








*MOLECULAR SELF-ASSEMBLY
TECHNOLOGY*

Background of Members

| | Name of Leader & Members | Faculty & Staff No. | Qualification | Area of Expertise |
|---|--|---------------------|--|--|
|  | <i>DR NURUL FADHILAH KAMALUL ARIPIIN</i> | CHEMICAL ENG. | Ph.D (BIOTECH.), KOREA UNIVERSITY | Liquid Crystal, Sugar-based surfactant, Drug Carrier, Functionalised Polymer |
|  | <i>DR NORNIZAR ANUAR</i> | CHEMICAL ENG. | Ph.D (CHEM. ENG.), UKM | Crystallisation, Amino Acids |
|  | <i>DR SITI NURUL 'AIN YUSOP</i> | CHEMICAL ENG. | Ph.D (CHEM.ENG.) UNIV. OF LEEDS | Crystallisation, Amino Acids |
|  | <i>DR TAN HUEY LING</i> | CHEMICAL ENG. | Ph.D (CHEM. ENG.), UNIV. OF MANCHESTER | Biomolecular Self Assembly, Membrane Biophysics, Bionanotechnology (Biosensor) |
|  | <i>SAKINAH MOHD ALAUDDIN</i> | CHEMICAL ENG. | M.Sc. (POLYMER SCI.) FREI UNIV. BERLIN | Functionalised Polymer, Polymer Nanocomposite |
|  | <i>MUHAMAD FITRI OTHMAN</i> | CHEMICAL ENG. | M.Sc. (CHEM. ENG.), UiTM | Crystallisation, Amino Acids |
|  | <i>HAIRUL AMANI ABDUL HAMID</i> | APPLIED SCIENCE | M.Sc. (CHEMISTRY), UKM | Liquid Crystals, Glycolipids, Polymer |

Research grants

| BIL | NAMA PENYELIDIK UTAMA | NAMA PROJEK | JENIS | AGENSI PEMBIAYA | STATUS | TARIKH MULA | TARIKH TAMAT | JUMLAH PEMBIAYAAN (RM) |
|-----|--------------------------|--|-------|---|--------|-------------|--------------|------------------------|
| 1 | NURUL FADHILAH | STUDIES OF THERMOTROPIC AND LYOTROPIC BEHAVIOURS OF GLYCOLIPIDS MIXTURES. | Geran | KPT | Tamat | 2014 | 2017 | 80,000 |
| 2 | NURUL FADHILAH | NEW CANDIDATES FOR TARGETED DRUG CARRIERS BASED ON PALM OIL-BASED GLYCOSIDES AND POLYMERIC COMPLEXES TOWARDS TUNEABLE NATURAL BASED CONTROLLED RELEASE SYSTEMS | Geran | Royal Academy of Engineering/ Akademi Sains Malaysia | Tamat | 2016 | 2017 | 36,277 |
| 3 | NORNIZAR ANUAR | PREDICTION OF CRYSTALLISATION BEHAVIOUR OF CARBAMAZEPINE-FUMARIC ACIDS COCRYSTALS IN ETHANOLIC SOLUTION USING MOLECULAR MODELLING TECHNIQUE | Geran | UiTM | Aktif | 2017 | 2019 | 35,000 |
| 4 | MUHAMAD FITRI BIN OTHMAN | KINETICS AND GROWTH OF COCRYSTALLIZATION OF IBUPROFEN AND AMINO ACID COFORMERS | Geran | KPT | Tamat | 2014 | 2017 | 70000 |
| 5 | HAIRUL AMANI ABDUL HAMID | STUDIES ON THE GLYCOLIPIDS PHASE BEHAVIOURS DERIVED FROM IN-VITRO CULTURED OF AROMATIC RICE (ORYZA SATIVA L. CV. MRQ 74) | Geran | KPT | Aktif | 2015 | 2017 | 102,200 |
| 6 | TAN HUEY LING | COMBATting ANTIMICROBIAL RESISTANCE THROUGH ENGINEERING AND EDUCATION | Geran | Royal Academy of Engineering/ Akademi Sains Malaysia | Aktif | 2017 | 2018 | 32,274.40 |
| 7 | TAN HUEY LING | BIORECTOR AND BIOENGINEERING | Geran | UiTM | Aktif | 2016 | 2019 | 32,000 |
| 8 | TAN HUEY LING | ROLES OF HYDROPHOBICITY AND ANIONS IN SELF-ASSEMBLED OLIGOPEPTIDES | Geran | KPT | Tamat | 2013 | 2015 | 65,000 |

Postgraduate Students

| BIL | NAMA PELAJAR | WARGANEGARA | TAHUN KEMASUKAN | TAHUN TAMAT PENGAJIAN | PERINGKAT PENGAJIAN |
|-----|-----------------------|-------------|-----------------|-----------------------|---------------------|
| 1 | HAMIZAH SHAMSUDEEN | MALAYSIA | 2013 | 2017 | MASTERS |
| 2 | SAKINAH MOHD ALAUDDIN | MALAYSIA | 2014 | 2017 | PhD |
| 3 | MARINA YUSOFF | MALAYSIA | 2015 | 2017 | MASTERS |
| 4 | MOHD SHARIZI | MALAYSIA | 2015 | 2017 | MASTERS |
| 5 | UMI RAFIAH SHUKRI | MALAYSIA | 2015 | 2018 | PhD |
| 6 | MOHD SULFAHMI LUKMAN | MALAYSIA | 2016 | 2019 | PhD |
| 7 | ILYANI ISMAIL | MALAYSIA | 2016 | 2018 | MASTERS |
| 8 | VANESSA SHALLOMY | MALAYSIA | 2016 | 2018 | MASTERS |

Niche Area and Relevance of RIG

Self-assembly technology group focuses on material development by the enhancement of material's properties through studies of **molecular self-assembly via non-covalent interactions** to target specific applications in the biological and renewable energy industries.

Organizational Chart

PENAUNG
(Naib Canselor UiTM)



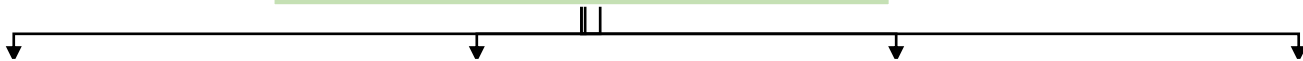
PENASIHAT 1
(Dekan)



PENASIHAT 2
(Timbalan Dekan Penyelidikan)



KETUA
DR NURUL FADHILAH KAMALUL Aripin



DR NURUL FADHILAH
(Mesogenic amphiphiles and polymer)



SAKINAH MOHD ALAUDDIN

HAIRUL AMANI
(Natural glycolipids)

DR TAN HUEY LING
(Biomolecular self-assembly)

MUHAMAD FITRI OTHMAN

DR NORNIZAR
(Crystallization)



DR SITI NURUL 'AIN

RIG Research Roadmap (5/10 yrs)

