

FKP UMP Research Goes on Display in CITREX Exhibition

Kuantan, 7 February – 38 projects in the form of prototype, exhibit or poster led by Faculty of Manufacturing Engineering, Universiti Malaysia Pahang have been showcased in a two-day Creation, Innovation, Technology and Research Exposition (CITREX 2018) which was held at UMP's Sport Complex, Gambang Campus.

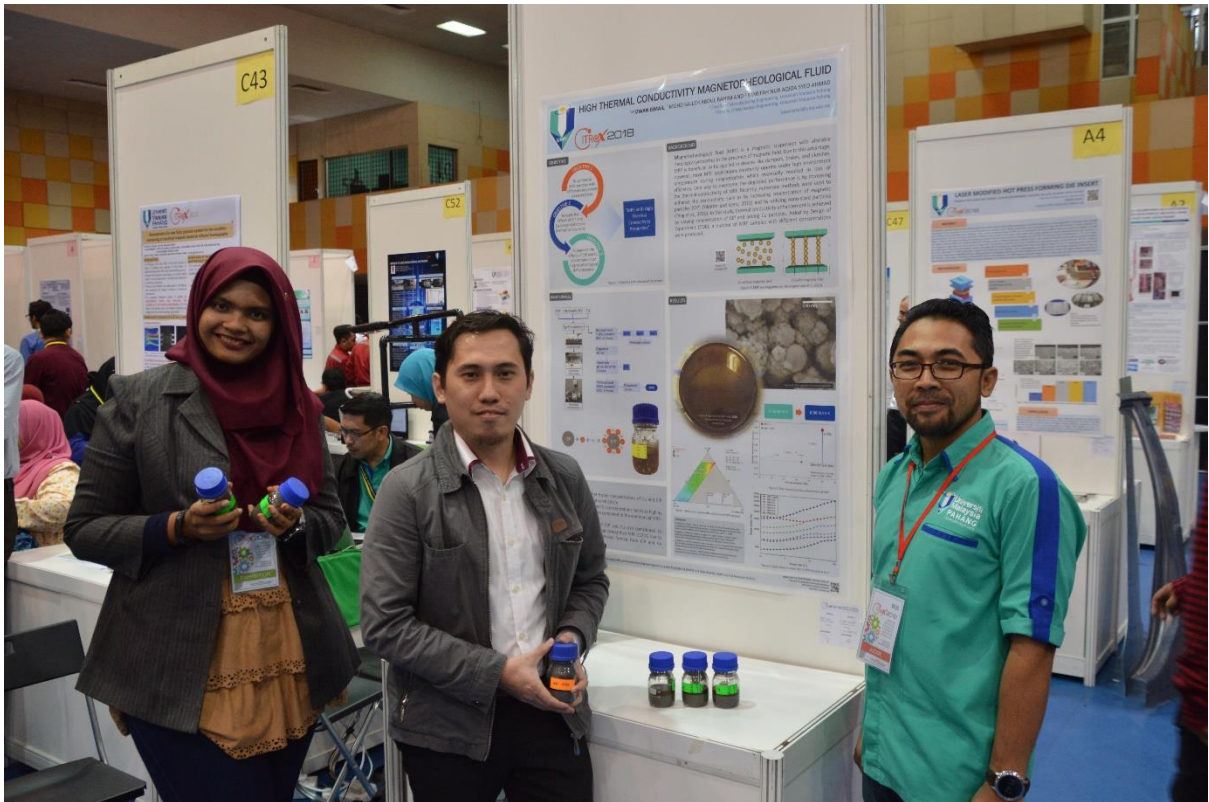
The CITREX exhibition becomes one of the most influential events conducted by the University that aims to showcase and reflect the research and project outcomes in various aspects such as research collaboration, knowledge transfer, technology exposure as well as sharing experience participated by 18 academic staff and 20 postgraduate students from the Faculty.

