

12th ISEM'17-Kanazawa, Technical Program

Nov.1	16:00	Registration (Shiinko Cultural Complex)			
	17:30	Welcome reception (Shiinko Cultural Complex)			
Nov.2	8:30	Registration (Nagasaki)			
	9:15	Opening Ceremony (Room A) Toru SAWAI, President of the Japanese Society of Experimental Mechanics, Professor, Kindai University, Japan Masayuki NAKADA, Chairperson of Organizing Committee of 12th ISEM - Kanazawa, Professor, Kanazawa Institute of Technology, Japan			
	9:30	Keynote Lecture 1 (Room A) Chair: Masayuki NAKADA (Kanazawa Institute of Technology, Japan) The New Generation Vibro-acoustic Insulation - A Quaternary Jump in Performance Igor EMBE, Professor, University of Ljubljana, Slovenia			
	10:30	Break			
	10:45	<p>Fluid Dynamics 1 (Room A, 2nd floor) Chair: Kung-Ming CHUNG (National Cheng Kung University, Taiwan)</p> <p>053 Breakup of Compound Liquid Sheet Formed by Impingement of Immiscible Liquid Jets Takahashi SUZUKI, Akihiko MITSUISHI and Kenzo KITAMURA (Toyoashi University of Technology, Japan)</p>	<p>Solid Mechanics 1 (Room B, 2nd floor) Chair: Shota HASUNUMA (Aoyama Gakuin University, Japan)</p> <p>005 Analysis of Creep Behavior of Bending Beam Load Cell Thomas KIEFFER (Vishay Precision Group Micro-Measurements, USA)</p>	<p>Instrumentation and Testing (Room C, 3rd floor) Chair: Daisuke SASAKI (National Institute of Technology, Ishikawa College, Japan)</p> <p>071 Measurement of Strain Wave in the Split Hopkinson Pressure Bar Device using Photoelasticity: Be Aimed at Development of Miniatured Split Hopkinson Pressure Bar Miki FUJIIWARA, Yuelin ZHANG, Satoru YONEYAMA (Aoyama Gakuin University, Japan) and Takashi YOKOYAMA (Okayama University of Science, Japan)</p>	<p>Medical and Welfare Engineering (Room D, 3rd floor) Chair: Takenobu SAKAI (Saitama University, Japan)</p> <p>028 Development of Measurement System of Kinetic Load Applied to Orthosis during Swing Phase Daisuke MORIOKA, Ichiro KITAYAMA, Masato KITANO, Takashi YAMANAWA, Takahisa YANO, Masahiro HANADA (Kindai University, Japan), Hideyo KOYAMA, Takashi MORIMOTO, Hideo SONDBE and Noriyuki MIYAZAKI (Kotonoura Rehabilitation Center Hospital, Japan)</p>
	11:05	<p>073 Mixed Convection Heat Transfer from a Vertical Heated Plate to a Uniform Downward Forced Flow Akihiko MITSUISHI, Sho YAMAMOTO, Kenzo KITAMURA and Takashi SUZUKI (Toyoashi University of Technology, Japan)</p>	<p>059 Evaluation of Microscopically Anisotropic Deformation Fields of Polycrystalline Pure Copper using Digital Image Correlation Method Makoto UCHIDA, Akito TANIGUCHI and Yoshinori KANEKO (Osaka City University, Japan)</p>	<p>094 Experimental Investigation of the Cutting Temperature in Vibration Hobbing Shu KARUBE (National Institute of Technology, Oita College, Japan)</p>	<p>095 Evaluation of Skills in Cardiopulmonary Resuscitation (CPR) Using Microsoft Kinect Satoru OKAMOTO, Hiroshi IWASHIKI, Kenji KARINO, Naoto SATO and Meiko Owada (Shimane University, Japan)</p>
