



UNIVERSITI MALAYSIA PAHANG  
AL-SULTAN ABDULLAH

# MENJULANG ILHAM KEJAYAAN

*'Inspiring Skyward Achievement'*

*Majlis Anugerah Cendekia Bitara'23*

Universiti Malaysia Pahang Al-Sultan Abdullah (UMPSA)



TEKNOLOGI  
UNTUK  
MASYARAKAT







# MENJULANG ILHAM KEJAYAAN

'Inspiring Skyward Achievement'

Majlis Anugerah  
Cendekia Bitara '23

## Kandungan

- 4** Atur Cara
- 5** Menjulang Ilham Kejayaan
- 6** Sekapur Sirih: Pro-Canselor UMPSA
- 7** Seulas Pinang: Pengerusi Lembaga Pengarah UMPSA
- 8** Seuntai Kata: Naib Canselor UMPSA
- 9** Seindah Bahasa: Pengerusi, Anugerah Cendekia Bitara '23
- 10** Anugerah Cendekia Bitara Awards (ACB) '23
- 11** Anugerah Akademik Universiti (AAU) '23
- 12** Anugerah e-Pembelajaran Universiti (APU) '23

- Anugerah Cendekia Bitara (ACB) '23**
  - 13** Kategori Penerbitan Jurnal
  - 43** Kategori Penerbitan Buku/Bab Buku
  - 65** Kategori Geran Antarabangsa
  - 71** Kategori Geran Industri
  - 74** Kategori Geran Agensi
  - 79** Kategori Perundingan
  - 81** Kategori Kualiti Penyelidikan
- Anugerah Sanjungan '23**
  - 83** Kategori Penerbitan Jurnal
  - 92** Kategori Anugerah Buku
  - 94** Kategori Produk Penyelidikan
- Anugerah Emas '23**
  - 96** Kategori Penerbitan Jurnal
- Anugerah Perak '23**
  - 122** Kategori Penerbitan Jurnal

- Anugerah Akademik Universiti '23**
  - 128** Anugerah Pengajaran (Kategori Kejuruteraan)
- Anugerah e-Pembelajaran Universiti' 23**
  - 130** Anugerah e-Pembelajaran (Fakulti/Pusat)
  - 132** Anugerah *Micro-Credentials* '23
  - 136** Jawatankuasa Induk ACB '23
  - 139** Sekalung Penghargaan
  - 140** Autograff



## Atur Cara

- |             |  |
|-------------|--|
| 7:30 malam  | : Ketibaan Tetamu Jemputan dan Penerima Anugerah   |
| 7:45 malam  | : Ketibaan Pengurusan Tertinggi Universiti   |
| 8:00 malam  | : Ketibaan Profesor Dato' Ts. Dr. Yuserrie bin Zainuddin<br>Naib Canselor UMPSA  |
| 8:15 malam  | : Ketibaan Ahli-ahli Lembaga Pemegang Amanah Yayasan UMPSA<br>: Ketibaan Ahli-ahli Lembaga Pengarah Universiti   |
| 8:20 malam  | : Ketibaan Pro-Canselor UMPSA<br>Tan Sri Dato' Sri (Dr.) Abi Musa Asa'ari bin Mohamed Nor  |
| 8:30 malam  | : Ucapan Alu-aluan Naib Canselor UMPSA<br>Profesor Dato' Ts. Dr. Yuserrie bin Zainuddin<br>: Ucapan Perasmian oleh Pro-Canselor UMPSA<br>Tan Sri Dato' Sri (Dr.) Abi Musa Asa'ari bin Mohamed Nor<br>: Tayangan Multimedia |
|             | : Majlis Makan Malam   |
|             | : Persembahan  |
|             | : Penyampaian Anugerah   |
|             | : Persembahan  |
|             | : Penyampaian Cenderamata  |
|             | : Sesi Bergambar Bersama Para Pemenang   |
| 10.30 malam | : Majlis Bersurai  |



# MENJULANG ILHAM KEJAYAAN

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## Menjulang Ilham Kejayaan (*Inspiring Skyward Achievement*)

### Menjulang

Selaut luas hampanan pengetahuan terbentang,  
Bertaut kita, dalam karya dan usaha,  
Sarjana mutiara penuh makna,  
Menjulang ilham, mencipta jejak gemilang.

### Ilham

Setiap perincian, setiap perihal,  
Menjadi kunci gerbang kejayaan,  
Kita bina jambatan dari ilmu dan harapan diri,  
Menyatu dalam harmoni, menjulang tinggi.

### Kejayaan

Tika ini adalah saksi,  
Martabat ilmu ilham dari Ilahi,  
Perit jerih membua harapan,  
Raikan kejayaan, sematkan mewah kesederhanaan.

UMPSA Menjulang Ilham Kejayaan.



## Sekapur Sirih

Assalamualaikum WBT dan salam sejahtera.

Alhamdulillah, syukur ke hadrat Allah SWT kerana dengan limpah rahmat dan izin-Nya Universiti Malaysia Pahang Al-Sultan Abdullah (UMPSA) berjaya menganjurkan anugerah yang gilang gemilang ini. Anugerah ini merupakan satu manifestasi pengiktirafan dan penghargaan terhadap usaha gigih para penyelidik UMPSA yang telah menyumbang secara signifikan kepada perkembangan ilmu dan kemajuan negara.

Dalam perkembangan marcapada, penyelidikan merupakan elemen penting dalam memperkasa pembangunan sesebuah negara. Lantas para penyelidik UMPSA telah menunjukkan kemampuan dan meraih kecemerlangan dalam pelbagai bidang. Pencapaian yang diraikan melalui anugerah ini membuktikan bahawa UMPSA mampu terus menjadi peneraju dalam kalangan Rangkaian Universiti-universiti Teknikal Malaysia (MTUN) dengan menghasilkan penyelidikan yang berimpak tinggi, berkualiti dan seterusnya memberi manfaat kepada masyarakat, industri serta negara. Kejayaan ini sejajar dengan visi UMPSA untuk menjadi sebuah Universiti Teknologi Terunggul.

Di samping itu, majlis ini juga merupakan wadah untuk kita menghargai kerja keras dan dedikasi yang telah dicurahkan oleh para penyelidik UMPSA. Semoga dengan adanya anugerah ini, semua penyelidik dapat terus bersemarak merencana kreativiti dan inovasi serta bersemangat untuk mencapai lebih banyak kejayaan dalam bidang penyelidikan dan inovasi.

Penghargaan yang tulus juga saya tujukan kepada pihak penganjur, panel penilai, dan semua yang terlibat dalam menjayakan majlis anugerah ini. Kejayaan penganjuran ini tidak akan tercapai tanpa komitmen dan kerjasama erat daripada semua pihak.

Akhir kata, setinggi-tinggi tahniah kepada semua penerima anugerah. Semoga kejayaan ini menjadi pemangkin untuk terus melangkah maju dalam usaha mengharumkan nama universiti dan negara kita di persada dunia.

Sekian, terima kasih.

**Tan Sri Dato' Sri (Dr.) Abi Musa Asa'ari bin Mohamed Nor**  
PSM., SSAP., SIMP., DIMP., SMP.  
Pro-Canselor  
Universiti Malaysia Pahang Al-Sultan Abdullah (UMPSA)





## Seulas Pinang

Assalamualaikum WBT dan salam sejahtera.

UMPSA telah mencapai usia 22 tahun pada tahun 2024. Sebagai universiti terulung dalam kalangan Rangkaian Universiti-universiti Teknikal Malaysia (MTUN), adalah penting untuk universiti menghargai mereka yang telah bertungkus-lumus meletakkan jenama UMPSA di mata masyarakat dan dunia.

Anugerah ini bukan sekadar penghargaan terhadap pencapaian, tetapi juga merupakan lambang kepada impian dan cita-cita yang dikejar dengan penuh tekad. Para penyelidik UMPSA telah membuktikan bahawa dengan usaha gigih, dedikasi yang tidak mengenal penat dan semangat yang tidak pernah luntur, kejayaan tertinggi dapat dicapai.

Kita semua di sini telah menyaksikan bagaimana inisiatif-inisiatif yang dirangka daripada awal penubuhan dengan kesungguhan dan komitmen boleh membawa kita semua ke aras yang tidak pernah kita bayangkan. Kejayaan-kejayaan yang diraikan hari ini adalah manifestasi daripada usaha berterusan dan kepercayaan yang tidak berbelah bahagi terhadap potensi diri dan kemampuan kita untuk menembusi batasan yang ada.

Saya percaya bahawa semangat untuk mencapai kejayaan yang menjulang tinggi ini akan terus menyala di dalam hati setiap penyelidik kita. Semoga anugerah ini menjadi pemangkin kita untuk terus meneroka peluang-peluang baru, mencipta inovasi yang luar biasa dan menggapai kejayaan-kejayaan yang lebih tinggi.

Akhir kata, saya ingin mengucapkan setinggi-tinggi tahniah kepada semua penerima anugerah pada hari ini. Teruslah menjulang impian anda dan jangan pernah berhenti bermimpi setinggi langit.

Sekian, terima kasih.

**Dato' Seri Abdul Razak bin Jaafar, DGPN.  
Pengerusi Lembaga Pengarah  
Universiti Malaysia Pahang Al-Sultan Abdullah (UMPSA)**





## Seuntai Kata

Assalamualaikum WBT dan salam sejahtera.

Setelah lebih dua dasawarsa penubuhannya, Universiti Malaysia Pahang Al-Sultan Abdullah (UMPSA) terus memperkuatkan posisinya dalam arena pendidikan tinggi global. Komitmen yang dizahirkan ini adalah bukti UMPSA terus komited untuk meningkatkan kesarjanaan dan mempersiapkan generasi akan datang dengan kemampuan yang diperlukan untuk bersaing secara efektif di peringkat nasional mahupun antarabangsa serta terus fokus bergerak ke hadapan dalam bidang pendidikan, penyelidikan dan inovasi.

Lakaran kecemerlangan dan kejayaan UMPSA ini bukanlah suatu kebetulan, tetapi merupakan komitmen tinggi yang dinadikan oleh warga kerjanya di pelbagai peringkat. Sementelahan, kejayaan ini turut didokong oleh dinamika warga universiti yang sentiasa bersedia untuk berevolusi bagi memastikan UMPSA terus relevan dan menjadi peneraju dalam bidang teknologi dan inovasi.

Anugerah Cendekia Bitara ini merupakan lambang komitmen UMPSA untuk menghargai sumbangan para akademia yang cemerlang dalam bidang penyelidikan, penerbitan, penulisan, kreativiti dan inovasi. Anugerah ini bukan sahaja mengiktiraf pencapaian luar biasa, tetapi juga menjadi pemangkin kepada golongan cendekiawan UMPSA ini untuk terus menghasilkan penyelidikan dan inovasi baharu yang bermanfaat demi kebaikan sejagat serta mampu menawarkan penyelesaian berdasarkan teknologi kepada masyarakat.

Setinggi-tinggi tahniah saya ucapkan kepada semua penerima Anugerah Cendekia Bitara 2023. Dedikasi, komitmen dan pencapaian anda adalah inspirasi kepada seluruh warga UMPSA sebagai koridor ilmu yang unggul yang akan terus melakar kejayaan khususnya dalam penyelidikan dan inovasi.

Sekian, terima kasih.

**Profesor Dato' Ts. Dr. Yuserrie bin Zainuddin, DIMP.  
Naib Canselor  
Universiti Malaysia Pahang Al-Sultan Abdullah (UMPSA)**





# MENJULANG ILHAM KEJAYAAN

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## Seindah Bahasa

Assalamualaikum WBT dan salam sejahtera.

Pertama sekali, saya memanjatkan syukur ke hadrat Allah SWT kerana dengan izin-Nya dapat kita meraikan kesemua penerima anugerah kecemerlangan Cendekia Bitara pada tahun ini. Dayung sudah di tangan, perahu sudah di air. Anugerah ini merupakan satu pengiktirafan tertinggi yang menjadi bukti kepada kesungguhan, dedikasi dan usaha yang telah ditunjukkan dalam memajukan bidang penyelidikan, inovasi dan pengajaran di universiti ini.

Penyelidikan adalah nadi kepada kemajuan sains dan teknologi. Ia membuka jalan kepada penemuan baharu, penyelesaian inovatif, dan kemajuan yang membawa manfaat kepada masyarakat. Para penerima anugerah tahun ini telah menunjukkan keupayaan luar biasa dalam menerajui penyelidikan yang berkualiti tinggi. Sumbangan mereka juga telah melonjakkan reputasi UMPSA dan memberi impak yang mendalam dari pelbagai segi.

Penyelidikan berterusan yang diusahakan oleh ahli akademik di UMPSA telah memacu universiti ke hadapan sebagai sebuah institusi pengajian tinggi yang serius terhadap hasil pelaburannya dalam R&D, penglibatan industri dan kebitaraan pengajaran. Oleh yang demikian, pengurusan bakat dan sistem sokongan yang mantap di samping persekitaran kerja yang positif akan sentiasa menjadi keutamaan dalam mengukuhkan budaya kecemerlangan.

Saya berbesar hati untuk menjadi sebahagian daripada Anugerah Cendekia Bitara 2023. Usaha menuju ke arah kecemerlangan adalah suatu perjalanan yang tidak berpenghujung dan harus dilalui dengan penuh keikhlasan dan iltizam. Semoga setiap sumbangan wacana minda dan daya usaha kita kepada universiti, negara dan bangsa akan beroleh reda daripada Allah SWT. Setinggi-tinggi tahniah dan terima kasih kerana menjadi sebahagian daripada lakaran kejayaan UMPSA.

Sekian, terima kasih.

**Profesor Ts. Dr. Aida binti Mustapha**  
**Pengerusi, Anugerah Cendekia Bitara '23**  
**Universiti Malaysia Pahang Al-Sultan Abdullah (UMPSA)**





## Anugerah Cendekia Bitara '23

Anugerah Cendekia Bitara ialah majlis penganugerahan tahunan yang dianjurkan oleh Universiti Malaysia Pahang Al-Sultan Abdullah (UMPSA) bermula tahun 2009 yang bertujuan untuk mengiktiraf kecemerlangan dalam aspek penyelidikan, inovasi dan pengkomersialan dalam kalangan staf akademik UMPSA.

'Cendekia' merujuk kepada seseorang atau sekumpulan intelektual atau sarjana akademik. 'Bitara' pula bermaksud luar biasa atau tiada tandingan yang merupakan kualiti yang dihasratkan oleh UMPSA bagi setiap staf akademik.

Oleh itu, 'Anugerah Cendekia Bitara' adalah pengiktirafan ke atas pencapaian ilmiah yang cemerlang, tiada tandingan, yang telah dicapai oleh staf akademik UMPSA.

Kategori penganugerahan Anugerah Cendekia Bitara adalah seperti berikut:

- Kategori Penerbitan Jurnal
- Kategori Penerbitan Buku
- Kategori Kertas Polisi
- Kategori Geran Antarabangsa
- Kategori Geran Industri
- Kategori Geran Agensi
- Kategori Harta Intelek Dikomersialkan
- Kategori Perundingan
- Kategori Produk Penyelidikan
- Kategori Kualiti Penyelidikan



## Anugerah Akademik Universiti '23

Anugerah Akademik Universiti (AAU) anjuran Pusat Inovasi dan Daya Saing Akademik merupakan antara anugerah tahunan berprestij UMPSA yang merangkumi dua anugerah utama iaitu:

i. **Anugerah Pengajaran**

- Terdapat tiga kategori: a) Kejuruteraan/Kejuruteraan Teknologi, b) Sains Gunaan, dan c) Sains Sosial.  
Penyertaan: Staf akademik yang berumur 35 tahun ke atas serta mempunyai pengalaman Pengajaran dan Pembelajaran (PdP) selama tiga tahun ke atas.

ii. **Anugerah Ahli Akademik Harapan**

Penyertaan: Staf akademik yang berumur 34 tahun dan ke bawah serta mempunyai pengalaman PdP satu hingga lima tahun ke atas.

Anugerah ini telah bermula pada tahun 2009 melalui Anugerah Pensyarah Cemerlang bagi menghargai jasa ahli akademik yang telah menonjolkan kecemerlangan dan kreativiti dalam aspek PdP. Ia juga dilihat sebagai satu bentuk penghargaan oleh universiti kepada ahli akademik yang telah menunjukkan usaha dan komitmen dalam membentuk pelajar menjadi cemerlang dan bersifat holistik.

Objektif AAU:

- Mengiktiraf sumbangan dan kepakaran staf akademik UMPSA dalam bidang PdP;
- Memberi galakan dan rangsangan kepada staf akademik untuk terus berusaha lebih gigih bagi mencapai kecemerlangan universiti dalam melahirkan modal insan yang berkualiti menerusi tugas pengajaran, penyeliaan, pembelajaran, dan lain-lain; dan
- Meningkatkan motivasi ahli akademik melalui pendekatan inovasi dan kreativiti dalam PdP.

Bagi AAU tahun 2023 ini, gerak kerja telah bermula dengan iklan hebahan permohonan pada awal Februari 2024, sesi bimbingan calon, sesi penjurian dalaman, saringan awal serta diakhiri dengan sesi saringan akhir pada Jun 2024.



## Anugerah e-Pembelajaran Universiti' 23

Anugerah e-Pembelajaran Universiti (APU) oleh Pusat Pengajaran Sumber dan e-Pembelajaran (CIReL), Jabatan Hal Ehwal Akademik dan Antarabangsa (JHEAA) merupakan salah satu anugerah tahunan berprestij UMPSA untuk e-Pembelajaran.

### i. Anugerah e-Pembelajaran

Terdapat dua kategori:

- Anugerah e-Pembelajaran Fakulti/Pusat
- Anugerah *Micro-Credentials* Terbaik.

Anugerah ini menghargai sumbangan penting fakulti dan pusat kepada kejayaan e-Pembelajaran UMPSA. Penghargaan ini melambangkan komitmen berterusan untuk kecemerlangan sekali gus memupuk inovasi dalam teknologi pendidikan. Ia juga memberi inspirasi kepada Pakar Bidang Subjek atau *Subject Matter Expert* (SME) bagi inovasi PdP serta komuniti UMPSA.

Matlamat bagi penganugerahan ini adalah untuk memupuk budaya e-Pembelajaran yang inovatif, serta kreativiti dalam pendekatan pedagogi. Anugerah yang berprestij ini juga dapat mengukuhkan identiti UMPSA dalam mencapai kecemerlangan, sekali gus dapat meningkatkan reputasi universiti dan mempamerkan kesungguhan dan dedikasi warga UMPSA untuk membentuk masa depan pendidikan melalui teknologi dan akademik.

Objektif Anugerah e-Pembelajaran Universiti (APU)

- Mengiktiraf kecemerlangan, kepakaran dan pengamalan terbaik bagi e-Pembelajaran oleh warga akademik UMPSA yang berfokus kepada inovasi PdP;
- Mengaspirasikan inovasi dan meningkatkan akses serta fleksibiliti ahli akademik dalam inovasi teknologi pendidikan UMPSA, terutamanya untuk pengajaran dan pembelajaran yang berkualiti; dan
- Menggalakkan staf akademik UMPSA mempertingkatkan usaha memupuk kecemerlangan modal insan berkualiti melalui pengajaran, penyeliaan, pembelajaran, dan banyak lagi.

# Anugerah Cendekia Bitara '23: Kategori Penerbitan Jurnal



**Penulis Utama:**

Ts. Dr. Nasrul Hadi bin Johari

**Penulis Bersama:**

Menichini C., Hamady M., Xu X.Y.

**Tajuk Artikel:**

*Computational Modeling of Low-Density Lipoprotein Accumulation at The Carotid Artery Bifurcation After Stenting*

**Tajuk Jurnal:**

*International Journal for Numerical Methods in Biomedical Engineering*

**Penulis Utama:**

Profesor Madya Ts. Dr. Liang Yong Yeow

**Penulis Bersama:**

Fletcher D.F.

