



Engineering projects for society

Even as the number of projects done by students of engineering is increasing every year, the quantum of untapped potential of innovation by the students continues to remain large.

Over seven lakh engineering students are spending more than Rs.200 crore on projects every year, according to an estimate of All India Manufacturers' Organisation. But less than 10 per cent of the projects are innovative and are beneficial to society.

At a competition held in Chennai last month to select the best engineering project by students, Vice chancellor of Anna University P. Mannar Jawahar said the spirit of innovation was gaining more strength and momentum every year among budding engineers. But there was lack of understanding about the regulations by government which would have a great impact on marketing their new product. "Many ideas of students are good. But making it a successful business model is a greater challenge," he said.

A recent innovation by a team of students of Velammal Engineering College to control mosquitoes won them an award of Rs.1 lakh. One of the team members, T. Naveen Prakash of the Electronics and Communication Engineering Department of the college, says, "Our innovation describes the use of a biomaterial, which has been proved to possess the same physical and bio-chemical characteristics of that of hemoglobin. This would attract mosquitoes. The goal is to aid in the destruction of mosquitoes making minimum demand on the user. The prototype works regardless of the power supplied, as a battery option is provided with a backup time of 6 hours.

B. Vinoth, another team member who is a student of Mechanical Engineering, says the design consists of three components, namely, bio-material, fine-wired grids and battery.

"We made the biomaterial in our college laboratory to use as the source to attract mosquitoes. We cross-linked biomaterial molecules with Dextrin to increase its stability. The biomaterial is placed beneath the fine-wired mesh and as the mosquito enters the space between the wires it gets electrocuted." "We are waiting for the funding from the university and planning to go for patent to



INNOVATIVE: A student explains his innovation, a solar-powered e-bike. PHOTO: SPECIAL ARRANGEMENT

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price of Rs. 400," says V. Kailash another student.

Dinesh Kumar, an ECE student of Jeppiaar Engineering College, has worked on a project on solar-powered e-bike. He says that the project would be a stepping stone for future innovations to successfully harness solar power. "I spent Rs. 75,000 on the project. The bike has petrol and battery options too, he adds.

Syed Abuthahir, a student of Mohamed Sathak A.J. College of Engineering, who worked on a project on a 'pick-and-place robot', says that student projects are a wonderful way of shaping creativity. "We have reduced the time delay in placing the object by the robot by a certain degree of innovation," he says. "We will continue to do research in the topic after the completion of the course in engineering," he says.

Innovations to the fore at TECHKNOW' 2010

Velammal Engg grads hit on solution to irking mosquitoes woe

Chennai, Apr 10:

Mosquitoes have become a major threat for mankind in the present day. Diseases related to mosquitoes are on the increase. But the effectiveness of such products is the debate today! Mosquito Bats have established a trend to destroy mosquitoes with the availability of human Labour. Ever wondered if the mosquito bats could attract and kill mosquitoes on their own? Three final year students from Velammal Engineering College, Chennai have devised a prototype to achieve this task.

Naveen Prakash (ECE), B.Vinoth (Mech) and V.Kailash (ECE) have developed a product which uses a Bio-material along with two other factors to attract the mosquitoes and electrocute them. Speaking about their product the students stated that they had resorted to Electricity as it was the best way to destroy the mosquitoes. The attraction of mosquitoes towards the factors considered were already proved. On asked if this idea struck them, they replied that, "People all around the world knew about the factors to attract mosquitoes but never came up with a product out of that! Innovation strikes like lightning. We just had to harness the maximum benefit from it".

Presenting their Innovation in the



V.Kailash, B.Vinoth and T.Naveen Prakash

Techknow 2010, conducted by Anna University along with AIMO on 2nd and 3rd April, they had won the first place of Rs one Lakh out of the 90 odd colleges that took part in it. When asked about the future plan, they responded, "We are waiting the funding from VC's to make this into a Venture in the near Future!

We'll be soon releasing this prod-

uct into the market for a mere price of Rs.400 which with a guarantee period of four years."

Expressing their sincere thanks to the College management and the Head's of ECE and Mechanical department for their Moral support to every activity, the students in particular thanked the Chemistry department for helping them to prepare the Bio- material successfully.