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Research Center for Water Treatment Technologies (Teknologi Rawatan Air dan Air Sisa– TeRAS)



Sustainable Environment

Objectives:

- TeRAS aims to be a leading center in development of advanced materials and technology for water treatment. The main objectives of TeRAS are to undertake, coordinate and lead research on advanced materials and technology development for water treatment, to develop competitive and competent researchers who are able to produce high quality research with remarkable high impact and commercial value and to be recognized as a center for knowledge and innovative technology disseminations and establish networking with universities, laboratories and industries at national and international level.

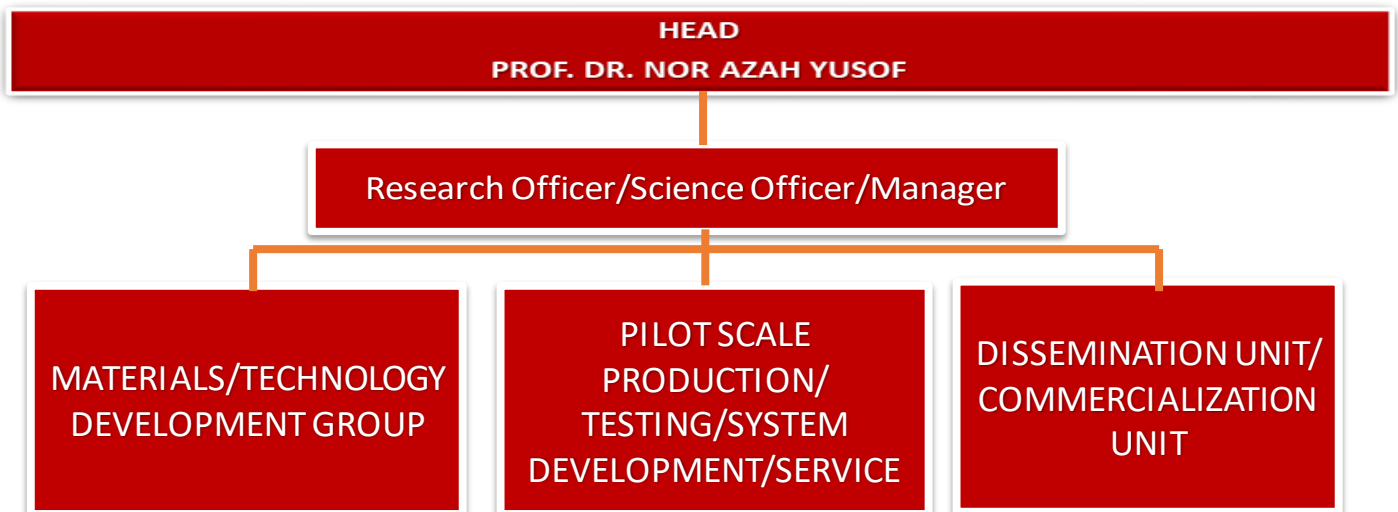


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Human Resource

Organization Chart





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Prof. Dr. Nor Azah Yusof, AP Dr. Abdul Halim Abdullah, AP Dr Janet Lim Hong Ngee, AP Dr Jaafar Abdullah, Dr. Tan Yen Ping, Dr. Norhazlin Zainuddin, Dr. Shahrul Ainliah Alang Ahmad, Dr. Ernee Noryana Muhamad, Dr. Norizah Abdul Rahman, Dr Siti Nurul Ain Md Jamil, Dr. Mohd Haniff Wahid, Dr. Sazlinda Kamuruzaman, Dr. Ili Syazana Johari



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PHYSICAL FACILITIES

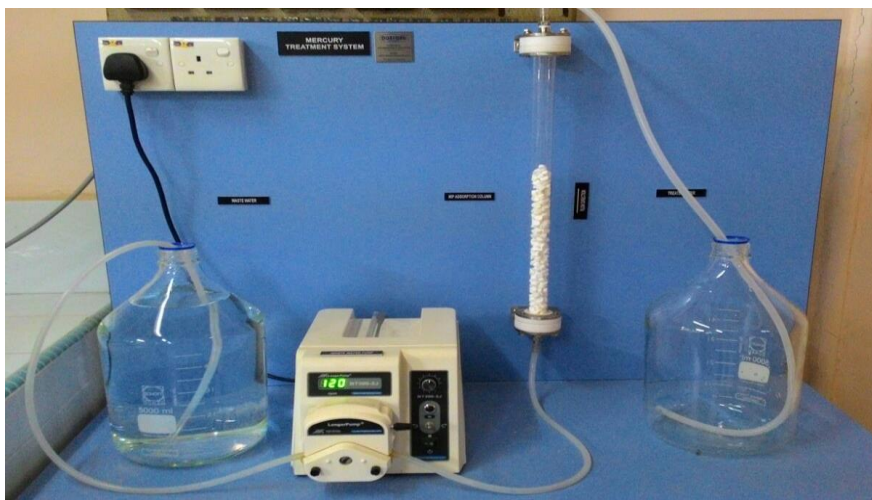
- **Basic Lab Facilities**
- **Available Equipment:**
 1. UV-Visible spectrophotometer
 2. Atomic Absorption Spectrophotometer (AAS)
 3. Inductively coupled plasma optical emission spectrophotometer (ICP-OES)
 4. Potentiostat
 5. Polymer Reactor (upscaling, 20L/50Kg)
 6. GC (Gas Chromatography)
 7. XRD/FTIR/BET
 8. GCMS/NMR
 9. Water Analysis (TSS/DO/COD analysis)
 10. Mercury Analyzer
 11. Pilot scale water treatment system (photocatalytic/polymer/sorbent based)



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Water Treatment System Model



Reactor for Large Scale Chemical Reaction



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FOCUS AREA

1. Removal of water pollutants using Natural and Synthetic Adsorbents/ Nanomaterial /Functional Material
2. Degradation of organic pollutants via Advanced Oxidation Processes (Photocatalytic)
3. Sensor technology for insitu pollutants analysis in water and wastewater

IMPACT FOR SOCIETY AND INDUSTRY

1. Sustainable Environment
2. Water Security
3. Effective and cheaper technology