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2nd IC²EMIS

PROGRAM BOOK

The 2nd International Conference on Engineering and Management in Industrial System (ICOEMIS)

“BUILDING SUSTAINABLE INDUSTRIAL SYSTEM FOR RESILIENCE SOCIETY POST-PANDEMIC”

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ICOEMIS

Program Book of The 2nd International Conference on Engineering and Management in Industrial System (ICOEMIS)

5th October 2022
Malang, East Java, Indonesia

Organized by:



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Industrial Engineering Department
Faculty of Engineering
Universitas Brawijaya

WELCOME MESSAGE
from Head of Industrial Engineering Department,
Faculty of Engineering, Universitas Brawijaya



To all the committees and all academic civitates of Department of Industrial Engineering, Faculty of Engineering, Universitas Brawijaya, I am very pleased for the participation of the presenters, participants, speakers, and all the important parts involved on the arrangement of the 2nd International Conference on Engineering and Management in Industrial System (2nd ICOEMIS), which is held on October 5th 2022, in Batu, Malang.

I believe that the 2nd ICOEMIS 2022 will bring the best in terms of researchers, technology and science on an international scale to forge partnerships and cooperation, and to share research progress between campuses, institutions, and small to large scale industries in order to optimize the management and the use of the available resources into multi-disciplinary science.

This event has a very wide coverage that provides a forum for all parties involved in the development of Information Engineering and Technology as well as on indirectly related science and application. The great hope of the event is that it is able to foster optimal collaboration of all elements and build science and technology together quickly, rapidly and appropriately for the world.

I then express my sincere gratitude for the willingness of all attendees, keynote speakers and all organizing committees for the maximum effort that has been made to obtain the selection of relevant papers with better innovations, creativity and scientific contributions.

Finally, this event is hopefully able to provide inspiration of better and more optimal researches for the success and prosperity of all mankind from the developed science and technology. We wish you success in this conference and may you feel enjoy, happy and comfortable during your stay in Batu, Malang, Indonesia.

Sincerely,

Sugiono, ST., MT., PhD

Head of Industrial Engineering Department
Universitas Brawijaya



WELCOME MESSAGE

from the Conference Chair of 2nd ICOEMIS 2022



I warmly welcome you to the 2nd International Conference on Engineering and Management in Industrial System (2nd ICOEMIS) in Batu, Malang. With a record number of participants expected this year, we are delighted to see that this biennial conference is becoming larger and more substantial every year.

The theme for this year's conference is "Building Sustainable Industrial System for Resilience Society Post-Pandemic", is particularly appropriate for a meeting at this moment. The pandemic brought challenges for industries to sustain their business as usual, effect on society's struggle to live normally. During these periods, social and economic behaviour is changing, energy transition is expanding, and technological disruption occurs, forcing industries to adapt. Therefore, I am equally excited about the wide variety of ideas that scholars and practitioners will bring into our fold. This richness of ideas bodes well for our future sustainable industrial system to achieve resilience society.

I am also particularly excited about the upcoming presentations from our keynote speakers to share their insights across varying areas in delivering sustainable solutions through leveraging advanced manufacturing system, human factors, energy system, supply chain management, and ecological industry for competitive advantage on our industrial system. As for the theme-based invited speeches are presented by Dr Ishardita Pambudi Tama from University Brawijaya, Indonesia, Professor Yassierly from Institute of Technology Bandung, Indonesia, Dr Bertha Maya Sopha from University Gadjah Mada, Indonesia, Dr Zuhriah Ebrahim from Universiti Teknikal Malaysia Melaka, Malaysia, Professor Benjamin McLellan from

Kyoto University, Japan, and Professor Ian Campbell from Loughborough University, UK.

This year's conference is held on hybrid, and it would not be possible without generous help from a large number of people. I am truly grateful to our Head and Secretary of Industrial Engineering Department, Dr. Sugiono and Dr.Eng. Oke Oktaviany for the time, energy and thought that they have invested in supporting the program. I am also thankful to the conference organizing committee members, the track chairs, the paper reviewers, the session chairs, and the numerous volunteers for generous contributions to this conference. We also appreciate the cadre of sponsors supporting this conference. Most of all, I thank you, the participants, for enriching these annual conferences by your presence. I hope you will enjoy the content, renew old friendships, make new friends, get new ideas, and above all, have a good time.

Thank you!

