

Profile Image

**TS. DR. HATIKA BINTI  
KACO**

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## CONTACT

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**E-mail:**  
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**Faculty:** Kolej Permata  
Insan

## SUPERVISION

PhD - Completed: 0, Ongoing: 0

Master - Completed: 0,  
Ongoing: 0

## AREAS OF EXPERTISE

Polymer-based 3d Printing Materials

Material Properties

Cellulosic And Fibre Technology (including Nano Cellulosic Materials)

## ACADEMIC QUALIFICATION

PhD in Materials Science (2015)

Bachelor in Materials Science (2011)

## RESEARCH

**1. INVESTIGATING THE DE-AND-RE-POLYMERIZATION ON CHAIN EXTENSION OF RECYCLED PET FOR HIGH PERFORMANCE 3D PRINTING MATERIAL**

2024 GERAN KPT ON GOING MAIN RESEARCHER

**2. GIFT TO GIVE: EXPLORING GIFTED STUDENTS AS TRENDSETTERS TO INTENSIFY STEM LEARNING THROUGH ADDITIVE MANUFACTURING TECHNOLOGY**

2024 GERAN PENYELIDIKAN PUSAT TANGGUNGJAWAB (PT) ON GOING MAIN RESEARCHER

**3. TOUCH AND MEMORIZE: INAUGURATION OF ROSARY-LIKE 3D PRINTED BRAILLE QURAN FOR VISUALLY IMPAIRED CHILDREN**

2019 GERAN PENYELIDIKAN USIM COMPLETED MAIN RESEARCHER

# PUBLICATION

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## 1. SULAM NATURE APPRECIATION MODULE: SCIENCE AND THE QURAN IN HARMONY

INTERNATIONAL SEMINAR ON ISLAMIC AND SCIENCE

2024 PROCEEDING NON-INDEX MAIN AUTHOR

## 2. CHAPTER 1: ICE BREAKING: PERSONAL TIC TAC TOE

3D PRINTING ACTIVITY FOR YOUNG INNOVATORS: DESIGN IT! CREATE IT!INNOVATE IT!

2024 CHAPTER IN BOOK MAIN AUTHOR

## 3. CHAPTER 3: UNLEASHING CREATIVITY: CRAFTING AN EDUCATIONAL TOOL THROUGH INNOVATION

3D PRINTING ACTIVITY FOR YOUNG INNOVATORS: DESIGN IT! CREATE IT!INNOVATE IT!

2024 CHAPTER IN BOOK MAIN AUTHOR

## 4. INNOVATION UNVEILED: PRESENTING MY INVENTIVE MODEL IN THE PROJECT REPORT

3D PRINTING ACTIVITY FOR YOUNG INNOVATORS: DESIGN IT! CREATE IT!INNOVATE IT!

2024 CHAPTER IN BOOK MAIN AUTHOR

## 5. FIZIK: HATIKA KACO

MODUL PENGAJARAN DAN PEMBELAJARAN SERTA PENTAKSIRAN BERSEPADU KURIKULUM PENDIDIKAN PINTAR BERBAKAT INTEGRASI AQLI DAN NAQLI (IGED), ASAS 2

2022 CHAPTER IN BOOK MAIN AUTHOR

## 6. 3D PRINTED BRAILLE TILES AND TAPE FOR BEGINNERS IN LEARNING QURAN BRAILLE

KONGRES DAN PERTANDINGAN INOVASI DALAM PENGAJARAN DAN PEMBELAJARAN (KNOVASI) 2021

2021 PROCEEDING NON-INDEX MAIN AUTHOR

## 7. FUN LEARNING ACTIVITY WITH 3D PRINTING KIT AS ATTRACTIVE APPROACHES FOR EMPHASIZING PHYSICS INTEREST

ACTIVE LEARNING IN EDUCATION 4.0: STUDENTS AS OWNERS OF LEARNINGS

2021 CHAPTER IN BOOK MAIN AUTHOR

## 8. OIL WATER SEPARATION: INAUGURATION OF CELLULOSE AND CHEMICALLY MODIFIED CELLULOSE-RGO VIA GRAPHENE OXIDE FUNCTIONALIZATION

