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PENSYARAH UNIVERSITI DS13

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**Faculty:** Kolej Permata  
Insan

**SUPERVISION**

PhD - Completed: 0, Ongoing: 0

Master - Completed: 0,  
Ongoing: 0

**AREAS OF EXPERTISE**

Ordinary Differential And Partial Differential Equations

Computational Simulation And Modelling

Fuzzy Mathematics

**ACADEMIC QUALIFICATION**

PhD in Mathematics (2020)

Master in Mathematics (2013)

Bachelor in Mathematics (2011)

**RESEARCH**

**1. DEVELOPMENT OF A TECHNOLOGY - AND GAMIFICATION-  
INTEGRATED INNOVATION FOR THE ADDITIONAL  
MATHEMATICS SUBJECT**

2026 GERAN PENYELIDIKAN PUSAT TANGGUNGJAWAB (PTJ) ON GOING  
CO-RESEARCHER

**2. DEVELOPMENT OF AN INTERACTIVE ADDITIONAL  
MATHEMATICS MODULE INTEGRATING VARK LEARNING  
STYLES**

2025 GERAN PENYELIDIKAN PUSAT TANGGUNGJAWAB (PTJ) ON GOING  
MAIN RESEARCHER

**3. FUZZY GROWTH MODELS FOR CLIMATE-ROBUST PALM  
OIL PRODUCTION USING EXTENDED RUNGE-KUTTA FOURTH  
ORDER METHOD INCORPORATING POLYNOMIAL  
INTERPOLATION TECHNIQUES**

2025 GERAN KPT ON GOING MAIN RESEARCHER

# PUBLICATION

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## 1. EFFECTIVENESS OF GAME-BASED LEARNING FOR ENHANCING CREATIVE THINKING IN JUNIOR HIGH MATHEMATICS

INSAN JUNIOR RESEARCHERS INTERNATIONAL CONFERENCE 2025

2025 PROCEEDING NON-INDEX CORRESPONDING AUTHOR

## 2. ASSESSING CREATIVITY USING FUZZY LOGIC TECHNIQUES AMONG GIFTED STUDENTS

INSAN JUNIOR RESEARCHERS INTERNATIONAL CONFERENCE 2025

2025 PROCEEDING NON-INDEX CORRESPONDING AUTHOR

## 3. ENHANCING GIFTED MINDS THROUGH MATH PUZZLES

INSAN JUNIOR RESEARCHERS INTERNATIONAL CONFERENCE 2025

2025 PROCEEDING NON-INDEX CORRESPONDING AUTHOR

## 4. PROCEEDINGS BOOK ICIEST 2025

2025 BOOK

## 5. FUZZY PREDATOR-PREY SYSTEMS BY EXTENDED RUNGE-KUTTA METHOD WITH POLYNOMIAL INTERPOLATION TECHNIQUE

SEMARAK INTERNATIONAL JOURNAL OF MACHINE LEARNING

2024 JOURNAL OTHER DATABASE MAIN AUTHOR

## 6. CRYPTOGRAPHY: DISCOVERY AWARENESS AMONG PERMATA INSAN COLLEGE STUDENT

4TH INSAN JUNIOR RESEARCHERS INTERNATIONAL CONFERENCE 2023 (IJURECON 2023)

2023 PROCEEDING NON-INDEX CORRESPONDING AUTHOR

## 7. MINI SURVEY ON LEARNING JAPANESE LANGUAGE AMONG PERMATA INSAN COLLEGE STUDENTS

4TH INSAN JUNIOR RESEARCHERS INTERNATIONAL CONFERENCE 2023 (IJURECON 2023)

2023 PROCEEDING NON-INDEX CORRESPONDING AUTHOR

## 8. THE NOTION OF STABILITY OF A DIFFERENTIAL EQUATION AND DELAY DIFFERENTIAL EQUATION MODEL OF HIV INFECTION OF CD4+ T-CELLS

INTERNATIONAL JOURNAL OF MATHEMATICS AND COMPUTERS IN SIMULATION

2021 JOURNAL OTHER DATABASE MAIN AUTHOR / CONTACT PERSON IN USIM

## 9. FAST AND ROBUST PARAMETER ESTIMATION IN THE APPLICATION OF FUZZY LOGISTIC EQUATIONS IN POPULATION GROWTH

MATEMATIKA: MALAYSIAN JOURNAL OF INDUSTRIAL AND APPLIED MATHEMATICS

2019 JOURNAL MYCITE CORRESPONDING AUTHOR

## 10. THE APPLICATION OF FUZZY LOGISTIC EQUATIONS IN POPULATION GROWTH WITH PARAMETER ESTIMATION VIA MINIMIZATION

MALAYSIAN JOURNAL OF FUNDAMENTAL AND APPLIED SCIENCES

2017 JOURNAL INDEXED BY WOS MAIN AUTHOR / CONTACT PERSON IN USIM

## 11. MULTISCALE BOUNDARY ELEMENT METHOD FOR LAPLACE EQUATION

JURNAL TEKNOLOGI

2016 JOURNAL INDEXED BY ISI, SCOPUS AND ERA CO-AUTHOR

## 12. FUZZY LOGISTIC EQUATION BY POLYNOMIAL INTERPOLATION

AIP CONFERENCE PROCEEDINGS

2016 JOURNAL INDEXED BY SCOPUS MAIN AUTHOR / CONTACT PERSON IN USIM

## 13. THE EXISTENCE AND UNIQUENESS THEOREMS OF FUZZY DELAY DIFFERENTIAL EQUATIONS

MALAYSIAN JOURNAL OF FUNDAMENTAL AND APPLIED SCIENCES

2014 JOURNAL INDEXED BY WOS MAIN AUTHOR / CONTACT PERSON IN USIM

# AWARDS/RECOGNITION

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## 1. STAF CONTOH (KATEGORI AKADEMIK)

