

The 4th International Conference on Mechanical Engineering

Conference Program

Tuesday, August 27, 2019

15.00 – 18.00	Registration – Entrance Sewu 2
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Wednesday, August 28, 2019

07.30 – 08.30	Registration – Entrance Sewu 2
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08.30 - 09.10	Opening Ceremony – Sewu 2
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09.10 - 09.50	Keynote speech I – Sewu 2
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09.50- 10.10	Coffee Break
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10.10 - 10.50	Keynote speech II – Sewu 2
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10.50 - 11.30	Keynote speech III – Sewu 2
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11.30 - 13.00	Lunch
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13.00 - 15.00	Parallel Session 1 – Sewu 2, Sambu Sari 1-3
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15.00 - 15.15	Coffee Break
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15.15 - 18.00	Parallel Session 2 – Sewu 2, Sambu Sari 1-3
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19.00 - 21.00	GALA DINNER - Restaurant
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Thursday, August 29, 2019

07.30 – 08.00	Registration - Entrance Sewu 2
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08.00 - 09.30	Parallel session 3 – Sewu 2, Sambu Sari 1-3
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09.30 - 09.45	Coffee break
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09.45- 11.30	Parallel session 4 – Sewu 2, Sambu Sari 1-3
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11.30 - 13.00	Lunch
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13.00 - 15.00	Parallel session 5 – Sewu 2, Sambu Sari 1-3
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15.00 - 15.15	Coffee break
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15.15 - 16.30	Parallel session 6 – Sewu 2, Sambu Sari 1-3
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16.30 - 17.00	Closing Ceremony – Sewu 2
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Parallel Session Mapping

Date & Time	Parallel Session	Room Name and Paper Number			
		Sewu 2	Sambi Sari 1	Sambi Sari 2	Sambi Sari 3
August 28, 13. ⁰⁰ - 15. ⁰⁰	1	154, 161, 055	181, 080, 121	109, 190, 148	069, 016, 067
		042, 094, 045	103, 119, 091	150, 018, 011	062, 152, 029
		084, 017	097, 028	034, 021	086, 087
August 28, 15. ¹⁵ - 17. ⁴⁵	2	118, 031, 032	112, 134, 007	015, 101, 024	004, 030, 009
		033, 035, 038	014, 020, 151	058, 008, 096	113, 063, 111
		043, 044, 052	001, 027, 110	036, 039, 072	104, 089, 098
		053	114	090	192
August 29, 08. ⁰⁰ - 09. ³⁰	3	085, 054, 056	130, 049, 132	095, 100, 102	180, 129, 156
		057, 059, 060	131, 138, 175	155, 160, 163	003, 019, 088
August 29, 09. ⁴⁵ - 11. ³⁰	4	159, 065, 066	012, 139, 137	126, 176, 177	172, 164, 185
		073, 061, 077	157, 076, 082	127, 184, 186	174, 158, 144
		081		191	
August 29, 13. ⁰⁰ - 14. ⁴⁵	5	162, 168, 099	188, 165, 169	170, 075	140, 105
		107, 108	171, 167	070, 071	106, 133
		115, 022	005, 187	143, 189	040, 141
August 29, 15. ¹⁵ - 16. ¹⁵	6	128, 122	074, 037	182, 068	173, 145
		135, 136	079, 147	120, 041	149, 142

Wednesday, August 28, 2019 - Parallel session 1

Time	Sewu 2 (Energy)	Sambi Sari 1 (Material)	Sambi Sari 2 (Design)	Sambi Sari 3 (Manufacture)
13.00 – 13.15	154. Experimental and Numerical Study on The Boundary Layer Flow over a Flat Plate with a Semi-Circular Bump with and without a Transversal Wire <i>Sutardi, Radiaprima Kartika Wijaya and Setyo Hariyadi</i>	181. Influence of Thermal Cycling of Cold Rolled Stainless Steel 316L onto Hardness and Microstructures <i>Fahmi Mubarak and Putri Intan Usi Fausia</i>	109. Power Prediction of a 4-CRU Parallel Mechanism Based on Extra Gradient Boosting Regressor <i>Mochammad Solichin, Latifah Nurahmi and Bimo Jati Putro</i>	069. Optimization of Welding Parameters Effect of Metal Inert Gas on a Steels Joint <i>Hakam Muzakki and Teguh Prasetyo</i>
13.15 – 13.30	161. The Exergy Analysis on Energy System of AC Split Application with Capillary Tube Incorporated Ejector and Dual Evaporator Temperature <i>Made Ery Arsana, I Gusti Bagus Wijaya Kusuma, Made Sucipta and I Nyoman Suamir</i>	080. 3D Reconstruction of Rolling Contact Fatigue Cracks in Rails with Tight Serial Cutting <i>Rayendra Anandika, Jan Lundberg and Christer Stenström</i>	190. Numerical Homogenization of Viscoelastic Composites with Elliptical Piezoelectric Fibers <i>Mohammed Al-Ajmi</i>	016. Optimizing the Machining Conditions on Friction Stir Welding of Aluminum Alloy through Design Experiments <i>Muhammad Iswar, Muhammad Arsyad Suyuti and Rusdi Nur</i>
13.30 – 13.45	055. Numerical Study of Three-Dimensional Flow Characteristics Around the Wing Airfoil E562 With Forward and Rearward Wingtip Fence <i>Setyo Hariyadi Suranto Putro, Sutardi and Wawan Aries Widodo</i>	121. Friction and Wear Performance of Phosphonium-based Ionic Liquid Additives in Glycol Media <i>Wahyu Wijanarko, Hamid Khanmohammadi and Nuria Espallargas</i>	148. Free Vibration Characteristics of Jute Fibre Reinforced Composite for Determination the Material Properties: Numerical and Experimental Studies <i>Muhammad Rizal, Amir Zaki Mubarak and Muhammad Asyraf</i>	067. Effect of a Dissimilar Thin Plate Joint of Metal Inert Gas <i>Hakam Muzakki, Sabarudin Ahmad and Muallim Muallim</i>
13.45 – 14.00	042. Numerical Simulation Analysis of Supersonic Asymmetric Converging-Diverging Nozzle with Stepped Curvature and Curved Geometries <i>Hariyotejo Pujowidodo, Ahmad Indra Siswantara, Budiarmo -, Asyari Daryus, Gun Gun Ramdhan Gunadi and Candra Damis Widiawaty</i>	103. The effect of acidity and rotation speed in titanium dioxide synthesise process <i>Andi Erwin Eka Putra, Hairul Arsyad, Novriany Amaliyah and Azwar Hayat</i>	150. Biomechanical Analysis of Correction Force and Cobb Angle in Scoliotic Spine Fixation <i>Meifal Rusli, Nofri Kurnia Putra, Hendery Dahlan and Roni Eka Sahputra</i>	062. Multi Objective Optimization in End-Milling of Carbon Fiber Reinforced Polymer using Backpropagation Neural Network-Genetic Algorithm <i>Mohammad Khoiril Effendi, Bobby Oedy Pramoedyo Soepangkat, Rachmadi Norcahyo and Fajar Perdana Nurullah</i>

