



# BOOK PROGRAMME

# ICOAMS 2021

**The 4th International Conference on Advanced Materials Science  
(ICOAMS2021)**

# ICME '21

**in conjunction with**

**The 11th International Conference in Mechanical and Manufacturing  
Engineering ICME'21**

# SURAKARTA 25-26<sup>TH</sup> AUGUST 2021

Organized by :



In Collaboration with :



## Organiser:

Master Mechanical Engineering Programme, School of Graduate Studies, Universitas Muhammadiyah Surakarta

## In collaboration with:

- Faculty of Mechanical and Manufacturing Engineering, Universiti Tun Hussein Onn Malaysia, Malaysia
- Sekolah Tinggi Teknik Warga, Surakarta, Indonesia
- Faculty of Science and Technology, Universitas Muhammadiyah Kalimantan Timur, Indonesia
- Asosiasi Program Studi Teknik Mesin Perguruan Tinggi Muhammadiyah, Indonesia

## FOREWORD FROM THE CONFERENCE CHAIRS

We welcome you to the The 4<sup>d</sup> International Conference on Advance Materials Science (ICOAMS2021) in conjunction with 11th International Conference in Mechanical and Manufacturing Engineering (ICME2021), held in 25-26 August 2021 in Universitas Muhammadiyah Surakarta via online zoom meeting. As a premier conference in the field, ICOAMS 2021 and ICME 2021 provides a highly competitive forum for reporting the latest developments in the research and application of mechanical science and engineering. We are pleased to present the proceedings of the conference as it will be published in Material Science Forum, Trans Tech Publication (Scopus Journal) for ICOAMS 2021.

ICOAMS 2021 and ICME 2021 is two young conferences for research in the areas of material science and other fields in mechanical engineering. Although it is only in third year, they have already witnessed significant growth. The authors of submitted papers come from different countries such as Asian Countries, South Korea, China and Malaysia, many national institutions.

These conferences represent the effort of many people. We would like to express our gratitude to the Rector of Universitas Muhammadiyah Surakarta, Head of LPPI, Director of Pasca Sarjana, Dean of Enginnering Faculty, the members of the Program Committee, Students of HIMMA, technical experts and the external reviewers for their hard work in reviewing submissions. We also thank the invited speaker, **Dr. Nadiyah binti Ishak** Head Lecturer in Research and Innovation Unit of Kolej Universiti Islam Melaka (KUIM) Malaysia, for sharing her knowledge and insights with us. Finally, this conference event would not be possible without the excellent papers contributed by authors. We thank all the authors for their contributions and their participation in ICOAMS 2021 and ICME 2021.

We hope that this program will further stimulate research in material science and other fields in Mechanical engineering and provides practitioners with better techniques and tools for deployment. We feel honored and privileged to serve the best recent developments in the field of ICOAMS 2021 and ICME 2021 to you through this exciting program.

Prof. Dr. Sarjito  
Assoc. Prof. Dr. Waluyo Adi Siswanto,  
Assoc. Prof. Dr Mohammad Sukri Mustapa,  
Assoc. Prof. Dr.Tri Widodo Besar Riyadi,  
Assoc. Prof. Dr. Agus Dwi Anggono,

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## VENUE

### For conference:

Online via Zoom



### For organizer:

Office of Collaboration and International Affairs

7<sup>th</sup> floor, Gedung Induk Siti Walidah  
Universitas Muhammadiyah Surakarta  
Jl. Ahmad Yani, Pabelan, Kartasura, Surakarta 57162,  
Jawa Tengah, Indonesia



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## KEYNOTE SPEAKER



**Dr. Nadiah Binti Ishak**

Head of Research and Innovation Unit  
Kolej Universiti Islam Melaka (KUIM), Malaysia

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# BROCHURE

## ICOAMS 2021

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# ICOAMS

25-26 August 2021

## INTERNATIONAL CONFERENCE ON ADVANCED MATERIALS SCIENCE (ICOAMS 2021)

**ICME '21**  
in Conjunction with  
The 11th International Conference in Mechanical and  
Manufacturing Engineering ICME'21