Sincerely,







Dr.ES. Widha Kusumaningdyah

The 2nd ICOEMIS 2022 Conference Chair

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CONFERENCE INFORMATION

- Date** : Wednesday, 5th October, 2022
- Organizer** : Industrial Engineering Department,
Faculty of Engineering, Universitas Brawijaya
- Conference Web** :  : <http://icoemis.teknik.ub.ac.id> (Official Website)
 : <https://icoemis.ub.ac.id> (OCS)
 : icoemis@ub.ac.id
- Venue** : Golden Tulip Holland Resort Batu
Jl. Cherry No. 10, Panderman Hill, Batu
65314 Malang, Indonesia
 : +62 341 3302000
 : holland-resort-batu.goldentulip.com
 : reservation@gthollandresortbatu.com
- Venue Attractions** :
 - Jawa Timur Park 2 (JTP 2) – 1,4 km
 - Batu Night Spectacular (BNS) – 1,7 km
 - Jawa Timur Park 1 (JTP 1) – 2,9 km
 - Museum Angkut – 3,5 km
 - Alun-alun Kota Batu – 3,7 km
 - Jawa Timur Park 3 (JTP 3) – 4,5 km
 - Batu Love Garden – 7,1 km
 - San Terra Delaponte – 10,9 km
- Online Meeting** : Meeting Link: <https://s.sub.ac.id/icoemis2022>
Meeting ID: 942 2819 2324
Passcode: tiub

KEYNOTE SPEAKERS



Professor Ian Campbell
Loughborough University, United Kingdom
Expertise: Additive Manufacturing and Practice Product Design



Professor Benjamin McLellan
Kyoto University, Japan
Expertise: Sustainability Within the Energy and Resources Sectors



DR. Zuhriah Binti Ebrahim, CENG
Technical University of Malaysia Malacca, Malaysia
Expertise: Sustainable Manufacturing and Lean Performance



Prof. Yassierli, S.T., M.T., Ph.D.
Institut Teknologi Bandung, Indonesia
Expertise: Human Factors Engineering and Occupational Safety and Health Management



Ir. Bertha Maya Shopa, S.T., M.T., Ph.D., IPM., ASEAN Eng.
Universitas Gadjah Mada, Indonesia
Expertise: Humanitarian Logistics, Energy Modelling and Policy



Ir. Ishardita Pambudi Tama, S.T., M.T., Ph.D., IPU., ASEAN Eng.
Universitas Brawijaya, Indonesia
Expertise: Manufacturing Management and Research on Industry 4.0

COMMITTEES

Scientific Committee:

- ◆ Professor Ts. Dr. Effendi Bin Mohamad, Universiti Teknikal Malaysia Melaka, MY
- ◆ Professor Dr. Mohd. Rizal Bin Salleh, Universiti Teknikal Malaysia Melaka, MY
- ◆ Professor Madya Dr. Nur Izan Syahriah Binti Hussein, Universiti Teknikal Malaysia Melaka, MY
- ◆ Professor Madya Dr. Mohd. Amri bin Sulaiman, Universiti Teknikal Malaysia Melaka, MY
- ◆ Ir. Dr-Ing. Azrul Azwan Abdul Rahman, Universiti Teknikal Malaysia Melaka, MY
- ◆ Nor Akramin Bin Mohamad, Universiti Teknikal Malaysia Melaka, MY
- ◆ Ir. Dr. Mohamad Ridzuan Jamli, Universiti Teknikal Malaysia Melaka, MY
- ◆ Prof. Shigeyuki Haruyama, Yamaguchi University, JP
- ◆ Prof. I-Lin Wang, National Cheng Kung University, TW
- ◆ Andy Sudjana P., Ph.D., National University of Singapore, SG
- ◆ Dr. Md. Hasanuzzaman, University of Malaya, MY
- ◆ Yuliani Dwi Lestari, ST., MBA., Ph.D., School of Business and Management Institut Teknologi Bandung, ID
- ◆ Dr. Eng. Irma Nur Afiah, Universitas Muslim Indonesia, ID
- ◆ Dr. Eng. Ir. Titis Wijayanto, ST., M.Des., Universitas Gadjah Mada, ID
- ◆ Prof. Dr. Ir. Qomariatus Sholihah, ST., M.Kes, IPU., Universitas Brawijaya, ID
- ◆ Ir. Ishardita Pambudi Tama, ST., MT., Ph.D., IPU., Universitas Brawijaya, ID
- ◆ Sugiono, ST., MT., Ph.D., Universitas Brawijaya, ID
- ◆ Yeni Sumantri, S.Si., MT., Ph.D., Universitas Brawijaya, ID
- ◆ Ir. Oyong Novareza, ST., MT., Ph.D., Universitas Brawijaya, ID

Advisory Boards:

- ◆ Sugiono, ST., MT., Ph.D.
- ◆ Prof. Dr. Ir. Qomariatus Sholihah, ST., M.Kes., IPU.
- ◆ Ir. Oyong Novareza, ST., M.T., Ph.D.
- ◆ Yeni Sumantri, S.Si., MT., Ph.D.
- ◆ Ir. Nasir Widha Setyanto, ST., MT., IPM., ASEAN Eng.

Organizing Committee:

◆ Conference Chair

Dr.ES Widha Kusumaningdyah, ST., MT.

◆ Co-conference Chair

1. Ir. Nasir Widha Setyanto, ST., MT., IPM., ASEAN. Eng.
2. Dr.Eng. Zefry Darmawan, ST., MT.

◆ Secretary

1. Ir. Wifqi Azlia, ST., MT., IPM.
2. Astuteryanti Tri Lustyana, ST., MT.

◆ Treasurer

1. Ir. Amanda Nur Cahyawati, ST., MT.
2. Ir. Ratih Ardia Sari, ST., MT.

◆ Technical Programs Committee

1. Ir. Dewi Hardiningtyas, ST., MT., MBA.
2. Ir. Ceria Farela Mada Tantrika, ST., MT.
3. Ir. Raditya Ardianwiliandri, ST., MMT.

