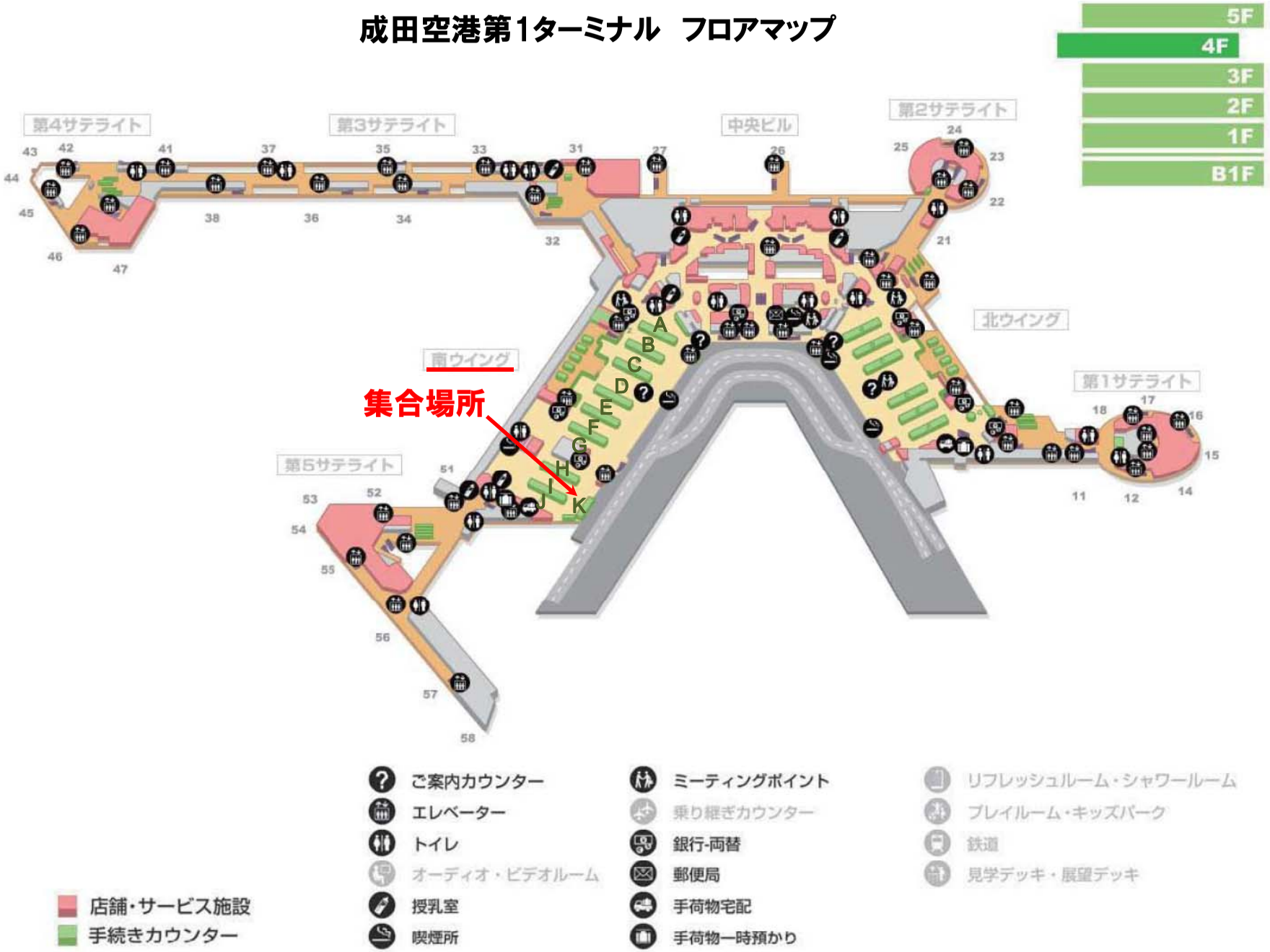
7. 注意事項

1) 明大生の自覚を持って行動する。マナー（服装）やエチケットに注意
2) 団体行動となるので、集合時間を守ること（研究室ごとに代表者を決定、代表者が人数確認し報告のこと）
3) 学会発表・講演聴講、企業見学では、積極的に質問すること (in English!)
4) グループ内や外部との間でトラブルを起こさないよう注意すること
5) インフルエンザ等の対策を徹底すること（マスク、うがい薬持参、手洗い・うがいの励行、発熱や体調不良は直ちに報告のこと）