	11:25	<p>075 A Research of Wake Development Behind a Cyclist in Hoods Position PHUNG Mai Van, MIJAU Jun-Jih, LIN San-Yih and Li Shang Ru (National Cheng Kung University, Taiwan)</p>	<p>091 Investigation of Fatigue Crack Opening Stress Level of Fine Particle Peened A7075 Aluminum Alloy by Using Digital Image Correlation Method Taiga KUSUNOKI, Kazuya YAMAMOTO and Yuichi ONO (Tottori University, Japan)</p>	<p>125 Trial of Crack Detection Using Laser Speckle Movement Kohei KAWAHARA and Motoharu FUJIGAKI (University of Fukui, Japan)</p>	<p>066 Injury Risk Evaluation of Brain Concussion in the American Football Based on Reproduction Analysis of Accident Cases Kouta MIYOSHI, Yuelin ZHANG, Satoru YONEYAMA (Aoyama Gakuin University, Japan), Shigenori AOKIWA, Hirochika NAKADATE (Tokyo Metropolitan University, Japan) and Takayuki KOYAMA (Nihon University, Japan)</p>
	11:45	<p>036 Measurement of the Combustion Wave Propagating in Shock Tube by the Ion Probes Yushun SUDA, Souma OKAMOTO, Itsuki KISHIDA (Tokyo Metropolitan College of Industrial Technology, Japan), Tatsuro INAGE (Shonan Institute of Technology, Japan) and Shinzuke UDAGAWA (Tokyo Metropolitan College of Industrial Technology, Japan)</p>	<p>092 Determination of Stress - Strain Relation of A6061 Aluminum Alloy Friction Stir Welds Using DIC Method Shohei INOUE, Yuta TACHI, Yuichi ONO (Tottori University, Japan) and Takashi YOKOYAMA (Okayama University of Science, Japan)</p>		
	12:10	Presentations by Supporting Companies Kyowa Electronic Instruments Co., Ltd., Phatron Limited, Shimadzu Corporation, Yamamoto Metal Technos Co., Ltd.			
	12:55	Lunch			
	14:30	<p>Fluid Dynamics 2 (Room A, 2nd floor) Chair: Takashi SUZUKI (Toyoashi University of Technology, Japan)</p> <p>007 An Experimental Study on a Compressible Cylindrical Cavity Flow Kung-Ming CHUNG, Yi-Xuan HUANG, Kuan-Hung LEE and Keh-Chin CHANG (National Cheng Kung University, Taiwan)</p>	<p>Solid Mechanics 3 (Room B, 2nd floor) Chair: Yuichi ONO (Tottori University, Japan)</p> <p>079 Identification of Viscoelastic Properties by Virtual Finite Element Method Yusuke HOSHINO, Yuelin ZHANG and Satoru YONEYAMA (Aoyama Gakuin University, Japan)</p>	<p>Solid Mechanics 2 (Room C, 3rd floor) Chair: Motoharu FUJIGAKI (University of Fukui, Japan)</p> <p>038 Joining Interface Condition and Joining Strength of Pulsed Current Sintering for Prolonging Fatigue Life Daisuke SASAKI (National Institute of Technology, Ishikawa College, Japan)</p>	<p>Materials Science and Engineering 1 (Room D, 3rd floor) Chair: Hiroshi TAKAHASHI (Tohoku University, Japan)</p> <p>063 Visualization of Ultrasonic Waves Propagations on CFRP Having Concentric Fibers Takeshi ASHIZAWA, Yoshihiro MIZUTANI, Akira TODOROKI and Yoshihiro SUZUKI (Tokyo Institute of Technology, Japan)</p>
	14:55	<p>014 Investigation of Aerodynamic Coefficient Correction of AGARD Model with Static Pressure Measurement in Tri-sonic wind tunnel Hung-Yen CHOU, Yi-Chung LIU, Jung-Nian HSU and Jian-Min HAUNG (National Chung-Shan Institute of Science and Technology, Taiwan)</p>	<p>093 Evaluation of Viscoelastic Characteristics of Polymer by Indentation Test Kazuki KATO, Shunnosuke KISHIBE and Kenichi SAKAUE (Shibaura Institute of Technology, Japan)</p>	<p>044 Fatigue Life Prediction under Low Cycle Fatigue with Machined Surface Layer Shota HASUNUMA, Kazuki MOTOMATSU and Takeshi OGAWA (Aoyama Gakuin University, Japan)</p>	<p>100 Molecular Dynamics Simulation on Weak Bond in Adhesive Jointed Epoxy Resin Takenobu SAKAI, Atsushi TAMURA and Kensuke KAGEYAMA (Saitama University, Japan)</p>