◆ Scientific Publication Committee

1. Ir. Oyong Novareza, ST., MT., Ph.D.
2. Sylvie Indah Kartika Sari, ST., M.Eng.
3. Ir. Sri Widiyawati, ST., MT.
4. Ir. Ihwan Hamdala, ST., MT., IPM.
5. Muhammad Hidayat, SE.

◆ Funding and Sponsorship Committee

1. Ir. Dwi Hadi Sulistyarini ST., MT.
2. Angga Akbar Fanani, ST., MT.
3. Ir. Endra Yuafanedi Arifianti, ST., MT.

- ◆ Publication and Documentation Committee
 1. L. Tri Wijaya Nata Kusuma, ST., MT., Ph.D.
 2. Ir. Bambang Indrayadi, MT.
 3. Andi Mochamad Mawardi, ST.

- ◆ Accommodation and Transportation Committee
 1. Wisnu Wijayanto Putro, ST., M.Eng.
 2. Suluh Elman Swara, ST., MT.
 3. Hary Sudjono, S.Si., MT.
 4. Budiono, ST.

- ◆ Consumption Committee
 1. Anggi Anggraeni, S.Si.
 2. Rosdyana Latifah, S.Sos.



SCOPE OF THE CONFERENCE

“Building Sustainable Industrial System for Resilience Society Post-Pandemic”

Topic and sub-topics are included but not limited to:

- ◆ **System Design Engineering**
 1. Design and Manufacturing Engineering
 2. Product Design and Innovation
 3. Service Design
 4. Product-Service Systems
 5. Energy Industry
- ◆ **Ergonomics and Human Factor**
 1. Bioengineering
 2. Biomechanics
 3. Cognitive Ergonomics
 4. Occupational Health and Safety
- ◆ **Operation Research and Management Science**
 1. Statistics and quality engineering
 2. Human resources management
 3. Supply Chain Management
 4. Big Data Analytics
- ◆ **Manufacturing Systems**
 1. Ecology Industry
 2. Lean Manufacturing

TECHNICAL PROGRAM

Wednesday, 5th October, 2022

Time	Event
Venue: Ballroom	
07:00-08:00	Registration
08:00-08:05	Opening by MC
08:05-08:10	Opening speech from the Conference Chair of 2 nd ICOEMIS – Dr.ES. Widha Kusumaningdyah, ST., MT.
08:10-08:20	Speech from the Dean of Faculty of Engineering, Universitas Brawijaya - Prof. Ir. Hadi Suyono, ST., MT., Ph.D., IPU, ASEAN Eng.
08:20-08:30	Indonesian Traditional Dance Performance Photo Session
08:30-08:40	Coffee Break
08:40-09:20	Keynote Speech 1: Ir. Ishardita Pambudi Tama, ST., MT., Ph.D., IPU, ASEAN Eng., Universitas Brawijaya, ID
09:20-10:00	Keynote Speech 2: Ir. Bertha Maya Shopa, ST., M.Sc., Ph.D., IPM., ASEAN Eng., Universitas Gadjah Mada, ID
10:00-10:40	Keynote Speech 3: Prof. Yassierli, S.T., M.T., Ph.D., CPE., Institut Teknologi Bandung, ID
10:40-11:20	Keynote Speech 4: Assoc. Prof. Dr. Zuhriah Ebrahim – Universiti Teknikal Malaysia Melaka (UTeM), MY
11:20-12:00	Keynote Speech 5: Prof. Benjamin McLellan – Kyoto University, JP
12:00-12:40	Keynote Speech 6: Professor Ian Campbell – Loughborough University, UK
Venue: Restaurant	
12:40-13:30	Break
Venue: Ballroom, Classroom, Zoom	
13:30-17:40	Parallel Session & Coffee Break
Venue: Ballroom	
19:00-21:00	Gala Dinner, Awarding, and Closing Ceremony