8. 課題

この研修は、機械工学専攻における教育の一環として計画されたものである。帰国後、直ちに報告書（別紙参照、様式は後日メールにて配信予定）を PDF ファイルにてメールで提出のこと。
提出先：ismai@meiji.ac.jp　提出締切 **9 月 17 日(火)**

成田空港第1ターミナル　フロアマップ



ISMAI-08 2013 Presentation Entries from Meiji Univ. (2013.07.03)

No.	Presenter	Grade	Gender	Authors	Adviser	Presentation Type	Title
1	Shota Shimizu	M1	Male	Takumi Homma, Hiroki Tsuchiya, Yasutoshi Ishihara	Yasutoshi Ishihara	Poster	A simulation study onan iterative reconstruction method fortime-correlation magnetic particle imaging
2	Katsufumi Kondo	M2	Male	Katsufumi Kondo, Junya Takahashi, Tetsuya	Tetsuya Aizawa	Oral	Investigation of Soot Deposition on Wall in a Diesel Combustion via Transmission Electron Microscope
3	Masanori Sakai	M2	Male	Masanori Sakai, Kei Okabe, Tetsuya Aizawa	Tetsuya Aizawa	Oral	Nanostructure Analysis of Soot Particles Directly Sampled at Different Axial Locations in Diesel Spray Flame via HRTEM
4	Tsuyoshi Harada	M2	Male	Tsuyoshi Harada, Norimitsu Koga, Tetsuya	Tetsuya Aizawa	Oral	In-flame Temperature Measurements of Diesel Spray Flame using 50 m Thin-Wire Type-R Thermocouple
5	Yusuke Tsuji	B4	Male	Yusuke Tsuji, Natsuki Taki,Yutaro Ishizuka, Masaki Kuribayashi, Shigemi Haruta, Tetsuya	Tetsuya Aizawa	Oral	A Study on Soot Formation and Oxidation Processes in Diesel Spray Flame by LII and LS techniques -Effect of Ambient Oxygen Concentration-
6	Kota Suzuki	B4	Male	Kota Suzuki, Yushun Shiozaki, Tetsuya Aizawa	Tetsuya Aizawa	Poster	Soot Formation and Oxidation Processes in Rich Premixed Combustion of n-Heptane
7	Takato Saito	M2	Male	Takato Saito, Yoji Kuroda	Yoji Kuroda	Oral	Experimental Analysis of SeqSLAM for Mobile Robot Localization in Urban Environments
8	Yusuke Nakamura	M1	Male	Yusuke Nakamura, Keisuke Kato	Keisuke Kato	Poster	Development of a mobile robot moving on stairs adaptively
9	Kazuki Watanabe	M2	Male	Kazuki Watanabe, Kazuo Kato	Kazuo Kato	Oral	Heating properties of Resonant Cavity Applicator with Electrical Shield for Treating Rheumatoid Arthritis
10	Wataru Kasai	M1	Male	Wataru Kasai, Keisuke	Keisuke Kato	Poster	Gait Generation for Robot Moving on Winding Stair
11	Takayuki Yokoyama	M2	Male	Takayuki Yokoyama, Keisuke Kato	Keisuke Kato	Poster	Autonomous Controlled Manipulator for life-supporting robots
12	Jiro Arakawa	M2	Male	Jiro Arakawa, Yasuhiro Shindo, Mitsunori Kubo, Kazuo Kato	Kazuo Kato	Oral	Temperature estimation of hyperthermia treatment with blood perfusion inside the blood vessel
13	Junichi Nagasawa	M1	Male	Junichi Nagasawa, Jiro Arakawa, Yasuhiro Shindo, Kazuo Kato	Kazuo Kato	Oral	Heating properties of the re-entrant type cavity applicator with cooling effect of blood perfusion
14	Kazutoshi Shibafuji	M1	Male	Kazutoshi Shibafuji, Yasuhiro Shindo, Kazuo Kato, Mitsunori Kubo	Kazuo Kato	Oral	Heating properties of coaxial needle applicator made of SMA for brain tumor hyperthermia treatment
15	Takuma Saito	M1	Male	Takuma Saito, Yasutoshi Ishihara	Yasutoshi Ishihara	Poster	Investigation of the depth profiling for noninvasive blood glucose measurements based on photoacoustic spectroscopy
16	Yusuke Abe	M1	Male	Yusuke Abe, Taichi Shiiba	Taichi Shiiba	Poster	Experimental Evaluation of Tire Characteristics for Racing Kart with 6-DOF Motion Platform
17	Kei Yasumuro	M1	Male	YasumuroKei Yasumuro, Yong Han, Ryosuke Goto, Yasuyuki Miyajima, Haruo	Haruo Shimosaka	Poster	Riding Comfort Evaluation by a Simulator
18	Takehito Kano	M1	Male	Takehito Kano, Yota Morinaga, Taichi Shiiba	Taichi Shiiba	Poster	Improvement of Vehicle Dynamic Performance with Integrated Control System