	15:10	<p>087 Velocity Profile Measurement of Swirling Turbulent Flow Downstream of the Double Bend Pipe Using Phased Array LVP San SHWIN, Ari HAMDANI, Hideharu TAKAHASHI and Hiroshige KIKURA (Tokyo Institute of Technology, Japan)</p>	<p>058 Effect of Moisture Content on Blockade Solidification Based on Structural Components Nami TAGAMI, Satoru MIZUNO, Toru SAWAI (Kindai University, Japan), Takashi KAJIMOTO (Industrial Technology Center of Wakayama Prefecture, Japan) and Tamio IDA (Kindai University, Japan)</p>	<p>066 Low Cycle Fatigue Life Estimation of Stainless Steel Koshiro KAWASE, Kiyotaka ORUNAI, Tadao FUKUITA and Koichi OZAKI (Okayama Prefecture University, Japan)</p>	<p>107 Moss-greening Material with Ceramic Base Utilizing Waste Silica Kentaro YASUI, Ayako TANAKA, Kenichi ITO (University of Miyazaki, Japan), Minoru RUIISAKI (Fuji Silya Chemical Ltd., Japan) and Hiroyuki KINOSHITA (University of Miyazaki, Japan)</p>
	15:30	<p>098 Development of a Wave-Power Generation System Using a Silt Type Break Water (Performance of bending plate type generator in 1/5 scale experiment.) Tatsuro WAKIMOTO, Kenji KATOH, Takashi SHIGEMATSU and Shinya YOSHIOKA (Osaka City University, Japan)</p>	<p>062 Strength Evaluation and Fracture Behavior Observation of Carbon Fiber Reinforced Plastic Tube under Impact Loading Shuto AMAHATA (Aoyama Gakuin University, Japan), Jun KOYANAGI (Tokyo University of Science, Japan) and Taro YONEYAMA (Aoyama Gakuin University, Japan)</p>		<p>121 Application to Water-Permeable Paving Blocks of Ceramics using Waste Glass Fiber Reinforced Plastic Yusuke YASUDA, Hayato IWASAKI, Kentaro YASUI, Shogo SOTO, Toshihiro FUJI and Hiroyuki KINOSHITA (University of Miyazaki, Japan)</p>
	15:50	Break			
	16:10	<p>Fluid Dynamics 3 (Room A, 2nd floor) Chair: Tatsuro WAKIMOTO (Osaka City University, Japan)</p> <p>064 Flow Patterns of Inverted Plate in Vortex Streets Behind a Triangular Prism Anson LAI, Yen-Hui KUNG, Chen-Chou CHU and Chen-Cheng CHANG (National Taiwan University, Taiwan)</p>	<p>Solid Mechanics 4 (Room B, 2nd floor) Chair: Thomas KIEFFER (Vishay Precision Group Micro-Measurements, USA)</p> <p>061 Measuring Frequency Dependence of Articular Cartilage by Acoustic Vibration Tatsuro YOSHINO, Yuelin ZHANG and Satoru YONEYAMA (Aoyama Gakuin University, Japan)</p>	<p>Thermodynamics (Room C, 3rd floor) Chair: Kiyotaka ORUNAI (Okayama Prefecture University, Japan)</p> <p>049 Features and Benefits of Solid Biofuels "BIC" to Replace Coal Coke Toru SAWAI and Tamio IDA (Kindai University, Japan)</p>	<p>Environmental Science and Engineering (Room D, 3rd floor) Chair: Takenobu SAKAI (Saitama University, Japan)</p> <p>010 Measurement and Mode Analysis of Acoustic Sound Radiated from Forward-Step with POD-LE Combined Method Osamu TERASHIMA (Toyoama Prefectural University, Japan)</p>