OFFLINE PARALLEL SESSION

Venue: Ballroom		Session Chair:
Topic: System Design Engineering		Agustina Eunike
1.	13:40-13:50 Art. ID. 134 (Offline)	Trend Analysis of Technology by Using F-Trem Japanese Patent and Core Technology Clarification with Quality Function Deployment (QFD) Approach Yoshie Ishii, Shigeyuki Haruyama
2.	13:50-14:00 Art. ID. 138 (Offline)	A Study on the Relationship between "Managerial Decision Making" and "Factors Influencing Innovation Success" in Japanese Niche Top Firms. Shigeyuki Haruyama, Kojiro Fujiyama
3.	14:10-14:20 Art. ID. 209 (Offline)	The Effect of Working Capital on Profit with Firm Size and Leverage Variables as Moderating (Case Study: Consumer Goods Company Listed in IDX-IC Period 2017 - 2021) Joko Waluyo Jati, Windijarto
4.	14:20-14:30 Art. ID. 259 (Offline)	Review of Knowledge and Technology Transfer Program in Developing Economies (With case study in Metal Based SMEs in Indonesia) Fourry Handoko, Ellysa Nursanti, Endah KusumaRastini, Prima Vitasari
5.	14:30-14:40 Art. ID. 112 (Offline)	Mapping of a Circular Economy Implementation in Indonesian Textile Industry: Benchmarking to Taiwan Textile Industry Policy Agustina Eunike, Rio Prasetyo Lukodono, Winky Angga
6.	14:40-14:50 Art. ID. 243 (Offline)	The Increasing Marketing Range with Website for A Small and Medium Enterprise Of Cassava Chips Ihwan Hamdala, Ishardita Pambudi Tama, Rahmi Yuniarti, Wifqi Azlia
7.	14:50-15:00 Art. ID. 253 (Offline)	Business Intelligence Framework Design to Support Manufacturing Process Quality Control L. Tri Wijaya N. Kusuma, Endra Yuafanedi Arifianto

Venue: Class A		Session Chair:
Topic: Manufacturing System		Zefry Darmawan
1.	13:30-13:40 Art. ID. 040 (Offline)	A Review of Response Surface Methodology Approach in Achieving Multi-Response Setup Optimisation in The Machining Proces Yohanes Tri Joko Wibowo, Nurhadi Siswanto, M. Suef
2.	13:40-13:50 Art. ID. 042 (Offline)	Drug Inventory Control Using Continuous Review System in the Hospital in Central Java Rahayu Khasanah
3.	13:50-14:00 Art. ID. 067 (Offline)	Evaluation of The Application of Good Manufacturing Practice and Sanitation Standard Operating Procedures in Production Process the Rendang in IKM Rendang Zara Padang City Candrianto, Isra Mouludi, Erwinsyah Sipahutar
4.	14:00-14:10 Art. ID. 107 (Offline)	Design of Virtual Reality Applications using Multimedia Development Life Cycle to Support Basic Practices of Industrial Engineering Design Abdullah Azzam, Abdul Aziz Aljabar
5.	14:10-14:20 Art. ID. 117 (Offline)	Improvement of Warehouse Layout for Paper Storage Using ABC Method Arinda Soraya Putri, Anisa Jala Wardani
6.	14:20-14:30 Art. ID. 122 (Offline)	Online Partial Discharge Measurement for Condition-Based Maintenance of HV Power Cables in Railway Infrastructure Alfonsus Julanto Endharta, Youngseon Kim, Jongwoon Kim
7.	14:30-14:40 Art. ID. 212 (Offline)	Implementation of Lean Manufacturing Using Value Stream Mapping in an Effort to Reduce Production Process Waste at PT. X Erlinda Muslim, Salsabila Annisa Arista, Kenichi Mario
8.	14:40-14:50 Art. ID. 215	Design and Performance Analysis of Horizontal Axis Wind Turbine Taperless NACA 6510 using QBLADE

Venue: Class A		Session Chair:
Topic: Manufacturing System		Zefry Darmawan
	(Offline)	Software Fanisya Dwiyani, Ahmad Zamakhsyari Sidiq, Ahmad Said
9.	14:50-15:00 Art. ID. 239 (Offline)	Design Cabin's Mechanism to Reduce Rollover Impact Zefry Darmawan, Shigeyuki Haruyama, Oke Oktaviany, Dwi Hadi Sulistyarini, Oyong Novareza
10.	15:10-15:20 Art. ID. 008 (Online)	Application of Pareto Diagram, Cause and Effect Analysis, and Failure Mode and Effect Analysis (FMEA) on the Mobile Crane Faisal Rahman, Sugiono, Achmad As'ad Sonief, Oyong Novareza

Venue: Class A		Session Chair:
Topic: Operation Research and Management Science		Ceria Farela Mada Tantrika
1.	15:10-15:20 Art. ID. 085 (Offline)	Electric Vehicle Routing Problem Using Adaptive Simulated Annealing Prayoga Yudha Pamungkas, Rifdah Zahabiyah, Nadiyah Ghina S.
2.	15:20-15:30 Art. ID. 129 (Offline)	Quality Control Analysis of Giboult Joint Products in The Metal Casting Industry: A Six Sigma Approach Afiqoh Akmalia Fahmi, Romadhani Ardi
3.	15:30-15:40 Art. ID. 130 (Offline)	Driver and Barrier Factors of Construction Waste Management in Engineering, Procurement, Construction (EPC) Project in Indonesia Abdul Jabbar, Romadhani Ardi
4.	15:40-15:50 Art. ID. 136 (Offline)	Green Supply Chain Management (GSCM) Performance Measurement and Improvement Using Green Supply Chain Operations Reference (GSCOR) and Green Operation in Plywood Company Amanda Sofiana, Surya Harum Chandrasari, Hasyim Asyari, Yudi Syahrullah