**Tajuk Artikel:**

*Computational Fluid Dynamics Simulation of Forward Osmosis (FO) Membrane Systems: Methodology, State of Art, Challenges and Opportunities*

**Tajuk Jurnal:**

*Desalination*



**Penulis Utama:**

Profesor Madya Ts. Dr. Liang Yong Yeow

**Penulis Bersama:**

Chong Y.K., Weihs G.A.F.

**Tajuk Artikel:**

*Validation and Characterisation of Mass Transfer of 3D-CFD Model for Twisted Feed Spacer*

**Tajuk Jurnal:**

*Desalination*

**Penulis Utama:**

Profesor Madya Ts. Dr. Liang Yong Yeow

**Tajuk Artikel:**

*Review of Analytical and Numerical Modeling for Pressure Retarded Osmosis Membrane Systems*

**Tajuk Jurnal:**

*Desalination*



**Penulis Utama:**

Profesor Madya Ts. Dr. Liang Yong Yeow

**Penulis Bersama:**

Goi Y.K., Lau W.J., Fimbres Weihs G.A.

**Tajuk Artikel:**

*Analysis of The Effect of Advanced FO Spacer on The Specific Energy Consumption of Hybrid RO Desalination System*

**Tajuk Jurnal:**

*Journal of Membrane Science*

**Penulis Utama:**

Profesor Madya Ts. Dr. Liang Yong Yeow

**Penulis Bersama:**

Ng W.H., Weihs G.A.F.

**Tajuk Artikel:**

*Quantifying The Potential of Pressure Retarded Osmosis Advanced Spacers for Reducing Specific Energy Consumption in Hybrid Desalination*

**Tajuk Jurnal:**

*Journal of Water Process Engineering*



**Penulis Utama:**

Profesor ChM. Dr. Chong Kwok Feng

**Penulis Bersama:**

Lee S.P., Ali G.A.M., Assiri M.A., Kong K.V., Teo E.Y.L.

**Tajuk Artikel:**

*Pseudocapacitive Performance of Phenothiazine Functionalized Graphene Aerogel*

**Tajuk Jurnal:**

*Applied Surface Science*

**Penulis Utama:**

Profesor ChM. Dr. Chong Kwok Feng

**Penulis Bersama:**

Thalji M.R., Ali G.A.M., Shim J.-J.

**Tajuk Artikel:**

*Cobalt-Doped Tungsten Suboxides for Supercapacitor Applications*

**Tajuk Jurnal:**

*Chemical Engineering Journal*



**Penulis Utama:**

Profesor Madya Dr. Lee Chia Kuang

**Penulis Bersama:**

Bujna M., Abd Jamil A.H., Ee P.T.

**Tajuk Artikel:**

*A Cause and Effect of a Nonpayment Model Based on the DEMATEL Algorithm*

**Tajuk Jurnal:**

*Journal of Legal Affairs and Dispute Resolution in Engineering and Construction*

**Penulis Utama:**

Profesor Madya Dr. Muhammad Ashraf bin Fauri@Fauzi

**Tajuk Artikel:**

*A Bibliometric Review on Knowledge Management in Tourism and Hospitality: Past, Present and Future Trends*

**Tajuk Jurnal:**

*International Journal of Contemporary Hospitality*



**Penulis Utama:**  
Profesor Madya Dr. Muhammad Ashraf bin  
Fauri@Fauzi

**Penulis Bersama:**  
Kamaruzzaman Z.A., Abdul Rahman H.

**Tajuk Artikel:**  
*Bibliometric Review on Human Resources Management and Big Data Analytics*

**Tajuk Jurnal:**  
*International Journal of Manpower*



**Penulis Utama:**  
Ts. Dr. Hajar Fauzan bin Ahmad

**Penulis Bersama:**  
Siew S.W., Musa S.M., Sabri N., Farida Asras M.F.

**Tajuk Artikel:**  
*Evaluation of Pre-Treated Healthcare Wastes During COVID-19 Pandemic Reveals Pathogenic Microbiota, Antibiotics Residues, and Antibiotic Resistance Genes Against Beta-Lactams*

**Tajuk Jurnal:**  
*Environmental Research*

# MENJULANG ILHAM KEJAYAAN

'Inspiring Skyward Achievement'



**Penulis Utama:**  
Profesor Madya Ts. Dr. Herma Dina binti Setiabudi

**Penulis Bersama:**  
Arifin M.N., Jusoh R., Abdullah H., Ainirazali N.

**Tajuk Artikel:**  
*Recent Advances in Advanced Oxidation Processes (AOPS) for The Treatment of Nitro- and Alkyl-Phenolic Compounds*

**Tajuk Jurnal:**  
*Environmental Research*



**Penulis Utama:**  
Dr. Jun Haslinda binti Haji Shariffuddin

**Penulis Bersama:**  
Nayeem A., Ali M.F.

**Tajuk Artikel:**  
*The Recent Development of Inverse Vulcanized Polysulfide as An Alternative Adsorbent for Heavy Metal Removal in Wastewater*

**Tajuk Jurnal:**  
*Environmental Research*

**Penulis Utama:**

Profesor Madya Dr. Mohd Herwan bin Sulaiman

**Penulis Bersama:**

Mustaffa Z., Zakaria N.F., Saari M.M.

**Tajuk Artikel:**

*Using The Evolutionary Mating Algorithm for Optimizing Deep Learning Parameters for Battery State of Charge Estimation of Electric Vehicle*

**Tajuk Jurnal:**

*Energy*

**MENJULANG  
ILHAM KEJAYAAN**

*'Inspiring Skyward Achievement'*

*Majlis Anugerah  
Cendekia Bitara '23*

**Penulis Utama:**

Profesor Madya Dr. Mohd Herwan bin Sulaiman

**Penulis Bersama:**

Mustaffa Z.

**Tajuk Artikel:**

*Using The Evolutionary Mating Algorithm for Optimizing The User Comfort and Energy Consumption in Smart Building*

**Tajuk Jurnal:**

*Journal of Building Engineering*



**Penulis Utama:**

Profesor Ts. Dr. Mohd Rusllim bin Mohamed

**Penulis Bersama:**

Kishore D.J.K., Sudhakar K., Peddakapu K.

**Tajuk Artikel:**

*Swarm Intelligence-Based MPPT Design for PV Systems Under Diverse Partial Shading Conditions*

**Tajuk Jurnal:**

*Energy*

**Penulis Utama:**

Profesor Ts. Dr. Mohd Rusllim bin Mohamed

**Penulis Bersama:**

Peddakapu K., Srinivasarao P., Liu X., Krishna Kishore D.J.

**Tajuk Artikel:**

*Faults Identification in High Voltage Direct Current Transmission Lines Using Adaptive Neuro-Fuzzy Inference System*

**Tajuk Jurnal:**

*International Journal of Modelling and Simulation*



**Penulis Utama:**

Profesor Madya Dr. Mohd Fadzil Faisae bin Ab. Rashid

**Penulis Bersama:**

Ramli A.N.

**Tajuk Artikel:**

*A New Multiobjective Tiki-Taka Algorithm for Optimization of Assembly Line Balancing*

**Tajuk Jurnal:**

*Engineering Computations* (Swansea, Wales)

**Penulis Utama:**

Profesor Madya Ts. Dr. Farhan binti Mohd Said

**Penulis Bersama:**

Zhang J., Jing Z.

**Tajuk Artikel:**

*Hydrogels Based on Seafood Chitin: From Extraction to The Development*

**Tajuk Jurnal:**

*International Journal of Biological Macromolecules*

# MENJULANG ILHAM KEJAYAAN

'Inspiring Skyward Achievement'



**Penulis Utama:**

Profesor Madya Ts. Dr. Mior Ahmad Khushairi bin  
Mohd Zahari

**Penulis Bersama:**

Syed M.H., Khan M.M.R., Beg M.D.H., Abdullah N.

**Tajuk Artikel:**

*Current Issues and Potential Solutions for The  
Electrospinning of Major Polysaccharides and Proteins:  
A Review*

**Tajuk Jurnal:**

*International Journal of Biological Macromolecules*



**Penulis Utama:**

Profesor Madya Ts. Dr. Mior Ahmad Khushairi bin  
Mohd Zahari

**Penulis Bersama:**

Syed M.H., Khan M.M.R., Beg M.D.H., Abdullah N.

**Tajuk Artikel:**

*An Overview on Recent Biomedical Applications of Biopolymers: Their Role in Drug Delivery Systems and Comparison of Major Systems*

**Tajuk Jurnal:**

*Journal of Drug Delivery Science and Technology*

# MENJULANG ILHAM KEJAYAAN

'Inspiring Skyward Achievement'

Majlis Anugerah  
Cendekia Bitara '23

**Penulis Utama:**

Profesor Madya Ts. Dr. Mior Ahmad Khushairi bin  
Mohd Zahari

**Penulis Bersama:**

Syed M.H., Khan M.M.R., Beg M.D.H., Abdullah N.

**Tajuk Artikel:**

*A Review on Current Trends and Future Prospectives of Electrospun Biopolymeric Nanofibers for Biomedical Applications*

**Tajuk Jurnal:**

*European Polymer Journal*

# MENJULANG ILHAM KEJAYAAN

'Inspiring Skyward Achievement'



**Penulis Utama:**  
Profesor Madya Ts. Dr. Ferda Ernawan

**Penulis Bersama:**  
Aminuddin A., Abu Bakar S.

**Tajuk Artikel:**  
*A Blind Recovery Technique with Integer Wavelet  
Transforms in Image Watermarking*

**Tajuk Jurnal:**  
*Engineering Science and Technology, An International  
Journal*



**Penulis Utama:**  
Dr. Ku Muhammad Na'im bin Ku Khalif

**Penulis Bersama:**  
Alam N.M.F.H.N.B., Jaini N.I.

**Tajuk Artikel:**  
*Synergic Ranking of Fuzzy Z-Numbers Based on  
Vectorial Distance and Spread for Application in  
Decision-Making*

**Tajuk Jurnal:**  
*AIMS Mathematics*



**Penulis Utama:**  
Cik At-Tasneem binti Mohd Amin

**Penulis Bersama:**  
Wan Hamzah W.A., Ismail M.A.

**Tajuk Artikel:**  
*Effect of Diameter, Twist Angle, and Blade Count on  
The Thermal-Hydraulic Performance of A Decaying  
Twisted Swirler*

**Tajuk Jurnal:**  
*Case Studies in Thermal Engineering*



**Penulis Utama:**  
Profesor Dr. Wan Azmi bin Wan Hamzah

**Penulis Bersama:**  
Zawawi N.N.M., Hamisa A.H., Hendrawati T.Y., Safril S

**Tajuk Artikel:**  
*Performance of Hybrid Electric Vehicle Air-Conditioning  
Using SiO<sub>2</sub>/POE Nanolubricant*

**Tajuk Jurnal:**  
*Case Studies in Thermal Engineering*



**Penulis Utama:**  
Profesor Madya Ts. Dr. Khairil Azman bin Masri

**Penulis Bersama:**  
Shahnewaz S.M., Ahmad Abdul Ghani N.A., Putra Jaya R., Siew Choo C., Giannakopoulou P.P., Rogkala A., Lampropoulou P., Petrounias P.

**Tajuk Artikel:**  
*Porous Asphalt Mixtures Enriched with Bamboo Fibers as A New Approach for Future Sustainable Construction*

**Tajuk Jurnal:**  
*Construction and Building Materials*



**Penulis Utama:**  
Profesor Madya Ts. Dr. Khairunisa binti Muthusamy

**Penulis Bersama:**  
Tanash A.O., Mat Yahaya F., Ismail M.A.

**Tajuk Artikel:**  
*Potential Of Recycled Powder from Clay Brick, Sanitary Ware, and Concrete Waste as A Cement Substitute for Concrete: An Overview*

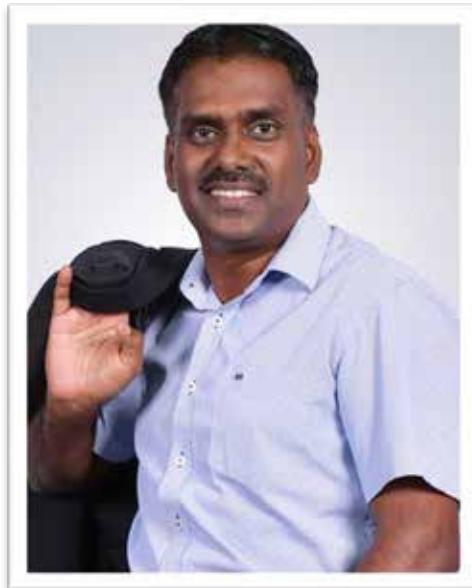
**Tajuk Jurnal:**  
*Construction and Building Materials*



# MENJULANG ILHAM KEJAYAAN

'Inspiring Skyward Achievement'

Majlis Anugerah  
Cendekia Bitara '23

**Penulis Utama:**

Profesor Ts. Dr. Gaanty Pragas a/l Maniam

**Penulis Bersama:**

Palanisamy K.M., Bhuyar P., Ab. Rahim M.H.,  
Govindan N., Maniam G.P.

**Tajuk Artikel:**

*Cultivation of Microalgae Spirulina Platensis Biomass  
Using Palm Oil Mill Effluent for Phycocyanin  
Productivity and Future Biomass Refinery Attributes*

**Tajuk Jurnal:**

*International Journal of Energy Research*

**Penulis Utama:**

Profesor Ts. Dr. Gaanty Pragas a/l Maniam

**Penulis Bersama:**

Palanisamy K.M., Bhuyar P., Rahim M.A., Vadiveloo A.,  
Al-Dhabi N.A., Govindan N.

**Tajuk Artikel:**

*Lipid Enhancement in Oleaginous Nannochloropsis SP.  
Under Nitrate Limitation for Future Bioenergy  
Production*

**Tajuk Jurnal:**

*International Journal of Energy Research*



**Penulis Utama:**  
Profesor Madya Dr. Ramadhansyah Putra Jaya

**Penulis Bersama:**  
Ghamari A., Jeong S.-H., Thongchom C.

**Tajuk Artikel:**  
*An Innovative Shear Links as Dampers Compound of Shear Plates and Round HSS Sections*

**Tajuk Jurnal:**  
*Journal of Materials Research and Technology*



**Penulis Utama:**  
Profesor Madya Dr. Syarifah Nur Aqida binti Syed Ahmad

**Penulis Bersama:**  
Yap S.W., Johari N., Mazlan S.A., Arifin R., Hassan N.A., Johari M.A.F.

**Tajuk Artikel:**  
*Superhydrophobic Zinc Oxide/Epoxy Coating Prepared by A One-Step Approach for Corrosion Protection of Carbon Steel*

**Tajuk Jurnal:**  
*Journal of Materials Research and Technology*



**Penulis Utama:**

Dr. Nurul Akmal binti Che Lah

**Tajuk Artikel:**

*Tunable Functionality of Pure Nano Cu- and Cu-based Oxide Flexible Conductive Thin Film with Superior Surface Modification*

**Tajuk Jurnal:**

*Surfaces and Interfaces*

**Penulis Utama:**

Dr. Nurul Akmal binti Che Lah

**Penulis Bersama:**

Murthy P.

**Tajuk Artikel:**

*Elucidating The Modified Performance of High Nuclearity of Cu Nanostructures-PTFE Thin Film*

**Tajuk Jurnal:**

*Scientific Reports*



**Penulis Utama:**  
Profesor Dr. Jose Rajan

**Penulis Bersama:**  
Kunwar R., Pal B., Izwan Misnon I., Daniyal H., Zabihi F., Yang S., Sofer Z., Yang C.-C.

**Tajuk Artikel:**  
*Characterization Of Electrochemical Double Layer Capacitor Electrode Using Self-Discharge Measurements and Modeling*

**Tajuk Jurnal:**  
*Applied Energy*

**Penulis Utama:**  
Profesor Dr. Jose Rajan

**Penulis Bersama:**  
Ling J., Misnon I.I., Rahim M.H.A., Yang C.-C.

**Tajuk Artikel:**  
*Improving Fresh and End-Used Carbon Surface by Sunlight: A Step Forward in Sustainable Carbon Processing*

**Tajuk Jurnal:**  
*ACS Sustainable Chemistry and Engineering*



**Penulis Utama:**

Profesor Madya Dr. Fatmawati binti Adam

**Penulis Bersama:**

Okwuwa C.C., Adam F., Mohd Said F., Ries M.E.

**Tajuk Artikel:**

*Cellulose Dissolution for Edible Biocomposites in Deep Eutectic Solvents: A Review*

**Tajuk Jurnal:**

*Journal of Cleaner Production*

**Penulis Utama:**

Profesor Madya Dr. Fatmawati binti Adam

**Penulis Bersama:**

Yap S Ramli N.A., Adam F., Amin K.N.M., Bakar N.F.A., Ries M.E.

**Tajuk Artikel:**

*Mechanical and Thermal Evaluation of Carrageenan/Hydroxypropyl Methyl Cellulose Biocomposite Incorporated with Modified Starch Corroborated by Molecular Interaction Recognition*

**Tajuk Jurnal:**

*ACS Applied Polymer Materials*



**Penulis Utama:**

Profesor Ir. Ts. Dr. Mahendran a/l Samykano

**Penulis Bersama:**

Sofiah A.G.N., Sudhakar K., Said Z., Pandey A.K.

**Tajuk Artikel:**

*Copper Oxide/Polyaniline Nanocomposites-Blended in Palm Oil Hybrid Nanofluid: Thermophysical Behavior Evaluation*

**Tajuk Jurnal:**

*Journal of Molecular Liquids*

**Penulis Utama:**

Profesor Ir. Ts. Dr. Mahendran a/l Samykano

**Penulis Bersama:**

Kamal Kamarulzaman M., Hisham S., Kadrigama K., Ramasamy D., Said Z., Pandey A.K.