**Materials Science Forum**  
Q4 Condensed Matter Physics  
best quartile  
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### PAPER SUBMISSION

To submit Paper,  
please follow the steps

Register yourself at  
[icoams.ums.ac.id/2021/](http://icoams.ums.ac.id/2021/)

Paper submission will be  
closed at **25th of August**

Accepted papers will be  
published in **SCOPUS indexed**

**Regular Paper**  
All authors from  
Indonesia (USD 250)

**Participants**  
Indonesian (Listener)  
(RP 100,000.00)

**CONFERENCE FEES**

**International Paper**  
All authors from different  
countries, or single country  
outside Indonesia (USD 200)

**Paper in Bahasa  
Indonesia**  
(need English translation)  
(USD 310)

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LPII UMS, Gedung Siti Walidah  
Tri.Riyadi@ums.ac.id  
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ICME 2021

# ICME '21

**11<sup>th</sup> International Conference  
in Mechanical and Manufacturing  
Engineering 2021**

*"Empowering Academic, Industry and Community  
Collaboration Through Engineering Advancement"*

**FKMP**



**SCAN CODE**

For more  
info.



**AUGUST 25 - 26  
2021  
Online  
Conference**

Universiti Tun Hussein Onn Malaysia

**ORGANISER**

Faculty of Mechanical  
and Manufacturing Engineering  
Universiti Tun Hussein Onn Malaysia

# ICME '21

**11<sup>th</sup> International Conference  
in Mechanical and Manufacturing  
Engineering 2021**

*"Empowering Academic, Industry and Community  
Collaboration Through Engineering Advancement"*

**KEYNOTE  
SPEAKERS**



Prof. Dato' Ts. Dr.  
Ahmad Mujahid  
Ahmad Mujahid  
Universiti Pendidikan  
Nasional Malaysia,  
Malaysia



Prof. Dr. Osman W.B.M.G.N.  
Sakarya University,  
Turkey



Prof. Muzaniso Kujio,  
Kagoshima University of Technology,  
Japan



Prof. Dr. Kikabe Wangkuanawand,  
King Mongkut's University of Technology  
Thonburi  
Thailand



Prof. Dr. K. Bakasubramanian,  
Research Institute of Higher Education and Research,  
India



Prof. Dr. Ming K. Lim,  
Chongqing University,  
China



Assoc. Prof. Ts. Dr. Muskaifa Ibrahim,  
Universiti Tun Hussein Onn Malaysia,  
Malaysia



Assoc. Prof. Dr. Walyo Adi Siswanto,  
Universitas Muhammadiyah Surakarta,  
Indonesia



Dato' Sri Ibrahim Ahmad  
Universiti Tun Hussein Onn Malaysia,  
Malaysia



**AUGUST 25 - 26  
2021  
Online  
Conference**

Universiti Tun Hussein Onn Malaysia

**ORGANISER: FACULTY OF MECHANICAL AND MANUFACTURING ENGINEERING, UTHM**

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## COMMITTEE ICOAMS 2021

### *Conference Chairs:*

*Prof. Dr. Sarjito*

*Assoc. Prof. Dr. Waluyo Adi Siswanto,*

*Assoc. Prof. Dr. Mohammad Sukri Mustapa,*

*Assoc. Prof. Dr. Tri Widodo Besar Riyadi,*

*Assoc. Prof. Dr. Agus Dwi Anggono,*

### **Track 1: Metallurgy and Materials Science**

- Ferrous and non-ferrous metallurgy • mineral processing • hydrometallurgy • pyrometallurgy • electrometallurgy • structure of materials • materials research and development.

### **Track 2: Nanomaterials and Nanotechnology**

- Nanoparticles • coatings and thin films • inorganic-organic hybrids and composites • membranes • nano-alloys • quantum dots • self-assemblies • graphene • nanotubes • synthesis of organic, inorganic, and hybrid nanomaterials • characterization of mesoscopic properties • modelling of nanomaterials and/or mesoscopic effects • new application of nanomaterials.

### **Track 3: Characterization and Testing of Materials**

- Destructive and non-destructive testings • mechanical and physical tests • metallography • failure analysis • corrosion resistance • chemical analysis • surface characterization and microanalysis of surfaces • features and fractures • industrial performance measurement • materials selection • general material design, characterization, and evaluation.