The 4th Internasional Conference of Mechanical Engineering

Time	Sewu 2 (Energy)	Sambi Sari 1 (Material)	Sambi Sari 2 (Design)	Sambi Sari 3 (Manufacture)
14.00 – 14.15	094. Thermodynamic Investigation of Automotive Air Conditioning System Performance Using Ejector as an Expansion Device <i>Kasni Sumeru, Pratikto, Rachmad Imbang Tritjahjono and Mohamad Firdaus Sukri</i>	119. Fabrication Membrane of Titanium Dioxide (TiO ₂) Blended Polyethersulfone (PES) and Polyvinilidene Fluoride (PVDF); Characterization, Mechanical Properties and Water Treatment <i>Agung Mataram, Nyayu Anisya and Nyayu Ayu Nadiyah</i>	018. Effect of Contact Surface Temperature on Wear of Nickel-Chromium Layer <i>I Made Widiyarta, I Made Parwata, I Putu Lokantara and Dwipayana Dwipayana</i>	152. Effect of grain size on silica blasting processes on the roughness of medical grade SS316L <i>Teguh Dwi Widodo, Rudianto Raharjo, Redi Bintarto and Fikrul Akbar Alamsyah</i>
14.15 – 14.30	045. Analysis of Heat Transfer and Pressure Loss of Fluid Flow through Perforated Concave Delta Winglet Vortex Generators in A Rectangular Channel with Field Synergy Principle <i>Syaiful, Pracayasa Ade Putra, Mohammad Tauviqirrahman, Nazaruddin Sinaga and Myung-Whan Bae</i>	091. An Experimental Investigation of Geopolymer Composite Reinforced by Short Carbon Fiber <i>Jamiatul Akmal, Mohammad Badaruddin and Kiki Eko Suwanto</i>	011. Geometric Modeling of Fore Body Surface Remotely Operated Vehicle (ROV) Observation Class <i>Dhimas Satria, Romi Wiryadinata, Dpal Esiswitoyo, Muhamad Haykal Fasya, Erny Listijorini and Rina Lusiani</i>	029. Development of Tools Utilization Monitoring System on Labor-Intensive Manufacturing Industry <i>Herman Budi Harja, Tri Prakosa, Sri Raharno, Indra Nurhadi, Yatna Yuwana Martawirya, Rachmad Hartono and Muhammad Zulfahmi</i>
14.30 – 14.45	084. The Study of The Aerodynamic Effect of Motorcar Rear Wing Using Computational Simulation <i>Awang Idris and Abdul Salam Aliyas</i>	097. Low cycle fatigue properties of aluminizing coating on cold-drawn AISI 1018 steel <i>Mohammad Badaruddin, Zulhanif and Helmy Alian</i>	034. Numerical Study of Heat Transfer And Stress-Strain on 2 Joints and 3 Joints Soot Blower Lance Tube at Suralaya Power Plant <i>Agung Nugroho, Agus Sigit Pramono and Agung Nugroho</i>	086. Analysis of Chips Formation in Subtractive Manufacturing for Working Safety <i>Fachri Koeshardono and Aep Baihaki</i>
14.45 – 15.00	017. Effect of Natural Gas Injection Timing On Combustion Performance & Methane Slip Emission of Diesel – NG Dual Fuel Engine : An Experimental Study <i>Betty Ariani, Made Ariana and Muhammad Fathallah</i>	028. The performance of carbide waste as an adsorbent to reduce spark ignition engine emission <i>Hendry Sakke Tira, Made Wirawan and Samsul Rahman</i>	021. Urban Soundscape Prediction Based On Acoustic Ecology and MFCC Parameters <i>Anastasia Noviyanti, Anugrah Sabdono Sudarsono and Dian Kusumaningrum</i>	087. Effect of Feeding and Depth of Cut on Surface Roughness in Truing and Dressing Process Using Cylindrical Grinding Machine <i>Fachri Koeshardono and Seafuri Khairunnisa</i>