	16:30	<p>099 Force Mechanism of NACA 4412 Airfoil in Static and Dynamic Ground Effect at Moderate Reynolds Numbers Yung-Sheng LIN, Pe-Lun LO, Chin-Chou CHU and Chen-Cheng CHANG (National Taiwan University, Taiwan)</p>	<p>123 On Application of Caustic Method to Measure Stress Intensity Factor of Multiple Branching Crack Shinichi SUZUKI, Takahiro MAEDA, Takahiro NAKASE and Yoshiko NAKATA (Toyoashi University of Technology, Japan)</p>	<p>054 Power Generation Performance of Hydrogen-Fueled Micro Thermophotovoltaic Reactor Chien-Chun KAO, Yueh-Heng LI and Jing-Ru HONG (National Cheng Kung University, Taiwan)</p>	<p>019 Study on Recycling Method of Waste Gypsum Board Paper: Application of Waste Gypsum Board Paper for Soil Improvement Yusuke IMMURA, Tomoaki SATOMI and Hiroshi TAKAHASHI (Tohoku University, Japan)</p>
	16:50	<p>124 An Experimental Study on the Stability of the Accelerating Phase at Low Reynolds Number in a Pulsating Pipe Flow Quang-Huy NGUYEN, Jun-Jih MIJAU and Y. T. HSU (National Cheng Kung University, Taiwan)</p>	<p>126 Three Dimensional Displacement Measurement of Collapsing Embankment Using Sampling More Camera Tomoaki NAKAIZUMI, Motoharu FUJIGAKI, Yusuke SUGIWA (University of Fukui, Japan) and Taro YONEYAMA (Aoyama Gakuin University, Japan)</p>	<p>096 Flame Modes and Combustion Characteristics of a Triple Port Burner Chun-Han CHEN (National Cheng Kung University, Taiwan), Chao-Wei HUANG (National Kaohsiung University of Applied Science, Taiwan) and Yueh-Heng LI (National Cheng Kung University, Taiwan)</p>	<p>020 A Study on Development of Planting Soil by Recycling High-Water Content Mud Shimpei OSHIMA, Tomoaki SATOMI and Hiroshi TAKAHASHI (Tohoku University, Japan)</p>
	17:10	<p>132 Improving the Mixing Performance of a 3D Lab-on-a-Chip Device by using Fluid Dynamics Simulation Toshiro KOBAYASHI, Yuhai YOSHIMASA (National Institute of Technology, Tsuyama College, Japan), Yuichi UTSUMI and Akimbu YAMAGUCHI (University of Hyogo, Japan)</p>	<p>080 Measuring Strain under Ultra-high Temperature Environment Using Digital Image Correlation with Laser Speckle Pattern Kan SAWAI (Aoyama Gakuin University, Japan), Yasuhiro FUKUDA, Jun KOYANAGI (Tokyo University of Science, Japan), Yuelin ZHANG, Satoru YONEYAMA (Aoyama Gakuin University, Japan) and Kenichi HIRAI (IHI Aerospace Co., Ltd., Japan)</p>	<p>097 Optimizing the Operating Parameters of Torrefaction Process on the Combustion Enhancement of Coal/Biochar Blended Fuels Kai-Lin XIAO (National Cheng Kung University, Taiwan), Chao-Wei HUANG (National Kaohsiung University of Applied Science, Taiwan), Guan-Bang CHEN and Yueh-Heng LI (National Cheng Kung University, Taiwan)</p>	<p>021 Study on Fluorine Insolubilization of Paper Sludge Ash by Using Bone Char for Soil Improvement Tatsuru SAKURAI, Tomoaki SATOMI and Hiroshi TAKAHASHI (Tohoku University, Japan)</p>
