

Profile Image

**PROF. MADYA DR.  
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ISA**

PENSYARAH UNIVERSITI DS14

## CONTACT

**Phone:** 6525

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**Faculty:** Fakulti Sains  
Dan Teknologi

## SUPERVISION

PhD - Completed: 0, Ongoing: 1

Master - Completed: 13,  
Ongoing: 0

## AREAS OF EXPERTISE

Bioseparation Technology

Biosurfactant Technology

Occupational Safety And Health

## ACADEMIC QUALIFICATION

PhD in Food Biosciences (2008)

Master in Sains Nuklear (2001)

Bachelor in Sains Nuklear (2001)

## RESEARCH

**1. SYNTHESIS OF NANO-STRUCTURED COMPOSITE THIN FILM MEMBRANES BY NANOPARTICLE/SURFACTANT MATERIALS BLENDING WITH HIGH-FLUX AND FOULING RESISTANCE PROPERTIES**

2016 GERAN KPT COMPLETED MAIN RESEARCHER

**2. FABRICATION OF MODIFIED NANOFILTRATION MEMBRANE FOR THE REMOVAL OF INDUSTRIAL ENDOCRINE DISRUPTING CHEMICALS (EDCS)**

2016 GERAN PENYELIDIKAN AGENSI KERAJAAN COMPLETED MAIN RESEARCHER

**3. HIGHLY EFFICIENT RECOVERY OF SURFACTIN VIA ONE-STEP MICELLAR ENHANCED ULTRAFILTRATION(MEUF) TECHNIQUE**

2016 GERAN PENYELIDIKAN TRANSLASIONAL COMPLETED MAIN RESEARCHER

**4. PENGURUSAN SUMBER AIR HUJAN PERINGKAT BANDARAYA DI PAYA INDAH WETLAND-PILOT PLANT MEMBRANE WATER TREATMENT SYSTEM**

2015 GERAN PENYELIDIKAN AGENSI KERAJAAN COMPLETED MAIN RESEARCHER

**5. SYNTHESIS OF NOVEL ACTIVE CHITOSAN SURFACTANT NANOFILTRATION MEMBRANES FOR DYES WASTERWATER AND HEAVY METAL REMOVAL**

2015 GERAN PENYELIDIKAN AGENSI KERAJAAN COMPLETED MAIN RESEARCHER

# RESEARCH

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## 6. DESIGN AND FABRICATION OF STATE-OF-ART CAPILLARY SPINNING SYSTEM (CAPSYS) AND THE PRODUCTION OF NOVEL ACTIVE NARROW-PORES ULTRAFILTRATION CAPILLARY (ULTRA-CAP) FIBER MEMBRANES

2014 GERAN PENYELIDIKAN KOMPETITIF KLUSTER COMPLETED MAIN RESEARCHER

## 7. INVESTIGATION OF SURFACTIN ISOFORMS PRODUCTION AND ACTIVITY AGAINST VARIOUS TYPES OF PATHOGENIC BACTERIA

2012 GERAN KPT COMPLETED MAIN RESEARCHER

## 8. USE OF RESPONSE SURFACE METHODOLOGY FOR ENHANCEMENT OF ITURIN A PRODUCTION AND INVESTIGATION OF ITS ANTIFUNGAL ACTIVITY FOR BIOLOGICAL CONTROL OF CERTAIN PHYTOPATHOGENS

2012 GERAN KPT COMPLETED MAIN RESEARCHER

## 9. HIGHLY EFFICIENT AND COST EFFECTIVE SINGLE-STEP ULTRAFILTRATION (UF) TECHNIQUE FOR RECOVERY AND PURIFICATION OF SURFACTIN

2012 GERAN KPT COMPLETED MAIN RESEARCHER

## 10. INVESTIGATION OF FENGYCIN ISOFORMS PRODUCTION BY NOVEL ISOLATES OF BACILLUS SUBTILIS AND ITS ACTIVITY AGAINST VARIOUS TYPES OF FUNGI.

