



UNIVERSITI
TEKNOLOGI
MARA

Cawangan Perlis
Kampus Arau



PROGRAMME
BOOK

THE 8TH INTERNATIONAL CONFERENCE ON SOLID STATE SCIENCE AND TECHNOLOGY (ICSSST 2021)

VIRTUAL CONFERENCE

Organized by Universiti Teknologi MARA Perlis Branch as host
cooperation with The Malaysian Solid State Science and
Technology Society (MASS)

1st to 3rd November 2021

*Emerging Trends in
Solid State Science for
Smart Society*

ICSSST
2021

THEMES

"Emerging Trends in Solid State Science for Smart Society"

ABOUT

The 8th International Conference on Solid State Science and Technology (8th ICSSST 2021) is biennial event in Malaysia. This virtual conference is jointly organized by Universiti Teknologi MARA Perlis as host, in cooperation with the Malaysian Solid State Science and Technology Society (MASS). The aim of this conference is to provide a platform for the solid-state science and technology community to share and discuss latest developments and findings of related fields. It is the organizer's hope that this conference will offer networking environment in forging and strengthening research collaborations within this community.



اُنِيُوْ تِكْنُوْلُوْجِيْ مَآرَا
UNIVERSITI
TEKNOLOGI
MARA



ICSSST 2021
8th INTERNATIONAL CONFERENCE ON
SOLID STATE SCIENCE & TECHNOLOGY



**SCAN QR CODE FOR FLIP
PROGRAMME BOOK**

TABLE OF CONTENTS

01

OPENING SPEECH

PROF. DR. HJ KHUDZIR HJ ISMAIL

PAGE :

1

02

WELCOMING SPEECH

PROF. DR. ABDUL HALIM SHAARI

PAGE :

2

03

WELCOMING REMAKRS

PROF. TS DR. MOHD AZLAN MOHD ISHAK

PAGE :

3

04

PLANERY, KEYNOTE
AND INVITED SPEAKER

PAGE :

4-11

05

PROGRAMME
TENTATIVE

PAGE :

12-30

06

COMMITTEE
AND
PARTICIPANTS

PAGE :

31-36

OPENING SPEECH



Prof. Dr. Hj Khudzir Ismail

Rector, Universiti Teknologi
MARA (UiTM) Perlis Branch

Assalamu'alaikum wrt. wbt.

A very warm welcome to all participants of the 8th International Conference on Solid State Science and Technology 2021.

It is an enormous pleasure for us to organise four conferences namely the 8th ICSSST 2021 (The 8th International Conference on Solid State Science and Technology 2021), BIZMENT 2020 (The International Social Science Conference: Business, Management and Entrepreneurship), AGEOS 2020 (The Advanced Geospatial & Surveying Conference) and ISTEC 2020 (The 4th International Conference on Science, Technology and Engineering) which are underpinned under i-IDeA2020.

The primary focus of the 8th ICSSST 2021 is to create and provide a platform for the solid-state science and technology community to share ideas and discuss the latest developments and findings of related fields, exchange information, innovations, and products. On top of those, the conference will act as a medium in disseminating research and innovation to interest parties.

The UiTM Perlis management would like to express our gratitude to all participants, distinguished speakers, researchers, educators, and students for joining and sharing their valuable experiences and ideas with us. I hold great expectation that this conference will serve as a beginning to strengthening friendship and academic collaborations. Finally, I'd like to express my gratitude to the conference organising committee and the Malaysian Solid State Science and Technology (MASS) for their dedication, perseverance, and hard work in organising this conference.

Thank You.



WELCOMING SPEECH



Prof. Dr. Abdul Halim Shaari

Chairman, Malaysian Solid
State Science and
Technology Society (MASS)

Bismillahirrahmanirrahim

Assalamualaikum warahmatullahi wabarakatuh.

It is my utmost pleasure to welcome all participants from various institutions to the 8th International Conference on Solid State Science and Technology (8th ICSSST 2021), which is co-organized by the Universiti Teknologi MARA Perlis and the Malaysian Solid State Science and Technology Society (MASS). The participants will have the privilege to gather and exchange knowledge, and establish networking across numerous disciplines in a single platform.

The MASS is a highly regarded multi-disciplinary society comprised of chemists, physicists, materials scientists, and engineers. The society has proven its capabilities and maturity by organizing a variety of scientific events that benefit members while also disseminating science and technology to other members of society.

The ICSSST 2021 is an inaugural event, which aims to provide a premier platform for students, academicians, researchers, scientist, and practitioners to share insights and relevant information in regard to the innovations, trends and challenges encountered in world of research. Especially on the sustainable achievement in the domain of Solid State Science and Technology.

I would like to congratulate the organising committee for their diligence and enthusiasm in organising the conference. I convey my best wishes to all ICSSST 2021 participants and hope that the conference will bring an exhilarating and valuable experience.

Thank You,

WELCOMING REMARKS



Prof. Ts Dr. Mohd Azlan Mohd Ishak

Chairman, 8th International Conference on Solid State Science and Technology (ICSSST2021)



Assalamualaikum warahmatullahi wabarakatuh. Salam Sejahtera and greeting to all.

On behalf of the organizing committee, I would like to welcome all the delegates and guests to the 8th International Conference on Solid State Science and Technology (8th ICSSST 2021). This virtual conference is an annual event in Malaysia jointly organized by Universiti Teknologi MARA Perlis as host, in cooperation with the Malaysian Solid State Science and Technology Society (MASS). With the themes of "Emerging Trends in Solid State Science for Smart Society" I believe this conference is a great platform for the solid-state science and technology community to share and discuss latest developments and findings of related fields.

The conference which is held on 1-3rd November 2021 features one prestigious plenary speaker by Professor Prof. Dr. Chung-Jen Tseng, keynote speakers, invited talks from well-known scientists and virtual oral parallel sessions. In conjunction with this conference, we also organized the 5th Materials Technology Challenge (MTC5.0) as a sub-event of the 8th ICSSST 2021.

We are glad to announce that all the selected research papers received by the deadline to be considered published in some selected scientific journal.

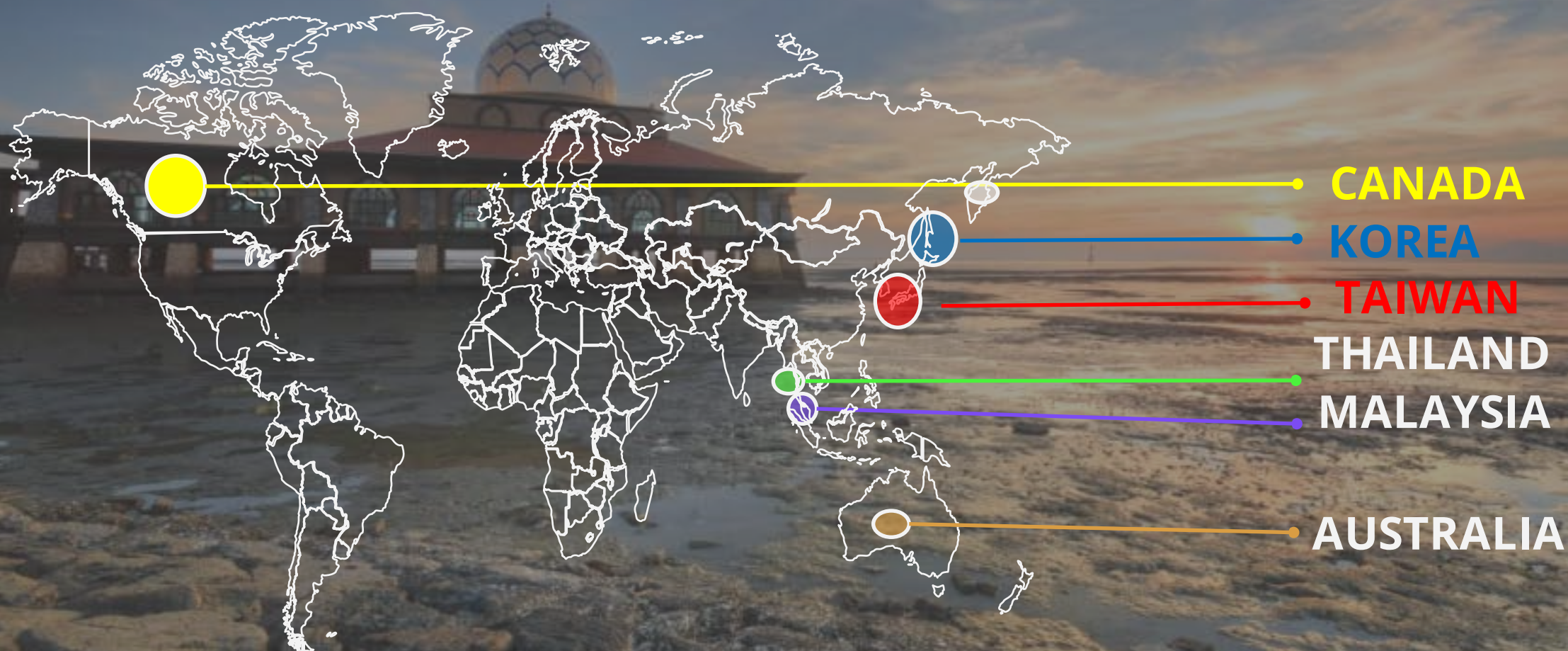
We anticipate that this conference will serve as a networking opportunity for students, professors, and researchers from Malaysia and throughout the world. We'd like to express our gratitude to all the authors for their amazing contributions to such a vast number of entries. Finally, we expect the conference to be enjoyable, educational, and entertaining, with a high-quality programme to contribute to what will be a memorable event.

