KUKTEM's emphasis on petrochemical, automotive industries

ALTHOUGH it has been only three years since Kolej Universiti Kejuruteraan dan Teknologi Malaysia (KUKTEM) was set up, it has started focusing on research and development activities.

Located close to the East Coast Petrochemical Belt and the DRB-Hicom assembly plant in Pahang, KUKTEM is moving into applied research to complement industries located around the campus.

It has plans to embark on applied research in areas covering the petrochemical and automotive industries.

The university college will make full use of the blend of experienced staff and newer members to chart their own success in research and development.

It has identified 19 research and development projects, which will be carried out starting next year.

Some project titles are Facilities and Maintenance Management System, Development of Multi Gas Burner For Combined Head and Power (CHP) Combustion System and a Study of Energy Efficiency For Industrial Heat Generation System Using Computer.

Also in the pipeline are the Pilot Scale Study of The Production of Value-Added Products From Zingiber Offinale Roscoe: Essential Oils and Ole Resin, a study on Implementation of Flexible Manufacturing Cell In Small- and Medium-Scale Metalworking Industries in Malaysia and Defect Inspection System On Webs (Textile).

Other projects are E-Learning: Feasibility Study On Using Open Source Technology In Developing Expert Module for Intelligent Tutoring System (ITS), designing a Prototype of Web-Based Simulation Tool (Case Studies for Manufacturing Application) and In-Situ High Intensity Ultrasonic (HIU) Assisted for Stainless Steel Leaf Filtration (Separation Processes).

Lecturers will also study the Development of the Process Control System Identification Using Multivariate Statistical Process Control.

Other projects include studies on Reduced Solid Waste in Palm Oil Industry (Extraction Process) and the Technical Competency and Capability Study on Plastics Industries in the East Coast of Peninsular Malaysia.

A study will also be done on the Implementation of Rapid Prototyping Technologies in Small- and Medium-Scale Industries (SMI) in Peninsular Malaysia and a study on Process Variables and their Effect on the Final Product of Sand Casting.

Other studies are on a New Design of a two-stroke Modular Engine for Multi-purpose Usage With Lean Burn Capabilities, Improving Malaysian Construction Industry Supply Chain Management and the Application of Ultrasound Technology in Enhancing Current Domestic Waste Treatment Plant Efficiency.

Also listed are projects covering Identification of River Water Quality Level at Sungai Kuantan and Application of Simulation Software Towards Productivity Improvement in the Automotive Manufacturing Industry.

The projects are expected to boost development of related industries as well as turning KUKTEM into a centre for knowledge and excellence in the country.

CHARTING SUCCESS: KUKTEM is moving into applied research to complement industries located around its campus in Pahang.