**Tajuk Artikel:**

*Improvement In Stability and Thermophysical Properties of CNC-MXene Nanolubricant for Tribology Application*

**Tajuk Jurnal:**

*Journal of Molecular Liquids*



**Penulis Utama:**  
Profesor Ir. Dr Mohd Faizal bin Jamlos

**Penulis Bersama:**  
Mohd Hilmi Tan M.I.S., Omar A.F., Kamarudin K.,  
Jamlos M.A.

**Tajuk Artikel:**  
*Ganoderma Boninense Classification Based on Near-Infrared Spectral Data Using Machine Learning Techniques*

**Tajuk Jurnal:**  
*Chemometrics and Intelligent Laboratory Systems*



**Penulis Utama:**  
Ts. Dr. Nasratun binti Masngut

**Penulis Bersama:**  
Selvanathan Y.

**Tajuk Artikel:**  
*Optimization of Process Factor and Characterization of Vinegar-Like Beverage Production Via Spontaneous Fermentation from Pineapple Peel Waste*

**Tajuk Jurnal:**  
*LWT*

# MENJULANG ILHAM KEJAYAAN

'Inspiring Skyward Achievement'



**Penulis Utama:**  
Profesor Ir. Ts. Dr. Kumaran a/l Kadirgama

**Penulis Bersama:**  
Kamal Kamarulzaman M., Hisham S., Ramasamy D.,  
Samykano M., Saidur R., Yusaf T.

**Tajuk Artikel:**  
*Improving The Thermophysical Properties of Hybrid Nanocellulose-Copper (II) Oxide (Cnc-Cuo) As A Lubricant Additives: A Novel Nanolubricant for Tribology Application*

**Tajuk Jurnal:**  
*Fuel*



**Penulis Utama:**  
Profesor Ir. Ts. Dr. Kamarul Hawari bin Ghazali

**Penulis Bersama:**  
Usman F., Fen Y.W., Meriaudeau F., Jose R.

**Tajuk Artikel:**  
*Biosensing Through Surface Enhanced Raman Spectroscopy: A Review on The Role of Plasmonic Nanoparticle-Polymer Composites*

**Tajuk Jurnal:**  
*European Polymer Journal*



# MENJULANG ILHAM KEJAYAAN

'Inspiring Skyward Achievement'

Majlis Anugerah  
Cendekia Bitara '23



**Penulis Utama:**  
Profesor Dr. Yudi Fernando

**Penulis Bersama:**  
Hendayani R.

**Tajuk Artikel:**  
*Adoption of Blockchain Technology to Improve Halal Supply Chain Performance and Competitiveness*

**Tajuk Jurnal:**  
*Journal of Islamic Marketing*



**Penulis Utama:**  
Profesor Madya Dr. Sudhakar Kumarasamy

**Penulis Bersama:**  
Khan S., Yusof M.H.B.

**Tajuk Artikel:**  
*Comparison of Mono and Bifacial Modules for Building Integration and Electric Vehicle Charging: A Case Study in Sweden*

**Tajuk Jurnal:**  
*Energy Conversion and Management: X*



**Penulis Utama:**

Ts. Dr. Mohd Nasrullah bin Zulkifli

**Penulis Bersama:**

Amalina F., Krishnan S., Zularisam A.W.,

**Tajuk Artikel:**

*Effect of Process Parameters on Bio-Oil Yield from Lignocellulosic Biomass Through Microwave-Assisted Pyrolysis Technology for Sustainable Energy Resources: Current Status*

**Tajuk Jurnal:**

*Journal of Analytical and Applied Pyrolysis*

**Penulis Utama:**

Ts. Dr. Mohd Nasrullah bin Zulkifli

**Penulis Bersama:**

Amalina F., Krishnan S., Zularisam A.W.,

**Tajuk Artikel:**

*Biochar And Sustainable Environmental Development Towards Adsorptive Removal of Pollutants: Modern Advancements and Future Insight*

**Tajuk Jurnal:**

*Process Safety and Environmental Protection*

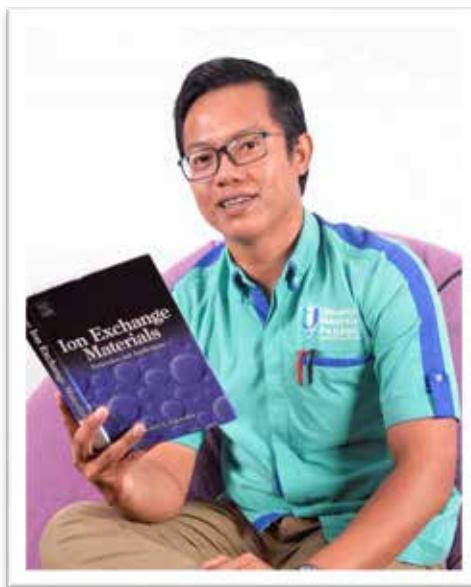


**Penulis Utama:**  
Profesor Madya Dr. Nina Suhaiti binti Azmi

**Penulis Bersama:**  
Kader M.A., Suhaiti Azmi N., Kafi A.K.M.

**Tajuk Artikel:**  
*Recent Advances in Gold Nanoparticles Modified Electrodes in Electrochemical Nonenzymatic Sensing of Chemical and Biological Compounds*

**Tajuk Jurnal:**  
*Inorganic Chemistry Communications*



**Penulis Utama:**  
Profesor Madya Dr. Ahmad Salihin bin Samsudin

**Penulis Bersama:**  
Mazuki N.F., Kufian M.Z., Saari M.M.

**Tajuk Artikel:**  
*Influencing of [EDIMP] TFSI in PMMA-PLA Doped LiTFSI Based Hybrid Gel Polymer Electrolyte on The Variation in Crystallinity Phase and Ionic Conduction Properties*

**Tajuk Jurnal:**  
*Journal of Non-Crystalline Solids*

# MENJULANG ILHAM KEJAYAAN

'Inspiring Skyward Achievement'



**Penulis Utama:**

Ts. Dr. Syafiq Fauzi bin Kamarulzaman

**Penulis Bersama:**

Muzahid A.J.M., Rahman M.A., Murad S.A., Kamal M.A.S., Alenezi A.H.

**Tajuk Artikel:**

*Multiple Vehicle Cooperation and Collision Avoidance in Automated Vehicles: Survey and An AI-Enabled Conceptual Framework*

**Tajuk Jurnal:**

*Scientific Reports*



**Penulis Utama:**

Dr. Mohd Fadhlizil Fasihi bin Mohd Aluwi

**Penulis Bersama:**

Wong K.K.V., Roney M., Uddin N., Imran S., Gazali A.M., Zamri N., Rullah K.

**Tajuk Artikel:**

*USNIC Acid as Potential Inhibitors of BCL2 And P13K Protein Through Network Pharmacology-Based Analysis, Molecular Docking and Molecular Dynamic Simulation*

**Tajuk Jurnal:**

*Journal of Biomolecular Structure and Dynamics*



**Penulis Utama:**

Dr. Mohd Fadhlizil Fasihi bin Mohd Aluwi

**Penulis Bersama:**

Roney M., Huq A.K.M.M., Issahaku A.R., Soliman M.E.S., Hossain M.S., Mustafa A.H., Islam M.A., Dubey A., Tufail A., Tajuddin S.N

**Tajuk Artikel:**

*Pharmacophore-Based Virtual Screening and In-Silico Study of Natural Products As Potential DENV-2 Rdrp Inhibitors*

**Tajuk Jurnal:**

*Journal of Biomolecular Structure and Dynamics*

**Penulis Utama:**

Dr. Mohd Fadhlizil Fasihi bin Mohd Aluwi

**Penulis Bersama:**

Roney M., Issahaku A.R., Forid M.S., Huq A.K.M.M., Soliman M.E.S., Tajuddin S.N.

**Tajuk Artikel:**

*In Silico Evaluation of Usnic Acid Derivatives to Discover Potential Antibacterial Drugs Against DNA Gyrase B and DNA Topoisomerase IV*

**Tajuk Jurnal:**

*Journal of Biomolecular Structure and Dynamics*



**Penulis Utama:**

Ts. Dr. Nurul Nadrah Aqilah binti Tukimat

**Penulis Bersama:**

Wan Mazlan W.A.S., Tukimat N.N.A.

**Tajuk Artikel:**

*Comparative Analyses on Disaggregation Methods for  
the Rainfall Projection*

**Tajuk Jurnal:**

*Water Resources Management*

**Penulis Utama:**

Profesor Madya Dr. Azrina Binti Abd Aziz

**Penulis Bersama:**

Solayman H.M., Hossen M.A., Yahya N.Y., Leong K.H.,  
Sim L.C., Monir M.U., Zoh K.-D.

**Tajuk Artikel:**

*Performance Evaluation of Dye Wastewater Treatment  
Technologies: A Review*

**Tajuk Jurnal:**

*Journal of Environmental Chemical Engineering*

# **Anugerah Cendekia Bitara 2023: Kategori Penerbitan Buku/Bab Buku**

# MENJULANG ILHAM KEJAYAAN

*'Inspiring Skyward Achievement'*



**Nama Penulis Utama:**

Profesor Dr. Jose Rajan

**Nama Penulis Bersama:**

Luruthudass Annaniah, Mohamed Salleh M. Saheed

**Tajuk Buku:**

*Led Packaging Technologies: Design, Manufacture,  
and Applications*

**Nama Penerbit:**

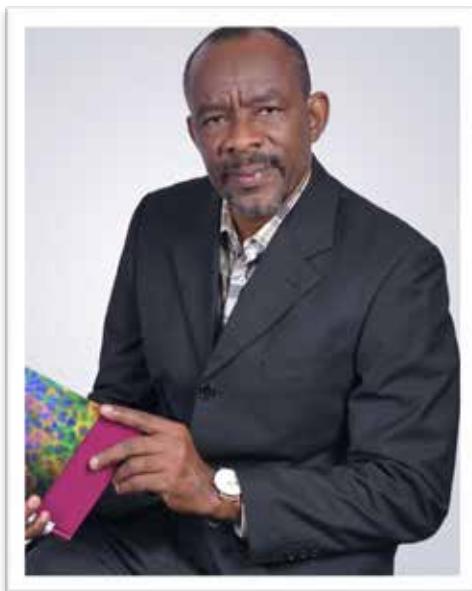
Wiley



# MENJULANG ILHAM KEJAYAAN

'Inspiring Skyward Achievement'

Majlis Anugerah  
Cendekia Bitara '23



**Nama Penulis Utama:**  
Profesor Dr. Abdurahman Hamid Nour

**Nama Penulis Bersama:**  
Aiman A. bin Mokaizh, Oluwaseun Ruth Alara, M. Abdulqawi

**Tajuk Buku:**  
*World Sustainable Construction Conference*

**Tajuk Bab Buku:**  
*Study Thermal Resistance of  $\gamma$ -Al<sub>2</sub>O<sub>3</sub> at Various Reaction Temperatures via TGA Analysis*

**Nama Penerbit:**  
Trans Tech Publications Limited

**Nama Penulis Utama:**  
Profesor Dr. Abdurahman Hamid Nour

**Nama Penulis Bersama:**  
Oluwaseun Ruth Alara, John Adewole Alara, Chinonso Ishmael Ukaegbu, Moses Oludayo Tade & Hassan Alsaggaf Ali

**Tajuk Buku:**  
*Advancements in Biosurfactants Research*

**Tajuk Bab Buku:**  
*Biosurfactants As Emulsifying Agents in Food Formulation*

**Nama Penerbit:**  
Springer

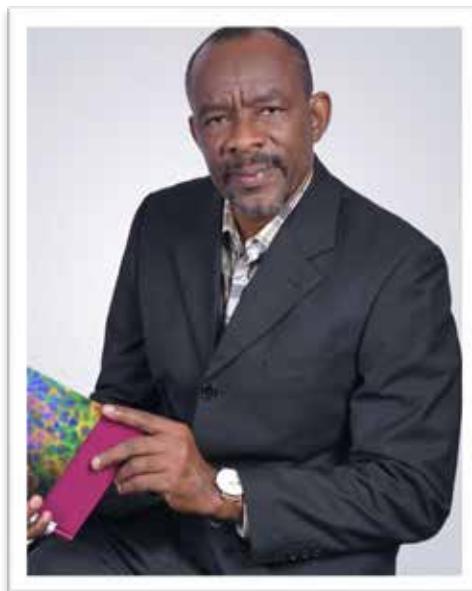
**Nama Penulis Utama:**  
Profesor Dr. Abdurahman Hamid Nour

**Nama Penulis Bersama:**  
John Adewole Alara, Oluwaseun Ruth Alara

**Tajuk Buku:**  
*Advancements in Biosurfactants Research*

**Tajuk Bab Buku:**  
*Role of Biosurfactants in Biocidal Activity and Wound Healing*

**Nama Penerbit:**  
Springer



**Nama Penulis Utama:**

Profesor Dr. Abdurahman Hamid Nour

**Nama Penulis Utama:**

Profesor Dr. Abdurahman Hamid Nour

**Nama Penulis Bersama:**

Oluwaseun Ruth Alara, John Adewole Alara, Moses Oludayo  
Tade & Hassan Alsaggaf Ali

**Nama Penulis Bersama:**

Akbari S., Kudrashou V.

**Tajuk Buku:**

*Advancements in Biosurfactants Research*

**Tajuk Buku:**

*Advancements in Biosurfactants Research*

**Tajuk Bab Buku:**

*Commercialization of Biosurfactants*

**Tajuk Bab Buku:**

*Surface Activity and Emulsification Properties  
of Saponins As Biosurfactants*

**Nama Penerbit:**

Springer

**Nama Penerbit:**

Springer International Publishing



# MENJULANG ILHAM KEJAYAAN

'Inspiring Skyward Achievement'

Majlis Anugerah  
Cendekia Bitara '23



**Nama Penulis Utama:**  
Profesor Madya Dr. Azrina binti Abd Aziz

**Nama Penulis Bersama:**  
Umi Rabiatul Ramzilah P. Remli, Lan Ching Sim,  
Minhaj Uddin Monir, Kah Hon Leong

**Tajuk Buku:**  
*Carbon Quantum Dots for Sustainable Energy and  
Optoelectronics*

**Tajuk Bab Buku:**  
*Photocatalytic Applications of Carbon Quantum Dots  
for Wastewater Treatment*

**Nama Penerbit:**  
Elsevier

**Nama Penulis Utama:**  
Profesor Madya Dr. Azrina binti Abd Aziz

**Nama Penulis Bersama:**  
Priyanka Saha, Minhaj Uddin Monir, Shaheen M.  
Sarkar

**Tajuk Buku:**  
*Crises In Oil, Gas and Petrochemical Industries:  
Volume 1: Disasters and Environmental Challenges*

**Tajuk Bab Buku:**  
*Noise Pollution from Oil, Gas, and Petrochemical  
Industries*

**Nama Penerbit:**  
Elsevier



**Nama Penulis Utama:**  
Profesor Madya Ir. Dr. Chin Siew Choo

**Nama Penulis Bersama:**  
Liew, Yu Xuan and Khong, Sheh Ching and Yee, Jia Jun and Tee, Kong Fah

**Tajuk Buku:**  
*Cement and Concrete: Design, Performance and Structure*

**Tajuk Bab Buku:**  
*Bamboo Fibre Composites: Potential and Challenges*

**Nama Penerbit:**  
Nova Science Publisher Inc.

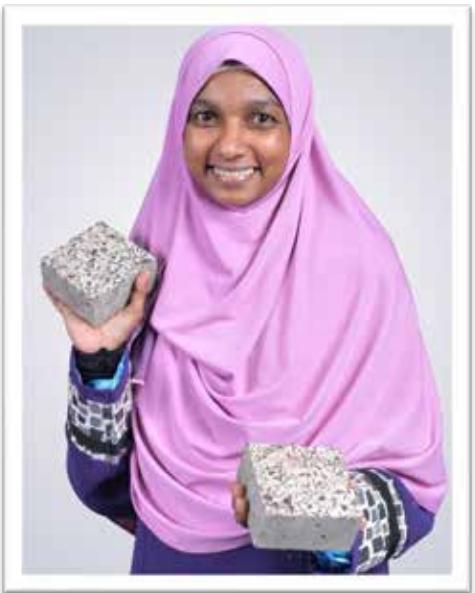
**Nama Penulis Utama:**  
Profesor Madya Ir. Dr. Chin Siew Choo

**Nama Penulis Bersama:**  
Mervin Ealiyas Mathews, Anandu E. Shaji, N. Anand, A. Diana Andrushia, Siew Choo Chin and Eva Lubloy

**Tajuk Buku:**  
*Intelligent Edge Computing for Cyber Physical Applications*

**Tajuk Bab Buku:**  
*IoT-Based BIM Integrated Model for Energy and Water Management in Smart Homes*

**Nama Penerbit:**  
Elsevier



**Nama Penulis Utama:**

Profesor Madya Ts. Dr. Khairunisa binti Muthusamy

**Nama Penulis Bersama:**

Hassan M.I., Othman R., Sulaiman M.A., Ruslan H.N.

**Tajuk Buku:**

*Key Engineering Materials*

**Tajuk Bab Buku:**

*Compressive Strength of Concrete Containing Roof Tile Waste As Partial Fine Aggregate Replacement*

**Nama Penerbit:**

Trans Tech Publications Limited

**Nama Penulis Utama:**

Profesor Madya Ts. Dr. Khairunisa binti Muthusamy

**Nama Penulis Bersama:**

Wong, W.H., Mohamad, N., Rajan, J., Budiea, A.M.A., P.P. Abdul Majeed, A., Kirgiz, M.S.

**Tajuk Buku:**

*Advance Upcycling of By-products in Binder and Binder-Based Materials*

**Tajuk Bab Buku:**

*Properties of Concrete Containing Coal Bottom Ash As Hydraulic Binder Substitution*

**Nama Penerbit:**

Elsevier



**Nama Penulis Utama:**

Ts. Dr. Nurizzatul Atikha binti Rahmat

**Nama Penulis Bersama:**

Kamil Khalili Haji Abdullah dan Khairun Adhani  
Khairunizam

**Tajuk Buku:**

Energy and Environment in the Tropics

**Tajuk Bab Buku:**

Natural Ventilation in Traditional Malay House: A Study  
of Flow Pattern by an Enhanced Smoke Wire  
Technique

**Nama Penerbit:**

Springer

**Nama Penulis Utama:**

Ts. Dr. Nurizzatul Atikha binti Rahmat

**Nama Penulis Bersama:**

Muhammad Arifuddin Fitriady, Nurizzatul Atikha  
Rahmat dan Ahmad Faiz Mohammad

**Tajuk Buku:**

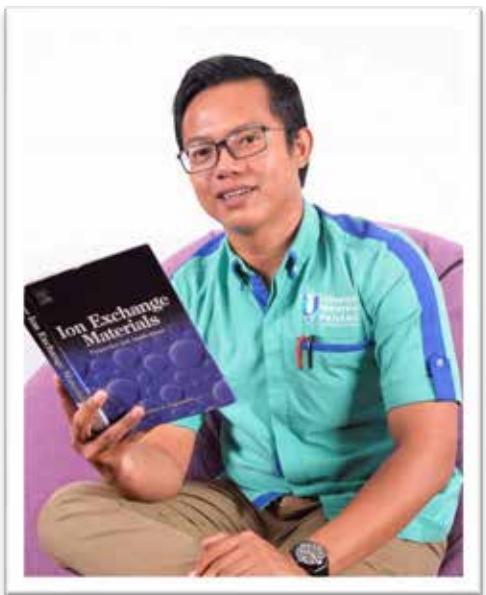
*Energy and Environment in The Tropics*

**Tajuk Bab Buku:**

*Urban Heat Island Phenomenon in Tropical Countries:  
Analysis of The Wake Flow Behind Slender High-Rise  
Building*

**Nama Penerbit:**

Springer



**Nama Penulis Utama:**  
Profesor Madya Dr. Ahmad Salihin bin Samsudin

**Nama Penulis Bersama:**  
M.A. Saadiah, A.F. Fuzlin, N.F. Mazuki, N.M. Ghazali

**Tajuk Buku:**  
*Advances in Electronic Materials for Clean Energy Conversion and Storage Applications*

**Tajuk Bab Buku:**  
*Organic Materials As Polymer Electrolytes for Supercapacitor Application*

**Nama Penerbit:**  
Woodhead Publishing Series in Electronic and Optical Materials



**Nama Penulis Utama:**  
Dr. Ahmmad Shukrie bin Md Yudin

**Nama Penulis Bersama:**  
Mohd Faizal Mohideen Batcha, Shahrin Hisham Amirnordin

**Tajuk Buku:**  
*Drying Technology in Food Processing Unit Operations and Processing Equipment in The Food Industry*

**Tajuk Bab Buku:**  
*Fluidized Bed Dryers*

**Nama Penerbit:**  
Elsevier



**Nama Penulis Utama:**  
Profesor Madya Dr. Aizi Nor Mazila binti Ramli

**Nama Penulis Bersama:**  
Nor Hasmaliana binti Abdul Manas, Dayang Norul Fairuz, Abang Zaidel, Nur Izyan Wan Azelee, Siti Fatimah Zaharah Mohd Fuzi, Shalyda Shaaranic Rosli Md. Illias, Norsuhada Abdul Karim

**Tajuk Buku:**  
*Smart Nanomaterials for Bioencapsulation*

**Tajuk Bab Buku:**  
*Delivery of Bioencapsulated Proteins*

**Nama Penerbit:**  
Elsevier



**Nama Penulis Utama:**  
Profesor Ts. Dr. Gaanty Pragas a/l Maniam

**Nama Penulis Bersama:**  
Natanamurugaraj Govindan, Karthick Murugan Palanisamy, Palaniselvam Kuppusamy, Mohd Hasbi Ab. Rahim

