



DR. MUHAMMAD AZAN BIN TAMAR JAYA

PENSYARAH UNIVERSITI DS13

CONTACT

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Faculty: Kolej Permata
Insan

SUPERVISION

PhD - Completed: 0, Ongoing: 0

Master - Completed: 0,
Ongoing: 0

AREAS OF EXPERTISE

Ceramics

Separation Technology

Activated Carbon

Thin Film Technologies

ACADEMIC QUALIFICATION

PhD in Kimia (2018)

Master in Kejuruteraan Kimia (2011)

Bachelor in Kejuruteraan (kimia) (2008)

RESEARCH

1. PEMBANGUNAN KESEDARAN, PERKONGSIAN DAN PANDUAN PENDIDIKAN ANAK-ANAK PINTAR BERBAKAT DI RUMAH MELALUI MODUL DAN PENGLIBATAN KOMUNITI DI DAERAH-DAERAH NEGERI SEMBILAN

2025 GERAN PENYELIDIKAN PUSAT TANGGUNGJAWAB (PTJ) ON GOING
CO-RESEARCHER

2. ADSORPTION MECHANISM OF AMMONIA BY POROUS CARBONIZED HOLLOW FIBER POLYMER

2024 GERAN KPT ON GOING MAIN RESEARCHER

3. MATHEMATICS CASE STUDY: SPM TRIAL AND SPM AMONG GIFTED AND TALENTED STUDENTS IN KOLEJ PERMATA INSAN

2024 GERAN PENYELIDIKAN PUSAT TANGGUNGJAWAB (PTJ) ON GOING
CO-RESEARCHER

4. NAQLI APPROACHES ON MATHEMATICAL THINKING AMONG GIFTED AND TALENTED MUSLIM STUDENTS

2024 GERAN PENYELIDIKAN PUSAT TANGGUNGJAWAB (PTJ) ON GOING
CO-RESEARCHER

5. KEBERKESANAN KAEDAH HAFAZAN TEMATIK DENGAN KURIKULUM PENDIDIKAN PINTAR BERBAKAT INTEGRASI NAQLI DAN 'AQLI KEPADA MURID PINTAR BERBAKAT DI KOLEJ GENIUS INSAN

2021

GERAN PENYELIDIKAN KHAS

COMPLETED

CO-RESEARCHER

RESEARCH

6. ADSORPTIVE SEPARATION UTILIZING SURFACE-MODIFIED CLINOPTILOLITE AND ACID-TREATED CLINOPTILOLITE IN TREATING PALM OIL MILL EFFLUENT (POME)

2019 GERAN PENYELIDIKAN USIM COMPLETED MAIN RESEARCHER

7. USIMAKERS (INDUSTRY4WRD - INDUSTRY@UNIVERSITY)

2019 PROJEK REVOLUSI INDUSTRI 4.0 COMPLETED CO-RESEARCHER

PUBLICATION

1. RECENT ADVANCES IN METHYLENE BLUE ADSORPTION USING CLINOPTILOLITE: MECHANISMS, MODIFICATIONS, AND FUTURE PERSPECTIVES

IOP CONFERENCE SERIES: EARTH AND ENVIRONMENTAL SCIENCE

2025 JOURNAL OTHER DATABASE MAIN AUTHOR

2. PROFILING OF TAYAMMUM CLAY PRODUCT IN MALAYSIA BY SPECTROSCOPIC-CHEMOMETRIC APPROACH

PAPER ASIA

2024 JOURNAL SCOPUS CO-AUTHOR

3. COMPARISON OF ADSORPTION CAPACITY BETWEEN PELLETIZED AND POWDERED CLINOPTILOLITE FOR METHYLENE BLUE REMOVAL

5TH INSAN JUNIOR RESEARCHERS INTERNATIONAL CONFERENCE & INNOVATION 2024 (IJURECON 2024)

2024 PROCEEDING NON-INDEX CORRESPONDING AUTHOR

4. HYDROGEN RECOVERY ANALYSES BASED ON LOGSIG ACTIVATION FUNCTIONS IN FEEDFORWARD NEURAL NETWORKS

INTERNATIONAL CONFERENCE ON INNOVATION & ENTREPRENEURSHIP IN COMPUTING, ENGINEERING & SCIENCE EDUCATION (INVENT 2024)

2024 PROCEEDING NON-INDEX CO-AUTHOR

5. KAEDAH HAFAZAN AL-QURAN TEMATIK

2024 BOOK CO-AUTHOR

6. BE A MATH HERO

2024 BOOK CO-AUTHOR

7. REMOVAL OF METHYLENE BLUE DYE USING PALM TRUNK BASED ACTIVATED CARBON VIA MICROWAVE IRRADIATED: OPTIMIZATION, ISOTHERM, KINETIC AND THERMODYNAMIC STUDIES