I'd like to thank my organising committee, MASS committee, chairpersons of parallel sessions, reviewers, all presenters, our sponsors, and Universiti Teknologi MARA Perlis branch for their supports and commitments.

Finally, on behalf of the ICSSST2021 committee, I would like to humbly welcome you to the 8th International Conference on Solid State Science and Technology and look forward to your active participation.

Have a great day!

ORIGIN OF PLANERY, KEYNOTE AND INVITED SPEAKER



PLENARY SPEAKER

Prof. Chung-Jen Tseng received his B.S. and M.S. degrees in Mechanical Engineering from National Chiao Tung University in 1986 and 1988 respectively, and his Ph.D. degree in Mechanical Engineering from The University of Texas at Austin (U.S.A.) in 1995. He received NEDO (New Energy and Industrial Technology Development Organization) Fellowship from the Japanese government and worked on hydrogen energy in Yokohama from 1995 to 1998. He joined the Department of Mechanical Engineering of National Central University in 1998.

Prof. Tseng had worked on vacuum super insulation, gaseous and liquid fuel combustion in porous medium burner, subsonic and supersonic impinging jet, thermal design of large electrical transformers, laser – tissue interaction, numerical simulation of transport phenomena in porous media, microscale heat transfer, and cathode material development for lithium batteries. His current research interest is in energy conversion and storage technologies, such as simulation of transport phenomena in electrochemical processes, innovative PEM fuel cell and stack design, SOFC system analysis, and solar hydrogen production by photoelectrochemical process.

Prof. Tseng also served as the General Secretary of the Combustion Institute of Taiwan from 2010 to 2014. He is an Associate Editor of Journal of Energy Engineering, and serves as editorial board member of several journals. His research was honored by the University with Research Excellence Award in 2013-2016, Distinguished Professorship in 2017-2019, and Patent Excellence Award in 2013, 2015 and 2016.



Prof. Dr. Chung-Jeng Tseng

Department of Mechanical Engineering
National Central University

KEYNOTE SPEAKER

Currently holding a post as Rector of UiTM Perlis Branch, Prof. Khudzir is a Professor in the field of Chemical Technology. He received his PhD from University of Strathclyde, United Kingdom, in which his area of research was nominated as the best in the area of conversion chemistry by the NATO-Advanced Study Institute (ASI). Among his notable achievement in the research field is when his work on coal desulphurization gained recognition from both the government and private statutory bodies and won the Petronas Incentives Award in 1996 and gold medal in the Mindex-Innotex Exhibition that was held in Kuala Lumpur. Currently, his research interest includes pyrolysis and gasification studies of coal and biomass blends, supercritical extraction of biomass for production of clean bio-oil and biodiesel and development of highly porous activated carbon from biomass wastes. Presently, he has published more than 250 papers in the highly impact international and national journals. He was a member of Natural Resources and Environment under Japan Society for Promotion of Science (JSPS)-Vice Chancellor Council (VCC), and has been invited as a 'visiting scientist' at Chemical Engineering Department and Energy Department in Kyoto University, Japan. Further, he has been appointed as paper reviewer for the journal of Energy, Fuels, Renewable Energy and Fuel Processing Technology under Elsevier.



Prof. Dr. Hj Khudzir Ismail

Rector, Universiti Teknologi MARA
(UiTM) Perlis Branch

KEYNOTE SPEAKER

Prof. Maxwell's research interests include the development of novel fibres, advanced composites, hierarchical materials, and self-organizing systems--where possible, employing naturally-sourced/sustainable materials. His interests also include the synthesis, structure, and properties of materials under extreme conditions, e.g. ultra-short time-scales and extreme pressures. His laboratory develops novel processes, e.g. hyperbaric-pressure laser chemical vapour deposition, ultra-high pressure diamond anvil cells, pulsed power material synthesis, & compact X-ray sources. He also conducts research and develops instruments for high-energy observational astrophysics/space science. Prof. Maxwell conducts basic and applied research, writes patents, and develops novel intellectual property. An experimentalist at heart, he enjoys developing advanced interdisciplinary experimental systems and production prototypes for science, industry, and economic development. Currently he teaches advanced graduate-level advanced materials, nanotechnology, and nano/micro engineering subjects



Prof. James L. Maxwell

*Director of Engineering Research,
Engineering Dept., La Trobe University*

KEYNOTE SPEAKER

Professor Lee D. Wilson, Ph.D finished his Bachelor degree from the University of Winnipeg in 1992 and he was awarded his Ph.D from the University of Saskatchewan in 1998. He was NSERC Postdoctoral Visiting Fellow, National Research Council of Canada, Steacie Institute for Molecular Sciences – Functional Materials Program, Ottawa, in 1999-2003. He is currently affiliated with the Department of Chemistry at the University of Saskatchewan as a Professor. His research interests covers diverse topics in physical chemistry, materials science and environmental chemistry. Ongoing research activities are focused on the development of new types of materials and studies related to adsorption and interfacial phenomena related to water science and technology. The Wilson research group is developing new forms sustainable biomaterials for the controlled removal of contaminants from water and chemical separations using methods based on green chemistry. This research contributes significantly to the science and technology of “smart” adsorbent materials that relate to issues relevant to water and energy security.



Prof. Lee D. Wilson
*Department of Chemistry,
University of Saskatchewan*

INVITED SPEAKER



01

**Prof. Dr. Zainal
Abidin Talib**

Jeonbuk National University
South Kores

02

**Prof. Dr. Azman
Jalar**

Universiti Kebangsaan Malaysia
(UKM)
Bangi, Selangor

03

**Prof. Dr. Suhairul
Hashim**

Universiti Teknologi Malaysia
(UTM)
Johor Bahru, Johor

04

**Prof. Dr. Huda
Abdullah**

Universiti Kebangsaan Malaysia
(UKM)
Bangi, Selangor

05

**Prof. Dr. Md. Rahim
Sahar**

Universiti Teknologi Malaysia
(UTM)
Johor Bahru, Johor

06

**Prof. Dr. Abdul Halim
Shaari**

Universiti Putra Malaysia
(UPM)
Serdang, Selangor

07

**Asst. Prof. Dr. Nabil
Hayeemasae**

Prince of Songkla University
Pattani Campus, Thailand

08

**Assoc. Prof. Dr. Noor
Baa'yah Ibrahim**

Universiti Kebangsaan Malaysia
(UKM)
Bangi, Selangor

INVITED SPEAKER



09

**Assoc. Prof. Dr.
Mohammad
Hafizuddin Hj Jumali**
Universiti Kebangsaan Malaysia
(UKM)
Bangi, Selangor

10

**Assoc. Prof. Dr. Abd
Mutalib Md Jani**
Universiti Teknologi MARA
(UiTM)
Seri Iskandar, Perak

11

**Assoc. Prof. Ts. Dr.
Mohd Hafiz Dzarfan
Othman**
Universiti Teknologi Malaysia
(UTM)
Johor Bahru, Johor

12

Dr. Arlina Ali
Universiti Malaysia Kelantan
(UMK)
Jeli, Kelantan

13

**Assoc. Prof. Dr.
Mohd Mustafa
Awang Kechik**
Universiti Putra Malaysia
(UPM)
Serdang, Selangor

14

**Assoc. Prof. Dr.
Iskandar Shahrim
Mustafa**
Universiti Sains Malaysia
(USM)
Pulau Pinang

15

**Assoc. Prof. Dr.
Ali H. Jawad Al-
Taie**
Universiti Teknologi MARA
(UiTM)
Shah Alam, Selangor

16

**Assoc. Prof. Dr.
Chen Soo Kien**
Universiti Putra Malaysia
(UPM)
Serdang, Selangor

INVITED SPEAKER



17

**Dr. Zuliahani
Ahmad**

Universiti Teknologi MARA
(UiTM)
Arau, Perlis

18

**Dr. Mohammad
Saifulddin Mohd
Azami**

Universiti Teknologi Malaysia
(UTM)
Johor Bahru, Johor

19

**Dr. Wan Izhan Nawawi
Wan Ismail**

Universiti Teknologi MARA
(UiTM)
Arau, Perlis

20

**Dr. Mohd Fairul Sharin
Abdul Razak**

Universiti Malaysia Perlis
(UniMAP)
Arau, Perlis

21

**Dr. Jeyashelly
Andas**

Universiti Teknologi MARA
(UiTM)
Arau, Perlis

22

**Dr. Nur Nasulhah
Kasim**

Universiti Teknologi MARA
(UiTM)
Arau, Perlis

23

**Dr. Wan Yusmawati
Wan Yusoff**

Universiti Pertahanan Nasional Malaysia
(UPNM),
Kuala Lumpur

TENTATIVE

DAY 1

1ST NOVEMBER 2021

8.00 AM REGISTRATION



TENTATIVE



2ND NOVEMBER 2021

DAY 2

(8.00 am - 10.30 am)