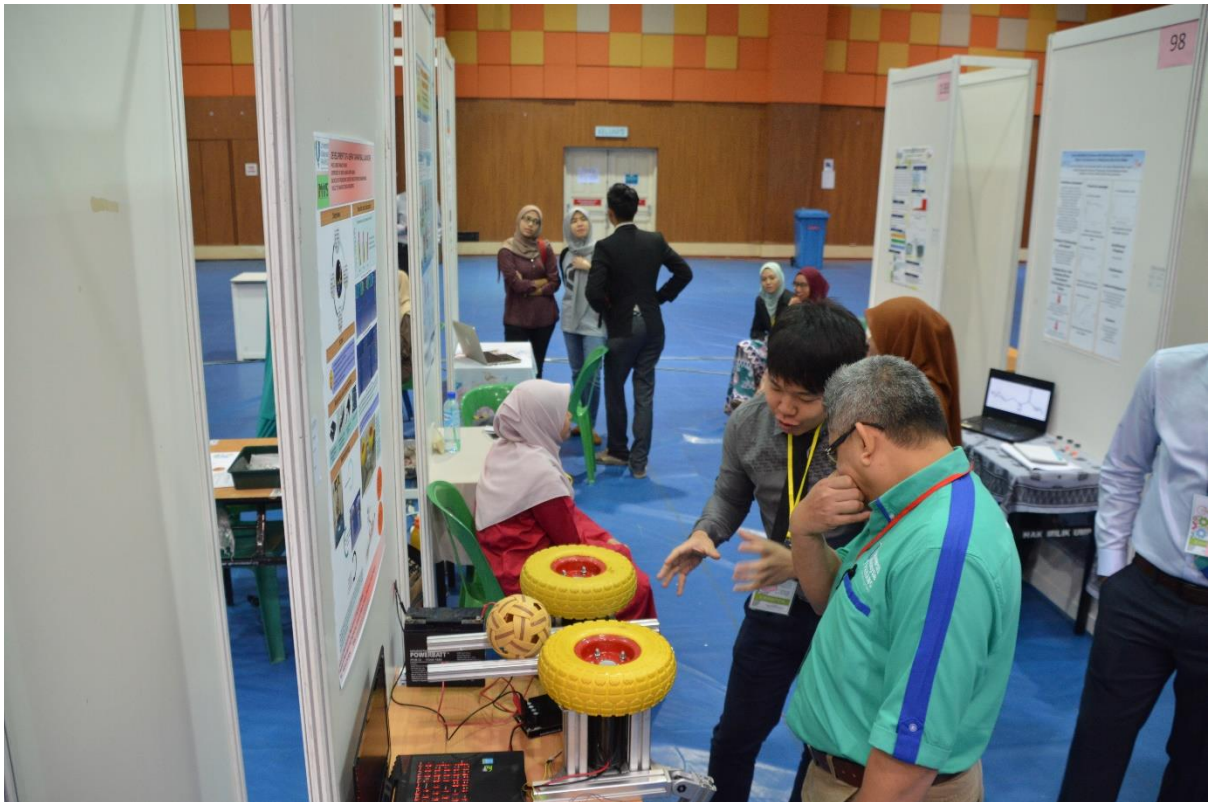
A research project conducted by Dr Mohammad Abdo Hashem entitled '*Autonomous Road Marks Painting System*' won the Gold Medal and '*Commercial IT Innovation*' Special Award sponsored by IBM Centre of Excellence (IBM CoE). On the same note, Associate Professor Ir. Dr Ahmad Razlan Yusoff won two Gold Medals through his research on *Nano-Mmt: Nanocoolant for Martensitic Material Transformation* and *Sustainable Machining Process*. Two students won two Gold Medals in the student category.

Through the organisation and participation of the staff and students, CITREX becomes part of the formal initiative to facilitate technology communitisation among the faculty researchers as well as to efficiently disseminate both the informal information and knowledge of current ongoing scientific advances to the community.

Further details on the Faculty's research projects participated in the CITREX 2018 are as follows:







| No | Project Leader | Research Title | Member | Medal |
|----|---|--|--|--------|
| 1 | Dr. Mohammed Abdo Hashem | Autonomous Road Marks Painting System | - | Gold |
| 2 | Prof. Madya Ir. Dr. Ahmad Razlan Bin Yusoff | Nano-Mmt : Nanocoolant For Martensitic Material Transformation | Prof. Madya Dr. Wan Azmi Bin Wan Hamzah | Gold |
| 3 | Prof. Madya Ir. Dr. Ahmad Razlan Bin Yusoff | Sustainable Machining Process | Salem Salah Abdullah Bagaber | Gold |
| 4 | Dr. Izwan Bin Ismail | High Thermal Conductivity Magnetorheological (MR) Fluid | Prof. Madya Dr. Syarifah Nur Aqida Binti Syed Ahmad, Mohd Salleh Bin Abdul Rahim | Silver |
| 5 | Ir. Dr. Faiz Bin Mohd Turan | Sustainability Assessment Calculator Integrated (SAC-i) | Puan Kartina Binti Johan @ Rahmat, Nur Soliha Binti Sahimi | Silver |
| 6 | Ir. Dr. Faiz Bin Mohd Turan | Smart Automated Water Irrigation (SAWI-i) | Puan Kartina Binti Johan @ Rahmat , Vivekanandan A/L Panneerselvam | Silver |
| 7 | Ir. Dr. Faiz Bin Mohd Turan | Technical Cleanliness Index (TeCdeX) | Puan Kartina Binti Johan @ Rahmat, Amyrrul Adly Shah Bin Muhamad Ridzwan Shah | Silver |
| 8 | Puan Kartina Binti Johan @ Rahmat | Sustainable Assessment Tool For Green Restaurant (SATG-i) | Ir. Dr. Faiz Bin Mohd Turan, Nur Qurratul Ain Binti Adanan | Silver |
| 9 | Puan Kartina Binti Johan @ Rahmat | Sustainability Assessment Calculator In Marine Leisure Industry Malaysia (MARLE-i) | Ir. Dr. Faiz Bin Mohd Turan, Wan Nurul Syahirah Binti Wan Lanang | Silver |
| 10 | Dr. Mohammed Abdo Hashem | Laser Simulator : A Novel Approach For Visibility Search Graph Based Path Planning | - | Silver |
| 11 | Prof. Madya Ir. Dr. Ahmad Razlan Bin Yusoff | Semi Active Suspension System | Dr. Fadhlur Rahman Bin Mohd Romly, Mohammed Ragab Ahmed | Silver |
| 12 | Dr. Mohd Zaidi Bin Sidek | Development Of Nano-Texture For Water-Resistivity Improvement | - | Silver |