**Tajuk Buku:**  
*Plant Polysaccharides As Pharmaceutical Excipients*

**Tajuk Bab Buku:**  
*Plant Polysaccharides for Protein Binding*

**Nama Penerbit:**  
Elsevier



**Nama Penulis Utama:**  
Dr. Jun Haslinda binti Haji Shariffuddin

**Nama Penulis Bersama:**  
Abdullah Nayem, Abu Yousuf

**Tajuk Buku:**  
*Biogas to Biomethane: Engineering, Production, Sustainability*

**Tajuk Bab Buku:**  
*Absorption Technology for Upgrading Biogas to Biomethane*

**Nama Penerbit:**  
Elsevier



**Nama Penulis Utama:**  
Profesor Madya Dr. Lee Chia Kuang

**Nama Penulis Bersama:**  
Wen-Nee Wong, Nurhaizan Mohd Zainudin, and Ahmad Huzaimi Abd Jamil

**Tajuk Buku:**  
*Research Handbook on Project Performance*

**Tajuk Bab Buku:**  
*Understanding The Causes and Effects of Low-Risk Management: Implementation in Projects Using The DEMATEL Algorithm*

**Nama Penerbit:**  
Edward Elgar Publishing



**Nama Penulis Utama:**  
Ts. Dr. Lee Khai Loon

**Nama Penulis Bersama:**  
G. Nawanir, J. K. Cheng, Haitham M. Alzoubi &  
Muhammad Alshurideh

**Tajuk Buku:**  
*The Effect of Information Technology on Business and  
Marketing Intelligence Systems*

**Tajuk Bab Buku:**  
*Educational Supply Chain Management: A View on  
Professional Development Success in Malaysia*

**Nama Penerbit:**  
Elsevier



**Nama Penulis Utama:**  
Ts. Dr. Luqman Hakim bin Ahmad Shah

**Nama Penulis Bersama:**  
Ramachandaran, N., Hou, W., Gerlich, A.

**Tajuk Buku:**  
*Advanced Engineering Materials: Properties and  
Processing Technologies*

**Tajuk Bab Buku:**  
*Influence of Tool Eccentricity Pin Positioning on  
AA6061 Aluminium Alloy Friction Stir Welds*

**Nama Penerbit:**  
Trans Tech Publications Limited



# MENJULANG ILHAM KEJAYAAN

'Inspiring Skyward Achievement'

Majlis Anugerah  
Cendekia Bitara '23



**Nama Penulis Utama:**  
Ts. Dr. Mohd Nasrullah bin Zulkifli

**Nama Penulis Bersama:**  
Krishnan S., Mazlan D., Din M.F.M., Chaiprapat S.

**Tajuk Buku:**  
*Cellulose: Development, Processing, and Applications*

**Tajuk Bab Buku:**  
*Cellulose Nanocrystals from Agro Residues As Reinforcing Agent in Nanocomposites*

**Nama Penerbit:**  
CRC Press



**Nama Penulis Utama:**  
Profesor Ts. Dr. Mohd Ruzaimi bin Mat Rejab

**Nama Penulis Bersama:**  
Ma Q., Rejab M.R.M., Alang N.A., Hanon M.M., Yang B., Hu H., Zhang B.

**Tajuk Buku:**  
*SpringerBriefs in Materials Thin-Walled Composite Protective Structures for Crashworthiness Applications Recent Advances and Future Developments*

**Tajuk Bab Buku:**  
*Crashworthiness Performance of Sandwich Panel with Self-Reinforced Polypropylene (SRPP) and Carbon Fiber-Reinforced Plastic (CFRP) Spherical-Roof Contoured Cores*

**Nama Penerbit:**  
Springer



**Nama Penulis Utama:**  
Ts. Dr. Mohd Azmir bin Arifin

**Nama Penulis Bersama:**  
Azmana, M., Mahmood, S., Nayeem, A., Arifin, M.A.B.

**Tajuk Buku:**  
*SpringerBriefs in Materials*  
*Advances in Bionanocomposites: Materials, Applications, and Life Cycle*

**Tajuk Bab Buku:**  
*Chitosan-Based Bionanocomposites: Synthesis, Properties, and Applications*

**Nama Penerbit:**  
Elsevier



**Nama Penulis Utama:**  
Ts. Dr. Mohd Faizal bin Md. Jaafar

**Nama Penulis Bersama:**  
Norhaiza G., Khairul Anuar S., Roziah Z., Khairunisa M., Fadzil M.Y.

**Tajuk Buku:**  
*Key Engineering Materials*

**Tajuk Bab Buku:**  
*Enhancement of Autogenous Healing on Pre-Cracked PFA Concrete Using Response Surface Methodology (RSM)*

**Nama Penerbit:**  
Trans Tech Publications Limited



**Nama Penulis Utama:**  
Dr. Mohd Hazwan bin Yusof

**Nama Penulis Bersama:**  
Amirul Nawaf Esa, Muhammad Fadhl Suhaimi

**Tajuk Buku:**  
*Energy and Environment in The Tropics*

**Tajuk Bab Buku:**  
*Thermal Comfort Attainment by Personal Vortex Tube Cooling Device*

**Nama Penerbit:**  
Springer



**Nama Penulis Utama:**  
Ts. Dr. Nasrul Azuan bin Alang

**Nama Penulis Bersama:**  
Nikbin K

**Tajuk Buku:**  
*Key Engineering Materials*

**Tajuk Bab Buku:**  
*Modelling of Creep Rupture in Grade 92 Steel Using A Microstructure-Type Finite Element Mesh*

**Nama Penerbit:**  
Trans Tech Publications Ltd.



**Nama Penulis Utama:**  
Profesor Madya Ir. Dr Ngien Su Kong

**Tajuk Buku:**  
*Album of Porous Media: Structure and Dynamics*

**Tajuk Bab Buku:**  
*Double Porosity in Soil*

**Nama Penerbit:**  
Springer



**Nama Penulis Utama:**  
Dr. Nurhaizan binti Mohd Zainudin

**Nama Penulis Bersama:**  
Ahmad Amir Hafiz Ahmad, Rahimi A. Rahman, and  
Fadzida Ismail

**Tajuk Buku:**  
*Research Handbook on Project Performance*

**Tajuk Bab Buku:**  
*Construction and Demolition Waste Recycling and  
Reuse Clause in Standard form of Contracts: Impact on  
Project Performance*

**Nama Penerbit:**  
Edward Elgar Publishing



**Nama Penulis Utama:**  
Ts. Dr. Nurjannah binti Salim

**Nama Penulis Bersama:**  
Siti Norbaini Sarmin

**Tajuk Buku:**  
*Cellulose: Development, Processing, and Applications*  
*Biocomposites As Structural*

**Tajuk Bab Buku:**  
*Biocomposites as Structural Components in Various Applications*

**Nama Penerbit:**  
CRC Press



**Nama Penulis Utama:**  
Puan Nurul Nadia binti Nor Hamran

**Nama Penulis Bersama:**  
Jaharah A. Ghani

**Tajuk Buku:**  
*Tribology in Sustainable Manufacturing*

**Tajuk Bab Buku:**  
*Nano-Additives-Assisted MQL Machining*

**Nama Penerbit:**  
Taylor & Francis

# MENJULANG ILHAM KEJAYAAN

'Inspiring Skyward Achievement'



**Nama Penulis Utama:**  
Profesor Madya Ts. Dr. Saifful Kamaluddin bin  
Muzakir@Lokman

**Nama Penulis Bersama:**  
M.A. Saadiah, N.F. Shaafi, A.S. Samsudin

**Tajuk Buku:**  
*Quantum Dots Emerging Materials for Versatile  
Applications*

**Tajuk Bab Buku:**  
*Functionalization of Carbon and Graphene Quantum  
Dots*

**Nama Penerbit:**  
Elsevier



**Nama Penulis Utama:**  
Ts. Dr. Shalyda binti Md Shaarani@Md Nawi

**Nama Penulis Bersama:**  
Aizi Nor Mazila Ramli, Nor Hasmaliana Abdul Manas,  
Rabiatul Adawiyah Ahmad, Siti Fatimah Zaharah  
Mohamad Fuzi and Zatul Iffah Mohd Arshad

**Tajuk Buku:**  
*Valorization of Wastes for Sustainable Development  
Waste to Wealth*

**Tajuk Bab Buku:**  
*Biofuel Scale-Up from Waste Source and Strategies for  
Cost Optimization*

**Nama Penerbit:**  
Elsevier



**Nama Penulis Utama:**  
Ts. Dr. Siti Maznah binti Kabeb

**Nama Penulis Bersama:**  
Nurul Huda Abu Bakar

**Tajuk Buku:**  
*Polymer Blend Nanocomposites for Energy Storage Applications*

**Tajuk Bab Buku:**  
*Polymer Blend Nanocomposites for Polymer Electrolyte Membrane Fuel Cell (PEMFC) Applications*

**Nama Penerbit:**  
Elsevier



**Nama Penulis Utama:**  
Ts. Dr. Siti Noor Hidayah binti Mustapha

**Nama Penulis Bersama:**  
Rohani Mustapha

**Tajuk Buku:**  
*Polyester-Based Biocomposites*

**Tajuk Bab Buku:**  
*Hybrid Polyester and Bio-Polyester Composites*

**Nama Penerbit:**  
CRC Press



**Nama Penulis Utama:**  
Profesor Madya Ts. Dr. Sunarti binti Abd Rahman

**Nama Penulis Bersama:**  
Wan Zulaisa Amira Wan Jusoh, Abdul Latif Ahmad,  
Nadzirah Mohd Mokhtar, Hasrinah Hasbullah

**Tajuk Buku:**  
*Advanced Materials for Wastewater Treatment and  
Desalination-Fundamentals to Applications*

**Tajuk Bab Buku:**  
*Investigating Thin-Film Composite Membranes  
Prepared by Interaction between Trimesoyl Chloride  
with M-Phenylenediamine and Piperazine on Nylon 66  
and Performance in Isopropanol Dehydration*

**Nama Penerbit:**  
CRC Press



**Nama Penulis Utama:**  
Profesor Madya Dr. Wan Mohd Hafizuddin bin Wan  
Yussof

**Nama Penulis Bersama:**  
Roli N.F.M., Saufi S.M., Abu Seman M.N., Mohammad  
A.W.

**Tajuk Buku:**  
*Nanofiltration for Sustainability: Reuse, Recycle and  
Resource Recovery*

**Tajuk Bab Buku:**  
*Recovery of Xylose from Oil Palm Frond (OPF)  
Bagasse Hydrolysate Using Commercial Spiral-Wound  
Nanofiltration Membrane*

**Nama Penerbit:**  
CRC Press



**Nama Penulis Utama:**  
Dr. Wan Norfazilah binti Wan Ismail

**Nama Penulis Bersama:**  
Nurul 'Azzyati Sabri, Nurlin Abu Samah dan Siti  
Umairah Mokhtar

**Tajuk Buku:**  
*Management and Mitigation of Emerging Pollutants*

**Tajuk Bab Buku:**  
*Conventional Wastewater Treatment Methods for The Removal of Eps*

**Nama Penerbit:**  
Springer



**Nama Penulis Utama:**  
Ts. Dr. Zatul Iffah binti Mohd Arshad

**Nama Penulis Bersama:**  
Jun Wei Roy Chong, Zatul Iffah Mohd Arshad, Kit  
Wayne Chew, Pau Loke Show

**Tajuk Buku:**  
*Principles of Multiple-Liquid Separation Systems Interaction, Application and Advancement*

**Tajuk Bab Buku:**  
*Polymer-Salt Interaction*

**Nama Penerbit:**  
Elsevier



**Nama Penulis Utama:**  
Profesor Dato' Ts. Dr. Zularisam bin Ab Wahid

**Nama Penulis Bersama:**  
Supriyanka Rana, Eshita Sharma, P. Mishra, L. Singh,  
Z.A. Wahid, R. Gupta, Swati Sharma

**Tajuk Buku:**  
*CO<sub>2</sub>-philic Polymers, Nanocomposites and Chemical Solvents: Capture, Conversion and Industrial Products*

**Tajuk Bab Buku:**  
*Metal-Organic and Covalent-Organic Frameworks for CO<sub>2</sub> Capture*

**Nama Penerbit:**  
Elsevier

# Anugerah Cendekia Bitara 2023: Kategori Geran Antarabangsa

# MENJULANG ILHAM KEJAYAAN

*'Inspiring Skyward Achievement'*



**Nama Ketua Projek:**  
Dr. Noormazlinah binti Ahmad

**Nama Projek:**  
*Hydroponics and Aquaponics with AiOT in Qatar  
(HAIAT)*

**Nama Pemberi Dana:**  
Qatar National Research Fund

**Jumlah Dana:**  
RM361,910.46



**Nama Ketua Projek:**  
Profesor Ir. Dr Mohd Faizal bin Jamlos

**Nama Projek:**  
*Iot Test and Measurement System for Precision Farming and Environmental Monitoring with Predictive Analytics Using Lorawan Communication*

**Nama Pemberi Dana:**  
Filpal (S) Pte. Ltd.

**Jumlah Dana:**  
RM199,659.56



**Nama Ketua Projek:**

Profesor Madya Ir. Dr Nurul Hazlina binti Noordin

**Nama Projek:**

*Mystem Project: Be Inspired*

**Nama Pemberi Dana:**

Motorola Solutions Foundation

**Jumlah Dana:**

RM137,753.26

**Nama Ketua Projek:**

Profesor Madya Ir. Dr Nurul Hazlina binti Noordin

**Nama Projek:**

*Enhancing Digital Making Modules for Inclusive Stem Education: A Study of Pedagogical Approaches, Customization Strategies, and Assessment Methods Within The P-Tech Program@UMP Stem Lab*

**Nama Pemberi Dana:**

IBM Asia - Vietnam & Malaysia

**Jumlah Dana:**

RM69,948.85



**Nama Ketua Projek:**  
Profesor Ts. Dr. Mohd Ruzaimi Bin Mat Rejab

**Nama Projek:**  
*Virtual Exhibition Space For Technical Historical Objects: Phase 2 - Augmented Reality*

**Nama Pemberi Dana:**  
*German Academic Exchange Service*

**Jumlah Dana:**  
RM112,256.65

# MENJULANG ILHAM KEJAYAAN

*'Inspiring Skyward Achievement'*



**Nama Ketua Projek:**

Dr. Siti Hajar Noor binti Shaarani

**Nama Projek:**

Hydroponics And Aquaponics With A lot in Qatar  
(HAIAT)

**Nama Pemberi Dana:**

Qatar National Research Fund

**Jumlah Dana:**

RM53,846.65

# Anugerah Cendekia Bitara 2023: Kategori Geran Industri

# MENJULANG ILHAM KEJAYAAN

*'Inspiring Skyward Achievement'*



**Nama Ketua Projek:**  
Ts. Dr. Syafiq Fauzi bin Kamarulzaman

**Nama Projek:**  
*Design and Development of Elephant Intrusion Detector and Deterrence in Plantation Based on Artificial Intelligence*

**Nama Pemberi Dana:**  
Satok Bridge Digital Sdn. Bhd.

**Jumlah Dana:**  
RM100,000.00



**Nama Ketua Projek:**  
Profesor ChM. Dr. Chong Kwok Feng

**Nama Projek:**  
*Lanthanum and Cerium Market Applications in The Water Industry*

**Nama Pemberi Dana:**  
Lynas Malaysia Sdn. Bhd.

**Jumlah Dana:**  
RM56,070.00

# Anugerah Cendekia Bitara 2023: Kategori Geran Agensi



# MENJULANG ILHAM KEJAYAAN

*'Inspiring Skyward Achievement'*

Majlis Anugerah  
Cendekia Bitara '23



**Nama Ketua Projek:**  
Profesor Madya Dr. Fazeeda binti Mohamad

**Nama Projek:**  
Pembangunan Rangka Tindakan dan Pelan  
Strategik Untuk Majlis Pekerja Negeri Pahang (MPNP)

**Nama Pemberi Dana:**  
Majlis Pekerja Negeri Pahang

**Jumlah Dana:**  
RM313,200.00

# MENJULANG ILHAM KEJAYAAN

*'Inspiring Skyward Achievement'*



**Nama Ketua Projek:**  
Encik Wan Nazrul Helmy bin Wan Mohd Zain

**Nama Projek:**  
Penyelidikan Penerbitan Buku 'Memoir Lima Dekad  
Stadium Darul Makmur, 1973-2023'

**Nama Pemberi Dana:**  
Perbadanan Stadium Darul Makmur

**Jumlah Dana:**  
RM145,000.00

**Nama Ketua Projek:**  
Encik Wan Nazrul Helmy bin Wan Mohd Zain

**Nama Projek:**  
Penyelidikan Penerbitan Buku 'Pancawarna: Al-Sultan  
Abdullah Ri'ayatuddin Al-Mustafa Billah Shah'

**Nama Pemberi Dana:**  
Majlis Ugama Islam dan Adat Resam Melayu Pahang

**Jumlah Dana:**  
RM50,000.00



**Nama Ketua Projek:**  
Mejar Dr. Imaduddin bin Abidin

**Nama Projek:**  
Pembangunan Insinerator Quran Pintar (IQP)

**Nama Pemberi Dana:**  
Jabatan Agama Islam Pahang

**Jumlah Dana:**  
RM65,000.00

**Nama Ketua Projek:**  
Mejar Dr. Imaduddin bin Abidin

**Nama Projek:**  
Pembangunan Insinerator Quran Pintar (IQP)

**Nama Pemberi Dana:**  
Wakaf Pahang

**Jumlah Dana:**  
RM65,000.00



**Nama Ketua Projek:**  
Dr. Suhaidah Binti Hussain

**Nama Projek:**  
Kajian Pewujudan Entiti Khusus Bagi Pengurusan  
Kemasukan, Pengeluaran Dan Penamatan Pas  
Lawatan Kerja Sementara (PLKS) Pekerja Asing

**Nama Pemberi Dana:**  
Institut Keselamatan Awam Malaysia (IPSON)

**Jumlah Dana:**  
RM21,300.00

# Anugerah Cendekia Bitara 2023: Kategori Perundingan

# MENJULANG ILHAM KEJAYAAN

*'Inspiring Skyward Achievement'*



**Nama Ketua Projek:**  
Profesor Madya Ir. Dr. Fadzil bin Mat Yahaya

**Tajuk Perundingan:**  
Kajian Kebolehsanaan Pembinaan Spurline ECRL  
di Pahang

**Nama Klien:**  
Pejabat Setiausaha Kerajaan Pahang

**Jumlah Perundingan:**  
RM103,425.05

# Anugerah Cendekia Bitara 2023:

## Kategori Kualiti Penyelidikan



الجامعة السلطانية للعلوم والتكنولوجيا  
UNIVERSITI MALAYSIA PAHANG  
AL-SULTAN ABDULLAH

**Faculty of  
Industrial Management**  
Fakulti Pengurusan Industri

**Nama Fakulti:**  
Fakulti Pengurusan Industri

**Skor:**  
92.29

**Bintang:**  
5 Bintang

# Anugerah Sanjungan 23: Kategori Penerbitan Jurnal



**Penulis Utama:**

Profesor Dr. Wan Azmi bin Wan Hamzah

**Penulis Bersama:**

Sharif M.Z., Ghazali M.F., Samykano M., Ali H.M.

**Tajuk Artikel:**

*Performance Improvement Strategies of R1234yf In Vapor Compression Refrigeration System As A R134a Replacement: A Review*

**Tajuk Jurnal:**

*Journal of the Taiwan Institute of Chemical Engineers*

**Penulis Utama:**

Profesor Dr. Wan Azmi bin Wan Hamzah

**Penulis Bersama:**

Sharif M.Z., Ghazali M.F., Ali H.M.