8.00 AM	REGISTRATION OF THE PRESENTERS / PARTICIPANT VIA VIRTUAL PLATFROM EMCEE/MODERATOR
8.30 AM	MALAYSIAN NATIONAL ANTHEM “NEGARAKU” AND “WAWASAN SETIA WARGA UITM”
8.35 AM	RECITAL DU’A BY USTAZ MOHD DAUD AHMAD
8.40 AM	WELCOMING SPEECH: PROF DR. HJ. KHUDZIR HJ. ISMAIL (RECTOR UNIVERSITI TEKNOLOGI MARA, PERLIS, MALAYSIA)
8.50 AM	WELCOMING SPEECH: PROF DR. ABDUL HALIM SHAARI PRESIDENT OF MALAYSIAN SOLID STATE SCIENCE AND TECHNOLOGY SOCIETY (MASS)
9.00 AM	PRESENTING I-IDEA 2020 AND ICSSST2021 CORPORATE MONTAGE
9.10 AM	PLENARY SESSION - PROF. DR. CHUNG-JEN TSENG (NATIONAL CENTRAL UNIVERSITY, TAIWAN) * MODERATOR: PROF. EMERITUS DATO’ DR. MUHAMMAD YAHYA*
9.55 AM	KEYNOTE SESSION 1 - PROF DR HJ. KHUDZIR HJ. ISMAIL (RECTOR UNIVERSITI TEKNOLOGI MARA, PERLIS, MALAYSIA) * MODERATOR: PROF. DR. ABDUL HALIM SHAARI*
10.25 AM	PHOTO SESSION VIA VIRTUAL PLATFORM
10.30 AM	REFRESHMENT

TENTATIVE



2ND NOVEMBER 2021

DAY 2

(10.40 am -17.00 pm)

10.40 AM	PARALLEL SESSION	
	SESSION 1	BREAKOUT ROOM 1:
	SESSION 2	BREAKOUT ROOM 2:
	SESSION 3	BREAKOUT ROOM 3:
	SESSION 4	BREAKOUT ROOM 4:
	SESSION 5	BREAKOUT ROOM 5:
13.05 PM	LUNCH BREAK	
14.30 PM	PARALLEL SESSION	
	SESSION 6	BREAKOUT ROOM 6:
	SESSION 7	BREAKOUT ROOM 7:
	SESSION 8	BREAKOUT ROOM 8:
	SESSION 9	BREAKOUT ROOM 9:
	SESSION 10	BREAKOUT ROOM 10:
17.00 PM	END OF DAY 2	

TENTATIVE



3RD NOVEMBER 2021

DAY 3

(8.00 am -13.00 pm)

8.00 AM	REGISTRATION OF THE PRESENTERS / PARTICIPANT VIA VIRTUAL PLATFROM EMCEE/MODERATOR	
8.30 AM	KEYNOTE SESSION 2 - PROF. JAMES L. MAXWELL DIRECTOR OF ENGINEERING RESEARCH, ENGINEERING DEPT., LA TROBE UNIVERSITY, AUSTRALIA * MODERATOR: PROF. DR. ZAINAL ABIDIN TALIB*	
9.00 AM	KEYNOTE SESSION 3 - PROF. LEE D. WILSON DEPARTMENT OF CHEMISTRY, UNIVERSITY OF SASKATCHEWAN, CANADA * MODERATOR: PROF. DR. ZAINAL ABIDIN TALIB*	
9.30 AM	PHOTO SESSION VIA VIRTUAL PLATFORM	
9.35 AM	REFRESHMENT	
9.40 AM	PARALLEL SESSIONS	
	SESSION 11	BREAKOUT ROOM 11 :
	SESSION 12	BREAKOUT ROOM 12
	SESSION 13	BREAKOUT ROOM 13:
	SESSION 14	BREAKOUT ROOM 14:
13.00PM	LUNCH BREAK	

TENTATIVE



3RD NOVEMBER 2021

DAY 3

(14.30 pm - 17.00 pm)

- | | |
|-----------------|--|
| 14.30 PM | RECITAL DU'A BY USTAZ MOHD DAUD AHMAD |
| 14.40 PM | CLOSING SPEECH: PROFESSOR TS DR. MOHD AZLAN MOHD ISHAK
CHAIRMAN ICSSST2021 |
| 14.50 PM | CULTURAL PERFORMANCE |
| 15.00 PM | AWARD CEREMONY

BEST PRESENTER AWARD
MATERIALS TECHNOLOGY CHALLENGE (MTC 5.0)
BEST UNDERGRADUATE THESIS AWARD
MASS FELLOWSHIP AWARD
BATON FOR NEXT YEAR CONFERENCE |
| 17.00PM | END OF CONFERENCE |

SESSION 1

Venue: Breakout Room 1

Chairperson: Assoc. Prof. Dr. Abdullah Chik

10 : 40 AM – 11 : 00 AM

INVITED SPEAKER

Prof. Dr. Zainal Abidin Talib

PAPER ID : 136

Investigation On The Formation Of Lead-free
Cesium Bismuth Bromide Perovskite

11 : 00 AM – 11 : 20 AM

INVITED SPEAKER

Assoc. Prof. Dr. Abdul Mutalib Md Jani

PAPER ID : 120

Spatially Controlled The Growth Of Gold Decorated
Carbon Nanotubes On A Porous Membrane And Its
Unique Catalytic Activity

11 : 20 AM – 11 : 35 AM

PRESENTER

Monica Limau Anak Jadam

PAPER ID : 14

Synthesis And Characterization Of Layered
Double Hydroxides With Varying Divalent Metal
Cations: Mg^{2+} , Zn^{2+} , Ca^{2+}

11 : 35 AM – 11 : 50 AM

PRESENTER

Azlina Yahya

PAPER ID : 24

Structural And Optical Properties Of Reduced
Graphene Oxide-coated Tellurite Glass Doped
With Erbium Nanoparticles

11 : 50 AM – 12 : 05 PM

PRESENTER

Prof. Ts. Dr. Abd Rahman Tamuri

PAPER ID : 31

Greenish Blue Phosphor of Europium and
Dysprosium Doped Magnesium-Strontium
Aluminate Prepared by Combustion Synthesis

12 : 05 PM – 12 : 20 PM

PRESENTER

Dr. Wan Aizuddin W Razali

PAPER ID : 63

Characterization Of Chromium Doped Zinc
Aluminate ($ZnAl_2O_4$) Phosphor Synthesized By
Sol-gel Method

12 : 20 PM – 12 : 35 PM

PRESENTER

Dr. Norherdawati Kasim

PAPER ID : 68

Nanohybrid Polysulfone Membrane For Water
Treatment Industries: Preparation And
Characterization

12 : 35 PM – 12 : 50 PM

PRESENTER

**Dr. Engku Abd Ghapur Che Engku
Ali**

PAPER ID : 78

Effect Of Growth Time Of Zinc Oxide Nano Rod
In Hydrothermal Process To The Performance
Of Dye-sensitized Solar Cells

DAY 2

2 NOVEMBER 2021

SESSION 2

Venue: Breakout Room 2

Chairperson: Dr. Haryana Mohd Hairi

10 : 40 AM – 11 : 00 AM

INVITED SPEAKER

Prof. Dr. Huda Abdullah

PAPER ID : 147

Zn_{1-x} Sn_x O (Zinc-Tin-Oxide) As An
Alternative CZTS Solar Cell Buffer Layer

11 : 00 AM – 11 : 20 AM

INVITED SPEAKER

Assoc. Prof. Dr. Mohammad

Hafizuddin Hj. Jumali

PAPER ID : 148

Development Of High-performance
Piezoelectric Nanogenerator Based On
BaTiO₃/PVDF Nanocomposite Fibers