19	Takuya Saitoh	M2	Male	Takuya Saitoh, Tomohide Yabuki, Osamu	Osamu Nakabeppu	Oral	Study on microlayer beneath elongated boiling bubble in mini-channel with MEMS sensor
20	Koki Matshumoto	M2	Male	Koki Matsumoto, Haruo Shimosaka	Haruo Shimosaka	Poster	Research on control system of a mass damper vibration control device
21	Jun Okabe	M1	Male	Jun Okabe, Siyu Chen, Yusuke Abe, Taichi Mat	Taichi Shiiba	Poster	Evaluation of Racing Kart Dynamic Performance with Tire Characteristics
22	Takuma Ehara	M2	Male	Takuma Ehara, Shinichi Nagumo	Shinichi Nagumo	Poster	Study on the validity of the internal humidification in a polymer electrolyte fuel cell
23	Atsushi Takagi	M2	Male	Atsushi TAKAGI and Haruo SIMOSAKA	Haruo Shimosaka	Poster	A study of a vibration control of construction using smart structures and semi-active control systems.
24	Masami Hoshino	M1	Male	Masami Hoshino, Zenichi Miyagi, Rozzeta Dolah	Zenichi Miyagi	Poster	Performance improvement of viscoelastic device and properties of characteristic evaluation of adhesive
25	Shogo Shimizu	M1	Male	Shogo Shimizu, Yoji	Yoji Kuroda	Oral	Suspicious objects detection using with 3DLRF in known environment
26	Kei Watanabe	M2	Male	Kei Watanabe, Zenichi Miyagi, Rozetta Dolah, Koji Takahashi	Zenichi Miyagi	Oral	Evaluation of Uncertainty Method with Interaction in Paper Permeability Tester
27	Takuya Nakazato	M1	Male	Takuya Nakazato, Yoshihiro Niikura,	Osamu Nakabeppu	Poster	Study on Temperature Measurement by Scanning Thermal Microscope with MEMS Cantilever Probe
28	Kyosuke Takekoshi	M1	Male	Kyosuke Takekoshi, Takumi Motosugi, Kodai Furukawa, Taichi Shiiba	Taichi Shiiba	Poster	Modeling of Rubber Bush for Real-time Simulation
29	Erina Aono	B4	Female	Erina Aono, Taichi Matsuoka, Takahiro Tomioka, Tadao	Taichi Matsuoka	Oral	Analysis of elastic vibration characteristics of railway car body
30	Hidetaka Suzuki	M2	Male	Hidetaka Suzuki, Shinichi Nagumo	Shinichi Nagumo	Poster	Influence of bucket shapes on output characteristic and efficiency of a Savonius rotor
31	Masataka Saito	M2	Male	Masataka Saito, Osamu Nakabeppu	Osamu Nakabeppu	Oral	Flow-type bio-calorimeter with MEMS thermopile sensor
32	Kodai Furukawa	M1	Male	Kodai Furukawa, Kyousuke Takekoshi,	Taichi Shiiba	Poster	Characteristics Evaluation of Rubber Bush with Small-Sized 6-DOF Motion Platform
33	Masahiko Taniguchi	M2	Male	Masahiko Taniguchi, Yoji Kuroda	Yoji Kuroda	Oral	Development and field test of volcano observation rover for long-term exploration
34	Takayuki Yokota	M1	Male	Takayuki Yokota, Yoji Kuroda	Yoji Kuroda	Oral	Moving objects recognition using the LRF for the accuracy of LaserSLAM
35	Kentaro Kiuchi	M1	Male	Kentaro Kiuchi, Yoji Kuroda	Yoji Kuroda	Oral	Estimation of the global coordinates based on digital map in the urban environment
36	Masanobu Saito	M1	Male	Masanobu Saito, Yoji Kureoda	Yoji Kudora	Oral	Safety teleoperation system using motion planning technique
37	Taiki Nakamura	M2	Male	Taiki Nakamura, Osamu Nakabeppu	Osamu Nakabeppu	Poster	Study on fast scanning calorimetry with cantilever type MEMS calorimeter
38	Daisuke Haga	M1	Male	Daisuke Haga, Kenichi P. Kobayashi	Kenichi P. Kobayashi	Oral	Flow Visualization of Oscillatory Flow between the Parallel Plates in the stack of the Thermoacoustic
39	Ken Miura	M2	Male	Ken Miura, Kenichi P. Kobayashi	Kenichi P. Kobayashi	Poster	Thermal Environment of a Parking Vehicle with the Solar Radiation
40	Masataka Sakamoto	M2	Male	Masataka Sakamoto, Kenichi P. Kobayashi	Kenichi P. Kobayashi	Poster	Heat Transfer Enhancement of Circular Cylinder by Shot-Peening surface