**Tajuk Artikel:**

*Performance Augmentation of Retrofitted Sustainable R1234yf In R134a Air Conditioning System Using Al<sub>2</sub>O<sub>3</sub>–SiO<sub>2</sub> Hybrid Nanolubricant*

**Tajuk Jurnal:**

*Journal of Thermal Analysis and Calorimetry*



# MENJULANG ILHAM KEJAYAAN

'Inspiring Skyward Achievement'

Majlis Anugerah  
Cendekia Bitara '23



**Penulis Utama:**  
Profesor Dr. Wan Azmi Bin Wan Hamzah

**Penulis Bersama:**  
Zawawi N.N.M., Majid Z.A.A., Rahim R.A., Ali H.M.

**Tajuk Artikel:**  
*Efficiency Enhancement of Building Multi-Layer Solar Collector With Sio<sub>2</sub>-Tio<sub>2</sub> Hybrid Nanofluids*

**Tajuk Jurnal:**  
*Building Simulation*



**Penulis Utama:**  
Profesor Madya Dr. Sudhakar Kumarasamy

**Penulis Bersama:**  
Khan S., Yusof M.H.

**Tajuk Artikel:**  
*Building Integrated Photovoltaics Powered Electric Vehicle Charging With Energy Storage For Residential Building: Design, Simulation, and Assessment*

**Tajuk Jurnal:**  
*Journal of Energy Storage*

# MENJULANG ILHAM KEJAYAAN

'Inspiring Skyward Achievement'



**Penulis Utama:**  
Profesor Madya Dr. Sudhakar Kumarasamy

**Penulis Bersama:**  
Khan N., Mamat R.

**Tajuk Artikel:**  
*Seaweed Farming: A Perspectives of Genetic Engineering and Nano-Technology Application*

**Tajuk Jurnal:**  
*Heliyon*



**Penulis Utama:**  
Profesor Dr. Jose Rajan

**Penulis Bersama:**  
Vijayan B.L., Yasin A., Misnon I.I., Karuppiah C., Yang C.-C.,

**Tajuk Artikel:**  
*Lithium-Ion Adsorption on Surface Modified Porous Carbon*

**Tajuk Jurnal:**  
*Journal of Energy Storage*



**Penulis Utama:**

Profesor Ir. Ts. Dr. Mahendran a/l Samykano

**Penulis Bersama:**

Aljaerani H.A., Pandey A.K., Said Z., Sudhakar K.,  
Saidur R.

**Tajuk Artikel:**

*Effect of TiO<sub>2</sub> Nanoparticles on The Thermal Energy Storage of HITEC Salt for Concentrated Solar Power Applications*

**Tajuk Jurnal:**

*Journal of Energy Storage*

**Penulis Utama:**

Profesor Ir. Ts. Dr. Mahendran a/l Samykano

**Penulis Bersama:**

Laghari I.A., Pandey A.K., Aljafari B., Kadrigama K.,  
Sharma K., Tyagi V.V.

**Tajuk Artikel:**

*Thermal Energy Harvesting of Highly Conductive Graphene-Enhanced Paraffin Phase Change Material*

**Tajuk Jurnal:**

*Journal of Thermal Analysis and Calorimetry*



**Penulis Utama:**  
Dr. Izan Izwan bin Misnon

**Penulis Bersama:**  
Shetty M., Manickavasakam K., Sabbanahalli C., Bekal C., Subrahmanyam P A., Roy K., Shivaramu P.D., Shenoy. B S., Rangappa D.

**Tajuk Artikel:**  
*Rapid Single Pot Synthesis of Hierarchical Bi<sub>2</sub>WO<sub>6</sub> Microspheres/RGO Nanocomposite and Its Application in Energy Storage: A Supercritical Water Approach*

**Tajuk Jurnal:**  
*Journal of Energy Storage*



**Penulis Utama:**  
Profesor Ir. Ts. Dr. Kumaran a/l Kadirgama

**Penulis Bersama:**  
Aslfattahi N., Samylingam L., Kiai M.S., Kadirgama K., Kulish V., Schmirler M., Said Z.

**Tajuk Artikel:**  
*State-of-The-Art Review on Electrolytes for Sodium-Ion Batteries: Potential Recent Progress and Technical Challenges*

**Tajuk Jurnal:**  
*Journal of Energy Storage*

**Penulis Utama:**

Profesor Ir. Ts. Dr. Kumaran a/l Kadrigama

**Penulis Bersama:**

Das L., Aslfattahi N., Habib K., Saidur R., Das A.,

**Tajuk Artikel:**

*Thermohydraulic Performance Investigation of A Heat Exchanger With Combined Effect of Ribbed Insert and Therminol55/Mxene+ Al<sub>2</sub>O<sub>3</sub> Nanofluid: A Numerical Two-Phase Approach*

**Tajuk Jurnal:**

*Heliyon*

**Penulis Utama:**

Profesor Ir. Ts. Dr. Kumaran a/l Kadrigama

**Penulis Bersama:**

Rahman M.T., Habib K., Quader M.N., Aslfattahi N., Das L.

**Tajuk Artikel:**

*Effect of Porous Density of Twisted Tape Inserts on Heat Transfer Performance Inside A Closed Conduit*

**Tajuk Jurnal:**

*Heliyon*



**Penulis Utama:**  
Profesor Madya Dr. Muhammad Ashraf bin  
Fauri@Fauzi

**Penulis Bersama:**  
Sapuan N.M., Zainudin N.M.

**Tajuk Artikel:**  
*Women and Female Entrepreneurship: Past, Present,  
and Future Trends in Developing Countries*

**Tajuk Jurnal:**  
*Entrepreneurial Business and Economics Review*



**Penulis Utama:**  
Profesor Ir. Ts. Dr. Kamarul Hawari bin Ghazali

**Penulis Bersama:**  
Usman F., Ghazali K.H., Muda R., Johari N.H., Dennis  
J.O., Tamam N., Sulieman A., Ji Y.

**Tajuk Artikel:**  
*Magnetoresistance And Magneto-Plasmonic Sensors  
for The Detection of Cancer Biomarkers: A Bibliometric  
Analysis and Recent Advances*

**Tajuk Jurnal:**  
*Sensors and Actuators Reports*



**Penulis Utama:**

Profesor Madya Ts. Dr. Abdul Rahimi bin  
Abdul Rahman

**Penulis Bersama:**

Al-Mohammad M.S., Haron A.T., Aloko M.N., Rahman  
R.A.

**Tajuk Artikel:**

*Factors Affecting BIM Implementation in Post-Conflict  
Low-Income Economies: The Case of Afghanistan*

**Tajuk Jurnal:**

*Journal of Engineering, Design and Technology*

**Penulis Utama:**

Profesor Madya Ts. Dr. Abdul Rahimi bin  
Abdul Rahman

**Penulis Bersama:**

Radzi A.R., Rahman R.A., Doh S.I.

**Tajuk Artikel:**

*Decision Making in Highway Construction: A  
Systematic Review and Future Directions*

**Tajuk Jurnal:**

*Journal of Engineering, Design and Technology*

# Anugerah Sanjungan 23: Kategori Anugerah Buku



# MENJULANG ILHAM KEJAYAAN

*'Inspiring Skyward Achievement'*

Majlis Anugerah  
Cendekia Bitara '23



**Nama Penulis:**

Profesor Dr. Hasan bin Ahmad

**Nama Penulis Bersama:**

Tan Sri Dato' Sri Dr. Abdul Aziz Abdul Rahman, Hasan Ahmad, Mohd Mahzan Awang, Faridah Hanum M. Si, Muhammad Azli Shukri

**Tajuk Buku:**

Rukun Negara dan Pancasila: Ideologi dan Amalan

**Nama Anugerah:**

Anugerah Buku Negara 2023

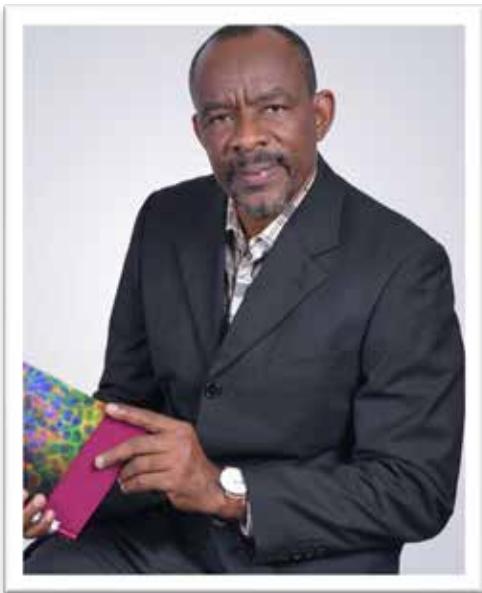
# Anugerah Sanjungan 23: Kategori Produk Penyelidikan



# MENJULANG ILHAM KEJAYAAN

'Inspiring Skyward Achievement'

Majlis Anugerah  
Cendekia Bitara '23



**Nama Penyelidik:**

Profesor Dr. Abdurahman Hamid Nour

**Tajuk Projek:**

*A Hybrid Ultrasonic Membrane Anaerobic System  
(UMAS) in Treating Wastewater*

**Nama Pameran:**

*Malaysia Technology Expo (MTE) 2023*

**Nama Anugerah:**

*Japan Intellectual Property Association (JIPA)  
- Best Environment Association*

# Anugerah Emas 23: Kategori Penerbitan Jurnal



# MENJULANG ILHAM KEJAYAAN

'Inspiring Skyward Achievement'

Majlis Anugerah  
Cendekia Bitara '23

| NAMA PENULIS UTAMA              | NAMA PENULIS BERSAMA   | TAJUK ARTIKEL   | TAJUK JURNAL                             |
|---------------------------------|--|---|--|
| Zulhelmi bin Ismail             | Abdullah A.H., Charles A., Ismail Z.   | <i>Introduction and Characterization of Simple Moisture-Driven Smart Paper for Chemistry Experiment in The Classroom: A Brief Guideline</i> | <i>Journal of Chemical Education</i>     |
| Mohd Ashraf bin Ahmad           | Krishnan H., Islam M.S., Ahmad M.A., Rashid M.I.M.   | <i>Parameter Identification of Solar Cells Using Improved Archimedes Optimization Algorithm</i>   | Optik                                    |
| Mahendran a/l Samykano          | Kalidasan B., Pandey A.K., Saidur R., Samykano M., Tyagi V.V.                              | <i>Nano Additive Enhanced Salt Hydrate Phase Change Materials for Thermal Energy Storage</i>  | <i>International Materials Reviews</i>   |
| Mohd Faizal bin Jamlos          | Raypah M.E., Nasru M.I.M., Nazim M.H.H., Omar A.F., Zahir S.A.D.M., Jamlos M.F., Muncan J. | <i>Spectral Response to Early Detection of Stressed Oil Palm Seedlings Using Near-Infrared Reflectance Spectra for Region 900-1000 Nm</i>   | <i>Infrared Physics and Technology</i>   |
| Muhammad Ashraf bin Fauri@Fauzi | Fauzi M.A.   | <i>Social Media in Disaster Management: Review of The Literature and Future Trends Through Bibliometric Analysis</i>                        | <i>Natural Hazards</i>                   |
| Mohd Herwan bin Sulaiman        | Sulaiman M.H., Mustaffa Z., Saari M.M., Daniyal H., Mirjalili S.                           | <i>Evolutionary Mating Algorithm</i>  | <i>Neural Computing and Applications</i> |
| Mohd Arfian bin Ismail          | Nordin N.S., Ismail M.A.   | <i>A Hybridization of Butterfly Optimization Algorithm and Harmony Search for Fuzzy Modelling in Phishing Attack Detection</i>              | <i>Neural Computing and Applications</i> |



| NAMA PENULIS UTAMA       | NAMA PENULIS BERSAMA   | TAJUK ARTIKEL   | TAJUK JURNAL   |
|--------------------------|--|---|--|
| Kamal Zuhairi bin Zamli  | Zamli K.Z., Alhadawi H.S., Din F.  | <i>Utilizing The Roulette Wheel Based Social Network Search Algorithm for Substitution Box Construction and Optimization</i>  | <i>Neural Computing and Applications</i>                           |
| Kamal Zuhairi bin Zamli  | Zamli K.Z., Din F., Alhadawi H.S.  | <i>Exploring A Q-Learning-Based Chaotic Naked Mole Rat Algorithm for S-Box Construction and Optimization</i>  | <i>Neural Computing and Applications</i>                           |
| Mohd Ashraf bin Ahmad    | Mohd Tumari M.Z., Ahmad M.A., Suid M.H., Ghazali M.R., Tokhi M.O.              | <i>An Improved Marine Predators Algorithm Tuned Data-Driven Multiple-Node Hormone Regulation Neuroendocrine-Pid Controller for Multi-Input-Multi-Output Gantry Crane System</i> | <i>Journal of Low Frequency Noise Vibration and Active Control</i> |
| Ferda Ernawan            | Ernawan F., Ariatmanto D.  | <i>A Recent Survey on Image Watermarking Using Scaling Factor Techniques for Copyright Protection</i>   | <i>Multimedia Tools and Applications</i>                           |
| Ferda Ernawan            | Ernawan F., Ariatmanto D.  | <i>An Efficient Adaptive Scaling Factor for 4x4 DCT Image Watermarking</i>  | <i>Multimedia Tools and Applications</i>                           |
| Irene Ting Wei Kiong     | Wang W.-K., Lu W.-M., Ting I.W.K., Siao W.-Y.                                  | <i>Earnings Management and Corporate Efficiency Pre-and Post-IFRS: Evidence from Taiwanese Listed Electronics Corporations</i>  | <i>Journal of Applied Accounting Research</i>                      |
| Gaanty Pragas a/l Maniam | Embong N.H., Hindryawati N., Bhuyar P., Govindan N., Rahim M.H.A., Maniam G.P. | <i>Enhanced Biodiesel Production Via Esterification of Palm Fatty Acid Distillate (PFAD) Using Rice Husk Ash (Niso4)/SiO2 Catalyst</i>  | <i>Applied Nanoscience (Switzerland)</i>                           |



# MENJULANG ILHAM KEJAYAAN

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Cendekia Bitara '23

| NAMA PENULIS UTAMA           | NAMA PENULIS BERSAMA   | TAJUK ARTIKEL   | TAJUK JURNAL   |
|------------------------------|--|---|--|
| Mohd Fadhlhan bin Mohd Yusof | Yusof M.F.M., Quazi M.M., Aleem S.A.A., Ishak M., Ghazali M.F.                     | <i>Identification of Weld Defect Through The Application of Denoising Method to The Sound Signal Acquired During Pulse Mode Laser Welding</i>                   | <i>Welding in The World</i>  |
| Mohd Nasrullah bin Zulkifli  | Amalina F., Abd Razak A.S., Zularisam A.W., Aziz M.A.A., Krishnan S., Nasrullah M. | <i>Comprehensive Assessment of Biochar Integration in Agricultural Soil Conditioning: Advantages, Drawbacks, and Future Prospects</i>                           | <i>Physics and Chemistry of The Earth</i>                                  |
| Mohd Faizal bin Jamlos       | Raypah M.E., Mahmud S., Samsuri S.A.M., Jamlos M.F.                                | <i>Effect of Annealing Atmosphere on Characteristics of Kaolin-Doped Zinc Oxide Disks</i>   | <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> |
| Mohd Nasrullah bin Zulkifli  | Amalina F., Krishnan S., Zularisam A.W., Nasrullah M.                              | <i>Recent Advancement and Applications of Biochar Technology As A Multifunctional Component Towards Sustainable Environment</i>                                 | <i>Environmental Development</i>   |
| Liang Yong Yeow              | Foo K., Liang Y.Y., Goh P.S., Fletcher D.F.  | <i>Computational Fluid Dynamics Simulations of Membrane Gas Separation: Overview, Challenges and Future Perspectives</i>  | <i>Chemical Engineering Research and Design</i>                            |
| Herma Dina binti Setiabudi   | Abdulkadir B.A., Teh L.P., Abidin S.Z., Setiabudi H.D., Jusoh R.                   | <i>Advancements in Silica-Based Nanostructured Photocatalysts for Efficient Hydrogen Generation from Water Splitting</i>  | <i>Chemical Engineering Research and Design</i>                            |
| Herma Dina binti Setiabudi   | Zaki R.S.R.M., Jalil A.A., Setiabudi H.D.  | <i>Intensified Photocatalytic Degradation of Methylene Blue Over Fe Supported on Dendritic Fibrous Sba-15: Optimisation, Kinetic, Isotherm, and Reusability</i> | <i>Chemical Engineering Research and Design</i>                            |



| NAMA PENULIS UTAMA          | NAMA PENULIS BERSAMA  | TAJUK ARTIKEL   | TAJUK JURNAL   |
|-----------------------------|---|---|--|
| Mazrul Nizam bin Abu Seman  | Shafie N.A., Abu Seman M.N., Saufi S.M., Mohammad A.W.  | <i>Influence of Polyethersulfone Substrate Properties on The Performance of Thin Film Composite Forward Osmosis Membrane: Effect of Additive Concentration, Polymer Concentration and Casting Thickness</i> | <i>Chemical Engineering Research and Design</i>              |
| Liang Yong Yeow             | Foo K., Lin W., Goh P.S., Ahmad A.L., Liang Y.Y.  | <i>Impact of Spacer on Membrane Gas Separation Performance</i>  | <i>Chemical Engineering Research and Design</i>              |
| Raihana Zahirah binti Edros | Edros R., Feng T.W., Dong R.H.  | <i>Utilizing Machine Learning Techniques to Predict The Blood-Brain Barrier Permeability of Compounds Detected Using Lcqtof-Ms in Malaysian Kelulut Honey</i>   | <i>Sar and Qsar in Environmental Research</i>                |
| Yudi Fernando               | Fernando Y., Shaharudin M.S., Abideen A.Z.  | <i>Circular Economy-Based Reverse Logistics: Dynamic Interplay Between Sustainable Resource Commitment and Financial Performance</i>  | <i>European Journal of Management and Business Economics</i> |
| Lee Khai Loon               | Mat Ishah N.S., Lee K.L., Nawairi G.  | <i>Educational Supply Chain Sustainability</i>  | <i>Asian Education and Development Studies</i>               |
| Wan Sharuzi bin Wan Harun   | Sandanamsamy L., Harun W.S.W., Ishak I., Romlay F.R.M., Kadrigama K., Ramasamy D., Idris S.R.A., Tsumori F. | <i>A Comprehensive Review on Fused Deposition Modelling of Polylactic Acid</i>  | <i>Progress in Additive Manufacturing</i>                    |
| Jose Rajan                  | Ganesh G., Yasin A., Misnor I.I., Fakharuddin A., Schmidt-Mende L., Ab Rahim M.H., Thomas S., Jose R.       | <i>Augmenting Stability and Performance in Perovskite Solar Cells: A Critical Review on Perovskite-Polymer Synergy</i>  | <i>Solar Energy</i>  |