11 : 20 AM – 11 : 35 AM

PRESENTER

Muhamad Anuar Abdul Muin

PAPER ID : 117

Optimization Of Thin Wasted Polystyrene
Embedded Multiwall Carbon Nanotubes
(MWCNT) Film For Solid Electrolyte Of
Flexible Dye-sensitized Solar Cell (DSSC)

11 : 35 AM – 11 : 50 AM

PRESENTER

Shaiful Bakhtiar Hashim

PAPER ID : 119

Effect Of Polymer Types On Metal Oxide
Substrates As An EGFET Sensor Based
Nitrate Sensing Layers

11 : 50 AM – 12 : 05 PM

PRESENTER

Muhammad Luqman Md Ali

PAPER ID : 124

A Review On The Modification Of
Hierarchical Zeolite Catalyst, HZSM-5 For
Bio-oil Production Via Catalytic Pyrolysis Of
Biomass

12 : 05 PM – 12 : 20 PM

PRESENTER

Norjulyati Hamzah

PAPER ID : 19

First-Principles LDA+U and GGA+U
Calculations on Structural and Electronic
Properties of Wurtzite ZnO

12 : 20 PM – 12 : 35 PM

PRESENTER

Ahmad Fuzairi Ahmad Faizal

PAPER ID : 22

Excellent Visible-Light-Induced Photocatalytic
activity of SrTiO₃ in terms of Structural and
electronic properties: ADFT + U investigations

12 : 35 PM – 12 : 50 PM

PRESENTER

Nurakma Natasya Md Jahangir Alam

PAPER ID : 66

First Principles Study Of Electronic And
Thermoelectric Properties Of Surface (001)
ATiO₃ (A=Pb, Sn) For Thin Film Application
Using Density Functional Theory

DAY 2

2 NOVEMBER 2021

SESSION 3

Venue: Breakout Room 3

Chairperson: Dr. Rozilah Rajmi

10 : 40 AM – 11 : 00 AM

INVITED SPEAKER

Dr. Jeyashelly Andas

PAPER ID : 123

Turning Waste Chicken Bones Into
Heterogeneous Catalyst For Biodiesel Synthesis
From Waste Cooking Oil

11 : 00 AM – 11 : 20 AM

INVITED SPEAKER

Assoc. Prof. Ts. Dr. Mohd Hafiz

Dzarfan Othman

PAPER ID : 144

Inexpensive Ceramic Membranes Derived From
Alternative Materials For Water & Wastewater
Treatment

11 : 20 AM – 11 : 35 AM

PRESENTER

Azzafeerah Mahyuddin

PAPER ID : 13

Polymer-free Transfer Of Graphene-based
Material Derived From Cooking Palm Oil By
Chemical Vapor Deposition Technique

11 : 35 AM – 11 : 50 AM

PRESENTER

**Dr. Wan Rafizah Wan Abdullah @
Wan Abd. Rahman**

PAPER ID : 129

Synthesis Of Cerium Oxide-Zinc Oxide
Heterostructured Photocatalyst For Potential
Water Treatment Application

11 : 50 AM – 12 : 05 PM

PRESENTER

Farah Liyana Bohari

PAPER ID : 59

Synthesis And Characterization Of 4-
chlorophenoxyacetic Acid Herbicide Interleaved
Into Calcium-Aluminium Layered Double
Hydroxide

12 : 05 PM – 12 : 20 PM

PRESENTER

Dr. Nor Hafizah Che Ismail

PAPER ID : 99

Novel Intercalation Mechanism Of Cationic
Surfactants Modified Muscovite

12 : 20 PM – 12 : 35 PM

PRESENTER

Dr. Khuzaimah Arifin

PAPER ID : 54

TiO₂/MXene-based Composite Material In
Photoelectrochemical Water Splitting
Application: A Review

12 : 35 PM – 12 : 50 PM

PRESENTER

Norinsan Kamil Othman

PAPER ID : 92

Green Corrosion Coating Using Palm Oil Based
Urethane Acrylate (POBUA) On Mild Steels In
3.5 NaCl Solution

DAY 2

2 NOVEMBER 2021

SESSION 4

Venue: Breakout Room 4
Chairperson: Dr. Intan Juliana Shamsudin

10 : 40 AM – 11 : 00 AM

INVITED SPEAKER

Asst. Prof. Dr. Nabil Hayemasae

PAPER ID : 164

Insight Into Relationship Between Mechanical Strength And Strain-induced Crystallization Of Natural Rubber/Halloysite Nanotubes Composites

11 : 00 AM – 11 : 20 AM

INVITED SPEAKER

Assoc. Prof. Dr. Noor Baa'iah Ibrahim

PAPER ID : 36

Pure Polycrystalline Barium Hexaferrite Film Prepared Without Buffer Layer, Using A Sol-gel Method

11 : 20 AM – 11 : 35 AM

PRESENTER

Adzrie Bin Baharudin

PAPER ID : 48

Characterization And Mechanical Properties Of Polylactic Acid (PLA) Biocomposite Filled Microcrystalline Cellulose (MCC) Extracted From Kenaf

11 : 35 AM – 11 : 50 AM

PRESENTER

Noor Aishatun Majid

PAPER ID : 149

Effect Of Various Concentrations Of Silane Coupling Agent Treated Palm Kernel Shell (PKS) Powder Filled Polyvinyl (Chloride) (PVC)/Acrylonitrile Butadiene Rubber (NBR) Compounds

11 : 50 AM – 12 : 05 PM

PRESENTER

Nor Mazlina Abdul Wahab

PAPER ID : 105

Mechanical Properties Of Natural Rubber Vulcanizates Containing Ethylene Propylene Diene Rubber Waste At Different Types Of Vulcanization System

12 : 05 PM – 12 : 20 PM

PRESENTER

Dr. Faiezah Hashim

PAPER ID : 86

The Effect Of Dynamic Vulcanization On The Properties Of Ethylene Vinyl Acetate (Eva)/Natural Rubber (NR)/Mengkuang Leaf Fibre (MLF) Thermoplastic Elastomer Composites

12 : 20 PM – 12 : 35 PM

PRESENTER

Nur Syuhada Ayob

PAPER ID : 101

Effect Of Different Types Of Fillers On Dielectric And Microwaves Properties Of Rubber-based Composites

12 : 35 PM – 12 : 50 PM

PRESENTER

Dr. Nabilah Afiqah Mohd Radzuan

PAPER ID : 137

3D Printed Polyamide-Carbon Fibre Composites Filament

DAY 2

2 NOVEMBER 2021

SESSION 5

Venue: Breakout Room 5

**Chairperson: Dr. Mohammad Saifulddin
Bin Mohd Azami**

10 : 40 AM – 11 : 00 AM

INVITED SPEAKER

Assoc. Prof. Dr. Chen Soo Kien

PAPER ID : 116

Critical Current Density Of Sintered Ex-situ
MgB₂ Superconductor

11 : 00 AM – 11 : 20 AM

INVITED SPEAKER

Dr. Wan Izhan Nawawi Wan Ismail

PAPER ID : 152

Immobilized TiO₂/PEG By Double Sided
Adhesive Tape (DSAT) For Photocatalytic
Decolorization Of Methylene Blue

11 : 20 AM – 11 : 35 AM

PRESENTER

Dr. Syahrul Humaidi

PAPER ID : 30

Superconductivity In (Fe_{1-x}SeSn_x)
Superconductor

11 : 35 AM – 11 : 50 AM

PRESENTER

Dr Hartini Ahmad Rafaie

PAPER ID : 35

Photocatalytic Degradation of Methylene Blue
Dye using Mg-Doped ZnO under UV Light
Irradiation

11 : 50 AM – 12 : 05 PM

PRESENTER

Nureel Imanina Abdul Ghani

PAPER ID : 37

Water-based Preparation Of Immobilized Ag-
doped TiO₂ Photocatalyst For Photocatalytic
Degradation Of RR4 Dye

12 : 05 PM – 12 : 20 PM

PRESENTER

Azliana Ramli

PAPER ID : 64

Mixed-halide Hybrid Perovskite With
Amino(methyl)pyridine-cation: Structural,
Chemical, Optical, And Conductivity Properties

12 : 20 PM – 12 : 35 PM

PRESENTER

Dr. Norazila Ibrahim

PAPER ID : 70

Electroresistance Effect In Monovalent Doped
La_{0.8-x}Dy_xNa_{0.2}MnO₃ (x = 0 And 0.1) Manganites