### **Track 4: Biomaterials, Energy materials and Advance Materials**

- Physical, biological and chemical sciences that underpin the design of biomaterials • polymer synthesis and characterization • drug and gene vector design • the biology of the host response • immunology and toxicology and self assembly at the nanoscale • implantable devices • bionanotechnology • tissue engineering • materials for energy (all aspects of thermal, renewable and nuclear power generation) • transmission and storage of the energy produced • development of materials with novel and/or useful optical, electrical, magnetic, catalytic, and mechanical properties.

### **Track 5: Computational Materials Science**

- obtaining new or enhanced insights into material behavior, properties and phenomena • predicting structure-property relationships for new materials in conjunction with data informatics • novel capabilities of computational tools, technical software and shareware, or cyberinfrastructures • application of modern computational methods alone or in conjunction with experimental techniques to investigate existing inorganic and organic materials as well as to discover new materials.

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## REVIEWERS

### ICOAMS 2020

No	Name	Affiliation
1	Agung Setyo Darmawan	Universitas Muhammadiyah Surakarta, Indonesia
2	Agus Dwi Anggono	Universitas Muhammadiyah Surakarta, Indonesia
3	Agus Suprpto	Universitas Merdeka Malang, Indonesia
4	Ajide O. Olufemi	University of Ibadan, Nigeria
5	Annie Mufyda Rahmatika	Universitas Gadjah Mada, Indonesia
6	Ariany Zulkania	Universitas Islam Indonesia, Indonesia
7	Darmanto	Universitas Wahid Hasyim Semarang, Indonesia
8	Dedhy Prihtiantoro	PT. Sinergi Teknik Berkemajuan, Indonesia
9	Denny Widhiyanuriyawan	Universitas Brawijaya, Indonesia
10	Dewa Ngakan Ketut Putra Negara	Universitas Udayana, Indonesia
11	Esther Titilayo Akinlabi	University of Johannesburg, South Africa
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13	Gunawan	Universitas Lambung Mangkurat, Indonesia
14	Helmy Purwanto	Universitas Wahid Hasyim Semarang, Indonesia
15	I Komang Astana Widi	Institut Teknologi Nasional Malang, Indonesia
16	Itopa Godwin Akande	University of Ibadan, Nigeria
17	Kusmiyati	Universitas Dian Nuswantoro, Indonesia
18	M. Sayuti	Universitas Malikussaleh, Indonesia
19	Mathan Sambu	SEGi University, Malaysia
20	Muhammad Syukron	Universitas Pembangunan Nasional Veteran Jogjakarta, Indonesia
21	Muniandy Nagentrau	Taylor's University, Malaysia
22	Musabbikhah	Sekolah Tinggi Teknologi Warga, Indonesia
23	Nasmi Herliba Sari	Universitas Mataram, Indonesia
24	Nguyen Thi Hong Anh	Ho Chi Minh City University of Food Industry, Vietnam
25	Nishata Royan Rajendran Royan	UOW Malaysia KDU University College, Malaysia
26	Nugroho Dewayanto	Universitas Gadjah Mada, Indonesia
27	Nur Hidayati	Universitas Muhammadiyah Surakarta, Indonesia
28	Olufunmilayo Joseph	Covenant University, Nigeria
29	Phan Thi Thanh Dieu	Ho Chi Minh City University of Food Industry, Vietnam