	17:30		<p>131 Variation of Flame Characteristics of Sargassum with the Variation of H₂ Addition Jun-You PAN (National Cheng Kung University, Taiwan), Tsang-Sheng CHENG (Chung Hua University, Taiwan), Yueh-Heng LI, Fang-Hsien WU and Jian-Syun WU (National Cheng Kung University, Taiwan)</p>	<p>068 Development on Constant Low Pressure Direct Box Shear Test Apparatus and Measurement of Shear Strength of Soil Tomoaki SATOMI and Hiroshi TAKAHASHI (Tohoku University, Japan)</p>	

Nov.3	8:30-9:15	Registration (Kajekiza)			
	9:15	Keynote Lecture 2 (Room A) Chair: Takashi YOKOYAMA (Okayama University of Science, Japan) Some Application Researches of Magnetic Fluids Seichi SUDO, Professor, Akita Prefectural University, Japan			
	10:15	Break			
	10:25	Poster session General poster presentation Special poster presentations by students of High School, College and College of Technology Awarding ceremony for students of High School, College and College of Technology			
	12:00	Lunch			
Nov.4	8:30-9:15	Registration (Kajekiza)			
	9:15	Keynote Lecture 3 (Room A) Chair: Jun-3th MIAU (National Cheng Kung University, Taiwan) Application of the Unmanned Aerial Vehicle in the Smart Agricultural Science Chang-Hsien TAI, Professor, President, National Pingtung University of Science and Technology, Taiwan			
	10:15	Break			
	10:30	008	009	004	009
	10:50	000	048	084	055
11:10	018	101	085	022	
11:30	009	039	029	029	
11:50	Lunch				
Nov.4	13:00	003	004	090	015
	13:20	077	114	103	023
	13:40	120	129	115	038
	14:00	128	110	013	013
	14:20	Break			
Nov.4	14:40	006	026	112	102
	15:00	083	112	102	
	15:20	119	102		
	15:45	Announcement on the next ISEB 2018 - Kaohsiung and Closing Address (Room A)			

Poster Presentation

General Presentation

027	Experimental Study on Dynamic Properties of A Type of Steel-Net Pad Damper at High Temperature	WANG Ke, WAN Jinzhe, LV Zhengsheng (Nanjing University of Aeronautics and Astronautics, China) and YU Yuanyuan (AVIC Aerospace Life-Support Industries, China)	Sound and Vibration
016	Reconstruction of Impact Force on a Concrete Column Using Bayesian Regularization Approach	Chenning CAI and Gang YAN (Nanjing University of Aeronautics and Astronautics, China)	Materials Science and Engineering
017	Guided Waves-based Monitoring of Impact Damage Evolution for Composite under Fatigue Loading	Jianfei TANG, Gang YAN and Xiang LU (Nanjing University of Aeronautics and Astronautics, China)	Materials Science and Engineering
023	On the Separation of Chemically Strengthened Ultrathin Glass Based on Fast Laser Induced Subcritical Crack Growth	Kuo-Shen CHEN, Jo-Fen CHUANG, Tz-Cheng CHIU, Tian-Shiang YANG (National Cheng-Kung University, Taiwan) and Mao-Chi LIN (Industrial Technology Research Institute, Taiwan)	Materials Science and Engineering
104	Visualization of Hand-polishing Process for Japanese Swords – Mechanical Properties of Natural and Artificial Polishing Stones and Kansei Evaluation by Craftsmen –	Kyo OI, Michio UNEDA and Ken-ichi ISHIKAWA (Kanazawa Institute of Technology, Japan)	Materials Science and Engineering
118	Experimental Study on Detection of Fatigue Crack for Metallic Components by Using Guided Waves	Lina LIU (Nanjing University of Aeronautics and Astronautics, China)	Materials Science and Engineering