DAY 2

2 NOVEMBER 2021

SESSION 6

Venue: Breakout Room 6

Chairperson: Dr. Nurul Syahidah Sabri

14 : 30 PM – 14 : 50 PM

INVITED SPEAKER

Prof. Dr. Md. Rahim Sahar

PAPER ID : 131

Cullet Titanium Nitrate Glass Ceramics

14 : 55 PM – 15 : 10 PM

PRESENTER

Lidyayatty Abdul Malik

PAPER ID : 74

X-Ray Analyses and Density Functional
Theory Study of NiO- BaCe_{0.54}Zr_{0.36}Y_{0.1}O_{2.95}
and NiO-*m*- BaCe_{0.54}Zr_{0.36}Y_{0.1}O_{2.95}
Composite Anode

15 :10 PM – 15 :25 PM

PRESENTER

Dr. Nurhafizah Md Disa

PAPER ID : 84

DFT Study On Structural Properties, Density
Of States And Band Structure Of Mono- & Bi-
layer Graphene

15 : 25 PM – 15 : 40 PM

PRESENTER

Mohd Saiful Bahari Shaari

PAPER ID : 109

Magnet Potential Energy Research For
Magnetism System Development

15 : 40 AM – 15 : 55 PM

PRESENTER

Dr. Haryana Mohd Hairi

PAPER ID : 114

Numerical Study On Refractive Index
Modification Of Chromium Oxide Coated
Silica Optical Fiber Sensor Using COMSOL
Multiphysics

15 : 55 PM – 16 : 10 PM

PRESENTER

Dr. Siti Nurul'Ain Yusop

PAPER ID : 130

Dissolution Prediction Of β -succinic Acid In
Ethanol Solution Using Molecular Dynamic
Simulation

16 : 10 PM – 16 : 25 PM

PRESENTER

Assoc. Prof. Dr. Abdullah Chik

PAPER ID : 128

First Principle Study Of Thermoelectric
Properties Of La Doped SrZrO₃ Perovskite

16 : 25 PM – 16 : 40 PM

PRESENTER

Noor 'Aisyah Johari

PAPER ID : 20

Effects of Hubbard U correction on the
structural and electronic properties of rutile,
anatase and brookite TiO₂

DAY 2

2 NOVEMBER 2021

SESSION 7

Venue: Breakout Room 7

Chairperson: Dr. Wan Rafizah Wan Abdullah

14 : 30 PM – 14 : 50 PM

INVITED SPEAKER

Dr. Nur Nasulhah Kasim

PAPER ID : 153

Effect Of Sequential Pre-treatment On The Thermal Behaviour Of Pretreated Palm Empty Fruit Bunch Using Thermal Gravimetric

14 : 50 PM – 15 : 10 PM

INVITED PRESENTER

Prof. Dr. Abdul Halim Shaari

PAPER ID : 159

Effect Of Indium And Yttrium Substitution In Bismuth Ferrite Ceramics

15 : 10 PM – 15 : 25 PM

PRESENTER

Yusuf Shehu

PAPER ID : 155

Investigation of antimony Doped TiO_2 Microspheres Growth Mechanism: The Role Of Dopant Molarity

15 : 25 PM – 15 : 40 PM

PRESENTER

Suhaida Dila Safian

PAPER ID : 134

Electrochemical Properties Of Modified LaSrCoFeO_3 Cathode Thin Film On Proton Conductor Ceramics

15 : 40 PM – 15 : 55 PM

PRESENTER

Nur Farahin Yusoff

PAPER ID : 76

A Short Review On Catalytic Properties For Dry Methane Reforming

15 : 55 PM – 16 : 10 PM

PRESENTER

Nurul Waheeda Mazlan

PAPER ID : 75

Physicochemical And Electrochemical Properties Of LSCF And 70LSCF-30BCZY Cathode Composite : A Correlation Study

16 : 10 PM – 16 : 25 PM

PRESENTER

Assoc. Prof. Dr. Yap Chi Chin

PAPER ID : 65

Effect Of Copper Iodide Doping Concentration On The Indoor Photovoltaic Performance Of Inverted Type Organic Solar Cell

16 : 25 PM – 16 : 40 PM

PRESENTER

Yap Siew Hong

PAPER ID : 122

Comparative Study On Superconducting Properties And Surface Morphology Analysis For $\text{Y}_{0.85}\text{K}_{0.15}\text{Ba}_2\text{Cu}_3\text{O}_{7-d}$ And $\text{Y}_{0.85}\text{Ca}_{0.15}\text{Ba}_2\text{Cu}_3\text{O}_{7-d}$ Synthesized Via Thermal Treatment Method

DAY 2

2 NOVEMBER 2021

SESSION 8

Venue: Breakout Room 8

Chairperson: Assoc. Prof. Dr. Abdul Motalib
Md Jani

14 : 50 PM – 15 : 10 PM

INVITED SPEAKER

Assoc. Prof. Dr. Mohd. Mustafa

Awang Kechik

PAPER ID : 139

Improvement Of Flux Pinning Of
 $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$ Films By Gd₂11 Nano
Inclusions

15 :10 PM – 15 :25 PM

PRESENTER

Dr. Rozilah Rajmi

PAPER ID : 71

Effect Of Magnetic Ions (A=Ni, Cr; X = 0 and
0.03) Substitution in $\text{Pr}_{0.75}\text{Na}_{0.25}\text{Mn}_{1-x}\text{A}_x\text{O}_3$
Manganite On Structural, Magnetic And
Electrical Transport Properties

15 : 25 PM – 15 : 40 PM

PRESENTER

Dr. Safura Taufik

PAPER ID : 60

Development of an Electrochemical Impedance
based Sensor for the Detection of Malathion
using Reduced Graphene Oxide and Gold
Nanoparticles

15 : 40 PM – 15 : 55 PM

PRESENTER

Prof. Madya. Dr Nafisah
Osman

PAPER ID : 96

Global Trends In SOFC Scenario And Future
Perspectives

15 : 55 PM – 16 : 10 PM

PRESENTER

Lau Lik Nguong

PAPER ID : 15

Structural And Electrical Properties Of La-Ca-
Mn-O/ZnO Composites

16 : 10 PM – 16 : 25 PM

PRESENTER

Mohammad Shyfur Rahman
Chowdhury

PAPER ID : 133

Impact Of Cosmological Constant In
Cosmological Models

DAY 2

2 NOVEMBER 2021

SESSION 9

Venue: Breakout Room 7

Chairperson: Dr. Norazila Ibrahim

14 : 30 PM – 14 : 50 PM

INVITED SPEAKER

Dr. Mohd Fairul Sharin Bin Abdul Razak

PAPER ID : 158

The Study Of The Modification Dye Sensitized Solar Cell Using Biopolymer And Conducting Polymer As Modifiers

14 : 50 PM – 15 : 10 PM

INVITED SPEAKER

Dr. Wan Yusmawati Binti Wan Yusoff

PAPER ID : 143

The Influence Of Gamma Radiation Exposure Towards Hardness, Intermetallic Compound And The Area Of Eutectic Phase Of Solder Joint

15 : 10 PM – 15 : 25 PM

PRESENTER

Sofiah Abd Rani

PAPER ID : 81

Dose Response Of Radiation-induced Low-dose Film Dosimeter Of Inorganic Salt And Red Cresol Dyed Blended PVA

15 : 25 PM – 15 : 40 PM

PRESENTER

Nur Amira Binti Zainul Armir

PAPER ID : 95

Comparison Of Characterization Of Regenerated Cellulose Hydrogel Composed With Polyanionic And Polycationic Polymers

15 : 40 PM – 15 : 55 PM

PRESENTER

Wahida Abdul Rahman

PAPER ID : 10

Preparation and Characterization of Biocomposite Film Derived from Microcrystalline Cellulose (MCC) of Jackfruit Rind Waste

15 : 55 PM – 16 : 10 PM

PRESENTER

Amalia Zulkifli

PAPER ID : 98

Effectiveness Of Sulphuric Acid/Lactic Acid As Catalyst Towards Bio-based Polyol

16 : 10 PM – 16 : 25 PM

PRESENTER

Dr. Then Yoon Yee

PAPER ID : 111

Preparation And Physicochemical Properties Of Polyester Polyol Plasticized Poly(lactic Acid)/Zinc Oxide Films

16 : 25 PM – 16 : 40 PM

PRESENTER

Assoc. Prof. Dr. Noor Azilah Mohd Kasim

PAPER ID : 108

Functionalization Of Carbon Nanofibers Using Dodecylamine And Octadecanol And Their Characterization