Venue: Class A		Session Chair:
Topic: Operation Research and Management Science		Ceria Farela Mada Tantrika
5.	15:50-16:00 Art. ID. 154 (Offline)	Post-Harvest Handling in the Dragon Fruit Supply Chain Sumardi Hadi Sumarlan, Moh. Rajiv Rohman Aritaga, Lailatul Maghfiroh, M. Andi Wicaksana, Hammam, Mahmuddin Ridlo, Abdul Mulukul Ikrom, Darmanto, Zaqlul Iqbal
6.	16:00-16:10 Art. ID. 156 (Offline)	Post-Harvest Handling in the Sweet Potato Supply Chain Sumardi Hadi Sumarlan, Muhammad Andi Wicaksana, Mahmuddin Ridlo, Hammam, Lailatul Maghfiroh, Moh Rajiv Rohman Aritaga, Abdul Mulukul Ikrom, Darmanto, Zaqlul Iqbal
7.	16:10-16:20 Art. ID. 160 (Offline)	A Framework for Observational Data-Based Response Surface Methodology Mochammad Arbi Hadiyat, Bertha Maya Sopha, Budhi Sholeh Wibowo
8.	16:20-16:30 Art. ID. 256 (Offline)	Employing Technological Support to Improve SMEs Logistic Performance: A Case Study on The Gravity Location Models Approach for SMEs in Indonesia Fourry Handoko, Ellysa Nursanti, Endah Kusuma Rastini, Prima Vitasari
9.	16:30-16:40 Art. ID. 069 (Offline)	The Analysis of Land Logistic Transport Driver Cognitive Load Impact to Supply Chain Performance Using System Dynamics Approach Ishardita Pambudi Tama, Adithya Sudiarno, Aisyah Larasati, Dewi Hardiningtyas, Willy Satrio Nugroho
10.	16:40-16:50 Art. ID. 241 (Offline)	Print Quality Evaluation of Drop-On-Demand (DOD) Inkjet Printers by Rear-Cut "W" Waveform Design Oke Oktavianty, Yoshie Ishii, Tadayuki Kyoutani, Shigeyuki Haruyama, Zefry Darmawan, Sugiono
11.	16:50-17:00 Art. ID. 242 (Offline)	Quality Improvement of Black Garlic as an Effort to Reduce Products Defects by Using Taguchi Method Oke Oktavianty, Dwi Hadi Sulistyorini, Oyong Novareza, Angga Akbar Fanani, Sanij Zahrah

Venue: Class A		Session Chair:
Topic: Operation Research and Management Science		Ceria Farela Mada Tantrika
		Firdausa

Venue: Class B		Session Chair:
Topic: Ergonomics and Human Factors		Sylvie Indah Kartika Sari
1.	13:30-13:40 Art. ID. 009 (Offline)	Website Evaluation of Universitas Ahmad Dahlan's Industrial Engineering Study Program using Performance Method and Retrospective Thinking Aloud (RTA) Hapsoro Agung Jatmiko, Ratna Dewi Setianingsih
2.	13:40-13:50 Art. ID. 038 (Offline)	Measuring The Social Impact on Employee Engagement Using Agent-Based Simulation Arief Rahman, Sri Gunani Partiw, Ratna Sari Dewi, Naning Aranti Wessiani
3.	13:50-14:00 Art. ID. 041 (Offline)	Combination of Scrum Framework and System Dynamic in Construction: A New Proposal for Safety Implementation Adithya Sudiarno, Okto Abdillah
4.	14:10-14:20 Art. ID. 063 (Offline)	Analysis of Occupational Safety and Health of Solar Power Plant Rooftop at Ichsan Gorontalo University Building Stephan Adriansyah Hulukati, Qomariyatus Sholihah, Marjono, Nuddin Harahab
5.	14:20-14:30 Art. ID. 074 (Offline)	Exoskeleton Needs in Heavy Equipment Maintenance and Repair Work: A Preliminary Study Wyke Kusmasari, Farid Wajdi, Firmansyah Aji Wicaksono
6.	14:30-14:40 Art. ID. 080 (Offline)	The Effect of Physical Activity and Sleep Duration on Students Sleep Quality in East Java during COVID-19 Pandemic Herry Christian Palit, Debora Anne Yang Aysia,