ISMAI-08 日程(案)

日時	内　容	比較
9月 3日	東京- 釜山 BX111 成田13：55発→釜山16：15着 17:00 釜山 出発-18:30晋州　到着 19:00 夕食(百年 石焼ご飯) 20:30- Dongbang Hotel 宿泊	
9月 4日	朝食(Dongbang Hotel) 09:30-10:00 ISMAI-08 登録 10:00-10:45 ISMAI-08 論文発表 11:00-12:15 Opening Ceremony & Keynote Speech 12:20-13:10 昼食(Dongbang Hotel) 13:30-14:30 Poster Session 14:45-16:45 ISMAI-08 論文発表 16:50-18:20　晋州城見学と記念写真、学生交流 18:30- Banquet (Dongbang Hotel) 20:30- Dongbang Hotel宿泊	晋州城はホテルから歩いて5－10分
9月 5日	朝食(Dongbang Hotel) 08:20 Dongbang Hotel　出発 09:00-10:00 慶尚大学校(博物館など) 見学 10:30-11:50 KAI 見学 12:10-13:10 昼食(石園参鶏湯) 13:10-14:00 移動 14:00-15:00 斗山重工業見学 15:20-17:00 釜山　移動 17:00-18:30 海雲台散歩 と見学 19:00-20:30 夕食(刺身料理) 20:00-海雲台　Grand　Hotel宿泊	
9月 6日	07:00-07:50 朝食 (海雲台　Grand　Hotel) 08:00-09:00 Hotel-空港　移動 BX112 釜山10：55発→成田12：55着	

ISMAI-08 2013

The Eighth International Symposium on Mechanics, Aerospace and Informatics Engineering 2013
Session Schedule