DAY 2

2 NOVEMBER 2021

SESSION 10

Venue: Breakout Room 10

Chairperson: Ts. Dr Khadijah Hilmun Kamarudin

14 : 30 PM – 14 : 50 PM

INVITED SPEAKER

Prof. Dr. Azman Jalar

PAPER ID : 150

Microstructural Stability Of Intermetallic
Compound Layer Of Metallurgical
Interconnection In Semiconductor Packaging

14 : 50 PM – 15 : 10 PM

INVITED SPEAKER

Assoc. Prof. Dr. Iskandar

Shahrim Mustafa

PAPER ID : 125

Optical Characterization Of Na_2O - ZnO - B_2O_3 -
 SiO_2 Glass System Via Various SiO_2 Sources

15 :10 PM – 15 :25 PM

PRESENTER

Assoc. Prof. Dr. Ahmad Nazlim
Yusoff

PAPER ID : 33

Proton Relaxation In Several Laboratory
Magnetic Resonance Imaging (MRI)
Phantoms

15 : 25 PM – 15 : 40 PM

PRESENTER

Nur Aisyah Ab Malik Marwan

PAPER ID : 67

Structural And Elastic Characteristics Of Ti-
alloys Doped With β - stabilizer For Human
Bone Implant

15 : 40 AM – 15 : 55 PM

PRESENTER

Dr. Solhan Yahya

PAPER ID : 16

Electrochemical Polarization Studies On
Corrosion Inhibition Of Alloy By Tannin And
Catechin

15 : 55 PM – 16 : 10 PM

PRESENTER

Muhammad Syahirul Ikhwan
Ab Aziz

PAPER ID : 44

The Surface Morphology And
Recyclability Studies Of Immobilized
Titanium Dioxide Under Surfactant As
Dispersing Agent

16 : 10 PM – 16 : 25 PM

PRESENTER

Siti Raihan Hamzah

PAPER ID : 41

The Porosity Study Of Immobilized
 TiO_2 /ENR/PVC Under Photoetching
Process For Light Harvesting
Enhancement Through Photocatalytic
Degradation Of RR4 Dye

DAY 2

2 NOVEMBER 2021

SESSION 11

Venue: Breakout Room 11

Chairperson: Dr. Then Yoon Yee

3 NOVEMBER 2021

DAY 3

9 : 40 AM – 10 : 00 AM

INVITED SPEAKER

Dr. Zuliahani Ahmad

PAPER ID : 154

Improved Mechanical And Corrosive
Properties Of Unsaturated Polyester-graphene
Treated With Silane Coupling Agent

10 : 00 AM – 10 : 15 AM

PRESENTER

Munirah Onn

PAPER ID : 52

Morphology And Characterization Study Of
Effective Microorganism (EM) Waterbased
Epoxy Coatings

10 : 15 AM – 10 : 30 AM

PRESENTER

Ts Dr Ruziana Mohamed

PAPER ID : 77

Enhanced The Properties Of ZnO Thin Film By
Graphene Oxide Coating At Different
Concentrations Via Solution Immersion
Method

10 : 30 AM – 10 : 45 AM

PRESENTER

Dayang Habibah Abang Ismawi Hassim

PAPER ID : 50

Characterization Of Ethylene-vinyl Acetate/Natural
Rubber (EVA/NR)-based Thermoplastic Elastomer
For Fused Deposition Modelling (FDM)-3D Printing
Material

10 : 45 AM – 11 : 00 AM

PRESENTER

Ts. Dr. Khadijah Hilmun Kamarudin

PAPER ID : 11

Effect Of Electrode Thickness And Surface
Morphology On Electrochemical Performance
Of EDLC Based Solid Polymer Electrolytes

11 : 00 AM – 11 : 15 AM

PRESENTER

Sharifah Nafisah Syed Ismail

PAPER ID : 5

Unsaturated Polyester Composite Filled With
Coconut Shell Natural Fibre: Preparation And
Mechanical Performance

SESSION 12

Venue: Breakout Room 12

Chairperson: Assoc. Prof. Dr. Ahmad Nazlim Yusoff

9 : 40 AM – 10 : 00 AM

INVITED SPEAKER

Dr. Mohammad Saifulddin Mohd
Azami

PAPER ID : 157

Silver Deposited On Graphitic Carbon Nitride
Prepared Under Microwave Irradiation For
Photo degradation Of 2-chlorophenol

10 : 00 AM – 10 : 15 AM

PRESENTER

Abqari Luthfi Albert Abdullah

PAPER ID : 83

Effect Of Synthesis Temperature On
Morphological And Microstructural Properties
Of Graphene-ZnO Composites Prepared By
Solvothermal Method

10 : 15 AM – 10 : 30 AM

PRESENTER

Zainur Atika Ibrahim

PAPER ID : 34

Effect Of Dilution Gas To The Silicon Carbide
Films Using Very High Frequency - Plasma
Enhanced Chemical Vapour Deposition

10 : 30 AM – 10 : 45 AM

PRESENTER

Dr. Intan Juliana Shamsudin

PAPER ID : 28

Synthesis Of Hydrophobic Benzoyl
Carrageenan As Polymer Electrolyte

10 : 45 AM – 11 : 00 AM

PRESENTER

Umairah Mohd Zaki

PAPER ID : 91

Effects Of Inorganic Salts And Maltose On
The Dose-response Of HEMA Polymer Gel
Dosimeters At Diagnostic Range

11 : 00 AM – 11 : 15 AM

PRESENTER

Ting Lee Mon

PAPER ID : 47

Optimizing Mode-mismatched Thermal Lens
Method For Study Of Liquid Thermal
Diffusivity

DAY 3

3 NOVEMBER 2021

SESSION 13

Venue: Breakout Room 13

Chairperson: Dr. Solhan Yahya

9 : 40 AM – 10 : 00 AM

INVITED SPEAKER

Assoc. Prof. Ali H. Jawad Al-Taie

PAPER ID : 160

Chitosan- Biohybrid Nanocomposite Material
For Wastewater Treatment

10 : 00 PM – 10 : 20 PM

INVITED SPEAKER

Prof. Dr. Suhairul Hashim

PAPER ID : 151

Thermoluminescence Properties Of Pure Gold
Nanoparticles Embedded BaSO₄- TeO₂- B₂O₃
Glasses co-doped With Rare Earth Ions As A Solid
TL Detector

10 : 20 AM – 10 : 30 AM

PRESENTER

Prof. Madya Dr. Lim Kean Pah

PAPER ID : 21

Structural, Electrical, And Magneto-transport
Properties Of Pr_{0.7}Sr_{0.3}MnO₃: Al₂O₃ Composites

10 : 30 AM – 10 : 45 AM

PRESENTER

Nur Syazana Nazeri

PAPER ID : 45

Effect Of Water As Dispersing Agent For
Prepared Immobilized Titanium Dioxide

10 : 45 AM – 11 : 00 AM

PRESENTER

Nadiah Sabihah Md Natar

PAPER ID : 46

Preparation Of Water-base Immobilized N
Doped TiO₂ Using DSAT Technique For
Photocatalytic Degradation Of Methylene Blue
Dye

11 : 00 AM – 11 : 15 AM

PRESENTER

Husniyah Aliyah Lutpi

PAPER ID : 104

Physical, Mechanical Properties And Thermal
Shock Resistance Of Li₂O-Al₂O₃-SiO₂-MgO-TiO₂-
Na₂O

11 : 15 AM – 11 : 30 AM

PRESENTER

Lili Widarti Binti Zainuddin

PAPER ID : 12

The Study Of Hubbard U Correction On
Structural, Electronic And Optical Properties Of
LiNbO₃

11 : 30 AM – 11 : 45 AM

PRESENTER

Dr. Nurul Akidah Baharuddin

PAPER ID : 103

Structural And Electrical Properties Of LiNi_{1-x}
Ru_xO₂ (x=0.3,0.4) As A Potential Electrode For
Symmetrical Solid Oxide Fuel Cell

DAY 3

3 NOVEMBER 2021

SESSION 14

Venue: Breakout Room 14

Chairperson: Dr. Engku Abd Ghafur bin Che Engku Ali

9 : 40 AM – 10 : 00 AM

INVITED SPEAKER

Dr. Arlina Ali

PAPER ID : 162

Synthesis And Characterization Of Aluminium Oxide Added With Zinc Oxide Nanostructures For Against UV Protection

10 : 00 AM – 10 : 15 AM

PRESENTER

Noratiqah Yusop

PAPER ID : 145

Influence of soft phase thickness on magnetic properties of $\text{BaFe}_{12}\text{O}_{19}/\text{Y}_3\text{Fe}_5\text{O}_{12}$ film prepared by a sol-gel method