Wednesday, August 28, 2019 - Parallel session 2

Time	Sewu 2 (Energy)	Sambi Sari 1 (Material)	Sambi Sari 2 (Design)	Sambi Sari 3 (Manufacture)
15.15 – 15.30	118. Numerical Simulation Of Coal Particle Size (Fineness) Effect To Combustion Characteristics Of Sub-Critical Pulverized Coal Boiler 600 MW Capacity <i>Heri Purnomo and Bambang Sudarmanta</i>	112. Application of Seeds from Psidium Guajava as Organic Inhibitor <i>Atria Pradityana, Subowo, Hari Subiyanto, Eddy Widiyono and Gathot Dwi Winarto</i>	015. Evaluation of Derailment Risk by Simplified Analytic Procedure and Computer Simulation <i>Yunendar Aryo Handoko, Yunus Sinaga and Prasetya Adi Nugraha</i>	004. Numerical Structure Analysis of Air Purifier Bike with Frame Designs and Materials Variation <i>Bambang Iskandriawan, Jatmiko Jatmiko and Joko Ade Nugroho</i>
15.30 – 15.45	031. The Experiment Study of Performance of Air Heater Solar Collectors Type Dimple Inline Plate V-Corrugated Absorber <i>Marsianus Mario Fredrikus Hanmina and Djatmiko Ichsani</i>	134. Effect of ground glass particles on the water absorption and tensile properties of epoxy <i>Sugiman, Paryanto Dwi Setyawan and Salman</i>	101. Design and Analysis for Vibration Assisted Micro Milling <i>Wina Libyawati, Gandjar Kiswanto and Poly Poly</i>	030. Effects of Processing Parameters on The Tensile Strength of Injection Moulding Unidirectional Glass Fiber Reinforced Polypropylene Composite <i>Muhammad Alek Ad, Heru Santoso Budi Rochardjo and Cahyo Budiyanoro</i>
15.45 – 16.00	032. The Effect of Injection Timing of Diesel Engine Using Emulsified Fuel on Engine Performances and Exhaust Emissions <i>Irvan Septian Krisandika, Rosid Rosid and Bambang Sudarmanta</i>	007. Improving of Electric Voltage Response Based on Improving of Electrical Properties for Multiferroic Material of BiFeO ₃ -BaTiO ₃ System <i>Dwita Suastiyanti, Yuli Nurul Maulida and Marlin Wijaya</i>	024. Dynamic Trajectory Generation of Suspended Cable Driven Parallel Robot <i>Adlina Taufik Syamlan, Latifah Nurahmi, Mohamad Nasyir Tamara and Bambang Pramujati</i>	009. The Phase Transformation of CP-Titanium Grade 2 and AISI 316 L in Cardiovascular Stent Manufacturing by Die Sinking EDM <i>Eko Pujiyulianto, Yasmina Amalia, Tri Wahyuningsih, Frideni Y. P. G. Field, Riria Z. Mirahati and Suyitno</i>
16.00 – 16.15	033. Experimental Study of Performance of Scroll Type Expander in Organic Rankine Cycle (Orc) With R-141b Working Fluid <i>Dueng Deriva, M.Yunus Abdullah and Prabow</i>	014. Root Caused Failure Analysis of Tube Pendant Superheater in 660 MW Coal Power Plant <i>Ariyana Dwiputra, Ruly Sitanggang, Eko Supriyanto and Nur Achmad Busairi</i>	058. Modification, Manufacturing, and Testing of Three Axes Load cell <i>Satrio Wicaksono, Ferryanto Ferryanto, Agung Wibowo and Andi Isra Mahyuddin</i>	013. Effect of Punch Angle and Punch Radius on Bending Angle through V-Bending Process of Sheet Metal <i>Muhammad Arsyad Suyuti, Muhammad Iswar and Rusdi Nur</i>