2012 GERAN PENYELIDIKAN USIM COMPLETED MAIN RESEARCHER

## 11. EXPLOITATION OF NOVEL LOCAL ISOLATES OF B. SUBTILIS FOR SURFACTIN YIELD AND ISOFORMS PRODUCTION INVESTIGATION

2011 GERAN PENYELIDIKAN FUNDAMENTAL COMPLETED MAIN RESEARCHER

## 12. PRODUCTION OF SURFACTIN BY B.SUBTILIS ATCC 21332 USING PALM OIL MILL EFFLUENT (POME) AS FERMENTATION MEDIA

2009 GERAN PENYELIDIKAN FUNDAMENTAL COMPLETED MAIN RESEARCHER

# PUBLICATION

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## 1. BLUEPRINT KELESTARIAN USIM: MENYEMARAKKAN KAMPUS BARAKAH

2021 POLICY

## 2. EVALUATION OF ANTIBACTERIAL POTENTIAL OF BIOSURFACTANT PRODUCED BY SURFACTIN-PRODUCING BACILLUS ISOLATED FROM SELECTED MALAYSIAN FERMENTED FOODS

FOOD BIOTECHNOLOGY

2020 JOURNAL ISI MAIN AUTHOR

## 3. DEVELOPMENT OF POLYETHERSULFONE (PES)/REDUCED GRAPHENE OXIDE NANOCOMPOSITE NANOFILTRATION MEMBRANE

MALAYSIAN JOURNAL OF FUNDAMENTAL AND APPLIED SCIENCES

2020 JOURNAL INDEXED BY WOS MAIN AUTHOR

## 4. SINGLE STEP CROSS-FLOW ULTRAFILTRATION TECHNIQUE FOR RECOVERY AND PURIFICATION OF SURFACTIN PRODUCED BY BACILLUS SUBTILIS MSH1

INTERNATIONAL JOURNAL OF PHARMA AND BIO SCIENCES

2018 JOURNAL SCOPUS MAIN AUTHOR

## 5. KINETICS OF SURFACTIN PRODUCTION BY BACILLUS SUBTILIS IN A 5 L STIRRED-TANK BIOREACTOR

SAINS MALAYSIANA

2017 JOURNAL WOS MAIN AUTHOR

## 6. INTRODUCTION TO CHEMICAL SAFETY

2017 BOOK MAIN AUTHOR

## 7. THE EFFECT OF GAMMA IRRADIATION ON CHITOSAN AND ITS APPLICATION AS A PLANT GROWTH PROMOTER IN CHINESE KALE (BRASSICA ALBOGLABRA)

AIP CONFERENCE PROCEEDINGS

2016 JOURNAL WOS MAIN AUTHOR

## 8. PRODUCTION, CHARACTERIZATION AND ANTIBACTERIAL ACTIVITY OF SURFACTIN PRODUCED BY BACILLUS SUBTILIS MSH1

BORNEO BIOTECH SYMPOSIUM 2016

2016 PROCEEDING NON-INDEX MAIN AUTHOR

## 9. A SIMPLE AND EFFECTIVE ISOCRATIC HPLC METHOD FOR FAST IDENTIFICATION AND QUANTIFICATION OF SURFACTIN

SAINS MALAYSIANA

2015 JOURNAL WOS MAIN AUTHOR

## 10. ISOLATION AND SCREENING OF BIOSURFACTANT-PRODUCING BACILLUS SUBTILIS IN LOCAL TRADITIONAL FERMENTED FOODS

INTERNATIONAL CONFERENCE ON SCIENCE, TECHNOLOGY, ENGINEERING AND MANAGEMENT

2015 PROCEEDING NON-INDEX MAIN AUTHOR

## 11. MODIFIED FERMENTATION MEDIA FOR ENHANCED PRODUCTION OF SURFACTIN BY LOCAL ISOLATED BACILLUS SUBTILIS

INTERNATIONAL CONFERENCE ON SCIENCE, TECHNOLOGY, ENGINEERING AND MANAGEMENT

2015 PROCEEDING NON-INDEX MAIN AUTHOR

## 12. ISOLATION AND IDENTIFICATION OF SURFACTIN PRODUCER FROM LOCAL ISOLATES OF BACILLUS SUBTILIS

3RD INTERNATIONAL SCIENCE POSTGRADUATE CONFERENCE 2015

2015 PROCEEDING NON-INDEX MAIN AUTHOR

## 13. CLEANING POTENTIAL OF SURFACTIN ON FOULED ULTRAFILTRATION (UF) MEMBRANES

SAINS MALAYSIANA

2012 JOURNAL WOS MAIN AUTHOR

# PUBLICATION

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## 14. SURFACE ACTIVITY OF SURFACTIN RECOVERED AND PURIFIED FROM FERMENTATION BROTH USING A TWO-STEP ULTRAFILTRATION (UF) PROCESS