Venue: Class B		Session Chair:
Topic: Ergonomics and Human Factors		Sylvie Indah Kartika Sari
		Jessica Priscillia Gunawan
7.	14:50-15:00 Art. ID. 159 (Offline)	Development of Soft-Hard Ergonomics Tool Prototype Design for Smart Comfortable Home and Social Humanity Environment Using Deep Particle Swarm Optimization-Based Industrial Product Imam Cholissodin, Arief Andy Soebroto, Marji, Rizal Maulana, Adharul Muttaqin, Dewi Hardiningtyas
8.	15:00-15:10 Art. ID. 162 (Offline)	Cybersickness Assessment of Microsoft Hololens for Immersive Training Reza Aulia Akbar, Chiuhsiang Joe Lin, Retno Widyaningrum, Adithya Sudiarno
9.	15:10-15:20 Art. ID. 217 (Offline)	Evaluation of Fatigue among Passenger Train Drivers Using Sustained Attention Test (SAT) Sevty Auliani, Shafira Aidil Fitriyeni, Hardianto Iridiastadi
10.	15:20-15:30 Art. ID. 221 (Offline)	User Experience Evaluation of Promotion and Claim Web Application with Cognitive Ergonomic Approach Maya Arlini Puspasari, Komang Ayu Mas Shinta Wedanty, Safa Talitha Madani
11.	15:30-15:40 Art. ID. 222 (Offline)	Evaluation of The Cabin Temperature Effect on Driver Sleepiness using Electroencephalography (EEG) and Karolinska Sleepiness Scale (KSS) Billy Muhamad Iqbal, Valda Aqila Afranovka, Maya Arlini Puspasari, Armand Khalif Susetyo, Safa Talitha Madani, Salsabila Annisa Arista
12.	15:40-15:50 Art. ID. 233 (Offline)	Health Risk Assessment: Ore Processing New Plant Case Study Edi Karyono Putro, Nieke Karnaningroem, Arie Dipareza Syafei
13.	15:50-16:00 Art. ID. 234 (Offline)	Analysis of Factors Affecting Safety Performance In Nickel Mining And Processing Company Nur Fitria Ningsih, Adhitya Sudiarno

Venue: Class B		Session Chair:
Topic: Ergonomics and Human Factors		Sylvie Indah Kartika Sari
14.	16:00-16:10 Art. ID. 236 (Offline)	2D Numerical Model of Downward Push Pull Ventilation for Protecting Workers against Airborne Infection Ratna Sari Dewi, Burniadi Moballa, Anny Maryani
15.	16:10-16:20 Art. ID. 247 (Offline)	Predicting the Contingency Value of Short Distance Train Driver's Situational Awareness Performance using QUASA Dewi Hardiningtyas, Ishtar Adristi, Sugiono, Sylvie Indah Kartika Sari
16.	16:20-16:30 Art. ID. 158 (Offline)	Handling of Colour Changes in Cocoa Powder After Alkalization Process (Dutch Process) Sylvie Indah Kartika Sari, Wisnu Wijayanto Putro, Astuteryanti Tri Lustyana, Silfia Anggraeni



ONLINE PARALLEL SESSION

Venue: Zoom Breakout Room MS		Session Chair:
Topic: Manufacturing System		Oyong Novareza
1.	13:40-13:50 Art. ID. 015 (Online)	A Study on Identification of Product Value Based on Patent Analysis: The Case of The Projector Koji Masuda, Shigeyuki Haruyama
2.	13:50-14:00 Art. ID. 016 (Online)	Planning of Preventive Maintenance Time Interval on Rubber Tyred Gantry Unit Using Reliability Centered Maintenance (RCM) II Haswika
3.	14:00-14:10 Art. ID. 022 (Online)	Process Improvement of Winding Machines for Reducing Cone Defects: Case Study in a Yarn Manufacturing Company Hasna Khairunnisa, Hamdan S. Bintang, Septia Nur Safitri
4.	14:10-14:20 Art. ID. 026 (Online)	Kaizen Application for Reducing Catch Cord Yarn Waste in Sarong Production Adhy Prastyo Eko Putranto, Sulistyo Adi Nugroho
5.	14:20-14:30 Art. ID. 073 (Online)	The Effect of Composite Thickness as Thermal Insulation Roof Coating on Room Temperature Reduction Redi Bintarto, Anindhito Purnowidodo, Djarot B. Darmadi, Teguh Dwi Widodo
6.	14:30-14:40 Art. ID. 164 (Online)	Using Design Thinking Methodology to Design Multi Purpose Crutch Ismail Alif Siregar, Fitorio Bowo Leksono, Hari Nugraha, Donna Angelina
7.	14:40-14:50 Art. ID. 177 (Online)	Simulation of Mangosteen Puree Raw Materials with Dynamic System Nurhayati Sembiring, Chintya P. Febrina, Christian Herlim, Erma Dwi Yanti, Jihan Nabila Lubis
8.	14:50-15:00 Art. ID. 223 (Online)	Assignment Optimization of Engine Repair Project Assignments Using Hungarian Method Made Gandhi Wahyu Putra, Atya Nur Aisha, Fida

Venue: Zoom Breakout Room MS		Session Chair:
Topic: Manufacturing System		Oyong Novareza
		Nirmala Nugraha
9.	15:00-15:10 Art. ID. 244 (Online)	Integrated Quality Management System (IQMS) And Overall Equipment Effectiveness (OEE) to Improve Sea Water Purification into Drink Water Tito M. Benjamin, Wifqi Azlia