The 4th Internasional Conference of Mechanical Engineering

Time	Sewu 2 (Energy)	Sambi Sari 1 (Material)	Sambi Sari 2 (Design)	Sambi Sari 3 (Manufacture)
16.15 – 16.30	035. CFD Simulations of Complex Fluid Flow in Gas-Solid Fluidized Bed using Modified k-epsilon Turbulence Models <i>Asyari Daryus, Ahmad Indra Siswantara, Budiarmo -, Gun Gun Ramdhan Gunadi, Hariyotojo Pujowidodo and Candra Damis Widiawaty</i>	020. Corrosion Behavior of a Predeformed FeNi Lateritic Steel with Bainite Structure <i>Miftakhur Rohmah, M. Syaiful Anwar and Fatayalkadri Citrawati</i>	008. Optimization in Airless Tires Design Using Back-Propagation Neural Network (Bpnn) and Genetic Algorithm (Ga) Approaches <i>Agus Sigit Pramono and Mohammad Khoiril Effendi</i>	063. Prediction of Cutting Force in End Milling of Glass Fiber Reinforced Polymer (GFRP) Composites Using Adaptive Neuro Fuzzy Inference System (ANFIS) <i>Mohammad Khoiril Effendi, Bobby Oedy Pramodyo Soepangkat, Suhardjono, Rachmadi Norcahyo, Sutikno and Sampurno</i>
16.30 – 16.45	038. Numerical Study and Unsteady Savonius and Icewind Turbine Blade Design in FSI Method <i>Zain Lillahulhaq and Vivien Suphandani Djanali</i>	151. Effects of Manganese Addition on the Microstructures and Mechanical Properties of Cu-29Zn-0.5Al Alloys <i>Imam Basori</i>	096. Modularization of Ship Engine Room Using Design Structure Matrix (DSM) Based on The Genetic Algorithm <i>Farhan Aji Waskita, Arif Kurniawan, Gunawan and Yanuar</i>	111. Process Simulation Based on 3D Printed Vero-Clear to Produce Injection Mold Inserts <i>Ismet P. Ilyas and Riona Ihsan Media</i>
16.45 – 17.00	043. Numerical Study of the Characteristics of Flow and Heat Transfer Design of USC 1000 MW Superheater Boiler <i>Ronny Sirait and Prabowo</i>	001. Aging and Degradation of Electrode Cu Spot Welding On The Thin Plate Low Carbon Steel <i>Agus Sifa, Ario Baskoro and Tito Endramawan</i>	036. Analysis Properties of Rock Mechanics in JIPE area, Gresik, East Java, Indonesia for Tunnel Construction using Deformation Methods in MATLAB Application <i>Dina Yulianita, Rista Fitri Indriani and Muthiul Padlilah</i>	104. Life Cycle Cost and Replacement Analysis for Power Plant Generator <i>Ridho Luthfi and Sutikno</i>
17.00 – 17.15	044. Influence of Water Diesel Emulsion on The Performance and Emission Diesel Engine Under Varying Engine Load <i>Abdul Wahid Arohman, Rosid Rosid and Bambang Sudarmanta</i>	027. Analysis on Superheater Tubes Degradation at a Tangentially Fired Pulverized Coal Power Plant <i>Muhammad Aujul Majdi and Suwarno</i>	039. Power and Tractive Force Analysis of Series-Parallel Hybrid Vehicle Based on Road Test (Case Study: Toyota Prius Hybrid) <i>Luthfie Hadi and I Nyoman Sutantra</i>	089. Design Analysis in the Application of Solar Energy for Crossing River HDPE Boat <i>Eko Julianto and Agoes Santoso</i>

The 4th Internasional Conference of Mechanical Engineering

Time	Sewu 2 (Energy)	Sambi Sari 1 (Material)	Sambi Sari 2 (Design)	Sambi Sari 3 (Manufacture)
17.15 – 17.30	052. Experimental Study Effect of Classifier Pulverizer Opening Setting Variation on Fineness Production Passed 200 Mesh for Berau Coal in Unit 6 of Suralaya Steam Power Plant <i>Imam Dwi Prasetyo and Prabowo</i>	110. Correlation of Holding Time and Bottom Ash Particle Size to Mechanical Properties of Polypropylene Composite <i>I Made Kastawan, I Nyoman Sutantra and Sutikno</i>	072. Power and Tractive Force Analysis of Series-Parallel Plug-in Hybrid Vehicle Based on Road Test (Case Study: Toyota Prius Plug-in Hybrid) <i>Darius Giovanni and I Nyoman Sutantra</i>	098. Multi-Response Optimization of Vibration and Surface Roughness on the Surface Grinding Process Parameter Using OCR12VM Material With Taguchi-Grey Method <i>Hendri Jumianto, Suhardjono, Sampurno and Mohammad Khoirul Effendi</i>
17.30 – 17.45	053. Analysis and Optimization Of A 400 MW Coal Fired Power Plant Under A Proposed Low Rank Coal with Flue Gas Recirculation Mode <i>I Gede Darmadi and Budi Utomo Kukuh Widodo</i>	114. Evaluation of Inhibitive Action from Papaya Leaf on Surface API 5L Grade B in Acid Solution <i>Atria Pradityana, Nur Husodo, Budi Luwar Sanyoto, Heru Mirmanto and Mahirul Mursid</i>	090. The Influence of Un-lean CNG Injection to the Material Strength of the Single Cylinder Dual Fuel Diesel Engine <i>Agoes Santoso, Bambang Sampurno, Semin and Beny Cahyono</i>	192. Waste analysis to improve container port performance using lean six sigma method. <i>Witantyo and Naurah Ranaindy</i>