10 : 15 AM – 10 : 30 AM

PRESENTER

Nurhaswani Alias

PAPER ID : 132

Comparison between oxide nanotubes fabricated on Ti and Ti-Nb alloys; characterization and photocatalytic reduction of Cr(VI)

10 : 30 AM – 10 : 45 AM

PRESENTER

Aliah Nursyahirah Kamarudin

PAPER ID : 121

Optimization of the Liquid Source $\text{YBa}_2\text{Cu}_3\text{O}_y + \text{ErBa}_2\text{Cu}_3\text{O}_y + \text{Ba}_3\text{Cu}_5\text{O}_8$ in Bulk $\text{YBa}_2\text{Cu}_3\text{O}_y$ Superconductors Grown by Infiltration Growth Process

10 : 45 AM – 11 : 00 AM

PRESENTER

Nur Quratul Aini Ismail

PAPER ID : 49

Influence Of Milling Time On The Microstructural Properties Of $\text{ZnO-Bi}_2\text{O}_3\text{-Sb}_2\text{O}_3\text{-CoO-MnO}_2\text{-Al}_2\text{O}_3$ Based Ceramic-varistors

11 : 00 AM – 11 : 15 AM

PRESENTER

Ts. Syafawati Nadiah Mohamed

PAPER ID : 102

Judd-ofelt Analysis And Up-conversion Of $\text{Er}^{3+}/\text{V}^{4+}$ Co-doped $\text{Na}_2\text{O-CaO-B}_2\text{O}_3$ Glasses

11 : 15 AM – 11 : 30 AM

PRESENTER

Dr Abdul Rahman Mohmad

PAPER ID : 56

Photoluminescence Investigation Of BaSi_2 Epitaxial Film On Si Substrate

11 : 30 PM – 11 : 45 PM

PRESENTER

Dr. Nurul Syahidah Sabri

PAPER ID : 110

Optical Properties of $\text{xSrO-(90-x)B}_2\text{O}_3\text{-2CeO}_2\text{-8Al}_2\text{O}_3$ Glasses

ORGANIZING COMMITTEE

Patron
Advisor
Main Chairman

ICSSST Chairman
ICSSST 2021 Deputy Chairman
ICSSST2021 Deputy Chairman II
Secretary
Treasurer
Registration

Publication

Logistics
Promotion & Graphic Designer

Sponsorship
Certificates
Corporate

Website

Material Tech. Challenge

: Prof. Ts. Dr. Hajah Roziah Mohd Janor
: Prof. Dr. Hj. Khudzir Hj. Ismail
: Assoc. Prof. Ts. Dr. Shukor Sanim Mohd Fauzi
: Prof. Ts. Dr. Mohd Azlan Mohd Ishak
: Assoc. Prof. Dr. Nafisah Osman
: Prof. Ts. Dr. Mohd Azlan Mohd Ishak
: Assoc. Prof. Dr. Nafisah Osman
: Dr. Jeyashelly Andas
: Dr. Wan Izhan Nawawi Wan Ismail
: Dr. Nur Nasulhah Kasim
: Wahida Abdul Rahman
: Sharifah Nafisah Syed Ismail
: Dr. Dalina Samsudin
: Dr. Wan Izhan Nawawi Wan Ismail
: Dr. Ali H. Jawad Al-Taie
: Noor Aishatun Majid
: Suhaida Dila Safian
: Zainon Shaari
: Dr. Nor Hafizah Che Ismail
: Azliana Ramli
: Dr. Faiezah Hashim
: Siti Sarina Sulaiman
: Alif Faisal Ibrahim
: Mohammad Hafiz Ismail
: Dr. Siti Nurlia Ali



NATIONAL ADVISORY COMMITTEE

1. Prof. Dato' Dr. Roslan Abd. Shukor
Department of Applied Physics, Universiti
Kebangsaan Malaysia
2. Prof. Dr. Ab Malik Marwan Ali
Deputy Head of Centre for Functional
Material and Nanotechnology, Institute of
Science (IOS), Universiti Teknologi MARA
3. Prof. Ts. Dr. Hanafi Ismail.
Director of Innovation Centre and
Consultation, Universiti Sains Malaysia
4. Prof. Dr. Mat Uzir B. Wahit,
Jabatan Kejuruteraan Bioproses & Polimer
Sekolah Kejuruteraan Kimia & Kejuruteraan
Tenaga, UTM Johor Bahru
5. Prof. Dr. Abd Halim Shaari
Fakulti Sains, Universiti Putra Malaysia
6. Prof. Dr. Wan Haliza Binti Abd Majid
Department of Physics, Faculty of Science,
UM

INTERNATIONAL ADVISORY COMMITTEE

1. Prof. Dr. Imad (Moh'd Khair)
Rashid Hamadneh,
University of Jordan
2. Prof. Dr. Putut Marwoto,
M.S., Universitas Negeri
Semarang (UNNES)
3. Prof. Dr. Timbangan
Sembiring, M.Sc.,
Universitas Sumatera Utara
4. Prof. Dr. Naseem Iqbal,
National University of
Sciences and Technology
(NUST)
5. Prof. Dr. Eng. Kuwat
Triyana,, M.Si Universitas
Gadjah Mada, Indonesia

1. Dr. Mustafa Anwar, Assistant Professor, U.S.-Pakistan. Center for Advanced Studies in Energy, National. University of Sciences & Technology.
2. Dr. Syahrul Humaidi, Physics Department, Universitas Sumatera Utara, Medan, Indonesia
3. Prof. Safir Ahmad Hashmi, Department of Physics & Astrophysics, University of Delhi, Delhi, India
4. Asst. Prof. Dr. Sitisaiyidah Saiwari, Department of Rubber Technology and Polymer Science, Faculty of Science and Technology, Prince of Songkla University, Pattani Campus, Thailand
5. Prof. Novesar Jamarun, MS, Ph.D, Jurusan Kimia Universitas Andalas Padang, Sumatera Barat. Rektor Institut seni Indonesia Padang Panjang
6. Dr. Evizal Abdul Kadir, ST, M.Eng Director of Research Institute and Community Services Lecturer Informatics Engineering, Faculty of Engineering Universitas Islam Riau. Jl. Kaharuddin Nasution 113, Pekanbaru, Riau.
7. Dr. Arbi Haza Nasution, B.IT (Hons), M.IT Head of Department of Informatics Engineering, Faculty of Engineering, Universitas Islam Riau. Jl. Kaharuddin Nasution 113, Pekanbaru, Riau.
8. Dr. Eng. Adi Novriansyah Head of Reservoir Laboratory Petroleum Engineering Department Faculty of Engineering, Universitas Islam Riau. Jl. Kaharuddin Nasution 113, Pekanbaru, Riau.
9. Jhonni Rahman, B.Eng., M.Eng., P.hD. Department of Mechanical Engineering. Faculty of Engineering, Universitas Islam Riau. Jl. Kaharuddin Nasution 113, Pekanbaru, Riau.
10. Dr. Radhika Thankappan Scientist, Centre for Materials for Electronics Technology [C-MET] (Scientific Society under M/o of Electronics and Information Technology, Govt. of India)
11. Assoc. Prof. Rinlee Butch M. Cervera, Ph.D. Department of Mining, Metallurgical, & Materials Engineering, University of the Philippines Diliman
12. Asst. Prof. Dr. Montri Luengchavanon, Prince of Songkla University

PARTICIPANTS

THANK YOU

1. TS. DR. KHADIJAH HILMUN KAMARUDIN
2. LILI WIDARTI BINTI ZAINUDDIN
3. AZZAFEERAH MAHYUDDIN
4. MONICA LIMA ANAK JADAM
5. LAU LIK NGUONG - (Mr.)
6. SOLHAN BINTI YAHYA
7. NORJULIYATI BINTI HAMZAH
8. NOOR 'AISYAH BINTI JOHARI
9. ASSOC. PROF. DR. LIM KEAN PAH
10. AHMAD FUZAIRI BIN AHMAD FAIZAL
11. AZLINA YAHYA
12. DR. INTAN JULIANA SHAMSUDIN
13. DR. SYAHRUL HUMAIDI
14. PROF. TS. DR. ABD RAHMAN TAMURI
15. DR. ZOLMAN BIN HARI
16. ASSOC. PROF. DR. AHMAD NAZLIM YUSOFF
17. ZAINUR ATIKA BINTI IBRAHIM
18. DR. HARTINI BINTI AHMAD RAFAIE
19. ASSOC. PROF. DR. NOOR BAA'YAH IBRAHIM
20. NUREEL IMANINA BINTI ABDUL GHANI