Venue: Zoom Breakout Room OR		Session Chair:
Topic: Operation Research and Management Science		Marudut Sirait
1.	13:30-13:40 Art. ID. 057 (Online)	Implementation Performance Improvement of Supply Chain with Supply Chain Operations Reference (SCOR) Racetrack at Small and Medium Industries (SMI) in Central Java Rizki Rahmattullah, Dhenia Lizariani Hafsa, Irzy Dzaluly, Jundi Nourfateha Elquthb
2.	13:40-13:50 Art. ID. 076 (Online)	Design Model Key Performance Indicators (KPI) Sustainable Supply Chain Management (SSCM) in The Textile Industry Using Analytical Hierarchy Process Method Dewi Putri Mardiana, Rangga Primadasa, Dina Tauhida
3.	13:50-14:00 Art. ID. 103 (Online)	Six Sigma Methods Implementation in Sports Apparel Manufacturing Company M. Habibie Urfa Wibowo, Aditya Rahadian Fachrur, Dyah Lintang Trenggonowati
4.	14:00-14:10 Art. ID. 188 (Online)	A Simulation Study on Increasing Truck Losing Productivity in Shipping Logistics Company Tanti Octavia, Sydney Sebastian
5.	14:10-14:20 Art. ID. 194 (Online)	Intention to Use Food Delivery Application: Gofood Indonesia Felicia Margaret, Julia Emma Smith, Helena Sidharta
6.	14:20-14:30	A Food Loss Behaviour Model for Micro, Small and

Venue: Zoom Breakout Room OR		Session Chair:
Topic: Operation Research and Management Science		Marudut Sirait
	Art. ID. 205 (Online)	Medium Enterprises in an Agricultural Supply Chain Vicky Rizky Noor, Johanna Renny Octavia, Carles Sitompul
7.	14:30-14:40 Art. ID. 219 (Online)	Modelling The Platoon Routing Problem of Autonomous Truck Fleet with Energy Saving Consideration Ying-Ting Lin, I-Lin Wang
8.	14:40-14:50 Art. ID. 045 (Online)	Multi-Objective Vehicle Routing Problem with Time Window and Drones (MO-VRPTW-D) using Simulated Annealing and Ant Colony Optimization Budi Santosa, Meidani Nuzul Tri Pamungkas
9.	14:50-15:00 Art. ID. 081 (Online)	The Smart Factory Model to Support Supply Chain and Logistics in The Manufacturing Industry Sri Raharno, Ari Setiawan, Vina Sari Yosephine, Rachmad Hartono, Muhammad Zulfahmi Febriansyah
10.	15:00-15:10 Art. ID. 145 (Online)	Why did Micro Small and Medium Enterprise (MSMEs) Fail to Take Advantage of Digital Marketing? Agus Mansur, Syafa Tania Prawibowo
11.	15:10-15:20 Art. ID. 155 (Online)	Performance Measurement at XYZ E-Commerce Use Balanced Scorecard Method Cindy Lawrenca
12.	15:20-15:30 Art. ID. 187 (Online)	Modelling of the Fresh Fruit Bunches Collection and Transportation System with Agent-Based Simulation in Optimizing the Mode of Transportation on Oil Palm Industry Rizkha Rida
13.	15:30-15:40 Art. ID. 249 (Online)	Supplier Selection and Order Allocation Problem Using AHP and Multi objective Programming Marudut Sirait, Muhammad Ghifary Rizqurrahman Aman

Venue: Zoom Breakout Room SDE		Session Chair:
Topic: System Design Engineering		Rahmi Yuniarti
1.	13:30-13:40 Art. ID. 059 (Online)	Measurement of Leadership Effectiveness in the Manufacturing Organization (Case Study: Stated Owned Enterprise of Indonesia) Devy Kusumoningtyas Utami, John Welly
2.	13:40-13:50 Art. ID. 065 (Online)	Implementation K-Means Clustering Method to Prioritize Taking Employee Leave Entitlement (Case Study: PT XYZ) Rizki Rahmattullah, Ahkamul Hakim, Abdullah 'Azzam
3.	13:50-14:00 Art. ID. 066 (Online)	Automatic Product Quality Inspection by Possibilistic C-Means, Fuzzy K-Medoids and Artificial Neural Networks: Case Study on Secom Dataset Aini Suri Talita, Suryadi Harmanto, Asep Mohamad Noor, Misdiyono
4.	14:00-14:10 Art. ID. 124 (Online)	A Study on the Method to Visualize the Product Development Cycle by Predicting Patent Applications for Each Product Yoshinori Hayashi, Kohji Masuda
5.	14:10-14:20 Art. ID. 128 (Online)	Identification of Risk Priorities with The House of Risk Method (Case Study: PPI Bonto Bahari, Bulukumba District, South Sulawesi) Yolanda Lapai, Evi Yuliatwati, Silvana Mohamad
6.	14:20-14:30 Art. ID. 176 (Online)	Tapioca Flour Production Uses a Dynamic System to Support the Green Industry Nurhayati Sembiring, William, Christian Herlim
7.	14:30-14:40 Art. ID. 193 (Online)	Strategy to Increase the Business Scale of BMUG Pulo Makmue with SWOT Analysis Method Muhammad Zakaria, Trisna, Zuraida, Amri
8.	14:40-14:50 Art. ID. 198 (Online)	Analysis Of Effectiveness of Change of Training Program with ADKAR Approach (Awareness, Desire, Knowledge, Ability and Reinforcement) Ainur Leksono, Praptini Yulianti
9.	14:50-15:00	The Effect of Return on Equity on Firm Value Through