024	Simultaneous Measurement of Wall Shear Stress Fluctuation and Velocity Fluctuation in a Turbulent Jet	Osamu TERASHIMA (Toyama Prefectural University, Japan)	Fluid Dynamics
041	Monitoring and Cleaning of Filtration-Film Clogging in Acid-Tank Circulation System for Semiconductor Manufacturing	Tian-Shiang YANG, Ting-Hsiang CHAI, Kuo-Shen CHEN (National Cheng Kung University, Taiwan), Kok Shen CHONG and Wei-Hsien LI (Taiwan Semiconductor Manufacturing Company, Ltd., Taiwan)	Fluid Dynamics
056	Fabrication of Cyanoacrylate Hollow Particles via Microbubble Generation	Shoki YUYAMA, Masanori ANDO and Toshinori MAKUTA (Yamagata University, Japan)	Fluid Dynamics
060	Wettability Effect on the Terminal Velocity of a Single Sphere Descending in Still Water Contained in an Inclined Pipe	Manabu IGUCHI, Shuta UEHIRA and Koji MORI (Osaka Electro-Communication University, Japan)	Fluid Dynamics
076	Experiment on Drag Force of Car Models Arranged in a Line	Sohei UEDA, Yuki SOMEYA, Hikaru KOYAMA and Hideaki MONJI (University of Tsukuba, Japan)	Fluid Dynamics
106	Measurement of Underwater Sound Generated by Bubbles from a Nozzle	Yuki SEKIGUCHI, Yoshiaki UEDA, Taku KINOSHITA (Setsunan University, Japan) and Tomoya NAKAJIMA (Osaka Prefecture University, Japan)	Fluid Dynamics
025	Crack Pattern Analysis of Tatami-ishi, A Volcano-derived Polygonal Fracture in Okinawa	Aika TAKASHIMA, Yuri AKIBA (University of Yamanashi, Japan), Akio INOUE (Prefectural University of Kumamoto, Japan) and Hiroyuki SHIMA (University of Yamanashi, Japan)	Solid Mechanics
057	Investigation of Optimal Laser Joining Condition of Engineering Plastics	Takuya MATSUMOTO, Shoya AZUMA, Tadao FUKUTA, Kiyotaka OBUNAI (Okayama Prefectural University, Japan), Yutaka MITOOKA (Industrial Technology Center of Okayama Prefecture, Japan) and Koichi OZAKI (Okayama Prefectural University, Japan)	Solid Mechanics
111	Prediction of Tensile Creep Failure Time for Unidirectional CFRP	Atsushi KOUMA, Masayuki NAKADA and Yasushi MIYANO (Kanazawa Institute of Technology, Japan)	Solid Mechanics
127	Evaluation of Fatigue Strength of Interlaminar Toughened CFRP Laminates Using Benzoxazine Resin as Matrix	Shota YAMANAKA, Masayuki NAKADA, Yasushi MIYANO (Kanazawa Institute of Technology, Japan) and Takayuki MATSUMOTO (JXTG Nippon Oil & Energy Corporation, Japan)	Solid Mechanics
042	Development of Guidance System for Bicycle Climbing Posture	Jerry CHEN and Eileen Chih-Ying YANG (National Chung Cheng University, Taiwan)	Bioengineering
082	Influence of Elastin Application on the Mechanical Properties of Dorsal Skins in Hairless Mice Subjected to Ultraviolet Irradiation	Daiki IMAI, Yuki KAWAMURA, Kumiko TAKEMORI, Hiroyuki ITO and Ei YAMAMOTO (Kindai University, Japan)	Bioengineering
088	Quantitative Evaluation of Polarized Emissivity and Polarized Reflectivity using Infrared Thermographic Instrument	Soshi SUZUKI and Nagahisa OGASAWARA (National Defense Academy, Japan)	Instrumentation and Testing
089	Image Processing for Reduction of Background Reflection from Thermal Image	Nagahisa OGASAWARA, Chie KOBAYASHI and Hiroyuki YAMADA (National Defense Academy, Japan)	Instrumentation and Testing