Thursday, August 29, 2019 - Parallel session 3

Time	Sewu 2 (Energy)	Sambi Sari 1 (Material)	Sambi Sari 2 (Design)	Sambi Sari 3 (Manufacture)
08.00 – 08.15	085. Numerical Study of Flow Characteristic and Heat Transfer on High Pressure Turbine Forced Cooling Process of PLTU Lontar <i>Suyadi and Ary Bachtiar</i>	130. Natural Fiber Reinforced Composites as Bulletproof Panel Materials <i>Sutikno, Ahmat Safaat and Fendy Kussuma</i>	095. Operator Splitting Method for Solving Anisotropic Problem <i>Is Bunyamin Suryo and Maureen Clerc</i>	180. Influence of Specimen Geometry to the Tensile Property of 316L Stainless Steel: Study Case on Raw Material of Stents <i>Achmad Syaifudin and Julendra B. Ariatedja</i>
08.15 – 08.30	054. Experimental Study The effect of the variation of the Mill Air Fuel ratio on fineness in the Pulverizer unit 6 of the Suralaya Steam Power Plant <i>Bintoro Adi Nugroho and Djatmiko Ichsani</i>	049. Effect of Vehicle Speed to the Fatigue Life of a Coil Spring Based on Strain-Life Approach <i>Teuku Edisah Putra</i>	100. Topology Optimization on Geometry of 3D Printed "Impulse RC Alien 4 Inch" Racing Quadcopter Frame with Polylactic Acid Material <i>Imang Eko Saputro, Alief Wikarta and Ali Muhtar</i>	129. Assembly Line Design in Final Assembly Excavator at PT.XYZ Using Genetic Algorithm <i>Risty Mayang Sari, Dida Diah Damayanti and Widia Juliani</i>
08.30 – 08.45	056. Numerical Study of Dual Fuel Engine using Proportional Natural Gas Split Injection <i>Frengki Mohamad Felayati, Semin Semin, Beny Cahyono and Rosli Abu Bakar</i>	132. Tensile, flexural and water absorption properties of bamboo fiber/unsaturated polyester composites: Effect of calcium carbonate content <i>Sugiman, Atin Martino, Paryanto Dwi Setyawan and Buan Anshari</i>	102. Design and Analysis of Regenerative Shock Absorber Using Ball Screw Mechanism for Vehicle Suspension <i>Dhion Khairul Nugraha and Harus Laksana Guntur</i>	156. Surface roughness characterization of medical implant material SS316L stainless steel after cut with water jet cutting process <i>Teguh Dwi Widodo, Rudianto Raharjo and Muhammad Zaimi</i>
08.45 – 09.00	057. Investigation of Dual Fuel Engine Performance Based on Proportional CNG Substitution <i>Semin, Istiqlal Sanatu, Beny Cahyono, Frengki Mohamad Felayati and Yudha Prasetiyo</i>	131. Effects of Oil Palm Empty Fruit Bunch and Magnesium Oxide Volume Fraction on Mechanical Characteristics of Railway Brake Block Composite Material <i>Sutikno, Wajan Berata, Fendy Kussuma and Ahmat Safaat</i>	155. Effect of surface treatment and grain boundary orientation to the changes in stents surface roughness <i>Achmad Syaifudin, Julendra B. Ariatedja and Katsuhiko Sasaki</i>	003. Surface Roughness Evolution and Dimensional Changes of Magnesium Alloy Plate during Electropolishing <i>Budi Arifvianto, Bahtiar Rahmat, Urip Agus Salim, Suyitno and Muslim Mahardika</i>

The 4th Internasional Conference of Mechanical Engineering

Time	Sewu 2 (Energy)	Sambi Sari 1 (Material)	Sambi Sari 2 (Design)	Sambi Sari 3 (Manufacture)
09.00 – 09.15	059. Effect of B20 Heating on the Macroscopic Fuel Spray Characteristic <i>Semin, Faris Muhammad, Beny Cahyono, Barokah Barokah and Saiful Irfan</i>	138. Analysis of Condensor Tube Thinning Distribution and Their Failure Modes Based on Eddy Current Data <i>Fatchur Rozaq and Fahmi Mubarak</i>	160. Analytical and Experimental Study of Translational Vibration Response's Reduction on Aluminum (Al) Drilling Process Using Translational Mass Vibration Absorber (TMVA) System <i>W Hendrowati, H L Guntur, A A A Daman and H Lestari</i>	019. The Combination Effect of Machine Dynamic Behavior, Laser Power and Scan Speed on the Accuracy of Single Layer Bead Corner Formation in the Selective Laser Melting <i>Teguh Pudji Purwanto, Alva Edy Tontowi and Rachmat R Sriwijaya</i>
09.15 – 09.30	060. An Experimental Investigation of Natural Gas Injection Timing on Dual-Fuel Engine <i>Semin, Yudha Prasetyo, Beny Cahyono, Frengki Mohamad Felayati and Istiqlal Sanatu Dzahab</i>	175. Carbon and Nitrogen Composition for Non-Precious Metal Catalyst to Physical Characterization and Electrochemical Properties <i>Vuri Ayu Setyowati, Diah Susanti, Lukman Noerochim, Eriek Wahyu Restu Widodo and Mohammad Yusuf Sulaiman</i>	163. Optimum Value Analysis of Vibration Response Reduction in Translational, Rolling, and Pitching Direction of the Primary System and Voltage Generation by Cantilever Piezoelectric Vibration Absorber (CPVA) Mechanism <i>W Hendrowati, H L Guntur, A A A Daman and A M Firdaus</i>	088. Replacement Scheduling of Brine Heater Desalination Plant Using Binary Integer Programming Method <i>Dini Rahmawati and Abdullah Shahab</i>