# MENJULANG ILHAM KEJAYAAN

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| NAMA PENULIS UTAMA              | NAMA PENULIS BERSAMA  | TAJUK ARTIKEL   | TAJUK JURNAL                              |
|---------------------------------|---|---|---|
| Amir bin Abdul Razak            | Lahimer A.A., Razak A.A., Sharol A.F., Sopian K.  | <i>Automotive Cabin Soak Temperature Control Strategies for Improved Safety, Comfort and Fuel Efficiency: A Review</i>  | <i>Solar Energy</i>                       |
| Abdul Rahimi bin Abdul Rahman   | Al-Mohammad M.S., Haron A.T., Esa M., Aloko M.N., Alhammadi Y., Anandh K.S., Rahman R.A.        | <i>Factors Affecting Bim Implementation: Evidence from Countries with Different Income Levels</i>   | <i>Construction Innovation</i>            |
| Md. Mustafizur Rahman           | Parvez M.S., Rahman M.M., Samykano M., Yeakub Ali M.  | <i>Electrochemical Characterization and Joule Heating Performance of Polyaniline Incorporated Cotton Fabric</i>   | <i>Physics and Chemistry of The Earth</i> |
| Ramadhansyah Putra Jaya         | Ali Mohamed A., Billa L., Putra Jaya R.   | <i>Challenges of Post-Conflict Urban Transportation Reconstruction in Mogadishu, Somalia</i>  | <i>Physics and Chemistry of The Earth</i> |
| Wan Norfazilah binti Wan Ismail | Abu Bakar N.H., Wan Ismail W.N., Mohd Yusop H., Mohd Zulkifli N.F.                              | <i>Synthesis of A Water-Based Teos-Pdms Sol-Gel Coating for Hydrophobic Cotton and Polyester Fabrics</i>  | <i>New Journal of Chemistry</i>           |
| Mohd Nasrullah bin Zulkifli     | Zaied B.K., Rashid M., Nasrullah M., Bari B.S., Zularisam A.W., Singh L., Kumar D., Krishnan S. | <i>Prediction and Optimization of Biogas Production from Pome Co-Digestion in Solar Bioreactor Using Artificial Neural Network Coupled with Particle Swarm Optimization (Ann-Pso)</i> | <i>Biomass Conversion and Biorefinery</i> |
| Gaanty Pragas a/l Maniam        | Malek M.N.F.A., Hussin N.M., Embong N.H., Bhuyar P., Rahim M.H.A., Govindan N., Maniam G.P.     | <i>Ultrasonication: A Process Intensification Tool for Methyl Ester Synthesis: A Mini Review</i>  | <i>Biomass Conversion and Biorefinery</i> |



| NAMA PENULIS UTAMA                      | NAMA PENULIS BERSAMA   | TAJUK ARTIKEL  | TAJUK JURNAL                                  |
|---|--|--|---|
| Saidatul Shima binti Jamari             | Madusari S., Jamari S.S., Nordin N.I.A.A., Bindar Y., Prakoso T., Restiawaty E., Steven S.                   | <i>Hybrid Hydrothermal Carbonization and Ultrasound Technology on Oil Palm Biomass for Hydrochar Production</i>  | <i>Chembioeng Reviews</i>                     |
| Che Ku Mohammad Faizal bin Che Ku Yahya | Karim A., Islam M.A., Mishra P., Muzahid A.J.M., Yousuf A., Khan M.M.R., Faizal C.K.M.                       | <i>Yeast and Bacteria Co-Culture-Based Lipid Production Through Bioremediation of Palm Oil Mill Effluent: A Statistical Optimization</i>                                       | <i>Biomass Conversion and Biorefinery</i>     |
| Zularisam bin Ab Wahid                  | Mishra P., Wahid Z.A., Zaid R.M., Rana S., Tabassum S., Karim A., Singh L., Islam M.A., Jaing X., Sakinah M. | <i>Kinetics and Statistical Optimization Study of Bio-Hydrogen Production Using The Immobilized Photo-Bacterium</i>  | <i>Biomass Conversion and Biorefinery</i>     |
| Gaanty Pragas a/l Maniam                | Khazaai S.N.M., Bhuyar P., Rahim M.H.A., Alwi M.H.F.M., Yiting S., Maniam G.P.                               | <i>Rapid Determination of Diesel/Biodiesel Blend Ratio Using Refractive Index, Density, and Kinematic Viscosity Measurements</i>   | <i>Biomass Conversion and Biorefinery</i>     |
| Sudhakar Kumarasamy                     | Khan S., Sudhakar K., Yusof M.H.B., Azmi W.H., Ali H.M.  | <i>Roof Integrated Photovoltaic for Electric Vehicle Charging Towards Net Zero Residential Buildings in Australia</i>  | <i>Energy for Sustainable Development</i>     |
| Mahendran a/l Samykano                  | Yadav A., Samykano M., Pandey A.K., Aljafari B., Tyagi V.V.  | <i>Synthesis and Characterization of Polyethylene Glycol- Polymethyl Methacrylate Infused Multiwalled Carbon Nanotube Nanocomposite As An Efficient Thermal Energy Storage</i> | <i>Materials Today Communications</i>         |
| Siti Rabiatull Aisha binti Idris        | Abdullah A., Aisha Idris S.R.  | <i>A Review: Effect of Copper Percentage Solder Alloy After Laser Soldering</i>  | <i>Soldering and Surface Mount Technology</i> |



# MENJULANG ILHAM KEJAYAAN

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Cendekia Bitara '23

| NAMA PENULIS UTAMA               | NAMA PENULIS BERSAMA   | TAJUK ARTIKEL   | TAJUK JURNAL   |
|----------------------------------|--|---|--|
| Siti Rabiatull Aisha binti Idris | Abdullah M.A., Idris S.R.A.  | <i>Role of Cu Percentage in The Sn-Xcu Alloy on The Mechanical Performance for Sn-Xcu/Enig Interface Produced by Laser Soldering</i>                                | <i>Soldering and Surface Mount Technology</i>                              |
| Nurul Aini binti Mohd Azman      | Subramaniam S.D., Azman N.A.B.M., Abdul Mudalip S.K.B., Halim L.A., Basrawi F., Muhammad N.B.  | <i>Modeling, Drying Kinetics, and Antioxidant Properties of Bentong Ginger Based on Different Drying Techniques</i>   | <i>Journal of Food Process Engineering</i>                                 |
| Mohd Ashraf bin Ahmad            | Mohd Tumari M.Z., Ahmad M.A., Mohd Rashid M.I.   | <i>A Fractional Order Pid Tuning Tool for Automatic Voltage Regulator Using Marine Predators Algorithm</i>  | <i>Energy Reports</i>  |
| Muhammad Aizzat bin Zakaria      | Vinayak A., Zakaria M.A., Baarath K., Peeie M.H., Ishak M.I.                                   | <i>A Novel Triangular-Based Estimation Technique for Bezier Curve Control Points Generation on Autonomous Vehicle Path Planning for The Roundabout Intersection</i> | <i>Journal of Intelligent and Robotic Systems: Theory and Applications</i> |
| Ngui Wai Keng                    | Faysal A., Ngui W.K., Lim M.H., Leong M.S.   | <i>Ensemble Augmentation for Deep Neural Networks Using 1-D Time Series Vibration Data</i>  | <i>Journal of Vibration Engineering and Technologies</i>                   |
| Asnul Hadi bin Ahmad             | Tajudin M.F.M., Ahmad A.H., Alias J., Razak N.A.A., Alang N.A.                                 | <i>Grain Refinement in Semi-Solid Metal Processing: Current Status and Recent Development</i>   | <i>International Journal of Advanced Manufacturing Technology</i>          |
| Sumaiya bt Zainal Abidin@Murad   | Osazuwa O.U., Zainal Abidin S., Roslan N.A., Fan X., Setiabudi H.D., Vo D.-V.N., Onwudili J.A. | <i>The Role of Catalyst Synthesis on The Enhancement of Nickel Praseodymium (Iii) Oxide for The Conversion of Greenhouse Gases to Syngas</i>                        | <i>Clean Technologies and Environmental Policy</i>                         |



| NAMA PENULIS UTAMA                | NAMA PENULIS BERSAMA  | TAJUK ARTIKEL  | TAJUK JURNAL  |
|-----------------------------------|---|--|---|
| Mohd Yusri bin Mohd Yunus         | Khudhur Abbas Al-Amshawee S., bin Mohd Yunus M.Y., Habib Dakhil I.                | <i>Multilayered Membrane Spacer: Does It Enhance Solution Mixing?</i>  | <i>Journal of Chemical Technology and Biotechnology</i> |
| Nur Hidayah binti Mat Yasin       | Yasin N.H.M., Aziz N.N.C., Azmai M.B.A., Hanapi M.F.M.                            | <i>Transesterification Method of Microalgae Biomass to Produce Fatty Acid Methyl Esters</i>  | <i>Journal of Chemical Technology and Biotechnology</i> |
| Rohaida binti Che Man             | Man R.C., Manas N.H.A., Illias R.M., Mudalip S.K.A., Sulaiman S.Z., Masngut N.    | <i>Enhanced Excretion of Recombinant Cyclodextrin Glucanotransferase and Cell Stability of Immobilized Recombinant Escherichia Coli by Reducing Tryptone Concentration</i> | <i>Journal of Chemical Technology and Biotechnology</i> |
| Siti Kholijah binti Abdul Mudalip | Hashim N.A., Mudalip S.K.A., Man R.C., Sulaiman S.Z.                              | <i>Menhaden Fish Oil Encapsulation by Spray Drying Process: Influence of Different Biopolymer Materials, Inlet Air Temperature and Emulsion Ratios</i>                     | <i>Journal of Chemical Technology and Biotechnology</i> |
| Sumaiya bt Zainal Abidin@Murad    | Hidayah N.N., Roslan N.A., Osazuwa O.U., Cuong Nguyen V., Zainal Abidin S.        | <i>Adsorptive Capacity and Kinetic Studies of Pk216 Resin for The Extraction of PR, GD, and DY Rare Earth Elements</i>   | <i>Journal of Chemical Technology and Biotechnology</i> |
| Rasidi bin Roslan                 | Hussain N.I.A.M., Salim N., Mustapha S.N.H., Misnor I.I., Rahim M.H.A., Roslan R. | <i>Lignocellulose Biomass Delignification Using Acid Hydrotrope As Green Solvent: A Mini-Review</i>  | <i>Cellulose Chemistry and Technology</i>               |
| Azrina binti Abd Aziz             | Monir M.U., Aziz A.A., Karim K.M.R., Khatun F., Tarek M., Yousuf A., N. Vo D.-V.  | <i>Catalytic Gasification of Empty Palm Fruit Bunches Using Charcoal and Bismuth Oxide for Syngas Production</i>   | <i>Topics in Catalysis</i>                              |



# MENJULANG ILHAM KEJAYAAN

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Cendekia Bitara '23

| NAMA PENULIS UTAMA            | NAMA PENULIS BERSAMA  | TAJUK ARTIKEL   | TAJUK JURNAL  |
|-------------------------------|---|---|---|
| Yudi Fernando                 | Fernando Y., Wahyuni-Td I.S., Zainul Abideen A., Mergeresa F.                                     | <i>Traceability Technology, Halal Logistics Brand and Logistics Performance: Religious Beliefs and Beyond</i>                                 | <i>Journal of Islamic Marketing</i>                               |
| Yudi Fernando                 | Fernando Y., Ahmad Jasmi M.F., Wahyuni-Td I.S., Mergeresa F., Khamis K.A., Fakhrorazi A., Omar R. | <i>Supply Chain Integration and Halal Frozen Meat Product Returns</i>   | <i>Journal of Islamic Marketing</i>                               |
| Jose Rajan                    | Roslee A.E., Nik Mohamed N.A., Thamburaja P., Jose R.   | <i>A Generalized Thermophysical Model for Materials from Molecular Clusters to Bulk Crystals</i>  | <i>Physica B: Condensed Matter</i>                                |
| Mahendran a/l Samykano        | Kumaresan R., Samykano M., Kadrigama K., Pandey A.K., Rahman M.M.                                 | <i>Effects of Printing Parameters on The Mechanical Characteristics and Mathematical Modeling of FDM-Printed PETG</i>                         | <i>International Journal of Advanced Manufacturing Technology</i> |
| Syed Mohd Saufi bin Tuan Chik | Rajendaren V., Saufi S.M., Zahari M.A.K.M.  | <i>Effect of Spinning Parameter on The Properties and Performance of Hollow Fiber Supported Liquid Membrane for Levulinic Acid Extraction</i> | <i>Korean Journal of Chemical Engineering</i>                     |
| Rahimah binti Embong          | Al Bijawi M.I., Embong R., Tayeh B.A.   | <i>A Review of The Role of Glass Waste on The Fresh and Mechanical Properties of Concrete As An Environmentally Friendly Materials</i>        | <i>Innovative Infrastructure Solutions</i>                        |
| Rahimah binti Jusoh@Awang     | Bing Kho Y., Jusoh R., Zuki Salleh M., Hisyam Ariff M., Zainuddin N.                              | <i>Magnetohydrodynamics Flow of Ag-Tio2 Hybrid Nanofluid Over A Permeable Wedge with Thermal Radiation and Viscous Dissipation</i>            | <i>Journal of Magnetism and Magnetic Materials</i>                |



| NAMA PENULIS UTAMA         | NAMA PENULIS BERSAMA  | TAJUK ARTIKEL  | TAJUK JURNAL                                      |
|----------------------------|---|--|---|
| JuliaWati binti Alias      | Mohamed N.S., Alias J., Johari N.A., Alang N.A., Ahmad A.H.           | <i>Development of Smart Self-Healing Coating for The Corrosion Protection of Magnesium Alloys: A Brief Review</i>                        | <i>Journal of Adhesion Science and Technology</i> |
| Ahmad Salihin bin Samsudin | Mazuki N.F., Khairunnisa K., Saadiah M.A., Kufian M.Z., Samsudin A.S. | <i>Ionic Transport Study of Hybrid Gel Polymer Electrolyte Based on Pmma-Pla Incorporated with Ionic Liquid</i>                          | <i>Ionics</i>                                     |
| Norhaida binti Ab. Razak   | Roslin M.A.A., Ab Razak N., Alang N.A., Sazali N.                     | <i>Numerical Simulation of P91 Steel Under Low-Cycle-Fatigue Loading</i>   | <i>Journal of Failure Analysis and Prevention</i> |
| Mohd Shamil bin Shaari     | Chin F.Y., Shaari M.S., Takahashi A., Akramin M.R.M., Urai S.         | <i>Fatigue Crack Growth Behavior of Alsi10mg Material Produced by Direct Metal Laser Sintering Using S-Version Finite Element Method</i> | <i>Journal of Failure Analysis and Prevention</i> |
| Mohd Ruzaimi bin Mat Rejab | Yusof Z., Rejab M.R.M., Ma Q.   | <i>Leaked Pipeline Reinforced with Composite Wrapping Under Cyclic Operation Loading</i>   | <i>Journal of Failure Analysis and Prevention</i> |
| Aizat bin Alias            | Razak N.S.A., Alias A., Mohsan N.M., Masjuki S.A.                     | <i>Numerical Investigation of The Failure of Stiffened Steel Plates Subjected to Near-Field Blast Loads</i>                              | <i>Journal of Failure Analysis and Prevention</i> |
| Mohd Ruzaimi bin Mat Rejab | Ma Q., Rejab M.R.M., Hassan S.A., Azeem M., Saffirna M.S.             | <i>Failure Behavior Analysis of The Spherical-Roof Contoured Core (Srcc) Under Quasi-Static Loading: A Numerical Study</i>               | <i>Journal of Failure Analysis and Prevention</i> |



# MENJULANG ILHAM KEJAYAAN

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Cendekia Bitara '23

| NAMA PENULIS UTAMA          | NAMA PENULIS BERSAMA   | TAJUK ARTIKEL   | TAJUK JURNAL                                      |
|-----------------------------|--|---|---|
| Nasrul Azuan bin Alang      | Ferdous I.U., Alang N.A., Alias J., Ahmad A.H., Mohd Nadzir S.                         | <i>Rupture Life and Failure Mechanism of Grade 91 Steel Under The Influence of Notch Constraint</i>   | <i>Journal of Failure Analysis and Prevention</i> |
| Juliawati binti Alias       | Alias J., Alang N.A., Ahmad A.H., Razak N.A.   | <i>Failure Analysis of A Carbon Steel Pipe-Flange Component</i>   | <i>Journal of Failure Analysis and Prevention</i> |
| Hanida binti Abdul Aziz     | Mohamed M.M., Abdul Aziz H., Abdul Manaf N., Lian See T.                               | <i>Semi-Quantitative Chemical Expert Tool for Occupational Safety and Health (Use and Standards of Exposure of Chemicals Hazardous to Health) Regulations 2000</i>            | <i>Acs Chemical Health and Safety</i>             |
| Mohamad Firdaus bin Basrawi | Abdul Halim L., Basrawi F., Md Yudin A.S., Mohd Azman N.A., Oumer A.N., Abd Razak S.B. | <i>Pulsation-Assisted Fluidised Bed Drying of Heat-Sensitive and Sticky Materials: Effect of Basic Parameter, and Pulsation-Specific Parameter</i>                            | <i>Particulate Science and Technology</i>         |
| Siti Zanariah binti Satari  | Zulkipli N.S., Satari S.Z., Hariri F., Abdullah N.A., Wan Yusoff W.N.S., Hussin A.G.   | <i>Cranial Morphology Associated with Syndromic Craniosynostosis: A Potential Detection of Abnormality in Patient's Cranial Growth Using Angular Statistics</i>               | <i>Cleft Palate Craniofacial Journal</i>          |
| Gaanty Pragas a/l Maniam    | Ma'arof N.A.N.B., Hindryawati N., Khazaai S.N.M., Bhuyar P., Rahim M.H.A., Maniam G.P. | <i>Exploitation of Cost-Effective Renewable Heterogeneous Base Catalyst from Banana (<i>Musa Paradisiaca</i>) Peel for Effective Methyl Ester Production from Soybean Oil</i> | <i>Applied Nanoscience (Switzerland)</i>          |



| NAMA PENULIS UTAMA         | NAMA PENULIS BERSAMA   | TAJUK ARTIKEL   | TAJUK JURNAL                                    |
|----------------------------|--|---|---|
| Zulhelmi bin Ismail        | Abdullah A.H., Ismail Z.   | <i>Butterfly Pea Flower As A Stabilizer for Shear Exfoliated Graphene: Green Material for Motion Monitoring and Morse Code Sensor</i>                                       | <i>Applied Nanoscience (Switzerland)</i>        |
| Herma Dina binti Setiabudi | Hasan R., Mohd Zaki R.S.R., Setiabudi H.D., Jusoh R., Jalil A.A., Shokouhimehr M.  | <i>Intensified PB(ii) Adsorption Using Functionalized Kcc-1 Synthesized from Rice Husk Ash in Batch and Column Adsorption Studies</i>                                       | <i>Applied Nanoscience (Switzerland)</i>        |
| Mohd Ruzaimi bin Mat Rejab | Ma Q., Merzuki M.N.M., Rejab M.R.M., Sani M.S.M., Zhang B.   | <i>A Review of The Dynamic Analysis and Free Vibration Analysis on Fiber Metal Laminates (FMLS)</i>   | <i>Functional Composites and Structures</i>     |
| Agi Augustine Aja          | Musa M.S.M., Agi A., Nwaichi P.I., Ridzuan N., Mahat S.Q.A.B.  | <i>Simulation Study of Polymer Flooding Performance: Effect of Salinity, Polymer Concentration in The Malay Basin</i>   | <i>Geoenergy Science and Engineering</i>        |
| Agi Augustine Aja          | Agi A., Jaafar M.Z., Majid Z.A., Saidina Amin N.A., Sidek M.A., Yakasai F., Ahmad Zaini M.A., Mohd Faizal A.N., Gbadamosi A., Sirajo L., Oseh J., Ridzuan N., Ngouangna E. | <i>Dynamic Modelling of Reservoir Fines Retention by Mesoporous Silica Nanofluid to Improve Oil Recovery During Low Salinity Water Flooding of A Consolidated Sandstone</i> | <i>Geoenergy Science and Engineering</i>        |
| Fatmawati binti Adam       | Ramli N.A., Adam F., Mohd Amin K.N., Nor A.M., Ries M.E.   | <i>Evaluation of Mechanical and Thermal Properties of Carrageenan/Hydroxypropyl Methyl Cellulose Hard Capsule</i>   | <i>Canadian Journal of Chemical Engineering</i> |
| Cheng Jack Kie             | Cheng J.K., Mohamad F., Tamyez P.F.M., Kamaruzzaman Z.A., Zainudin M.M., Zulkipli F.   | <i>Evaluation of The Effectiveness of Government Intervention Strategies to Control and Prevent Covid-19 in Malaysia by Systems Thinking</i>                                | <i>Public Administration and Policy</i>         |