21. SITI RAIHAN BINTI HAMZAH
22. MUHAMMAD SYAHIRUL IKHWAN BIN AB AZIZ
23. NUR SYAZANA BINTI NAZERI
24. NADIAH SABIAH BINTI MD NATAR
25. TING LEE MON
26. ADZRIE BIN BAHARUDIN
27. NUR QURATUL AINI BINTI ISMAIL
28. DAYANG HABIBAH BINTI ABANG ISMAWI HASSIM
29. MUNIRAH ONN
30. DR. KHUZAIMAH ARIFIN
31. DR. ABDUL RAHMAN MOHMAD
32. Ms FARAH LIYANA BOHARI
33. DR. SAFURA TAUFIK
34. DR. WAN AIZUDDIN W RAZALI
35. AZLIANA RAMLI
36. ASSOC. PROF. MADYA DR. YAP CHI CHIN
37. NURAKMA NATASYA BINTI MD JAHANGIR ALAM
38. NUR AISYAH AB MALIK MARWAN
39. DR. NORHERDAWATI BINTI KASIM
40. DR. NORAZILA BINTI IBRAHIM

PARTICIPANTS

THANK YOU

41. DR. ROZILAH BINTI RAJMI
42. LIDYAYATTY ABDUL MALIK
43. NURUL WAHEEDA BINTI MAZLAN
44. NUR FARAHIN BINTI YUSOFF
45. TS DR. RUZIANA BT MOHAMED
46. DR. ENSKU ABD GHAPUR BIN CHE ENSKU ALI
47. SOFIAH BINTI ABD RANI
48. ABQARI LUTHFI ALBERT BIN ABDULLAH
49. DR. NURHAFIZAH BINTI MD DISA
50. DR. FAIEZAH HASHIM
51. SHARIFAH NAFISAH SYED ISMAIL
52. UMAIRAH BINTI MOHD ZAKI
53. NORINSAN KAMIL OTHMAN
54. NUR AMIRA BINTI ZAINUL ARMIR
55. ASSOC. PROF. DR. NAFISAH OSMAN
56. AMALIA BINTI ZULKIFLI
57. DR. NOR HAFIZAH CHE ISMAIL
58. NUR SYUHADA AYOB
59. TS. SYAFAWATI NADIAH MOHAMED
60. DR. NURUL AKIDAH BAHARUDDIN
61. HUSNIYAH ALIYAH BINTI LUTPI
62. NOR MAZLINA ABDUL WAHAB
63. MOHD SAIFUL BAHARI SHAARI
64. DR. NURUL SYAHIDAH BINTI SABRI
65. DR. THEN YOON YEE
66. DR. HARYANA MOHD HAIRI
67. ASSOC. PROF. DR. CHEN SOO KIEN
68. MUHAMAD ANUAR ABDUL MUIN
69. SHAFUL BAKHTIAR BIN HASHIM
70. ASSOC. PROF. DR. ABDUL MUTALIB MD JANI
71. ALIAH NURSYAHIRAH KAMARUDIN
72. YAP SIEW HONG
73. DR. JEYASHELLY ANDAS
74. MUHAMMAD LUQMAN BIN MD ALI
75. ASSOC. PROF. DR. ISKANDAR SHAHRIM MUSTAFA
76. ASSOC. PROF. DR. ABDULLAH BIN CHIK
77. DR. WAN RAFIZAH BINTI WAN ABDULLAH @ WAN ABD. RAHMAN

PARTICIPANTS

THANK YOU


- 78. MOHAMMAD SHYFUR RAHMAN CHOWDHURY
- 79. SUHAIDA DILA BT SAFIAN
- 80. PROF. DR. ZAINALABIDIN TALIB
- 81. DR. NABILAH AFIQAH MOHD RADZUAN
- 82. ASSOC. PROF. DR. MOHD. MUSTAFA AWANG KECHIK
- 83. DR. WAN YUSMAWATI BINTI WAN YUSOFF
- 84. PROF. TS. DR. MOHD HAFIZ DZARFAN OTHMAN
- 85. NORATIQA YUSOP
- 86. PROF. DR. HUDA ABDULLAH
- 87. ASSOC. PROF. DR. MOHAMMAD HAFIZUDDIN HJ. JUMALI
- 88. NOOR AISHATUN BINTI MAJID
- 89. PROF. DR. AZMAN JALAR
- 90. PROF. DR. SUHAIRUL HASHIM
- 91. DR. WAN IZHAN NAWAWI B WAN ISMAIL

- 92. DR. SITI NURUL'AIN YUSOP
- 93. PROF. DR. MD. RAHIM BIN SAHAR
- 94. NURHASWANI ALIAS
- 95. DR. NUR NASULHAH BINTI KASIM
- 96. DR. ZULIAHANI AHMAD
- 97. YUSUF SHEHU
- 98. DR. MOHAMMAD SAIFULDDIN BIN MOHD AZAMI
- 99. MOHD FAIRUL SHARIN BIN ABDUL RAZAK
- 100. PROF. DR. ABDUL HALIM BIN SHAARI
- 101. ASSOC. PROF. DR. ALI H. JAWAD
- 102. DR. ARLINA ALI
- 103. ASSOC. PROF. DR. NABIL HAYEEMASAE
- 104. MOHD FAUZI ABDULLAH
- 105. DR. SITI AZRAH MOHAMAD SAMSURI
- 106. PROF. DR. SIDEK AB AZIZ
- 107. PROF. TS. DR. AZHAN BIN HASHIM @ ISMAIL

MTC 5.0 PARTICIPANTS

THANK YOU

1. TS. SYAFAWATI NADIAH BINTI MOHAMED
2. PROF. DR. AHMAD KAMAL HAYATI BIN YAHYA
3. DR. EZZA SYUHADAH BINTI SAZALI
4. HAFIZI BIN LUKMAN
5. LIDYAYATTY ABDUL MALIK
6. NUR SYAFKEENA AFFANDI
7. MUHAMMAD NAJWAN NIK MOHAMAD ROSDI
8. ASSOC PROF DR. NAFISAH OSMAN
9. TS. DR. RUZIANA BINTI MOHAMED
10. MYZATUL AZLYIN MUHAMAD
11. TS. DR. MOHD FIRDAUS MALEK
12. ASSOC PROF IR. DR. MOHAMAD HAFIZ MAMAT
13. DR. INTAN JULIANA SHAMSUDIN
14. NORSYABILA BINTI SHRGAWI
15. DR. HUSSEIN BIN HANIBAH
16. ASSOC PROF DR. SITI AMINAH BINTI MOHD NOOR
17. DR. NORHERDAWATI BINTI KASIM
18. DR. WAN IZHAN NAWAWI BIN WAN ISMAIL
19. NADIAH SABIHAH BINTI MD NATAR
20. SITI RAIHAN BINTI HAMZAH
21. MUHAMMAD AFIQ BIN ROSLI
22. NUREEL IMANINA BINTI AB GHANI
23. DR. NORHERDAWATI BINTI KASIM
24. NUR SYAHIRAH BINTI SUHALIM
25. DR. EBRAHIM MAHMOUDI
26. DR. INTAN JULIANA BINTI SHAMSUDIN
27. DR. AZUA-LAILI BINTI JAMARI
28. MONICA LIMAU JADAM
29. DR. ZAEMAH JUBRI
30. ASSOC PROF DR. SITI HALIMAH SARIJO
31. NUR SYAZANA BINTI NAZERI
32. DR. WAN IZHAN NAWAWI BIN WAN ISMAIL
33. MUHAMMAD SYAHIRUL IKHWAN BIN AB AZIZ
34. TS. AZREEN JUNAIDA BINTI ABD AZIZ
35. CIK WAN NOR ANASUHAH BINTI WAN YUSOFF
36. DR. NURUL AKIDAH BAHARUDDIN
37. DR. NURHAFIZAH BINTI MD DISA
38. ASSOC. PROF. DR. NURHAYATI ABDULLAH
39. MOHD FAUZI BIN ABDULLAH
40. SHAHIRA HUDA BINTI AZMAN
41. AZLINA YAHYA
42. TS. DR. MUHAMMAD NOORAZLAN ABD AZIS

The background of the image is a close-up photograph of water droplets on a green, textured surface, possibly grass. The droplets are of various sizes and are arranged in a way that creates a sense of depth and texture. The green surface is a deep, rich color, and the droplets are clear, reflecting light in a way that creates a shimmering effect. The overall composition is artistic and visually appealing.

“RESEARCH IS A SCIENTIFIC
ACTIVITY DEDICATED TO
DISCOVERING WHAT MAKES
GRASS GREEN.”

—RUSSELL BAKER