Thursday, August 29, 2019 - Parallel session 4

Time	Sewu 2 (Energy)	Sambi Sari 1 (Energy)	Sambi Sari 2 (Material)	Sambi Sari 3 (Design)
09.45 – 10.00	159. Numerical Study of a Savonius Wind Turbine with Standard Blades and Bach Blades Variations <i>Vivien Djanali, Zharfan Fathurrahman, Bambang Arip Dwiyantoro and Nur Ikhwan</i>	012. The Interactions of I-65 ⁰ Type Cylinder and Savonius Wind Turbine for Performance Improvement <i>Gunawan Sakti, Triyogi Yuwono and Wawan Aries Widodo</i>	126. Effect Of Sulfuric Acid Concentration On The Corrosion Rate Of ASTM A213-T12 Steel <i>Muhammad Nashir and Suwarno</i>	172. Hydro-Regenerative Shock Absorber with Two Generators in Series for Vehicle Suspension <i>Harus Laksana Guntur, Wiwiek Hendrowati and Aida Annisa Amin Daman</i>
10.00 – 10.15	065. Performances of Three Solar Distillators with Different Absorbers <i>Mirmanto, Made Wirawan and I.M.A. Sayoga</i>	139. Numerical Study of Coal Combustion Characteristics of In-Furnace Blending Method with Variety of Feeder Coal Type at Tilting Burner Angle -10 ° of 625 MW Forced Circulation Boiler <i>Fajar Purnomo and Atok Setiyawan</i>	176. Analisis The Effect Of Charcoal Mass Variation To Ni Content, Sinter Strength and Yield On Sintering Process Of Limonitic Laterite Nickel Ore <i>Fakhreza Abdul, Sungging Pintowantoro and Ari Maulidani</i>	164. Radial Vibration Damper (RVD) Mechanism Validation for Long Thin Shaft at Lathe Machine <i>W Hendrowati, H L Guntur, Aida Annisa Amin Daman and D Anggitasari</i>
10.15 – 10.30	066. Effect of Natural Gas Injection Pulse Width on Dual Fuel Engine Performance <i>Dimas Tegar Rahmatullah, Semin Semin, Frengki Mohamad Felayati and Beny Cahyono</i>	137. Prediction of furnace cleanliness status with artificial Intelligent for sootblower advisor in PLTU Suralaya Unit 4 <i>Khabib Abdul Munif and Unggul Wasiwitono</i>	177. Direct Reduction of Limonitic Laterite Nickel Ore with Variation Type of Reductor to Fe, Ni Content and Recovery by using Coal-Dolomit Bed Method <i>Sungging Pintowantoro, Fakhreza Abdul and Dede Zulyansyah</i>	174. The Effect of Tuned Mass Damper to the Vibration of Wind Turbine Structure Model <i>Harus Lakasna Guntur, Wiwiek Hendrowati and Aida Annisa Amin Daman</i>
10.30 – 10.45	073. Investigation the Effect of Superficial Velocity to the Heat Transfer in Bubbling Regime of Fluidization Using CFD Simulation <i>Candra Damis Widiawaty, Ahmad Indra Siswantara, Budiarmo, Asyari Daryus, Gun Gun Ramdhan Gunadi and Hariyotejo Pujowidodo</i>	157. Ratchet Flywheel Regenerative System to Enhance Energy Captured for Electric Vehicle (EV) <i>Agung Prijo Budijono, I Nyoman Sutantra, Agus Sigit Pramono, and Bidya Nur Habib</i>	127. The Effect of Citric Acid Concentration on Corrosion Behavior of Austenitic Stainless Steel 316 L <i>Handi Muhtadi and Suwarno</i>	158. Dynamic Analysis and Control of Gyroscopic Inverted Pendulum <i>Unggul Wasiwitono, Arif Wahjudi, Ari Kurniawan Saputra, Edwin Ramadhani Sampurna and I Nyoman Sutantra</i>

The 4th Internasional Conference of Mechanical Engineering

Time	Sewu 2 (Energy)	Sambi Sari 1 (Energy)	Sambi Sari 2 (Material)	Sambi Sari 3 (Design)
10.45 – 11.00	061. Numerical Investigation of Flow Through Square Duct With Installed Tripping Rod on square Elbow <i>Ikki Adji and Wawan Widodo</i>	76. Force Coefficients Characteristic on a Four Circular Cylinders in an In-Line Square Configuration near a Plane Wall at “Small Gap” <i>A. Grummy Wailanduw, Triyogi Yuwono and Priyo Heru Adiwibowo</i>	184. Deformation analysis of internal fixation plate on femur bone fracture considering material variation <i>Djoko Kuswanto, Achmad Syaifudin and Teguh Prasetyo</i>	144. Noise Reduction for Passenger Vehicle Radiator Cooling Fan by Using Additional Plate and Material Dampers <i>Rachmat Sriwijaya, Ilham Anjasmoro, Muhamad Akmal , Galih Prima Yoga , and Teguh Pudji Purwanto</i>
11.00 – 11.15	077. Emission Analysis of Dual Fuel Marine Engine Using Multi Diameters Hole Injector Based on Simulation <i>Semin, Tadjudin Aulia Wijaya, Beny Cahyono, Nilam S. Octavian and Rosli Abu Bakar</i>	082. Optimization of CNG Injection Duration on Combustions and Emissions Characteristics on CNG-CPO Biodiesel Dual Fuel Engine with Load Variations <i>Dori Yuvenda, Bambang Sudarmanta and Arif Wahjudi</i>	186. Effect of Stirring on the Quality of ADC 12 Cast Aluminium Alloy <i>Helena Carolina Kis Agustin, Indra Sidharta and Leonardus Leonardus</i>	
11.15 – 11.30	081. Numerical Analysis of Dual Fuel Marine Engine Performance using Multi Diameter Hole Injector <i>Semin, Atsil Dzakwan, Beny Cahyono, Nilam S. Octaviani and Rosli A. Bakar</i>		191. Impact Toughness Characteristics of SM570-TMC Steel Joint Using Welding Wire Containing 0.4% Nickel at Different Level of Heat Input <i>Herry Oktadinata, Winarto, Dedi Priadi, Eddy S. Siradj and Ario S. Baskoro</i>	