| NAMA PENULIS UTAMA               | NAMA PENULIS BERSAMA   | TAJUK ARTIKEL   | TAJUK JURNAL  |
|----------------------------------|--|---|---|
| Anwar bin P.P. Abdul Majeed      | Musa R.M., Abdul Majeed A.P.P., Suhaimi M.Z., Abdullah M.R., Mohd Razman M.A., Abdelhakim D., Abu Osman N.A. | <i>Identification of High-Performance Volleyball Players from Anthropometric Variables and Psychological Readiness: A Machine-Learning Approach</i> | <i>Proceedings of The Institution of Mechanical Engineers, Part P: Journal of Sports Engineering and Technology</i> |
| Siti Noor Hidayah binti Mustapha | Mohamad Isa M.I., Mustapha S.N.H.  | <i>Enhanced Hydrophobic Performance of UV-Curable Palm Oil Polyurethane by Fluoroacrylate Monomer</i>   | <i>International Journal of Polymer Analysis and Characterization</i>   |
| Abdul Rahimi bin Abdul Rahman    | Farouk A.M., Rahman R.A., Romali N.S.  | <i>Non-Revenue Water Reduction Strategies: A Systematic Review</i>  | <i>Smart and Sustainable Built Environment</i>  |
| Nor Khonisah binti Daud          | Daud N.K., Muthiyah D.   | <i>Adsorption of Co2 on Activated Carbon, Fe-Based Metal Organic Framework, ZNO, and CAO for Carbon Capture and Storage Application</i>             | <i>Chemical Engineering and Technology</i>  |
| Nurul Aini binti Mohd Azman      | Subramaniam S.D., Wan Yahaya W.A., Mohd Azman N.A., Mohd Arshad Z.I., Basrawi F.                             | <i>Sustainable Carrageenan/Nanocomposite Films Incorporated with Optimized Zingiber Officinale Extracts for Active Packaging Systems</i>            | <i>Chemical Engineering and Technology</i>  |
| Herma Dina binti Setiabudi       | Rajendran Y., Abdulkadir B.A., Jun L.N., Miskan S.N., Vo D.-V.N., Lim J.W., Setiabudi H.D.                   | <i>Ethylene Glycol Dry Reforming Over La-Co/Al2o3: Optimization and Regeneration Studies</i>  | <i>Chemical Engineering and Technology</i>  |
| Rohaida binti Che Man            | Baharudin N.N.H., Che Man R., Md Illias R., Sulaiman S.Z., Abdul Manas N.H., Wan Azelee N.I.                 | <i>Optimization of The Reaction Parameters of Immobilized Escherichia Coli for B-Cyclodextrin Production</i>  | <i>Chemical Engineering and Technology</i>  |



| NAMA PENULIS UTAMA           | NAMA PENULIS BERSAMA  | TAJUK ARTIKEL  | TAJUK JURNAL                               |
|------------------------------|---|--|--|
| Siti Zubaidah binti Sulaiman | Semawi N.H., Sulaiman S.Z., Mazilan M.S.R., Md Shaarani S., Che Man R., Abdul Mudalip S.K., Mohd Arshad Z.I., Nafsun A.I. | <i>Explosion Severity of Rice Dust in A Spherical System</i>   | <i>Chemical Engineering and Technology</i> |
| Hamidah binti Abdullah       | Tarek M., Atta M., Shukor M.Z., Abdullah H., Khan M.R.  | <i>Highly Effective B@G-C<sub>3n</sub>4/Polyaniline Nanoblend for Photoelectrocatalytic Reduction of Co<sub>2</sub> to Methanol</i>  | <i>Chemical Engineering and Technology</i> |
| Chin Sim Yee                 | Chin S.Y., Lim S.F., Lau K.K., Thangavel M., Kamaruzaman M.R.   | <i>Iron-Based Nanoparticles Oxygen Scavenger for Suppressing Heat-Stable Salts Formation in Amine</i>  | <i>Chemical Engineering and Technology</i> |
| Ahmad Salihin bin Samsudin   | Khan N.M., Kufian M.Z., Samsudin A.S.   | <i>The Correlation of Free Ions with The Conduction Phase of 1-Ethyl-3-Methylimidazolium Chloride in Gel Polymer Electrolyte-Based PMMA/Pla Blend Doped with LIBOB</i>   | <i>Journal of Electronic Materials</i>     |
| Ahmad Salihin bin Samsudin   | Samsudin A.S., Suhami N.S., Ghazali N.M.  | <i>The Correlation of Li<sup>+</sup> Carrier Towards Immittance Conduction Properties on Alginate-Pva-Lino<sub>3</sub> Complexes-Based Solid Polymer Electrolytes System</i>   | <i>Journal of Electronic Materials</i>     |
| Siti Zanariah binti Satari   | Mutalib S.S.S.A., Satari S.Z., Yusoff W.N.S.W.  | <i>A New Single Linkage Robust Clustering Outlier Detection Procedures for Multivariate Data</i><br>(Suatu Prosedur Baharu Pengesahan Data Terpencil Berasaskan Pengelompokan Rangkaian Tunggal Teguh Bagi Data Multivariat) | Sains Malaysiana                           |



# MENJULANG ILHAM KEJAYAAN

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Majlis Anugerah  
Cendekia Bitara '23

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|---------------------------------|--|--|---|
| Sumaiya Bt Zainal Abidin@ Murad | Rosli S.N.A., Othman N.H., Nguyen V.C., Zainal Abidin S.       | <i>Synergistic Syngas Production: Needleless Electrospinning Synthesis of Co/CeO<sub>2</sub>-La<sub>2</sub>O<sub>3</sub> Catalyst for Efficient Dry Reforming of Methane</i> | <i>Chemical Engineering and Technology</i>              |
| Mohd Helmi bin Suid             | Suid M.H., Ahmad M.A.  | <i>A Novel Hybrid of Nonlinear Sine Cosine Algorithm and Safe Experimentation Dynamics for Model Order Reduction</i>   | Automatika  |
| Natanamurugaraj Govindan        | Nithin B.R., Bhuyar P., Maniam G.P., Rahim M.H.A., Govindan N. | <i>Environment Friendly Approach for Plant Mediated Green Biosynthesis of Gold Nanoparticles and Their Modern Applications in Biomedical Aspects—An Updated Report</i>       | <i>Bionanoscience</i>                                   |
| Mohd Ashraf bin Ahmad           | Tumari M.Z.M., Ahmad M.A., Suid M.H., Ghazali M.R., Saat S.    | <i>Data-Driven Fractional-Order PID Controller Tuning for Liquid Slosh Suppression Using Marine Predators Algorithm</i>  | <i>Traitement Du Signal</i>                             |
| Abdul Rahimi bin Abdul Rahman   | Tan C.Y.M., Rahman R.A.  | <i>Well Building: Key Design Features for Office Environments</i>  | <i>Journal of Architectural Engineering</i>             |
| Asnul Hadi bin Ahmad            | Megalingam A., Ahmad A.H., Alang N.A., Alias J., Razak N.A.A.  | <i>Application of Response Surface Methodology for Parameter Optimization of Aluminum 7075 Thixoforming Feedstock Billet Production</i>                                      | <i>Journal of Materials Engineering and Performance</i> |



| NAMA PENULIS UTAMA              | NAMA PENULIS BERSAMA  | TAJUK ARTIKEL   | TAJUK JURNAL   |
|---------------------------------|---|---|--|
| Arman bin Abdullah              | Albarqouni Y., Banius E., Bakar N.H.A., Abdullah A.                     | <i>Uncovering Intelligent Self-Healing Coating: Synthesis Strategies, Performance, and Evaluation Techniques – A Review</i>             | <i>International Journal of Corrosion and Scale Inhibition</i> |
| Norhayati binti Abdullah        | Azimi A.Z.C., Abdullah N., Adam F., Hassan Z., Rahman S.A., Noor M.Z.M. | <i>The Simulation of Intermolecular Interactions of Carboxylic and Amine Groups with Calcium Carbonate</i>                              | <i>Jurnal Teknologi Sciences &amp; Engineering</i>             |
| Mohd Azmir bin Arifin           | Azahar N.I., Mokhtar N.M., Mahmood S., Aziz M.A.A., Arifin M.A.         | <i>Evaluation of Piper Betle L. Extracts and Its Antivirulence Activity Towards P. Aeruginosa</i>                                       | <i>Jurnal Teknologi Sciences &amp; Engineering</i>             |
| Mohd Hafizi bin Zohari          | Hafizi Z.M., Ibrahim I.N., Vorathin E.                                  | <i>Delamination Detection in Thin-Walled Composite Structures Using Acoustic Pitch-Catch Technique with Fiber Bragg Grating Sensors</i> | <i>Jurnal Teknologi Sciences &amp; Engineering</i>             |
| Rohaida binti Che Man           | Baharudin N.N.H., Man R.C., Manas N.H.A., Ahmad R.A., Zakaria N.N.M.    | <i>Cell Immobilization for Cyclodextrin Production: Mini Review</i>   | <i>Jurnal Teknologi Sciences &amp; Engineering</i>             |
| Ku Muhammad Na'im bin Ku Khalif | Alam N.M.F.H.N.B., Khalif K.M.N.K., Jaini N.I.                          | <i>Application of Intuitionistic Z-Numbers in Supplier Selection</i>  | <i>Intelligent Automation and Soft Computing</i>               |
| Norazaliza binti Mohd Jamil     | Husnin S.A.M., Mohd Jamil N., Basit K.S.A., Muhammad N.                 | <i>Campus Reopening During The Covid-19: Ode-Sird Model</i>   | <i>Journal of Engineering Science and Technology</i>           |



# MENJULANG ILHAM KEJAYAAN

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Majlis Anugerah  
Cendekia Bitara '23

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|-----------------------------------|---|---|--|
| Siti Kholijah binti Abdul Mudalip | Hashim N.A., Mudalip S.K.A., Arshad Z.I.M., Man R.C.                      | <i>Evaluation of Feed Flow Rate on The Physicochemical Properties of Fish Oil Microcapsules</i>   | <i>Journal of Engineering Science and Technology</i> |
| Roshahliza binti M Ramli          | Osman M.A., Ramli R.M., Mokhtar N.M., Mohd Shamsuddin P.N.F., Jabbar W.A. | <i>Solar-Powered Parallel Irrigation with IoT Monitoring System</i>   | <i>Journal of Engineering Science and Technology</i> |
| Nor Hanuni binti Ramli@Said       | Ramli N.H., Hisham N.E.B., Baharulrazi N.                                 | <i>The Effectiveness of Rice Husk Ash As Additive in Palm Oil-Based Compost in Enhancing The Nitrogen Uptake by Brassica Oleracea Var. Alboglabra L. (Chinese Kale) Plant</i> | Pertanika Journal of Tropical Agricultural Science   |
| Farah Hanani binti Zulkifli       | Bakhiet E., Mohamat Johari N.F.I., Jahir Hussain F.S., Zulkifli F.H.      | <i>Biomineralization of Carboxymethyl Cellulose-Sodium Alginate Infused with Cellulose Nanocrystals for Bone Regeneration</i>   | <i>Journal of Bioactive and Compatible Polymers</i>  |
| Mohd Fadhlhan bin Mohd Yusof      | Aleem S.A.A., Yusof M.F.M., Quazi M., Halil M.A., Ishak M.                | <i>Mel-Frequency Cepstral and Spectral Flux Analysis of The Acoustic Signal for Real-Time Status Monitoring of Laser Cleaning</i>   | <i>Materials Research Express</i>                    |
| Ngui Wai Keng                     | Keng N.W., Leong M.S., Shapiai M.I., Hee L.M.                             | <i>Blade Fault Localization with The Use of Vibration Signals Through Artificial Neural Network: A Data-Driven Approach</i>   | Pertanika Journal of Science and Technology          |



| NAMA PENULIS UTAMA               | NAMA PENULIS BERSAMA  | TAJUK ARTIKEL   | TAJUK JURNAL   |
|----------------------------------|---|---|--|
| Sharifah Fatiyah binti Symohamad | Hasan N.S.A., Mohamad S., Mohamad S.F.S., Arzmi M.H., Supian N.N.I.                           | <i>Ex-Situ Development and Characterization of Composite Film Based on Bacterial Cellulose Derived from Oil Palm Frond Juice and Chitosan As Food Packaging</i> | <i>Pertanika Journal of Science and Technology</i>     |
| Mohd Aizudin bin Abd Aziz        | Hairunnaja M.A., Aziz M.A.A., Rahman N.W.A., Arifin M.A., Isa K.M., Ali U.F.M.                | <i>Innovative Formulation and Characterisation of Grease Made from Waste Engine Oil</i>   | <i>Pertanika Journal of Science and Technology</i>     |
| Mohd Aizudin bin Abd Aziz        | Hairunnaja M.A., Aziz M.A.A., Bashari N.A.F., Arifin M.A., Nedumaran N., Isa K.M., Ali U.F.M. | <i>The Grease Formulation Using Waste Substances from Palm Oil Refinery and Other Industrial Wastes: A Review</i>   | <i>Pertanika Journal of Science and Technology</i>     |
| Muzamir bin Hasan                | Zaini M.S.I., Hasan M.  | <i>Effect of Optimum Utilization of Silica Fume and Lime on The Stabilization of Problematic Soils</i>  | <i>International Journal of Integrated Engineering</i> |
| Azizuddin bin Abd Aziz           | Ashwindran S.N., Azizuddin A.A., Oumer A.N.   | <i>A Low-Cost Digital Torquemeter Coordinated by Arduino Board</i>  | <i>International Journal of Integrated Engineering</i> |
| Hadi bin Manap                   | Nurulain S., Zawawi M.A., Ramli R.M., Manap H.  | <i>Intensity Stability Comparison Between Different Colors of Laser Pointer</i>   | <i>International Journal of Integrated Engineering</i> |
| Mohd Fakhrurrazi bin Ishak       | Zolkepli M.F., Ishak M.F., Daud S.  | <i>The Application of Unmanned Aerial Vehicle (UAV) for Slope Mapping for Gambang Damai Residents, Pahang: A Case Study</i>                                     | <i>International Journal of Integrated Engineering</i> |



# MENJULANG ILHAM KEJAYAAN

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Majlis Anugerah  
Cendekia Bitara '23

| NAMA PENULIS UTAMA            | NAMA PENULIS BERSAMA  | TAJUK ARTIKEL  | TAJUK JURNAL   |
|-------------------------------|---|--|--|
| Nur Farhayu binti Ariffin     | Nasrudin N.N., Ariffin N.F., Alias A., Hasim A.M., Zaimi M.N.S.     | <i>Experimental Validation of Reinforced Concrete Beam Incorporating Coal Fly Ash and Coal Bottom Ash Using Numerical Analysis</i> | <i>International Journal of Integrated Engineering</i> |
| Saffuan bin Wan Ahmad         | Kee T.K., Cheok C.J., Amzar Kamarudin M.A., Ahmad S.W., Suryanti R. | <i>Seismic Effect of The Offshore Structure Under Different Earthquake Loadings</i>  | <i>International Journal of Integrated Engineering</i> |
| Mohd Irwan bin Adiyanto       | Roslan H.A., Zulkhibri N.S., Faisal A., Adiyanto M.I.               | <i>Cost Estimation of Structural Work for Residential Building with Seismic Design Consideration</i>                               | <i>International Journal of Integrated Engineering</i> |
| Abdul Rahimi bin Abdul Rahman | Radzi A.R., Rahman R.A., Alias A.R., Almutairi S.                   | <i>Validating The Impact of Psychological, Physical and Social Factors on Workplace Well-Being for Construction Sites</i>          | <i>International Journal of Integrated Engineering</i> |
| Ahmad Salihin bin Samsudin    | Mazuki N.F., Samsudin A.S.B.  | <i>Effect Emimcl on Electrochemical Properties Based Pmma-Pla Hybrid Gel Polymer Electrolyte</i>                                   | <i>Molecular Crystals and Liquid Crystals</i>          |
| Mohd Bijarimi bin Mat Piah    | Piah M.B.M., Ahmad M.N., Abdullah E.N., Muzakkar M.Z.               | <i>Modifications of Poly(Lactic Acid) with Blends and Plasticization for Tenacity and Toughness Improvement</i>                    | <i>Indonesian Journal of Chemistry</i>                 |
| Musfirah binti Abdul Hadi     | Mohd Noor N.D., Hadi M.A.   | <i>Study of Tool Wear Progression Using Nano-Hybrid Cryogenic MQL in Milling Titanium Alloy</i>                                    | <i>Jurnal Tribologi</i>                                |



| NAMA PENULIS UTAMA               | NAMA PENULIS BERSAMA   | TAJUK ARTIKEL   | TAJUK JURNAL  |
|----------------------------------|--|---|---|
| Mohd Ali Hanafiah bin Shaharudin | Shaharudin M.A.H., Yusoff A.R.M.   | <i>Using Finite Element Simulation to Investigate The Effect of Cutting Edge Radius on Burr Formation for Inclined Dimple Milling Operation</i> | <i>Jurnal Tribologi</i>   |
| Gusman Nawair                    | Mohd Aripin N., Nawair G., Mahmud F., Ashraf Fauzi M., Hussain S., Lee K.L.          | <i>Systematic Literature Review: Theory Perspective in Lean Manufacturing Performance</i>   | <i>Management Systems in Production Engineering</i>                   |
| Mohd Mawardi bin Saari           | Saari M.M., Nadzri N.A., Zaini M.A.H.P., Sulaiman M.H., Kiwa T.                      | <i>A Circular Eddy Current Probe Using Miniature Fluxgates for Multi-Orientation Slit Evaluation in Steel Components</i>                        | <i>Russian Journal of Nondestructive Testing</i>                      |
| Ahmad Firdaus bin Zainal Abidin  | Kamarudin N.K., Firdaus A., Zabidi A., Ernawan F., Hisham S.I., Ab Razak M.F.        | <i>Android Malware Detection Using PMCC Heatmap and Fuzzy Unordered Rule Induction Algorithm (FURIA)</i>  | <i>Journal of Intelligent and Fuzzy Systems</i>                       |
| Nurizzatul Atikha binti Rahmat   | Fitriady M.A., Rahmat N.A., Mohammad A.F.  | <i>Vertical and Spanwise Wake Flow Structures of A Single Spire Over Smooth Wall Surface in A Wind Tunnel</i>                                   | <i>Journal of Applied Fluid Mechanics</i>                             |
| Mahadzir bin Ishak@ Muhammad     | Zul M.H., Ishak M., Nasir R.M., Aimani M.H., Quazi M.M.                              | <i>Effect of Laser-Textured Surface of Ti6Al4v on Frictional Wear Behavior</i>  | <i>International Journal of Automotive and Mechanical Engineering</i> |
| Mahendran a/l Samykano           | Yadav A., Samykano M., Pandey A.K., Tyagi V.V., Devarajan R., Sudhakar K., Noor M.M. | <i>A Systematic Review on Bio-Based Phase Change Materials</i>  | <i>International Journal of Automotive and Mechanical Engineering</i> |