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30	Pijarn Jornsano	King Mongkut's University of Technology Thonburi, Thailand
31	Prathabrao Muniandy	Quality Engineer Omron, Malaysia
32	Purnomo	Universitas Muhammadiyah Semarang, Indonesia
33	Rahmat Hidayat	Institut Teknologi Bandung, Indonesia
34	Rizqi Ilmal Yaqin	Politeknik Kelautan dan Perikanan Dumai, Indonesia
35	Saiwan Nawalertpanya	King Mongkut's University of Technology Thonburi, Thailand
36	Santhyami	Universitas Muhammadiyah Surakarta, Indonesia
37	Sarjito	Universitas Muhammadiyah Surakarta, Indonesia
38	Songwut Suramitr	Kasetsart University, Thailand
39	Sri Rejeki	Universitas Pembangunan Nasional Veteran Jawa Timur, Indonesia
40	Sugeng Slamet	Univeritas Muria Kudus, Indonesia
41	Sugiarto	Universitas Brawijaya, Indonesia
42	Supriyono	Universitas Muhammadiyah Surakarta, Indonesia
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44	Umi Rofiqah	Universitas Islam Indonesia, Indonesia
45	Van Phuc Nguyen	Ho Chi Minh City University of Food Industry, Vietnam
46	Venitalitya A.S. Augustia	Universitas Islam Indonesia, Indonesia
47	Waluyo Adi Siswanto	Universitas Muhammadiyah Surakarta, Indonesia
48	Wani Hadi Utomo	Universitas Brawijaya, Indonesia
49	Widowati	Universitas Tribhuwana Tungga Dewi, Indonesia
50	Yani Kurniawan	Universitas Pancasila, Indonesia
51	Yogesh Kumar	National Institute of Technology Patna, India
52	Yustia Wulandari Mirzayanti	Institut Teknologi Adhi Tama Surabaya, Indonesia

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## RUNDOWN SCHEDULE

**The 4rd International Conference on Advanced Materials Science (ICOAMS2021) in conjunction with 11th International Conference in Mechanical and Manufacturing Engineering (ICME2021)  
25-26 August 2021**

Time (GMT+7)	Activities
08.00 - 09.00	Preparation
09.00 - 09.50	Zoom Session Room 1 (All candidates)
09.00 – 09.05	1) Greetings and Opening prayers by David UMS
09.05 – 09.10	2) Introduction Emcee and moderators <ul style="list-style-type: none"> <li>• Sharfina Mutia Syarifah, M.EngTech (Emcee and Moderator Room 2)</li> <li>• Siti Farhanah S.M Johan, Ph.D (Moderator Room 1)</li> <li>• Atqiya Muslihati Lika, M.Sc (Moderator Room 2)</li> <li>• Noor Amira Sarani, Ph.D (Moderator Room 1)</li> </ul>
09.10 – 09.20	3) Singing Indonesia Raya & Sang Surya
09.20 – 09.30	4) Opening speech by Conference chair: Professor Dr. Sarjito, Universitas Muhammadiyah Surakarta (UMS)
09.30 – 09.45	5) Keynote Speaker: - International Speaker: Dr. Nadiyah Ishak (Kolej Universiti Malaysia Malacca) KUIM
09.45 – 09.50	6) Closing and Conference Briefing
09.50 – 10.00	Break & Preparation: Video profile of UMS and Department of Mechanical Engineering
10.00 – 11.30	<ul style="list-style-type: none"> <li>• Parallel session Room 1: 10 minutes' presentation + 5 minutes QA (Moderator: Siti Farhanah S.M Johan, Ph.D/ Noor Amira Sarani, Ph.D)</li> <li>• Parallel session Room 2: 10 minutes' presentation + 5 minutes QA (Moderator: Atqiya Muslihati Lika, M.Sc/ Sharfina Mutia Syarifah, M.EngTech)</li> </ul>
11.30 – 13.00	Break: praying time and lunch
13.00 – 15.30	<ul style="list-style-type: none"> <li>• Continued parallel session for room 1 (Moderator: Siti Farhanah S.M Johan, Ph.D/ Noor Amira Sarani, Ph.D)</li> <li>• Continued parallel session for room 2 (Moderator: Atqiya Muslihati Lika, M.Sc/ Sharfina Mutia Syarifah, M.EngTech)</li> </ul>
15.30 – 15.40	Closing session by Moderators

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**Conference Presentations**  
**(10 minutes Presentation, 5 minutes Q&A )**