Thursday, August 29, 2019 - Parallel session 5

Time	Sewu 2 (Energy)	Sambi Sari 1 (Energy)	Sambi Sari 2 (Material)	Sambi Sari 3 (Control)
13.00 – 13.15	162. Site Investigation on Water Cooled Chiller Plant for Energy Conservation and Environmental Impact Reduction of a Large Shopping Mall <i>I Nyoman Suamir, Made Ery Arsana, I Wayan Adi Subagia, I Made Rasta, Luh Putu Ike Midiani and Achmad Wibolo</i>	188. The effect of compression ratio variations to engine performance and emissions characteristics on diesel engine fuelled with Ethanol-intermediate sulphur content Diesel Fuel (Dexalite) Blend <i>Atok Setiyawan, Is Bunyamin Suryo and Arif Fadlulah</i>	170. Non-monotonous Effect of The Adhesive Thickness on The Stiffness of Adhesive Butt Joint at High Strain Rate Loading <i>Yohanes, Agus Sigit Pramono and Adib Burhan Yahya</i>	140. Design of Sliding Mode Control for Surge, Heave and Pitch Motion Control of UNUSAITS AUV <i>Hendro Nurhadi, Teguh Herlambang and Subchan</i>
13.15 – 13.30	168. Modeling and Simulation of Engine Speed on Idle Speed Conditions System by using MIMO on Spark Ignition Engine <i>Irianto and Irma Wulandari</i>	165. Combustion and Emissions Characteristics on Stationary Diesel Engine With 30% Water in Diesel Emulsion Fuel <i>Bambang Sudarmanta, Rosid, Irvan Septian Krisandika and Abdul Wahid Arohman</i>	075. Failure Investigation of a Steering Bearing in Matic Motorcycle 125 cc <i>Nur Aidi Ariyanto, Sri Nugroho and Rifky Ismail</i>	105. Performance Analysis and Comparation of BLDC Controller Trapezoidal and FOC <i>Agus Nurriartono, Agus Mukhlisin and Muhammad Nur Yuniarto</i>
13.30 – 13.45	099. Analysis of Particulate Dispersion from Coal Use in Suralaya Coal-fired Power Plant <i>Vini Charloth, Wawan Widodo and Idaa Warmadewanthi</i>	169. Effect of 35% Water in Diesel Emulsion Fuel and Afr Enriched Combustion on The Combustion and Emissions Characteristics <i>Rosid, Bambang Sudarmanta, Lukman Atmaja, Abdul Wahid Arohman and Irvan Septian Krisandika</i>	070. Numerical convergence in wear volume prediction of UHMWPE acetabular cup paired with cp Ti femoral head hip implants <i>Handoko, Suyitno, Rini Dharmastiti and Rahadyan Magetsari</i>	106. Towards Intelligent and Reconfigurable Brushless Direct Current (BLDC) Motor Controller <i>Agus Mukhlisin, I Nyoman Sutantra and Estiko Rijanto</i>
13.45 – 14.00	107. Experimental Study The Effect of Excess Air in to Unburn Carbon and Boiler Efficiency Using Coal with Heating Value 4200 kcal/kg at a 500 MW Capacity Power Plant <i>Imam Siswo Utomo and Djatmiko Ichsani</i>	171. Development and Experimental Evaluation of Small Concentrated Solar Oven <i>Tri Ayodha Ajiwiguna, Narulita Andriyani and Suwandi Suwandi</i>	071. Dissimilar Joining Metal of Aluminum 6061 and Galvanis Pipe Using Friction Welding Method <i>Widia Setiawan, Akhmad Herdiyanto, Nugroho Santoso and Surojo Surojo</i>	133. Short Circuit Study On Ship Dynamic Positioning System Based On Laboratory Scale Experiment <i>Sardono Sarwito, Semin, M Badrus Zaman, Soediby and Tangguh Setia Ramadhan</i>