037	Working Conditions for Maintaining a Seating Posture during Working with a Personal Computer on a Balance Chair	Noriyasu HIROKAWA and Yasuyuki TOYODA (Kindai University, Japan)	Medical and Welfare Engineering
033	Experimental Characterization of Laminar Forced Convection of Water-based Nano-emulsion of Tricosane	C. J. HO and Shun-Ren JHENG (National Cheng Kung University, Taiwan)	Thermodynamics
043	Fabrication of Sugar Alcohol Microcapsules Using Cyanoacrylate for Thermal Storage	Ryota MATSUKAGE, Fumikazu ABE and Toshinori MAKUTA (Yamagata University, Japan)	Thermodynamics
052	Operating Characteristics of a Tar Reformer in a New Fluidized Bed Gasification System	Takahiro MURAKAMI and Minoru ASAI (National Institute of Advanced Industrial Science and Technology, Japan)	Thermodynamics

Special Poster Session by Students of High School, College and College of Technology

Receipt number	Abstract title	Authors / Affiliations
S001	Development of a Hydrophilization Detection Device	Tomoya SANO and Natsuki TAKAGI (National Institute of Technology, Miyakonjo College)
S002	A Micromixer Using the Taylor-Dean Flow: Effect of Aspect Ratio on the Mixing Process	Tatsuki HAMADA, Yasutaka HAYAMIZU, Shinichiro YANASE, Toshihiko KAWABE, Takeshi GONDA, Shinichi MORITA, Shigeru OHTSUKA and Kyoji YAMAMOTO (National Institute of Technology, Yonago College)
S003	Characteristic Analysis of Contraction Universal Gripper based on Porous Granular Material	Naoki KUBOTA and Toshihiko SHIMIZU (Kobe City College of Technology)
S004	Mechanical Property of Late Wood in Obi-Sugi	Kosuke KAMIMURA, Akihiro TAKAHASHI, Naoyuki YAMAMOTO and Toshinobu TOYOHIRO (National Institute of Technology, Miyakonjo College)
S005	Development of Educational Materials for Engineering Design Process using Arduino and Scratch	Tomoyuki MURAKAMI, Kodai TAKAHASHI and Meguru ITO (Kanazawa Technical College)
S006	Temperature Dependence of Specific Heat in Superconducting SrAuSi ₃	Masatake MASUDOME, Ryusei FUKAMIZU and Tsugio HAMADA (National Institute of Technology, Miyakonjo College)
S007	Development of Compact Centrifugal Compressor with High Speed Rotational Impeller Driven by Engine for Quadruped Walking Robot	Takumi KOSHIMOTO, Toshihiko SHIMIZU, Takayuki SUZUKI, Shuhei IKEMOTO and Takeshi MIYAMOTO (Kobe City College of Technology)
S008	Gas-Surface Scattering Properties on Water Adsorbed Surfaces	Naoya UENE, Hideki TAKEUCHI, Yasutaka HAYAMIZU, Takeshi GONDA, Shinichi MORITA, Shigeru OHTSUKA and Kyoji YAMAMOTO (National Institute of Technology, Yonago College)
S009	A Study of Measurement on Tire-Road Friction Coefficient Using a Vehicle Tire	Taisei SUGINO, Shota KUO, Kohei TAKANO, Taisei ISE and Hiroshi TACHIYA (Kanazawa Technical College)
S010	Quality evaluation of compaction using light compaction machine	Isao KIMURA, Hayato ISHIZUKA and Tadaomi EGUCHI (National Institute of Technology, Akashi College)
S011	Development of Tornado Turbine for a Low-Head Micro Hydraulic Power Generator	Hiroki ITO and Tadayuki KAMIMURA (Osaka Prefecture University College of Technology)