MALAYSIAN JOURNAL OF MICROSCOPY

2023 JOURNAL SCOPUS CO-AUTHOR

8. OPTIMIZATION AND MASS TRANSFER SIMULATION OF REMAZOL BRILLIANT BLUE R DYE ADSORPTION ONTO MERANTI WOOD BASED ACTIVATED CARBON

ARABIAN JOURNAL OF CHEMISTRY

2023 JOURNAL ISI CO-AUTHOR

9. POLYMER FORMULATION USED INCARBON MEMBRANE SYNTHESIS ANDPERFORMANCE EVALUATION

ASIAN JOURNAL OF FUNDAMENTAL AND APPLIED SCIENCES

2023 JOURNAL OTHER DATABASE MAIN AUTHOR

10. TAMARIND SEED MODIFIED BY CUFE LAYERED FOR CAFFEINE REMOVAL FROM AQUEOUS SOLUTION

EMERGING TECHNOLOGIES FOR FUTURE SUSTAINABILITY PROCEEDINGS OF THE 2ND INTERNATIONAL CONFERENCE ON BIOMASS UTILIZATION AND SUSTAINABLE ENERGY

2023 CHAPTER IN BOOK CO-AUTHOR

11. IMMOBILIZATION OF CANDIDA RUGOSA LIPASE ON THE GLUTARALDEHYDE-ACTIVATED CHITOSAN BEADS

JOURNAL OF CHEMICAL ENGINEERING AND INDUSTRIAL BIOTECHNOLOGY

2022 JOURNAL OTHER DATABASE MAIN AUTHOR / CONTACT PERSON IN USIM

12. ELECTROSPUN NANOFIBER COMPOSITES FOR DRUG DELIVERY: A REVIEW ON CURRENT PROGRESSES

POLYMERS

2022 JOURNAL ERA MAIN AUTHOR / CONTACT PERSON IN USIM

13. POLYMER FORMULATION USED IN CARBON MEMBRANE SYNTHESIS AND PERFORMANCE EVALUATION

3RD KUALA LUMPUR INTERNATIONAL CONFERENCE ON MANAGEMENT, EDUCATION AND TECHNOLOGY(KLIMET 2022)

2022 PROCEEDING NON-INDEX MAIN AUTHOR

PUBLICATION

14. E-PROCEEDING : 2ND INSAN JUNIOR RESEARCHERS INTERNATIONAL CONFERENCE 2021 (IJURECON 2021) STREAM FOR A BETTER LIFE

2022 BOOK EDITOR

15. E-PROCEEDINGS 3RD INSAN JUNIOR RESEARCHERS INTERNATIONAL CONFERENCE 2022 (IJURECON 2022)

2022 BOOK CO-EDITOR

16. 3RD INSAN JUNIOR RESEARCHERS INTERNATIONAL CONFERENCE 2022 (IJURECON 2022)

2022 BOOK CO-EDITOR

17. PROCEEDINGS INSAN JUNIOR RESEARCHERS INTERNATIONAL CONFERENCE (IJURECON 2021) : STREAM FOR A BETTER LIFE

2022 BOOK EDITOR

18. SINGLE-STAGE MICROWAVE-ASSISTED COCONUT-SHELL-BASED ACTIVATED CARBON FOR REMOVAL OF DICHLORODIPHENYLTRICHLOROETHANE (DDT) FROM AQUEOUS SOLUTION: OPTIMIZATION AND BATCH STUDIES

INTERNATIONAL JOURNAL OF CHEMICAL ENGINEERING

2021 JOURNAL SCOPUS MAIN AUTHOR / CONTACT PERSON IN USIM

19. SYNTHESIS AND O₂/N₂ PERFORMANCE EVALUATION OF HOLLOW FIBER CARBON MEMBRANE OF 2,6-DIMETHYL-1,4-PHENYLENE OXIDE

ASIAN JOURNAL OF FUNDAMENTAL AND APPLIED SCIENCES

2021 JOURNAL OTHER DATABASE MAIN AUTHOR / CONTACT PERSON IN USIM

20. MODIFIED ZEOLITE AS PURIFICATION MATERIAL IN WASTEWATER TREATMENT: A REVIEW

SCIENTIFIC RESEARCH JOURNAL

2021 JOURNAL MYCITE CORRESPONDING AUTHOR

21. SYNTHESIS AND O₂/N₂ PERFORMANCE EVALUATION OF HOLLOW FIBER CARBON MEMBRANE OF 2,6-DIMETHYL-1,4-PHENYLENE OXIDE

4TH ASNET INTERNATIONAL MULTIDISCIPLINARY ACADEMIC CONFERENCE 2021 (AIMAC 2021)