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Time	Sewu 2 (Energy)	Sambi Sari 1 (Energy)	Sambi Sari 2 (Material)	Sambi Sari 3 (Control)
14.00 – 14.15	108. The Effects of Pilot Injection Timing in Dual-Fuel Diesel Engine using Biodiesel-CNG on The Combustion Characteristics and Exhaust Emissions <i>Ahmad Arbi Trihatmojo, Dori Yuvenda and Bambang Sudarmanta</i>	167. Passive Flow Control on Square Duct and 90° Elbow with Circular Turbulator at Certain Gaps <i>Randi Purnama Putra, Sutardi Sutardi and Wawan Aries Widodo</i>	143. Extraction and Characterization of Nanocrystalline Cellulose (NCC) from Ramie Fiber by Hydrochloric Acid Hydrolysis <i>Dimas Abdillah Akbar, Kusmono, Muhammad Waziz Wildan and Mochammad Noer Ilman</i>	040. Earthquake Waveform Data Conversion using Seisan and Seizmo for Magnitude Study Comparison <i>Anta Senaputra, Adlina Syamlan and Bambang Pramujati</i>
14.15 – 14.30	115. Numerical Study Effect of Burner Tilt Angle on the Boiler Rear Pass Temperature on PLTU Banten 1 Suralaya under LRC and MRC Coal Conditions <i>Nugroho Setyo Hutomo and Arif Wahjudi</i>	005. Numerical Study on the Performance and Flow Field of Varied Conical Basin for Efficient Gravitational Water Vortex Power Plant <i>Didit Setyo Pamuji, Nizam Effendy and Daru Sugati</i>	189. Plug and Play Manhole Kit Holder for Storage Tank: A Comprehensive Design Analysis <i>Hanung Kurniawan, Nurhasan Fitriyadi, Puspito Nikho Arfian, Mohammad Rais Alfiansyah Taufiq and Akmal Irfan Majid</i>	141. Position Estimation of Touristant ASV Using Ensemble Kalman Filter <i>Hendro Nurhadi, Teguh Herlambang and Dieky Adzkiya</i>
14.30 – 14.45	022. Investigation of PEM Fuel Cell Performance Using the Bio-Inspired Flow Field Combined with Baffles on Branch Channels <i>Arasy Fahrudin, Djatmiko Ichsani, Fadlilatul Taufany and Budi Utomo Kukuh Widodo</i>	187. Design Evaluation of an Automotive Radiator for Student Formula SAE Vehicle "Bimasakti": Thermal Calculations <i>Fajar Fitrahadi Danda, Muhammad Reza Pradecta, Luqman Al Huda and Akmal Irfan Majid</i>		

Thursday, August 29, 2019 - Parallel session 6

Time	Sewu 2 (Energy)	Sambi Sari 1 (Manufacture)	Sambi Sari 2 (Design)	Sambi Sari 3 (Design)
15.15 – 15.30	128. Analysis of an Optimum Method for Power Generation Using Flare Gas From Oil Refinery Plants <i>Farai William Saungweme and Bambang Arip Dwiyantoro</i>	074. Multi Objective Optimization in End-Milling of Carbon Fiber Reinforced Polymer Using Backpropagation Neural Network-Ant Colony Optimization <i>Bobby Oedy Pramoedyo Soepangkat, Mohammad Khoiril Effendi, Rachmadi Norcahyo and Fathi Robbany</i>	182. Girder extension effect on earthquake resilience of ship unloader crane: A numerical study <i>Suwarno and Achmad Syaifudin</i>	173. Analysis and Comparison of the Potentially Recaptured Kinetic Energy from the Vehicle Braking Process of Lock and Anti-Lock Brake System <i>Harus Laksana Guntur, Wiwiek Hendrowati and Aida Annisa Amin Daman</i>
15.30 – 15.45	122. Numerical Study of Optimization Performance Induced Draft Fan Through Openings Setting the Inlet Guide Vane <i>Yanuar Rulyanto and Heru Mirmanto</i>	037. The Effect of Processing Parameter on Composite's Impact Strength of Continuous Unidirectional Polypropylene-Glass Fiber Composite <i>Satrio Eko Wicaksono</i>	068. Ball Bearing Fault Diagnosis Using Wavelet Transform and Principal Component Analysis <i>Berli Kamiel and Ian Howard</i>	145. Simulation Study and Stress Analysis Conventional Pumping Unit Finite Element Method <i>Rachmad Pascal Tribuana and RachmatSriwijaya</i>
15.45 – 16.00	135. Numerical Analysis of Conjugate Porous Media for Increasing Heat Transfer Rate in Fixed Bed Spheres <i>Farida Rahmawati Purnadiana, Prabowo Prabowo and Herman Sasongko</i>	079. Macro-micro Analyses on 2-layer Semiautomatic MIG Welding of AA5052 Material Using ER5356 Electrode <i>Mudjijana Mudjijana, Rela Adi Himarosa and Sudarisman</i>	120. Dynamic Analysis of Bangladesh Broad Gauge Train Using Multibody System <i>Satrio Wicaksono, Handy Husodo and Andi Mahyuddin</i>	149. The Effect of Surface Contact on the Stress Distribution and Deflection of Airless Tire <i>Reodhy Hamzah and Rachmat Sriwijaya</i>
16.00 – 16.15	136. Flow Structure Investigation Heat Transfer Enhancement on Inner Tubular Pipe with Winglet Vortex Generator <i>Stefan Mardikus, Malfin Malfin and I Made Wicaksana Ekaputra</i>	147. The Effect of Suction Pressure of Vacuum Clamping on the Result of Aluminum Plate Cutting Process using Mini PC-Based CNC Milling <i>Karnova Yanel and Rachmat Sriwijaya</i>	041. Probabilistic Assessments of Fatigue Crack Growth Rate of TIG Welded Al 6013-t4 by Weibull Distribution Function <i>I Made Wicaksana Ekaputra, Gunawan Dwi Haryadi, Stefan Mardikus and Rando Tungga Dewa</i>	142. Multi-Function Wheelchair <i>A.Y. Novi MisgiPrabowoAdi, RachmatSriwijaya, Nurcahyo Dwi Nugroho, and Herianto</i>