Time	5F Room 1	5F Room 2	5F Room 3
09:30-10:00	**ISMAI-08 2013 Registration(5F Front Hall)**		
10:00-10:45 (45min) (talk 10min + discussion 5min)	Oral Session 1-1 (Chair: Ken P. Kobayashi)	Oral Session 2-1 (Chair: Yasuhiro Shindo)	Oral Session 3-1 (Chair: Jungwon Yoon)
	ISMAI08-TF-01: Investigation of Soot Deposition on Wall in a Diesel Combustion via Transmission Electron Microscope, *Katsufumi Kondo, Junya Takahashi and Tetsuya Aizawa (Meiji University)*	**ISMAI08-DP-01: Heating properties of Resonant Cavity Applicator with Electrical Shield for Treating Rheumatoid Arthritis,** *Kazuki Watanabe, Kazuo Kato (Meiji University)*	**ISMAI08-RM-01: Experimental Analysis of SeqSLAM for Mobile Robot Localization in Urban Environments,** Takato Saito, Yoji Kuroda *(Meiji University)*
	ISMAI08-TF-02: Computationally Simulated Lightning Effects on Aircraft Components, *Ravichandran Ranjith and Rho Shin Myong (Gyeongsang National University)*	**ISMAI08-DP-02: Unsteady Aerodynamic Analysis and Comparison with Experiment for Rocket Configurations in the Transonic Flow,** *Somdeb Bandopadhyay, D.H Kim, J.H Lee, Y.S Kwak(GNU) and Se-Hyun Yoon(KARI)*	**ISMAI08-RM-02: Reduction in Body Sway using Active Haptics Guidance,** *Muhammad Raheel Afzal, Yasir Jan and Jungwon Yoon (Gyeongsang National University)*
	ISMAI08-TF-03: Nanostructure Analysis of Soot Particles Directly Sampled at Different Axial Locations in Diesel Spray Flame via HRTEM, *Masanori Sakai, Kei Okabe and Tetsuya Aizawa (Meiji University)*	**ISMAI08-DP-03: Temperature Estimation of Hyperthermia Treatment with Blood Perfusion inside the Blood Vessel,** *Jiro Arakawa, Yasuhiro Shindo, Mitsunori Kubo and Kazuo Kato (Meiji University)*	**ISMAI08-RM-03: Suspicious Objects Detection using with 3DLRF in Known Environment,** *Shogo Shimizu, Yoji Kuroda (Meiji University)*
11:00-11:15	**Opening (Chair: Jeong-Se Suh)**		
11:15-11:45 (30min)	**Keynote Speech (Chair: Ken P. Kobayashi)** **ISMAI08-KN-01 Jun Sakakibara (Meiji University) Measurement of Three-dimensional Velocity Field in a Turbulent Jet by using Particle Image Velocimetry**		
11:45-12:15 (30min)	**Keynote Speech (Chair: Rho-Shin Myong)** **ISMAI08-KN-02 Hyoung-bum Kim (Gyeongsang National University) Opaque Flow Measurement using Ultrasound Method**		
12:20-13:10	Lunch		
13:30-14:30	**Poster Session (Chair: Tets Aizawa, Sujin Kim) 62 posters - See the poster List**		
14:45-15:45 (60min) (talk 10min + discussion 5min)	Oral Session1-2(Chair: Yasutoshi Ishihara, Wook Ryol Hwang)	Oral Session 2-2(Chair: Tetsuya Aizawa Jae Hyun Park)	Oral Session 3-2(Chair: Taichi Matsuoka Yoonsoo Kim)
	ISMAI08-MM-01: A Study on the Mechanical Behavior of DLC Coating by Sliding Contact Anlaysis, *Jun-Hyuk Lee, Tae-Jo Park, Hyun-Seok Kim and Seung-Ho Yang(Gyeongsang National University)*	**ISMAI08-AE-01: Developing Lattice Boltzmann Analysis Code in Generalized Coordinate,** *Ramki Murugesan, Jae Hyun Park, Rho-Shin Myong (Gyeongsang National University)*	**ISMAI08-RM-04: Development of Position Compensation System Using iGPS to Operate End Effector of Manipulator Precisely,** *Sanghun Pyo and Jungwon Yoon (Gyeongsang National University)*
	ISMAI08-MM-02: Study on Microlayer Beneath Elongated Boiling Bubble in Mini-channel with MEMS Sensor, *Takuya Saitoh, Tomohide Yabuki and Osamu Nakabeppu (Meiji University)*	**ISMAI08-CA-01: Evaluation of Uncertainty Method with Interaction in Paper Permeability Tester,** *Kei Watanabe, Zenichi Miyagi, Rozetta Dolah and Koji Takahashi (Meiji University)*	**ISMAI08-RM-05: Development and Field Test of Volcano Observation Rover for Long-term Exploration,** *Masahiko Taniguchi and Yoji Kuroda (Meiji University)*
	ISMAI08-MM-03: Strength Design Evaluation of the Double Planetary Gears, *Sung Gil Han, Yoo In Shin, Hyungchun Kim and Hui Cheol Kim (Gyeongsang Nati. University)*	**ISMAI08-AE-02: Dynamics of Particles in Quadrupole Dielectrophoretic Trap,** *Nichith Chandrasekaran and Jae Hyun Park (Gyeongsang National University)*	**ISMAI08-RM-06: Stabilization of a Quadcopter Using VICON Vision System,** *Arshad Mahmood and Yoonsoo Kim (Gyeongsang National University)*
	ISMAI08-MM-04: Flow-type Bio-calorimeter with MEMS Thermopile Sensor, *Masataka Saito and Osamu Nakabeppu (Meiji University)*	**ISMAI08-CA-02: Flow Visualization of Oscillatory Flow between the Parallel Plates in the Stack of the Thermoacoustics,** *Daisuke Haga and Kenichi P. Kobayashi (Meiji University)*	**ISMAI08-RM-07: Moving Objects Recognition using the LRF for the Accuracy of Laser SLAM,** *Takayuki Yokota and Yoji Kuroda (Meiji University)*
16:00-16:45 (45min) (talk 10min + discussion 5min)	Oral Session 1-3(Chair: Taichi Shiiba Su-Jin Kim)	Oral Session 2-3(Chair: Jun Sakakibara Hyoung-bum Kim)	Oral Session 3-3(Chair: Keisuke Kato Iljoong Youn)
	ISMAI08-TF-04: In-flame Temperature Measurements of Diesel Spray Flame using 50mm Thin-Wire Type-R Thermocouple, *Tsuyoshi Harada, Norimitsu Koga and Tetsuya Aizawa (Meiji University)*	**ISMAI08-DP-04: Heating Properties of the Re-entrant Type Cavity Applicator with Cooling Effect of Blood Perfusion,** *Junichi Nagasawa, Jiro Arakawa, Yasuhiro Shindo and Kazuo Kato (Meiji University)*	**ISMAI08-RM-08: Estimation of the Global Coordinates Based on Digital Map in the Urban Environment,** *Kentaro Kiuchi and Yoji Kuroda (Meiji University)*
	ISMAI08-TF-05: A DSMC Behavior According to Conservation Laws, *Abolfazl Karchani and Rho Shin Myong (Gyeongsang National University)*	**ISMAI08-DP-07: A Study on the Comparison of Transmission Error Prediction for a Helical Gear Pair,** *Qi Zhang, Zhezhu Xu, Jaihwa Kang and Sungki Lyu (GNU)*	**ISMAI08-DC-01: Effect of Wheel Upsizing on Vehicle Stability,** *Rodrigue Tchamna and Iljoong Youn (Gyeongsang National University)*