**SESSION 1 – ROOM 1**

**MODERATOR:**

**(MS. SITI FARHANAH S.M JOHAN / MDM. NOOR AMIRA SARANI):**

Time	Title	Authors	Remarks
10.00 – 10.15	Structure and Mechanical Properties of Double Side Friction Stir Welded Aluminium AA6061 with The addition of Cu Powder	Agus Dwi Anggono, Nur Kholis, Ngafwan	P190
10.15 – 10.30	Corrosion Protection on AISI 304 by Shot Peening Treatment with Variation of Particle Size and Shooting Pressure	Bambang Hari Priyambodo, Margono and Kacuk Cikal Nugroho	P120
10.30 – 10.45	Hardness and Wear Properties of Al-TiN Coatings Produced by Dc Sputtering	Margono, Bambang Hari Priyambodo, Kacuk Cikal Nugraha, Tjipto Sujitno and Suprpto	P110
10.45 – 11.00	Loading of Silver Nanoparticles onto Silica Sand Surface and Simulating of Heat Dissipation for Therapeutic Heat Applications	Junya Jettanasen, Thunchanok Prakit, Nattapon Thongyoo and Panapong Songsukthawan	P100
11.00 – 11.15	Deposition and Evaluation of Mechanical Properties of TiB2-TiO2 Ceramic Composite Coating on AISI 1020 Steel by TIG Cladding	Sujeet Kumar and Anil Kumar Das	P170
11.15 – 11.30	Effect of Particle Size, Pressure, Holding Time and Drying Temperature on the physical and mechanical properties of Briquettes	Musabbikhah, Putro S. and Samsul Bakhri	P300
<b>READY</b>	Analysis of the Effect of Aging Single Flange and Double Flange Track Roller Components on Reliability in Bulldozer Using Weibull Distribution	Iis Siti Aisyah, Chairal Reza Suprabowo, Bustami Abdurrohman Ma'ruf, M. Irkham Mamungkas, Yepy Komaril Sofi'i	P340
	The Effect Of Variation Of Aluminum Thickness Series 7075 On Heat Treatment Solution On Mechanical And Microstructure	Iis Siti Aisyah, Rr. Heni Hendaryati, Yepy Komaril Sofi'i, Krismondo Reza Prasetyo	P330

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## SESSION 1 – ROOM 2

MODERATOR:

(MDM ATQIYA MUSLIHATI LIKA / MISS SHARFINA MUTIA SYARIFAH):

Time	Title	Presenter	Remarks
10.00 – 10.15	The Effect of Vacuum Pressure during Autoclave Curing on Tensile Strength of Epoxy Composite Reinforced Natural Fiber of <i>Cordyline australis</i> with Sea Water Surface Treatment	Ida Bagus Putu Purwadnyana, Tjokorda Gde Tirta Nindhia, I Wayan Surata, I Wayan Bandem Adnyana, Mohd Yazid Yahya, Elammaran Jayamani	P160
10.15 – 10.30	Comparison of Emission and Fuel Consumption of Small Two-stroke Engine of Electric Generator Fueled by Using Three Different Types of Fuel: Biogas, Methanol, and Mixed Biogas-methanol	I Wayan Agus Rantia Dana, David Lie, Tjokorda Gde Tirta Nindhia, I Wayan Surata, I Wayan Bandem Adnyana, Samir Kumar Khanal, Tjokorda Sari Nindhia	P150
10.30 – 10.45	Characterization of Bio Oil Derived from Palm Kernel Shell Pyrolysis Catalyzed by Iron Ore Based Catalyst	Ariany Zulkania, Ari Adrianto, Wildan Widodo, Nanda Putri Islami Sudirman, Tiara Indri Wulandari	P70
10.45 – 11.00	Characteristics of Biochar from Jengkok Tobacco : The Effect of Quenching in Pyrolysis Process	Taufik Iskandar, Ayu Chandra Kartika Fitri	P200
11.00 – 11.15	Effects of Emulsifiers on Engineering and Microstructural Properties of HPMC/Shellac Composite Films	Vu Thi Huong, Le Thi Hong Thuy, Nguyen Hoc Thang, Nguyen Thanh Tung, Nguyen Van Khoi, Pham Thi Thu Ha, Truong Ngoc Yen and Nguyen Thi Luong	P20
11.15 – 11.30	Green Cosmetic from Natural Colorant of Anthocyanin Extracted from <i>Ipomoea Batatas L.</i>	Nguyen Thuc Boi Huyen and Nguyen Hoc Thang	P10
<b>READY</b>	Vallue added products from <i>Eichhornia crassipes</i>	Shahla Zhakir, Rajeswary Viswanathan, Silpa K.S, Savitha.K.U	P40
	Uptake Test the Content of Ambient SO <sub>2</sub> ( Sulphur Dioxide) and NO <sub>2</sub> (nitrogen Dioxide) Compounds in Lichen Thalli in Urban, Sub Urban and Forest in Surakarta, Central Java, Indonesia	Efri Roziaty, Sutarno, Suntoro Suntoro and Sugiyarto	P250