TEST ENGINEERING AND MANAGEMENT

2020 JOURNAL SCOPUS MAIN AUTHOR

## 9. DEGRADATION OF CELLULOSE MOLECULAR WEIGHT: EFFECT OF ACID HYDROLYSIS TIME ON CELLULOSE HYDROGEL PROPERTIES

INNOVATION FOR SUSTAINABILITY AND GREEN TECHNOLOGY: DEGRADATION OF INANIMATE FORMS

2019 CHAPTER IN BOOK MAIN AUTHOR

## 10. ENHANCED CORROSION INHIBITION USING PURIFIED TANNIN IN HCL MEDIUM

MALAYSIAN JOURNAL OF ANALYTICAL SCIENCES

2018 JOURNAL SCOPUS MAIN AUTHOR

## 11. EFFECT OF GRAPHENE OXIDE ON THERMAL STABILITY OF AEROGEL BIONANOCOMPOSITE FROM CELLULOSE-BASED WASTE BIOMASS

CELLULOSE

2018 JOURNAL WOS MAIN AUTHOR

## 12. REGENERATED KENAF CORE CELLULOSE PRODUCTS PREPARED VIA PRE-COOLED METHOD

THE 1ST INTERNATIONAL CONFERENCE OFAPPLIED BIOLOGY, CHEMISTRY & SCIENCE (ICABCS 2018)

2018 PROCEEDING NON-INDEX MAIN AUTHOR

## 13. PENGENALAN

POTENSI PRODUK HIJAU TERMAJU DARIPADA SUMBER BIOJJSIM PERTANIAN

2018 CHAPTER IN BOOK MAIN AUTHOR

# PUBLICATION

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## 14. LIGNOSELULOSA

POTENSI PRODUK HIJAU TERMAJU DARIPADA SUMBER BIOJISIM PERTANIAN

2018

CHAPTER IN BOOK

MAIN AUTHOR

## 15. SUMBER LIGNOSELULOSA DARIPADA HASIL INDUSTRI PERTANIAN

POTENSI PRODUK HIJAU TERMAJU DARIPADA SUMBER BIOJISIM PERTANIAN

2018

CHAPTER IN BOOK

MAIN AUTHOR

## 16. POTENSI BAHARU PRODUK KONVENSIONAL DARIPADA BIOJISIM LIGNOSELULOSA

POTENSI PRODUK HIJAU TERMAJU DARIPADA SUMBER BIOJISIM PERTANIAN

2018

CHAPTER IN BOOK

MAIN AUTHOR

## 17. SELULOSA SEBAGAI SUMBER APLIKASI TERMAJU

POTENSI PRODUK HIJAU TERMAJU DARIPADA SUMBER BIOJISIM PERTANIAN

2018

CHAPTER IN BOOK

MAIN AUTHOR

## 18. PENUTUP

POTENSI PRODUK HIJAU TERMAJU DARIPADA SUMBER BIOJISIM PERTANIAN

2018

CHAPTER IN BOOK

MAIN AUTHOR

## 19. PREPARATION OF CELLULOSE SOLUTION FROM OIL PALM EMPTY FRUIT BUNCH (EFB) PULP

ASIAN INTERNATIONAL CONFERENCE ON MATERIALS, MINERALS AND POLYMER

2012

PROCEEDING

NON-INDEX

MAIN AUTHOR

## 20. PENYEDIAAN LARUTAN SELULOSA DARIPADA PULPA SERABUT TANDAN KELAPA SAWIT (STKS)

KOLOKIUUM SISWAZAH KE-12, FAKULTI SAINS DAN TEKNOLOGI, UKM

2012

PROCEEDING

NON-INDEX

MAIN AUTHOR

# CONSULTATION

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## 1. KAJIAN BANCIAN INDUSTRI PERKAYUAN NEGARA

MALAYSIAN TIMBER INDUSTRY BOARD (MTIB)

2017

NATIONAL

# AWARDS/RECOGNITION

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## 1. ANUGERAH PENILAI BERKUALITI JANUARI 2024

2024

UNIVERSITY

## 2. ANUGERAH PENILAI BERKUALITI MAC 2024

2024

UNIVERSITY

## 3. ANUGERAH PENYELIDIK CEMERLANG MAC 2024

2024

UNIVERSITY

## 4. ANUGERAH PENULIS JURNAL CEMERLANG JUN 2024

2024

UNIVERSITY

## 5. ANUGERAH PENULIS JURNAL CEMERLANG FEBRUARI 2024

2024

UNIVERSITY