	ISMAI08-TF-06: A Study on Soot Formation and Oxidation Processes in Diesel Spray Flame by LII and LS techniques -Effect of Ambient Oxygen Concentration-, *Yusuke Tsuji, Natsuki Taki,Yutaro Ishizuka, Masaki Kuribayashi, Shigemi Haruta and Tetsuya Aizawa (Meiji University)*	**ISMAI08-DC-02: Analysis of Elastic Vibration Characteristics of Railway Car Body,** *Erina Aono, Taichi Matsuoka, Takahiro Tomioka, Tadao Takigami (Meiji University)*	**ISMAI08-RM-09: Safety Teleoperation System using Motion Planning Technique,** *Masanobu Saito and Yoji Kuroda (Meiji University)*
16:50-18:20	**Visit to Jinju Castle**		
18:30-20:30 (120min)	**Banquet(5F Room 1) - Best Presentation Award Ceremony - Closing (Chair: Prof. Jungwon Yoon)**		

Poster Session (Chair: Tets Aizawa, Sujin Kim) 48 posters - See the poster List

Poster Session 1	Poster Session 2	Poster Session 3
ISMAI08-TF-07: Numerical Prediction of Hydraulic Performances inside the Circular Orifice Plate, *Young-min Park and Hee-taeg Chung (Gyeongsang National University)*	**ISMAI08-DP-08: Transonic Steady Aerodynamic Analysis and Comparison with Experiment for Rocket Configurations,** *Jang-Ho Lee, Dong-Hyun Kim, Somdeb Bandopadhyay, Young-Sup Kwak (Gyeongsang National University) and Se-Hyun Yoon (KARI)*	**ISMAI08-DC-06: Riding Comfort Evaluation by a Simulator,** *Kei Yasumuro, Yong Han, Ryosuke Goto, Yasuyuki Miyajima and Haruo Shimosaka (Meiji University)*
ISMAI08-TF-08: Soot Formation and Oxidation Processes in Rich Premixed Combustion of n-Heptane, *Kota Suzuki, Yushun Shiozaki and Tetsuya Aizawa (Meiji University)*	**ISMAI08-DP-10: Non-linear Solution Technique for Yaw Brake System of MW-Class Wind Turbine,** *Min-Soo Seo, Dong-Hyun Kim, Hun-Ho Chu, Suk-Jin Hong(GNU), Chang-Hee Yoo, and Jin-Hwan Park (SangShin Brake Co., Ltd.)*	**ISMAI08-DC-07: Evaluation of Racing Kart Dynamic Performance with Tire Characteristics,** *Jun Okabe, Siyu Chen, Yusuke Abe and Taichi Shiiba (Meiji University)*
ISMAI08-EP-01: Effect of Low Purity Methanol on Smoke Emission and Performance in a DI Diesel Engine with the EGR Rate of 15.3%, *Syaiful, Stefan Mardikus (Diponegoro University), Myung-whan Bae, Hui-seong Park (GNU) and Hyung-Man Kim (Injei Univ.), Kazuo Tsuchiya (Meiji University)*	**ISMAI08-DP-11: Extreme Design Load Analysis of 5 MW Wind Turbine Using CFD and CSD Coupling Method,** *Dong-Hyun Kim, Thanh-ToanTran, Jang-Ho Lee, and Min-Su Seo (Gyeongsang Nati. Univ.)*	**ISMAI08-DC-08: Research on Control System of a Mass Damper Vibration Control Device,** *Koki Matsumoto and Haruo Shimosaka (Meiji University)*
ISMAI08-EP-02: A Study on Flow Uniformity in 500HP-Class SCR Reactor, *C.S. Yi, H. Jang, I.S. Park, J.S. Suh, C.D. Park, K.Y. Jeong (Gyeongsang National University)*	**ISMAI08-DP-12: Measurements through Pins of the Helical Gears External Surface with an Odd Number of Teeth,** *Inbum Lee, Qi Zhang, Zhezhu Xu, Jaihwa Kang and Sungki Lyu (Gyeongsang National University)*	**ISMAI08-DC-09: Modeling of Rubber Bush for Real-time Simulation,** *Kyosuke Takekoshi, Takumi Motosugi, Kodai Furukawa and Taichi Shiiba (Meiji University)*
ISMAI08-EP-03: Distributed Size Effects of Water Droplets on Collection Efficiency in Aircraft Icing, *Jiho Park and Rho Shin Myong (Gyeongsang National University)*	**ISMAI08-DP-13: Thermal Image Observation of Air Cooling Ball Screw Feed Drive,** *L.J. Liang, D.Y. Kim, Z.Z. Xu and S.K. Lyu (Gyeongsang National University)*	**ISMAI08-DC-10: A Study of a Vibration Control of Construction using Smart Structures and Semi-active control Systems,** *Atsushi TAKAGI and Haruo Simosaka (Meiji University)*
ISMAI08-EP-04: Numerical Analysis on the High Performance LED Flood light with 2-stage Heat-sink , *C.S. Yi, H. Jang, I.S. Park, J.S. Suh and H.C. Kim (Gyeongsang National University)*	**ISMAI08-CA-03: Experiment of the Linear Motion Roller Guide Calorific Characterstic,** *Je-Hong Park, Wan-Seok Yang, Kyeong-Woon Ra, Su-Jin Kim and Chun-Hong Park (Gyeongsang National University)*	**ISMAI08-DC-11: Structure Evaluation of High-power LED Floodlight using Vibration Analysis,** *Jae-hwan Shim, Sung Gil Han, Yoo In Shin, Hee Chun An, Jeong-se Suh,and Chul Ki Song (Gyeongsang National University)*