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| 13 | Dr. AKM Asif Iqbal | Novel Hybrid Composite For High-Speed Railway Brake Disc | - | Silver |
| 14 | Prof. Madya Ir Dr. Ahmad Razlan Bin Yusoff | Hybrid Energy Harvester | Nik Nurul Husna Bin Razali | Bronze |
| 15 | Dr. Mohammed Abdo Hashem | Automated Fruit Grading System | - | Bronze |
| 16 | Dr. Muhammed Nafis Bin Osman Zahid | Object Customization in CAD Software via Visual Basic Programming | Dr. Ahmad Shahir Bin Jamaludin, Mohamad Hafiz Bin Mohamad, Zainal Fahmi Bin Zainol Abidin | Bronze |
| 17 | Dr. Nanang Fatchurrohman | Friction Stir Processing Of Metal Matrix Composites | Che Dini Marini Binti Che Mohammad Ishkandar El-Rahimin | - |
| 18 | Dr. Mohd Hasnun Arif Bin Hassan | Development Of A Soccer Ball Launching Device | Encik Mohd Ali Hanafiah Bin Shaharudin, Prof. Dr. Zahari Bin Taha | - |

| No | Student | CITREX Research Title | Supervisor | Medal |
|----|---------------------------|---|--|--------|
| 1 | Muhammad Syafiq bin Alias | Design and Fabrication of Integrated Arduino Honey Stick Filling Machine | Dr. Mohd Zaidi bin Sidek | Gold |
| 2 | Tay Chui Sheng | SSA Calculator (Systematic Sustainability Assessment Calculator) | Ir. Dr. Faiz bin Mohd Turan | Gold |
| 3 | Wong Shung Jun | Educational "Green" Robotic Module | Dr. Nanang Fatchurrohman | Silver |
| 4 | Cheow Kah Chun | Development Of Portable/Foldable Lifting Truck For Loading And Unloading Purposes | Encik Mohd Ali Hanafiah Bin Shaharudin | Silver |
| 5 | Siti Rohani Binti Sofian | Metal Matrix Composites Fabrication Using Powder Metallurgy Potential Application For Automotive Components | Dr. Nanang Fatchurrohman | Silver |

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| 6 | Lim He Yue | Upper Limb Rehabilitation Device For Stroke Patients | Dr. Muhammad Aizzat Bin Zakaria | Silver |
| 7 | Lin Kah Kiat | Airport Gate Allocation Engine Using Combinatorial Particle Swarm Optimization | En. Zulkifli bin Md Yusof | Silver |
| 8 | Ng Siew Kian | Meat Shredder Machine | Dr Muchamad Oktaviandri | Silver |
| 9 | Foong Kah Keat | Visitor Management System For UMP Pekan Campus | Dr Muchamad Oktaviandri | Silver |
| 10 | Siti Dayana Nor Farhanah binti Mohd Nooh | Illig Value Reduction (IV-Minus) | Ir. Dr. Faiz bin Mohd Turan | Silver |
| 11 | Phoo Cheng Phang | Development Of A Sepak Takraw Launcher | Dr Mohd Hasnun Arif Bin Hassan | Bronze |
| 12 | Ng Weng Seng | Vision Based Smart Sorting Machine | Dr Ahmad Shahrizan Bin Abdul Ghani | Bronze |
| 13 | Tong Keong Sai | Micro-Deburring In Aluminum | Dr. Kushendarsyah Saptaji | Bronze |
| 14 | Ili Zhafirah Mardhiah binti Hashim | Design and Fabrication of An Integrated Arduino Droplet Machine | Dr. Mohd Zaidi bin Sidek | Bronze |
| 15 | Rosni Aida binti Mohd Noor | Design and Fabrication of An Arduino Based Scratch Machine | Dr. Mohd Zaidi bin Sidek | Bronze |
| 16 | Suresh A/L Sundarajoo | Design And Development Of Auto-Tracking Platform Device | Dr. Ahmad Shahrizan Abdul Ghani | Certificate |
| 17 | Muhamad Haziq Bin Mohamad Nordin | Measurement Of Cutting Force For Online Monitoring In Machining Process Using Load Cells Sensor | Dr. Mebrahitom Ashmelash | - |
| 18 | Lok Jia Jun | Brain-Controlled 1-Axis Movement Of Mobile Robot With Low-Cost EEG Module | Dr. Muhammad Aizzat Bin Zakaria | - |

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| 19 | Kishendran A/L Muniandy | Smart Waste Management System Based On Internet Of Things(Iot)Rnet Of Things(Iot) | Dr. Nurul Hidayah Binti Razak | - |
| 20 | Nur Syaza Aina binti Mahmud | Augmented Reality Indoor Navigation Application of FKP UMP (AINA) | | - |