2025 UNIVERSITY

## 2. ACADEMIC ADVISOR

PERSATUAN MALAYSIA INNOVATION, INVENTION AND CREATIVITY ASSOCIATION

2025 INTERNATIONAL

## 3. ACADEMIC ADVISOR

ASSOCIATION OF YOUNG INNOVATORS AND TECHNOLOGIST

2025 INTERNATIONAL

## 4. ENHANCING GIFTED MINDS THROUGH MATH PUZZLES: THE PUZZLEX LEARNING MODEL FOR CREATIVE THINKING

World Innovation STEM Competition 2025

2025 ANTARABANGSA SILVER

## 5. ONLINE GAME-BASED LEARNING MODELS IN MATHEMATICS EDUCATION

INSAN Junior Researchers International Conference (ijJURECON 2025)

2025 ANTARABANGSA GOLD

## 6. ASSESSING CREATIVE POTENTIAL USING FUZZY LOGIC TECHNIQUES

INSAN Junior Researchers International Conference (ijJURECON 2025)

2025 ANTARABANGSA SILVER

## 7. ENHANCING GIFTED MINDS THROUGH MATH PUZZLES

INSAN Junior Researchers International Conference (ijJURECON 2025)

2025 ANTARABANGSA SILVER

## 8. ENHANCING GIFTED MINDS THROUGH MATH PUZZLES - BEST RESEARCH AWARD

INSAN Junior Researchers International Conference (ijJURECON 2025)

2025 ANTARABANGSA BEST PAPER AWARD

## 9. EFFECTIVENESS OF GAME-BASED LEARNING FOR ENHANCING CREATIVE THINKING IN JUNIOR HIGH MATHEMATICS

INSAN Junior Researchers International Conference (ijJURECON 2025)

2025 ANTARABANGSA BRONZE

## 10. EFFECTIVENESS OF GAME-BASED LEARNING FOR ENHANCING CREATIVE THINKING IN JUNIOR HIGH MATHEMATICS- MOST PROMISING AWARD

INSAN Junior Researchers International Conference (ijJURECON 2025)

2025 ANTARABANGSA

## 11. THE ROLE OF VISCOSITY IN NANOFUID AS HEAT TRANSFER FLUID: AN OVERVIEW OF INFLUENTIAL FACTORS

INSAN Junior Researchers International Conference (ijJURECON 2025)

2025 ANTARABANGSA SILVER

## 12. GAME-BASED LEARNING IN CHEMISTRY: THE ROLE OF MEMORY CARD GAMES

INSAN Junior Researchers International Conference (ijJURECON 2025)

2025 ANTARABANGSA BRONZE

## 13. ELEMALLOY: ENHANCING LEARNING OF ELEMENTS AND ALLOYS THROUGH GAMEPLAY

INSAN Junior Researchers International Conference (ijJURECON 2025)

2025 ANTARABANGSA BRONZE

## 14. ANUGERAH PENYELIDIK HARAPAN

2024 UNIVERSITY

# AWARDS/RECOGNITION

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## 15. ANUGERAH PENYELIDIK CEMERLANG (JURNAL ARTIKEL TERBAIK)

2024 UNIVERSITY

## 16. ANUGERAH INOVASI TERBAIK

2024 UNIVERSITY

## 17. ANUGERAH JURI TERBAIK

2024 UNIVERSITY

## 18. ANUGERAH PENILAI BERKUALITI

2024 UNIVERSITY

## 19. ANUGERAH PENILAI GERAN BERKUALITI

2024 UNIVERSITY

## 20. ACADEMIC ADVISOR

UNIVERSITI SAINS ISLAM MALAYSIA

2024 UNIVERSITY

## 21. FUZZY PREDATOR-PREY SYSTEMS BY EXTENDED RUNGE-KUTTA METHOD WITH POLYNOMIAL INTERPOLATION TECHNIQUE

Semarak International Research Article Competition 2024 (SIRAC 2024)

2024 ANTARABANGSA SILVER

## 22. ASSESSING CREATIVITY IN GIFTED STUDENTS USING FUZZY LOGIC TECHNIQUES

INSAN JUNIOR RESEARCHER INTERNATIONAL CONFERENCE (IJURECON 2024)

2024 ANTARABANGSA BRONZE

## 23. DEVELOPING MATHEMATICAL PUZZLE-BASED GAMES TO ENHANCE CREATIVE THINKING SKILLS IN JUNIOR HIGH SCHOOL STUDENTS

INSAN JUNIOR RESEARCHER INTERNATIONAL CONFERENCE (IJURECON 2024)

2024 ANTARABANGSA BRONZE

## 24. THE DEVELOPMENT OF PUZZLE AS A PEDAGOGIC TOOL TO ENHANCE THE ABILITY OF MATHEMATICAL CREATIVE THINKING AMONG GIFTED STUDENTS

INSAN JUNIOR RESEARCHER INTERNATIONAL CONFERENCE (IJURECON 2024)

2024 ANTARABANGSA SILVER