SAINS MALAYSIANA

2011 JOURNAL WOS MAIN AUTHOR

## 15. INVESTIGATION OF CLEANING POTENTIAL OF SURFACTIN ON FOULED ULTRAFILTRATION (UF) MEMBRANES

INTERNATIONAL CONFERENCE OF CHEMICAL ENGINEERING AND INDUSTRIAL BIOTECHNOLOGY 2011

2011 PROCEEDING NON-INDEX MAIN AUTHOR

## 16. A FURTHER STUDY OF THE RECOVERY AND PURIFICATION OF SURFACTIN FROM FERMENTATION BROTH BY MEMBRANE FILTRATION

SEPARATION AND PURIFICATION TECHNOLOGY

2008 JOURNAL WOS MAIN AUTHOR

## 17. RECOVERY AND PURIFICATION OF SURFACTIN FROM FERMENTATION BROTH BY A TWO-STEP ULTRAFILTRATION PROCESS

JOURNAL OF MEMBRANE SCIENCE

2007 JOURNAL WOS MAIN AUTHOR

# CONSULTATION

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## 1. MSOSH 42ND OSH AWARD

MSOSH

2024 NATIONAL

## 2. 41ST MALAYSIAN SOCIETY FOR OCCUPATIONAL SAFETY AND HEALTH (MSOSH) OSH AWARD 2023 - ARA DAMANSARA MEDICAL CENTRE

MALAYSIAN SOCIETY FOR OCCUPATIONAL SAFETY AND HEALTH (MSOSH)

2023 NATIONAL

## 3. 41ST MALAYSIAN SOCIETY FOR OCCUPATIONAL SAFETY AND HEALTH (MSOSH) OSH AWARD 2023 - SYNERLITZ (MALAYSIA) SDN BHD

MALAYSIAN SOCIETY FOR OCCUPATIONAL SAFETY AND HEALTH (MSOSH)

2023 NATIONAL

## 4. 41ST MALAYSIAN SOCIETY FOR OCCUPATIONAL SAFETY AND HEALTH (MSOSH) OSH AWARD 2023 - EDRA POWER HOLDING SDN BHD - JIMAH POWER STATION

MALAYSIAN SOCIETY FOR OCCUPATIONAL SAFETY AND HEALTH (MSOSH)

2023 NATIONAL

## 5. 40TH MALAYSIAN SOCIETY FOR OCCUPATIONAL SAFETY AND HEALTH OSH AWARD (MEDIVEST SDN BHD HOSPITAL TUANKU AMPUAN NAJIHAH, KUALA PILAH, N. SEMBILAN)

MALAYSIAN SOCIETY FOR OCCUPATIONAL SAFETY AND HEALTH (MSOSH)

2022 NATIONAL

# AWARDS/RECOGNITION

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## 1. CONVERSION OF WASTEPAPER TO GLUCOSE AS AN ALTERNATIVE TO INCINERATION: TECHNO-ECONOMIC ANALYSIS AND SAFETY ASSESSMENT

4TH INNOVATION BANK CHALLENGE 2024 (IBC 2024)

2024 UNIVERSITI SILVER

## 2. COSMOGENIC RADIONUCLIDE FOR CIVIL APPLICATION: BE-7 AND APPLICATION OF TRANS-EQUATORIAL METHOD FOR NORTHEAST MONSOON FORECASTING IN MALAYSIA

INNOVATION BANK CHALLENGE 2023 (IBC2023)

2023 UNIVERSITI SILVER

## 3. CONVERSION OF WASTEPAPER TO GLUCOSE AS AN ALTERNATIVE TO INCINERATION: TECHNO-ECONOMIC ANALYSIS AND SAFETY ASSESSMENT

SCIENCE AND TECHNOLOGY RESERACH EXPO (SCITEX@20TH FST)

2023 UNIVERSITI GOLD

## 4. PES-PIA MEMBRANE FOR REACTIVE RED DYES REMOVAL

SCIENCE AND TECHNOLOGY RESERACH EXPO (SCITEX@20TH FST)

2023 UNIVERSITI GOLD

## 5. TIDAK DINYATAKAN

BACHELOR OF SCIENCE (HONS) INDUSTRIAL CHEMICAL TECHNOLOGY FACULTY OF SCIENCE & TECHNOLOGY SEMESTER I

2023 UNIVERSITI CERTIFICATE OF APPRECIATION