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## BREAK SESSION

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### SESSION 2 – ROOM 1

#### MODERATOR:

(MS. SITI FARHANAH S.M JOHAN / MDM. NOOR AMIRA SARANI)

Time	Title	Authors	Remarks
13.00 – 13.15	Analysis of the Effect of Aging Single Flange and Double Flange Track Roller Components on Reliability in Bulldozer Using Weibull Distribution	Iis Siti Aisyah, Chairal Reza Suprabowo, Bustami Abdurrohim Ma'ruf, M. Irkham Mamungkas, Yepy Komaril Sofi'i	P340
13.15 – 13.30	The Effect Of Variation Of Aluminum Thickness Series 7075 On Heat Treatment Solution On Mechanical And Microstructure	Iis Siti Aisyah, Rr. Heni Hendaryati, Yepy Komaril Sofi'i, Krismondo Reza Prasetyo	P330
13.30 – 13.45	Kajian Kuat Bending Komposit Anyaman Bambu Pada Mebel Partisi Ruang Rumah Terhadap Waktu Tahan Pemanasan Cetakan Polyester	Joko Yuniyanto Prihatin, Lujeng Widodo, Slamet Pambudi and Heri Kustanto	P90
13.45 – 14.00	Formulating Delamination-Fretting Wear Failure Predictive Equation in HAp Coated Hip Arthroplasty Using Multiple Regression Model	M. Nagentrau, N.H. Ibrahim, S. Jamian and A.L. Mohd Tobi	P320
14.00 – 14.15	Prediction of Brittle Fracture Propagation Behaviour of Hydroxyapatite (HAp) Coating in Artificial Femoral Stem Component	H.S. Chang, M. Nagentrau and N.H. Ibrahim	P310
14.15 – 14.30	Does Plasma Treatment Effective for Surface Modification of Polymer? an Overview of Treatment Effect on Adhesive and Tribological Properties	Purnomo, Dwi Windu Kinanti, Putu Hadi Setyarini, R.M. Bagus Irawan, Muhammad Subri	P230
14.30 – 14.45	Comparison of Emission and Fuel Consumption of 6000 Watt Flexible Fuel Electric Generator Fueled with Biogas or Gasoline	I Gede Artha Negara, Tjokorda Gde Tirta Nindhia, I Wayan Surata, I Gusti Ngurah Putu Tenaya, Ketut Astawa, Shailendra Kumar Shukla, Amit Jhalani, Tjokorda Sari Nindhia	P30
14.45 – 15.00	Development of An Oxide Dispersion Strengthened Austenitic Steel Powder With 4% Aluminum Addition	Abu Khalid Rivai, Nanda Shabrina and Bambang Sugeng	P350
15.00 – 15.15	Analysis the Effect of Perovskite CsPbBr <sub>3</sub> Concentration and Coating Method on Thin Film Morphology and its Photovoltaic Performance	Muhammad Afdhel Refialdi, Fajri Malik Ammrulloh, Nur Hanifah, Farhan Aryo Hutomo, Diah Susanti, and Azzah Dyah Pramata	P290

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15.15 – 15.30	The Effects of Annealing on the Morphology and Luminescence Stability of an Inorganic Perovskite CsPbBr <sub>3</sub> Synthesized Using the Ligand Assisted Reprecipitation (LARP) Method	Fajri Malik Ammrulloh, Muhammad Afdhel Refialdi, Farhan Aryo Hutomo, Nur Hanifah, Diah Susanti and Azzah Dyah Pramata	P270
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## SESSION 2 – ROOM 2