2021 PROCEEDING NON-INDEX MAIN AUTHOR

22. E-PROCEEDING IJURECON 2020 INSAN JUNIOR RESEARCHER CONFERENCE

2021 BOOK EDITOR

23. CLINOPTILOLITE WITH ITS MODIFICATION WITH DIFFERENT TYPES OF SURFACTANTS

RESEARCH AND INNOVATION: EDUCATION, TECHNOLOGY AND PERFORMANCE MANAGEMENT

2021 CHAPTER IN BOOK MAIN AUTHOR

24. SURFACTANT FUNCTIONALIZATION OF CLINOPTILOLITE AND THEIR RECENT APPLICATION IN ADSORPTION

INTERNATIONAL CONFERENCE ON RESEARCH AND PRACTICES IN SCIENCE, TECHNOLOGY AND SOCIAL SCIENCES 2020

2020 PROCEEDING NON-INDEX MAIN AUTHOR

25. HOLLOW FIBER CARBON MEMBRANE SYNTHESIZED FROM PPO POLYMER FOR O₂/N₂ BINARY SEPARATION

INTERNATIONAL CONFERENCE ON RESEARCH AND PRACTICES IN SCIENCE, TECHNOLOGY AND SOCIAL SCIENCES 2020

2020 PROCEEDING NON-INDEX MAIN AUTHOR

26. MAXIMUM WATER RECOVERY FOR AN URBAN SYSTEM USING WATER CASCADE ANALYSIS: A CASE STUDY ON THE AL-ABRAR OF GENIUS INSAN COLLEGE

1ST INSAN JUNIOR RESEARCHER INTERNATIONAL CONFERENCE 2020

2020 PROCEEDING NON-INDEX CO-AUTHOR

PUBLICATION

27. ADSORPTION OF ANIONIC REMAZOL BRILLIANT BLUE R DYE USING DURIAN PEEL BASED ACTIVATED CARBON VIA $\text{Na}_2\text{CO}_3/\text{CO}_2$ ACTIVATION

THE ISSUES IN TECHNOLOGIES: APPLICATION AND DEVELOPMENT

2020 CHAPTER IN BOOK CO-AUTHOR

28. ENHANCING CO_2/CH_4 SEPARATION USING PPO-DERIVED HOLLOW FIBER CARBON MEMBRANE

INTERNATIONAL JOURNAL OF ADVANCED RESEARCH IN ENGINEERING INNOVATION

2019 JOURNAL OTHER DATABASE MAIN AUTHOR / CONTACT PERSON IN USIM

29. ROBESON'S UPPERBOUND-ORIENTED ENHANCEMENT OF PERFORMANCE OF HOLLOW FIBER CARBON MEMBRANE FOR H_2/N_2 IDEAL SEPARATION

MELAKA INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES, SCIENCE AND TECHNOLOGY 2019 (MIC3ST 2019)

2019 PROCEEDING NON-INDEX MAIN AUTHOR

30. ENHANCING CO_2/CH_4 SEPARATION USING PPO-DERIVED HOLLOW FIBER CARBON MEMBRANE

KUALA LUMPUR INTERNATIONAL CONFERENCE ON MULTI-DISCIPLINARY RESEARCH (KLIC2019)

2019 PROCEEDING NON-INDEX MAIN AUTHOR

31. PHYSICAL TREATMENT TECHNOLOGY FOR LANDFILL LEACHATE

CONTROL AND TREATMENT OF LANDFILL LEACHATE FOR SANITARY WASTE DISPOSAL

2016 CHAPTER IN BOOK MAIN AUTHOR

32. COST-EFFECTIVE RETROFIT OF A PALM OIL REFINERY USING PINCH ANALYSIS

JURNAL TEKNOLOGI

2009 JOURNAL ISI, SCOPUS AND ERA CO-AUTHOR

AWARDS/RECOGNITION

1. INVESTIGATING THE POTENTIAL OF ACTIVATED CARBON FROM PISTACHIO SHELL TO TREAT DYE MATERIALS IN WASHING MACHINE WASTE WATER: REMOVAL OF METHYL ORANGE DYE

INSAN Junior Researchers International Conference (ijURECON 2025)

2025

ANTARABANGSA

SILVER

2. DEVELOPMENT OF PELLETIZED SURFACTANT-MODIFIED CLINOPTILOLITE FOR CONGO RED ADSORPTION

CREATIONS de UITM: INTERNATIONAL MEGA INNOVATION CARNIVAL (CDU 2024)

2024

ANTARABANGSA

SILVER

3. BEST PAPER AWARD

2020

INTERNATIONAL

4. STAF CONTOH (KATEGORI AKADEMIK)

2020

UNIVERSITY

5. ANUGERAH BEST WRITE-UP CATEGORY SECONDARY SCHOOL, SEBAGAI GURU PEMBIMBING

2020

NATIONAL

6. GOLD AWARD FOR KGI BY BEING COACH FOR STEM-DESIGN ASITA INVITATION TOURNAMENT 2019

2019

INTERNATIONAL