ISMAI08-EP-05: Experimental Study on Flow Characteristic in Plate Fin Heat Exchangers, *Tae-sik Jeong, Seung-jun Kim, Xin-cheng Tu andung-bum Kim (Gyeongsang National University)*	**ISMAI08-CA-04: Performance Improvement of Viscoelastic Device and Properties of Characteristic Evaluation of Adhesive,** *Masami Hoshino, Zenichi Miyagi, Rozzeta Dolah (Meiji University)*	**ISMAI08-DC-12: A Simulation Study on an Iterative Reconstruction Method Fortime-correlation Magnetic Particle Imaging,** *Shota Shimizu, Takumi Homma, Hiroki Tsuchiya and Yasutoshi Ishihara (Meiji University)*
ISMAI08-MM-05: Agitation Characteristics of a Suspension Polymerization Reactor, *Donghyun Lee and Wook Ryol Hwang (Gyeongsang National University)*	**ISMAI08-CA-05: A Study on Analysis of Temperature in High Frequency Induction Heating,** *Min-Hyeok Park, Han-Bin Kang, Ju-Han Song, In-Seok Pack, Dong-Ug Lee and Seok-Sun Lee(Gyeongsang National University)*	**ISMAI08-DC-13: Characteristics Evaluation of Rubber Bush with Small-Sized 6-DOF Motion Platform,** *Kodai Furukawa, Kyousuke Takekoshi and Taichi Shiiba (Meiji University)*
ISMAI08-MM-06: Study on Temperature Measurement by Scanning Thermal Microscope with MEMS Cantilever Probe, *Takuya Nakazato, Masayuki Shinya, Yoshihiro Niikura and Osamu Nakabeppu (Meiji University)*	**ISMAI08-CA-06: Thermal Environment of a Parking Vehicle with the Solar Radiation,** *Ken Miura, Kenichi P. Kobayashi (Meiji University)*	**ISMAI08-DC-14: Investigation of the depth profiling for noninvasive blood glucose measurements based on photoacoustic spectroscopy,** *Takuma Saito and Yasutoshi Ishihara (Meiji University)*
ISMAI08-MM-07: Study on Fast Scanning Calorimetry with Cantilever Type MEMS Calorimeter, *Taiki Nakamura, Osamu Nakabeppu (Meiji University)*	**ISMAI08-CA-07: A Study on Forming analysis of Eckold machine,** *In-Seok Pack, Han-Bin Kang, Ju-Han song, Min-Hyeok Park, Dong-Ug Lee and Seok-Sun Lee(Gyeongsang National University)*	**ISMAI08-RM-10: Analysis of Inverse Dynamics for Redundant Actuation System with Human Muscle Condition,** *Jiyeon Song, Sanghun Pyo and Jungwon Yoon (Gyeongsang National University)*
ISMAI08-MM-08: Tribological Study on Thermohydrodynamic Characteristics of micro-Dimpled Parallel Thrust Bearings : Effect of Cavitation, *Joon-Oh Lee, Yo-Han Jeong, Tae-Jo Park, Hyun-Seok Kim and Seung-Ho Yang (Gyeongsang National University)*	**ISMAI08-CA-08: Heat Transfer Enhancement of Circular Cylinder by Shot-Peening surface,** *Masataka Sakamoto and Kenichi P. Kobayashi (Meiji University)*	**ISMAI08-RM-11: Development of a mobile robot moving on stairs adaptively,** *Yusuke Nakamura and Keisuke Kato (Meiji University)*
ISMAI08-MM-09: Study on the Validity of the Internal Humidification in a Polymer Electrolyte Fuel Cell, *Takuma Ehara, Shinichi Nagumo (Meiji University)*	**ISMAI08-CA-09: Metal Forming Simulation with Emphasis on Metal Flow Lines,** *Seung-won Jeong, Jae-gun Eom and Man-soo Joun (Gyeongsang National University)*	**ISMAI08-RM-12: Gait Generation for Robot Moving on Winding Stair,** *Wataru Kasai and Keisuke Kato (Meiji University)*
ISMAI08-MM-10: Analysis of Heat Generation in Proportional Valve, *Yo-Han Jeong, Joon-Oh Lee and Tae-Jo Park (Gyeongsang National University)*	**ISMAI08-CA-10: Finite Element Analysis of Rotary Forging for a Efficient Hub Bearing Assembly,** *Moo-Ho Choi, Chan-hee Nam, Min-Cheol Kim and Man-Soo Joun (Gyeongsang National University)*	**ISMAI08-RM-13: Autonomous Controlled Manipulator for life-supporting robots,** *Takayuki Yokoyama and Keisuke Kato (Meiji University)*
ISMAI08-MM-11: Influence of Bucket Shapes on Output Characteristic and Efficiency of a Savonius rotor, *Hidetaka Suzuki, Shinichi Nagumo (Meiji University)*	**ISMAI08-DC-03: Experimental Evaluation of Tire Characteristics for Racing Kart with 6-DOF Motion Platform,** *Yusuke Abe and Taichi Shiiba (Meiji University)*	**ISMAI08-AE-03: Fatigue Performance of Transversely Reinforced Composite Single-Lap Joints In harsh Environmental Conditions,** *Myung-Gyun Ko, Han-Gi Son, Yong-Bin Park, Jin-Hwe Kweon and Jin-Ho Choi (Gyeongsang National University)*