# MENJULANG ILHAM KEJAYAAN

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Majlis Anugerah  
Cendekia Bitara '23

| NAMA PENULIS UTAMA                     | NAMA PENULIS BERSAMA   | TAJUK ARTIKEL  | TAJUK JURNAL  |
|--|--|--|---|
| Mahendran a/l Samykano                 | Rajamony R.K., Samykano M., Pandey A.K., Babu S.R., Noor M.M., Ramasamy D., Paw J.K.S., Natarajan S.K. | <i>Investigation on Thermophysical Properties of Multi-Walled Carbon Nanotubes Enhanced Salt Hydrate Phase Change Material</i>               | <i>International Journal of Automotive and Mechanical Engineering</i> |
| Mohd Hasnun Arif bin Hassan            | Radzuan N.Q., Hassan M.H.A., Omar M.N., Othman N.A., Radzi M.A.M., Kassim K.A.A.                       | <i>The Effect of Motorcycle Helmet Type on Head Response in Oblique Impact</i>   | <i>International Journal of Automotive and Mechanical Engineering</i> |
| Siti Rabiatull Aisha binti Idris       | Idris S.R.A., Mazelan M.N.   | <i>Effect of Microwave Hybrid Heating on Mechanical Properties and Microstructure of Sn3.0ag0.5cu/Cu Solder Joints</i>                       | <i>International Journal of Automotive and Mechanical Engineering</i> |
| Wan Muhammad Noor Sarbani bin Mat Daud | Daud S., Hamidi M.A., Mamat R., Nafiz D.M.   | <i>A Prediction of Graphene Nanoplatelets Addition Effects on Diesel Engine Emissions</i>  | <i>International Journal of Automotive and Mechanical Engineering</i> |
| Mohd Hafizi bin Zohari                 | Loman M., Hafizi Z.M., Lamin F.  | <i>High-Cycle Fatigue Life Behaviour of Fabricated Glass Fibre-Reinforced Polymer</i>  | <i>International Journal of Automotive and Mechanical Engineering</i> |
| Muhammad Ammar bin Nik Mu'tasim        | Mutasim M.A.N., Rashid M.F.F.A.  | <i>Hybrid Flow Shop Scheduling Problem with Energy Utilization Using Non-Dominated Sorting Genetic Algorithm-III (NSGA-III) Optimization</i> | <i>International Journal of Automotive and Mechanical Engineering</i> |
| Mohamad Heerwan bin Peeie              | Heerwan P.M., Shahrom M.A., Ishak M.I., Kato H., Narita T.   | <i>Investigation of The Performance of Plugging Braking System As A Hill Descent Control (HDC) for Electric-Powered Wheelchair</i>           | <i>International Journal of Automotive and Mechanical Engineering</i> |



| NAMA PENULIS UTAMA                   | NAMA PENULIS BERSAMA   | TAJUK ARTIKEL  | TAJUK JURNAL  |
|--------------------------------------|--|--|---|
| Muhammad Hatifi bin Mansor           | Mansor M.H., Sani M.S.M., Hassan M.F.  | <i>Eigenfrequency Shift of Piezoelectric Backplate in Vibro-Acoustic Energy Harvesting</i>   | <i>International Journal of Automotive and Mechanical Engineering</i> |
| Muhammad Hilmi bin Jalil             | Azmi M.S., Izham M.M., Jalil M.H., Mazlan M.H.   | <i>Ct-Fea of Inhomogeneous Lumbar with Different Loadings of The Spinal Cage</i>   | <i>International Journal of Automotive and Mechanical Engineering</i> |
| Mohd Zairulnizam bin Mohd Zawawi     | Shian H.L.M., Ishak I., bin Mohd Zawawi M.Z.   | <i>Rapid Fabrication of Glass Micro and Nanostructures Via Laser-Assisted Hot Embossing</i>  | <i>Journal of Laser Micro Nanoengineering</i>                         |
| Fazeeda Bt. Mohamad                  | Yusoff F.A.M., Mohamad F., Tamyez P.F.M., Panatik S.A.                                   | <i>Do I Need to Use It? Factors Influencing The Intention to Adopt Automated Parcel Lockers As Last-Mile Delivery Services</i>     | <i>Acta Logistica</i>   |
| Mohd Fadhlizil Fasihi bin Mohd Aluwi | Miah R., Voon K.W.K., Hug A.K.M.M., Rullah K., Tajuddin S.N., Hamid H.A., Aluwi M.F.F.M. | <i>Pharmacophore-Based Molecular Docking of Usnic Acid Derivatives to Discover Anti-Viral Drugs Against Influenza A Virus</i>      | <i>Journal of Research in Pharmacy</i>                                |
| Nadiya binti Haji Abd. Halim         | Al-Japairai K.A., Mahmood S., Abdul-Halim N., Almurisi S.H.                              | <i>A New and Rapid UV-Visible Spectrophotometric Method for Benidipine Hydrochloride Determination: Development and Validation</i> | <i>Pharmaceutical Chemistry Journal</i>                               |



# MENJULANG ILHAM KEJAYAAN

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Majlis Anugerah  
Cendekia Bitara '23

| NAMA PENULIS UTAMA           | NAMA PENULIS BERSAMA   | TAJUK ARTIKEL   | TAJUK JURNAL  |
|------------------------------|--|---|---|
| Aizi Nor Mazila binti Ramli  | Ramli A.N.M., Yusof S., Bhuyar P., Aminan A.W., Tajuddin S.N.                          | <i>An Its Gene-Mediated Molecular Detection of Fungi Associated with Natural and Artificial Agarwood from Aquilaria Malaccensis</i>                     | <i>Journal of Microbiology, Biotechnology and Food Sciences</i>                     |
| Mohd Zamri bin Ibrahim       | Saealal M.S., Ibrahim M.Z., Yakno M., Arshad N.W.                                      | <i>Three-Dimensional Convolutional Approaches for The Verification of Deepfake Videos: The Effect of Image Depth Size on Authentication Performance</i> | <i>Journal of Advances in Information Technology</i>                                |
| Muzamir bin Hasan            | Zaini M.S.I., Hasan M.   | <i>Effects of Industrial and Agricultural Recycled Waste Enhanced with Lime Utilisation in Stabilising Kaolinitic Soil</i>                              | <i>International Journal of Sustainable Construction Engineering and Technology</i> |
| Zahian Ismail                | Islam M.S., Ameedeen M.A.B., Ajra H., Ismail Z.B.                                      | <i>Blockchain-Enabled Secure Privacy-Preserving System for Public Health-Center Data</i>  | <i>International Journal of Advanced Computer Science and Applications</i>          |
| Suryanti binti Awang         | Miah M.B.A., Awang S., Rahman M.M., Hosen A.S.M.S.                                     | <i>Keyphrase Distance Analysis Technique from News Articles As A Feature for Keyphrase Extraction: An Unsupervised Approach</i>                         | <i>International Journal of Advanced Computer Science and Applications</i>          |
| Mohd Akramin bin Mohd Romlay | Husnain M.M.N., Akramin M.R.M., Shaari M.S., Takahashi A., Bashiri A.H., Alshoabi A.M. | <i>Comparison of Monte Carlo and Bootstrap Analyses for Residual Life and Confidence Interval</i>   | <i>Materials Science- Poland</i>  |



| NAMA PENULIS UTAMA               | NAMA PENULIS BERSAMA  | TAJUK ARTIKEL   | TAJUK JURNAL  |
|----------------------------------|---|---|---|
| Mohd Ikhwan bin Muhammad Ridzuan | Mohd Fauzi N.F., Roslan N.N.R., Muhammad Ridzuan M.I.       | <i>Reliability Performance of Distribution Network by Various Probability Distribution Functions</i>  | <i>International Journal of Electrical and Computer Engineering</i> |
| Mohammad Fadhil bin Abas         | Ann N.Q., Pebrianti D., Abas M.F., Bayuaji L.               | <i>Automated-Tuned Hyper-Parameter Deep Neural Network by Using Arithmetic Optimization Algorithm for Lorenz Chaotic System</i>   | <i>International Journal of Electrical and Computer Engineering</i> |
| Hajar Fauzan bin Ahmad           | Musa S.M., Siew S.W., Tay D.D., Ahmad H.F.                  | <i>Near-Complete Whole-Genome Sequence of Paenibacillus Sp. Nov. Strain J5c2022, A Sucretolerant and Endospore-Forming Bacterium Isolated from Highly Concentrated Sugar Brine</i>  | <i>Microbiology Resource Announcements</i>                          |
| Mohd Mawardi bin Saari           | Aziz Z., Saari M.M., Zaini M.A.H.P., Nadzri N.A., Chin S.Y. | <i>Improved Wireless Led-Based Light Emitters for Photocatalytic Oxidation in A Slurry Annular Reactor [Udoskonalone Bezprzewodowe Emityty Świata Oparte Na Diodach Led Do Fotokatalitycznego Utleniania W Zawiesinowym Pierścieniowym Reaktorze]</i> | <i>Przeglad Elektrotechniczny</i>                                   |
| Addie Irawan bin Hashim          | Irawan A., Azahar M.I.P., Ramli M.S.                        | <i>Pressure Regulation on A Single Finger of Tri-Finger Pneumatic Grasper Robot Using Finite Time and Convergence Prescribed Performance Control</i>  | <i>Przeglad Elektrotechniczny</i>                                   |



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|----------------------------------|---|---|---|
| Nur Syafiqah Fauzan              | Nur Syafiqah Fauzan <sup>1*</sup> , Nur, Alia Farahanin Mohd Tajuddin, Neroshini Thanarajee <sup>1</sup> , Dayana Hazwani Mohd Suadi Nata <sup>2</sup> , Ezrin Hani Sukadarin <sup>3</sup> , Mirta Widia <sup>1</sup> | <i>Risk Factors Associated with Occupational Stress Among Malaysian Construction Professionals</i>  | <i>Makara Journal of Health Research</i>                      |
| Rodziah binti Nazlan             | Busra N.A.N., Nadzmi H., Nazlan R.  | <i>Tailoring The Structural and Optical Properties of Oxychloride Magnesium Tellurite Glass with The Addition of Samarium Ions</i>          | <i>International Journal of Nanoelectronics and Materials</i> |
| Ahmad Mahfuz bin Gazali          | Siew S.W., Kosnin I.N., Zulkifli N.F., Ahmad H.F., Zamri N., Yusof M.F., Gazali A.M.  | <i>Characterization of Bacterial Communities in Prebiotics and Probiotics Treated Shrimp Farms from Kuantan</i>                             | <i>Malaysian Journal of Microbiology</i>                      |
| Mohd Amir Shahlan bin Mohd Aspar | Mohd-Aspar M.A.S., Edros R., Mokhtar S.U., Kamarudin N.   | <i>The Roles of Acidity, Peroxide and Non-Peroxide Compounds in Antibacterial Properties of Malaysian Kelulut, Tualang and Acacia Honey</i> | <i>Malaysian Journal of Microbiology</i>                      |

# Anugerah Perak 23: Kategori Penerbitan Jurnal



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| Mohd Herwan bin Sulaiman           | Sulaiman M.H., Mustaffa Z., Mohd Rashid M.I.  | <i>An Application of Teaching-Learning-Based Optimization for Solving The Optimal Power Flow Problem with Stochastic Wind and Solar Power Generators</i>     | <i>Results in Control and Optimization</i>                         |
| Abdul Rahman bin Mohd Kasim        | Kanafiah S.F.H.M., Kasim A.R.M., Zokri S.M., Arifin N.S., Nordin N.S., Mokhtar M.   | <i>Free Convection Boundary Layer Flow of Brinkman-Viscoelastic Fluid Over A Horizontal Circular Cylinder with Constant Wall Temperature</i>                 | <i>CFD Letters</i>   |
| Mohd Ruzaimi bin Mat Rejab         | Ma Q., Rejab M.R.M., Azeem M., Idris M.S., Rani M.F., Kumar A.P.                    | <i>Axial and Radial Crushing Behaviour of Thin-Walled Carbon Fiber-Reinforced Polymer Tubes Fabricated by The Real-Time Winding Angle Measurement System</i> | <i>Forces in Mechanics</i>   |
| Amir bin Abdul Razak               | Azmi M.A.A., Razak A.A., Tarminzi M.A.S.M., Sharol A.F., Yudin A.S.M., Majid Z.A.A. | <i>Hydrodynamics Investigations of Kaffir Lime Leaves Drying in A Swirling Solar Drying Chamber with Inclined Slotted Angle Air Distributor</i>              | <i>CFD Letters</i>   |
| Zuriani binti Mustaffa             | Mustaffa Z., Sulaiman M.H.  | <i>Stock Price Predictive Analysis: An Application of Hybrid Barnacles Mating Optimizer with Artificial Neural Network</i>                                   | <i>International Journal of Cognitive Computing in Engineering</i> |
| Muhammad Khairul Anuar bin Mohamed | Rosli W.M.H.W., Mohamed M.K.A., Sarif N.M., Mohammad N.F., Soid S.K.                | <i>Boundary Layer Flow of Williamson Hybrid Ferrofluid Over A Permeable Stretching Sheet with Thermal Radiation Effects</i>                                  | <i>CFD Letters</i>   |



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| Ruhil Amal binti Azmuddin      | Azmuddin R.A., Zamin A.A.M., Zahari H., Mokhtar R., Radzi F.A.M., Idris D.N.D. | <i>Analysing Tertiary Students' Reading Proficiency of CEFR Aligned Texts Via Online Discussion Forum in A Learning Management System</i>           | <i>Asian Journal of University Education</i>                                |
| Siti Hajar Noor binti Shaarani | Shamsudin W.N.A.W., Yahya C.K.M.F.C.K., Shaarani S.H.N.                        | <i>Antifungal Activity of Biosynthesized Silver Nanoparticles Mediated by Neem Leaf Extract Against Aspergillus Sp.</i>                             | <i>Biointerface Research in Applied Chemistry</i>                           |
| Mohd Rusllim bin Mohamed       | Deraman A.S., Mohamed M.R., Ibrahim W.I., Leung P.K.                           | <i>Flexible Horizontal Piezoelectric Energy Generator for Sea Wave Applications</i>   | <i>E-Prime - Advances in Electrical Engineering, Electronics and Energy</i> |
| Mohd Herwan bin Sulaiman       | Sulaiman M.H., Mustaffa Z., Saari M.M., Jadin M.S.                             | <i>A Simulation-Metaheuristic Approach for Finding The Optimal Allocation of The Battery Energy Storage System Problem in Distribution Networks</i> | <i>Decision Analytics Journal</i>   |
| Addie Irawan bin Hashim        | Azahar M.I.P., Irawan A., Raja Ismail R.M.T.                                   | <i>Adjustable Convergence Rate Prescribed Performance with Fractional-Order Pid Controller for Servo Pneumatic Actuated Robot Positioning</i>       | <i>Cognitive Robotics</i>   |
| Mohd Herwan bin Sulaiman       | Sulaiman M.H., Mustaffa Z.   | <i>An Application of Improved Salp Swarm Algorithm for Optimal Power Flow Solution Considering Stochastic Solar Power Generation</i>                | <i>E-Prime - Advances in Electrical Engineering, Electronics and Energy</i> |



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| Nurhafizah binti Abu Talip@ Yusof | Khair N.S., Talip Yusof N.A., Wahab Y.A., Bari B.S., Ayob N.I., Zolkapli M.           | <i>Substrate-Integrated Waveguide (Siw) Microwave Sensor Theory and Model in Characterising Dielectric Material: A Review</i>  | <i>Sensors International</i>                                      |
| Saidatul Shima binti Jamari       | Pauzi N., Mohamad S., Ghazali S., Jamari S.S.   | <i>Evaluation of Glucose Reduction for Silver Nanoparticles Synthesis with Nanocrystalline Cellulose Matrix</i>  | <i>Bionanoscience</i>   |
| Ramadhansyah Putra Jaya           | Chong B.W., Othman R., Jaya R.P., Li X., Hasan M.R.M., Abdullah M.M.A.B.              | <i>Meta-Analysis of Studies on Eggshell Concrete Using Mixed Regression and Response Surface Methodology</i>   | <i>Journal of King Saud University - Engineering Sciences</i>     |
| Abdul Rahimi bin Abdul Rahman     | Bunjaridh Y., Rahman R.A., Yusof L.M.   | <i>Digital Twin Production in The Architecture, Engineering, Construction and Operation Industry: Organizational Attributes and Strategies</i>   | <i>Journal of Engineering, Project, and Production Management</i> |
| Abdul Rahimi bin Abdul Rahman     | Saufi M., Yusof L.M., Rahman R.A.   | <i>Complaints and Rectifications During Defect Liability Period: Homebuyer Perspective</i>   | <i>Journal of Engineering, Project, and Production Management</i> |



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| Abdul Rahimi bin Abdul Rahman | Zamani S.H., Rahman R.A., Yusof L.M.  | <i>Well Building: Criteria for Residential Buildings in A Developing Country</i>  | <i>Journal of Engineering, Project, and Production Management</i>           |
| Mohamad Heerwan bin Peeie     | Majuma R., Peeie M.H.B., Ondong K., Abu Hassan O.                           | <i>Investigation of Brake Pad Wear Effect Due to Temperature Generation Influenced by Brake Stepping Count on Different Road Terrains</i>           | <i>Automotive Experiences</i>   |
| Mohamad Ashry bin Jusoh       | Zaini N.A.A.B., Azman I.Z.B., Kiong L.J., Rajan J., Mazwir M.H., Jusoh M.A. | <i>Structural and Electromagnetic Shielding Effectiveness of Carbon-Coated Cobalt Ferrite Nanoparticles Prepared Via Hydrothermal Method</i>        | <i>Progress in Electromagnetics Research C</i>                              |
| Mohd Herwan bin Sulaiman      | Sulaiman M.H., Mohamed A.I., Mustaffa Z.                                    | <i>An Application of Deep Learning for Lightning Prediction in East Coast Malaysia</i>  | <i>E-Prime - Advances in Electrical Engineering, Electronics and Energy</i> |
| Rahimah binti Embong          | Al Bijawi M.I., Embong R., Shubbar A.                                       | <i>Engineering Properties of Self-Compacting Concrete Incorporating Coal Bottom Ash (Cba) As Sustainable Materials for Green Concrete: A Review</i> | <i>Journal of Building Pathology and Rehabilitation</i>                     |
| Anita binti Abdul Rani        | Saad M., Shah N.A., Supian K., Rani A.A., Abidin I.                         | <i>Emotional and Spiritual Quotient for Sustainable Education's Service Quality</i>   | <i>International Journal of Evaluation and Research in Education</i>        |



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| Khairunisa binti Muthusamy  | Tanash A.O., Muthusamy K., Budiea A.M.A., Fauzi M.A., Jokhio G., Jose R. | <i>A Review on The Utilization of Ceramic Tile Waste As Cement and Aggregates Replacement in Cement Based Composite and A Bibliometric Assessment</i>  | <i>Cleaner Engineering and Technology</i>                                   |
| Nurul Hazlina binti Noordin | Noordin N.H., Eu P.S., Ibrahim Z.  | <i>FPGA Implementation of Metaheuristic Optimization Algorithm</i>   | <i>E-Prime - Advances in Electrical Engineering, Electronics and Energy</i> |
| Norazwina binti Zainol      | Zainol N., Aziz N.H., Baharudin A.S.                                     | <i>Influence of Agitation and Solvent Percentage on The Extraction of Phytochemical Compound from <i>Asystasia Gangetica</i></i>                       | <i>Food Chemistry Advances</i>  |
| Wan Azmi bin Wan Hamzah     | Safril, Azmi W.H., Zawawi N.N.M., Ramadhan A.I.                          | <i>Tribology Performance of TiO<sub>2</sub>-SiO<sub>2</sub>/PVC Nanolubricant for Various Binary Ratios for The Automotive Air-Conditioning System</i> | <i>Automotive Experiences</i>   |
| Mohd Riduan bin Ghazali     | Suresh K., Ghazali M.R., Ahmad M.A.B.                                    | <i>Safe Experimentation Dynamics Algorithm for Identification of Cupping Suction Based on The Nonlinear Hammerstein Model</i>                          | <i>Journal of Robotics and Control (JRC)</i>                                |
| Mohamed Ariff bin Ameedeen  | Kamarudin I.E., Ameedeen M.A., Razak M.F.A., Zabidi A.                   | <i>Integrating Edge Computing and Software Defined Networking in Internet of Things: A Systematic Review</i>   | <i>Iraqi Journal for Computer Science and Mathematics</i>                   |
| Norizam bin Sulaiman        | Hasan M.M., Hossain M.M., Sulaiman N.                                    | <i>Fatigue State Detection Through Multiple Machine Learning Classifiers Using EEG Signal</i>  | <i>Applications of Modelling and Simulation</i>                             |

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Universiti Malaysia Pahang Al-Sultan Abdullah (UMPSA) dengan segala sukacitanya merakamkan ucapan setinggi-tinggi penghargaan dan terima kasih kepada semua pihak yang terlibat secara langsung mahupun tidak langsung dalam menjayakan majlis ini.

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## Autograf



# *Majlis Anugerah Cendekia Bitara '23*

Universiti Malaysia Pahang  
Al-Sultan Abdullah  
26600 Pekan  
Pahang, Malaysia

Tel: +609 431 5000  
Faks: +609 431 5555  
E-mel: pro@umpsa.edu.my

[www.umpsa.edu.my](http://www.umpsa.edu.my)



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