Venue: Zoom Breakout Room SDE		Session Chair:
Topic: System Design Engineering		Rahmi Yuniarti
	Art. ID. 202 (Online)	Disclosure of Environmental Social and Governance (ESG) as Moderating Variables (Case Study: Banking Companies Listed on the Indonesia Stock Exchange Period 2017-2021) Sagita Melati, Fitri Ismiyanti
10.	15:00-15:10 Art. ID. 224 (Online)	Identifying Relevant Competencies for Regional Personnel Agency Aya Nur Aisha, Erif Rifki Rediana, Litasari Widayastuti Suwarsono
11.	15:10-15:20 Art. ID. 227 (Online)	A Study on the Method to Visualise the Product Development Cycle by Predicting Patent Applications for Each Product Yoshinori Hayashi
12.	15:20-15:30 Art. ID. 238 (Online)	Integrating Kano Model to e-TailQ for Service Excellence Development: A Case Study of Shopee Marketplace Theresia Amelia Pawitra, Lina Dianati Fathimah Hayati, Fisca Riana Sari
13.	15:30-15:40 Art. ID. 109 (Online)	Technometrics Model to Analyze Business Strategies for SME's in Indonesia Wandhansari Sekar Jatiningrum, Raja Asra Febriani
14.	15:40-15:50 Art. ID. 172 (Online)	Natural Resource Depletion Valuation for Calculation of Semi-Green Gross Regional Domestic Product (GRDP) in Sleman Regency, D.I. Yogyakarta Dian Hudawan Santoso, Yuli Dwi Astanti, Jamzani Sodik, Maria Noverella Adventia

Venue: Zoom Breakout Room EHF		Session Chair:
Topic: Ergonomics and Human Factors		Rio Prasetyo Lukodono
1.	13:30-13:40 Art. ID. 060 (Online)	Design Evaluation of Fret Wiring Table to Increase Workstation Productivity Rahmaniyah Dwi Astuti, Annisa Syahliantina,

Venue: Zoom Breakout Room EHF		Session Chair:
Topic: Ergonomics and Human Factors		Rio Prasetyo Lukodono
		Bambang Suhardi, Pringgo Widyo Laksono, Lobes Herdiman
2.	13:40-13:50 Art. ID. 077 (Online)	Musculoskeletal Pain and Eye Fatigue as an Impact of Online Learning Debora Anne Yang Aysia, Herry Christian Palit, Anthony Gunawan Tanputera
3.	13:50-14:00 Art. ID. 131 (Online)	Workload Analysis Using SOFI and FTE (Case Study at Warehouse PT. BCDE) Rahma Nur Hidayah, Atyanti Dyah Prabaswari
4.	14:00-14:10 Art. ID. 157 (Online)	Operator Productivity Analysis of Solvent-Based System Parts to Determine Productivity Levels and Time Workloads Using the Work Sampling Method (Case Study at PT. ABDCCD) Atyanti Dyah Prabaswari, Choirunisa Hifzhu Amanati, Alda Bella Oseasky
5.	14:10-14:20 Art. ID. 166 (Online)	Work Posture Analysis of Workers in the Factory Erna Crackers with Virtual Model Environment Nur Fajriah
6.	14:20-14:30 Art. ID. 179 (Online)	Design Of Ergonomic Checkpoints in Saltworks for Assessing Working Conditions of Salt Farmers Aminatus Suhra, Ratna Sari Dewi
7.	14:30-14:40 Art. ID. 213 (Online)	Muscle Activation Performance Analysis Using Machine Learning Algorithm in The Assembly System Rio Prasetyo Lukodono, Chiuhsiang Joe Lin
8.	14:40-14:50 Art. ID. 232 (Online)	Smart Portable Nebulizer Design for People with Breathing Problem in The Community Health Qomariyatus Sholihah, Dewi Hardiningtyas, Kumoro Asto Lenggono, Stephan Adriansyah Hulukati
9.	14:50-15:00 Art. ID. 237 (Online)	Lampit Seating Design Reduce Musculoskeletal Complaints I Nyoman Artayasa, I Kadek Pranajaya, Putu Riana Artyanti Putri

Venue: Zoom Breakout Room EHF		Session Chair:
Topic: Ergonomics and Human Factors		Rio Prasetyo Lukodono
10.	15:00-15:10 Art. ID. 058 (Online)	Visual Attention and Emotion Response in Detecting Motorcyclists and Cyclists Elicited Via Animation Clips Dian Kemala Putri, Kemal Ade Sekarwati, Indah Mulyani
11.	15:10-15:20 Art. ID. 118 (Online)	Analysis of Configuration Design (Layout Passengers) in Hybrid Community Bike (Case Study: Campus of Insitut Teknologi Sepuluh Nopember) Bambang Iskandriawan, Irna Arlianti, Arie Kurniawan