ISMAI08-MM-12: Strength Evaluation of the Mechanically Bolted Joint, *Cheol-Hwan Kim, Jong-Hwa Yun, Jin-Ho Choi and Jin-Hwe Kweon (Gyeongsang National University)*	**ISMAI08-DC-04: Design and Development of Can-classified Compressor with Permanent Magnet,** *Won seok Jo, Jun bok Kang, Jong ryul Kim, Won deuk Lee, Chang hun Kim and Kyung min Ko and Seong Beom Lee (Inje University)*	**ISMAI08-AE-04: Mechanical Properties of Nomex Honeycomb and its Constituents,** *Sung-Jun Park, Rene Roy, Jin-Hwe Kweon and Jin-Ho Choi (Gyeongsang National University)*
ISMAI08-DP-06: Heating Properties of Coaxial Needle Applicator made of SMA for Brain Humor Hyperthermia Treatment, *Kazutoshi Shibafuji, Yasuhiro Shindo, Kazuo Kato and Mitsunori Kubo (Meiji University)*	**ISMAI08-DC-05: Improvement of Vehicle Dynamic Performance with Integrated Control System,** *Takehito Kano, Yota Morinaga and Taichi Shiiba (Meiji University)*	**ISMAI08-AE-05: Static Characteristics of Composite Hat-joints Reinforced by Stainless Steel Pins,** *Dong-gwan Kim, Hun Ji. Yong-Bin, Park, Jin-Hwe Kweon and Jin-Ho Choi (Gyeongsang National University)*
ISMAI08-DP-05: Thermal Error Improvement of Ball Screw for High-precision Feed Drive System by Heat Source Control, *Z.Z. Xu, D.Y. Kim, H. S. Li and Sungki Lyu (GNU.)*		