General

‘ErgoSpillBag’ developed to handle chemical spills in labs

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The Innovative & Creative Team (KIK) from the Faculty of Engineering Technology (FTeK), Universiti Malaysia Pahang (UMP) has successfully developed the ‘ErgoSpillBag’, to facilitate quick reaction by laboratory users in emergency cases of chemical spills at the faculty’s lab.

Designed to be smaller and lighter, with ergonomic characteristics, the ‘ErgoSpillBag’ contains its own ‘Chemical Spill Kit’, and can be conspicuously hung on the walls at the lab.

According to FTeK Science Officer, Ikram Safiee, who is also the Head of KIK, the existing ‘Chemical Spill Kit’ currently used at the faculty is enclosed in a large bin, weighing some 30kg and placed in a locked and secluded room a distance away from the lab expending chemical content.

“The unsystematic arrangement of the kit inside the bin also makes it difficult for lab users to access it in emergency cases of chemical spills,” Ikram highlighted.

“This, in turn, causes undue delay to lab users to carry out cleaning and clearing activities should there be any chemical spill,” he added.

On that note, Ikram said KIK has developed a more efficient and easy-to-use product with ergonomic specifications – a bag equipped with wheels and adjustable handle, weighing about 7kg, and comes complete with a systematic arrangement of the prerequisite kit.

“The exterior of the ‘ErgoSpillBag’ is designed without any sharp edges, with an attached hook for an easy sling on the walls of the FTeK lab,” explained the Science Officer.

“Chemical spill is an anticipated emergency incident, with a probability of happening in any lab handling chemical content. Lab users are expected to respond quickly to handle any chemical spill in order to mitigate potential harmful effects on human health,” he emphasized.

Meanwhile, KIK Team Coordinator, Mimi Nabila Mohd Noordin, said the ‘ErgoSpillBag’ project was initiated and developed to upgrade the safety precautionary level of the students, staff and whoever is at the faculty’s lab handling chemical content.

“The initiative is in line with the FTek’s Occupational Health & Safety Policy, which also mirrors the OHSAS 1800:2007 standards,” said Mimi Nabila.

“The ‘ErgoSpillBag’ is designed to facilitate easy cleaning and clearing works by the lab users should there be any chemical spill. It also reinforces the efficient system of the Emergency Response Plan at the FTeK lab.

“Hence, should there be a chemical spill at the lab, all that any user needs to do is grab one of the ‘ErgoSpillbag’ already hanging on the wall, and apply the cleaning kit according to the sequence

prescribed in the User’s Manual enclosed in the bag,” she remarked.

The ‘ErgoSpillBag’ product recently coveted the Gold Award at the Malaysia Productivity Corporation (MPC) Team Excellence Mini Convention (East Coast Region) on June 24.

The project was collectively developed with the assistance of Dr. Ezrin Hani Sukadarin, Joharizal Johari, Hairunnisa Osman, Mohamad Hafizi Che Mat, Mohd Shamsul Azmi Samsudin and Mohd Azlan Sayuti.

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