### MODERATOR:

( MDM ATQIYA LIKA MUSLIHATI / MISS SHARFINA MUTIA SYARIFAH )

Time	Title	Presenter	Remarks
13.00 – 13.15	Value added products from <i>Eichhornia crassipes</i>	Shahla Zhakir, Rajeswary Viswanathan, Silpa K.S, Savitha.K.U	P40
13.15 – 13.30	Uptake Test the Content of Ambient SO <sub>2</sub> ( Sulphur Dioxide) and NO <sub>2</sub> (nitrogen Dioxide) Compounds in Lichen Thalli in Urban, Sub Urban and Forest in Surakarta, Central Java, Indonesia	Efri Roziaty, Sutarno, Suntoro Suntoro and Sugiyarto	P250
13.30 – 13.45	Corrosion Inhibition Data and Statistical Analysis of the Performance of Rosemary Oil Extract on High Carbon Steel in Dilute Electrolyte Solutions	Roland Tolulope Loto, Olayemi Odunlami, and Muyiwa Fajobi	P140
13.45 – 14.00	Study of the inhibition reaction of admixed grapefruit and lemongrass plant distillates on plain carbon steel corrosion	Roland Tolulope Loto, Muyiwa Fajobi, Precious Chukwuebuka Okpaleke and Ufansi Udoh	P130
14.00 – 14.15	The Effect of Cu <sub>2</sub> O Synthesis Method on Its Optical Properties	Farhan Aryo Hutomo, Nur Hanifah, Fajri Malik Ammrulloh, Muhammad Afdhel Refialdi, Widyastuti, and Azzah Dyah Pramata	P280
14.15 – 14.30	Synthesis and Characterization of Semiconductor Nanoparticles CuInS <sub>2</sub> QDs/TiO <sub>2</sub>	Nur Hanifah, Farhan Aryo Hutomo, Fajri Malik Ammrulloh, Muhammad Afdhel Refialdi, Widyastuti, Azzah Dyah Pramata	P260
14.30 – 14.45	Analisa Umur Pakai Worm Screw Press Type AP-17 Terhadap Beban Fatigue pada Pengolahan Minyak Kelapa Sawit	Teddy Tratama, Agus Dwi Anggono and Tri Widodo Besar Riyadi	P240
14.45 – 15.00	Effect of Etching and Electroless Plating Time on Contact Angel of Acrylonitrile Butadiene Styrene for 3D-Printed Substrates	Putu Hadi Setyarini, Ahmad Alwan Hidayat, Purnomo, Slamet Wahyudi, Dwi Hadi Sulistyarini	P220
15.00 – 15.15	Extraction of Flavonoid Compound of Bitter Melon ( <i>Momordica charantia L.</i> ) Fruit and Leaves Using the Soxhlet Method in Different Types of Solvent	Umi Rofiqah, Miftakhul Fakhrurozi and Muhammad Harris Hafidhuddin	P80

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15.15 – 15.30	Experiment to Fuel Tank Based Nanotechnology Fuel System	Edy Suryono, Ignatius Henry Adi Nagoro, and Albanus Bagus Prasajo Nefo	P180
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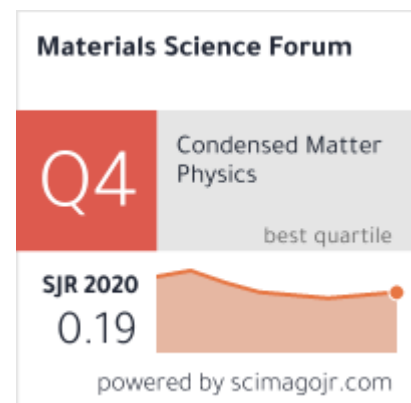
\*(Blue labelled rows) The selected presenters are to prepare for first session if there is enough time. Presenters are welcome to join both sessions.

## PUBLICATIONS

1. All accepted papers in ICOAMS 2021 will be published in:

### Materials Science Forum

<https://www.scientific.net/MSF>



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# PREVIOUS YEAR (2020) DOCUMENTATION