S012	Sensing on Automatic Arc Welding - Effect of Disturbance and Its Avoidance Method -	Taiki Yamaguchi, Tatsuya Yoshioka and Katuya KUGAI (Kindai University Technical College)
S013	Design of a Step Climbing Mechanism for Omnidirectional Robot	Naoki YAMAGUSHI and Natsuki TAKAGI (National Institute of Technology, Miyakonjo College)
S014	Application of Numerical Simulation to Heat Treatment	Koudai WATANABE, Takeshi GONDA, Yasutaka HAYAMIZU, Shigeru OHTSUKA and Masaki YAKABE (National Institute of Technology, Yonago College)
S015	Tensile Properties of a MDFed AZ31 Magnesium Alloy at Cryogenic Temperature	Masashi OHARA, Akihiro TAKAHASHI, Naoyuki YAMAMOTO, Hiromi MIURA, Masakazu KOBAYASHI and Toshinobu TOYOHIRO (National Institute of Technology, Miyakonjo College)
S016	Evaluation of Thermal Diffusivity Distribution of Jointed Aluminum Foils by Periodic Heating Method	Sho NAGATA, Shugo MIYAKE, Makoto SEKINE and Takeo KATO (Kobe City College of Technology)
S017	Analysis of Swimming Ability of Blue Fin Tuna and Its Application to Fish Robot - Development of Fish Robot -	Ikushi Yamamoto, Meitarou Takahashi, Yuuki Matsumoto and Katuya KUGAI (Kindai University Technical College)
S018	Study on Liquid Film Thickness on Horizontal Heat Exchanger Tube and Heat Transfer Characteristics in a Falling-Film-Type Heat Exchanger	Hazuki SHIOKAWA, Tsuyoshi NAKAMURA and Hiroyuki SHIRAIWA (National Institute of Technology, Miyakonjo College)
S019	Effects of Al/Ni Ratio on Exothermic Heat of Cold-Rolled Al/Ni Multilayer Materials	Kai UOZAKI, Rino YAMAMOTO, Taisei IZUMI and Shugo MIYAKE (Kobe City College of Technology)
S020	Spatter Adhesion Inhibitor made of Volcanic Ash for Metal Arc Welding	Daido KAWASAKI, Akihiro TAKAHASHI and Naoyuki YAMAMOTO (National Institute of Technology, Miyakonjo College)
S021	Simulation of Biphasic Defibrillator for Cardiopulmonary Resuscitation	Koki TABARA, Atsushi YAMANE, Tomoshi SASAKI and Hiroyuki NAKAYAMA (Izumo College of Medical Health and Nursing)
S022	Making of the ROBOCON Robot	Haruki NAKAGAWA, Ryo FUKAZAWA, Davis EVANS and Kouhei ITO (Kanazawa Technical College)
S023	Direct Dry Hobbing of High Hardness Material Using Vibration Tool	Kazuki KAMADA, Kai KIMIHARA and Shu KARUBE (National Institute of Technology, Oita College)
S024	Development of Non-Contact Vacuum Pad using Universal Jamming Gripper	Yoshiki MORI, Toshihiko SHIMIZU and Shuhei IKEMOTO (Kobe City College of Technology)
S025	Irreversibility Fields in Pb-Bi Metal Superconductors	Ryuji ABEYAMA, Ryusei FUKAMIZU and Tsugio HAMADA (National Institute of Technology, Miyakonjo College)
S026	Interaction Between Lunar Soil Simulant And Metal Materials	Ryota YAMANA, Tadaomi EGUCHI, Wataru UTAKA and Taiga SHIRAKAWA (National Institute of Technology, Akashi College)
S027	Grinding FCD700 with CBN Grinding Wheel ~Influence of Grinding Condition for Residual Stress~	Masateru OUE and Takeshi MIYAMOTO (Kobe City College of Technology)
S028	Characteristic of the Gas-Liquid Two-phase Flow in the Cyclone Nozzle	Shota OMI and Atsushi HARADA (National Institute of Technology, Ishikawa College)