

25th ANNUAL Cork Mechanical, Manufacturing and Biomedical Engineering Exhibition

Biomedical Engineering - Engineers of the Future Aiding Mankind

Ireland's largest Engineering and Innovation Event, featuring over 180 stands, took place on the 14th April, in the Nexus Courtyard, Student Centre, Cork Institute of Technology.



Wheelchair Mobility Device for uneven and soft terrain in conjunction with Stylite Designs, demonstrated by Brian Murphy and Joseph Doran to Siobhán Ryan.



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Centrepiece exhibits included the inaugural final year Capstone Projects 2010-11 of the new CIT BEng (Honours) in Building Services Engineering Level 8 Degree. The exhibition for the first time of the final year projects of the BEng (Honours) in Chemical and Biopharmaceutical Engineering was a most welcome development.

The Official Exhibition Presentation Ceremony was overseen by Master of Ceremonies Mr Matthew Cotterell, Head of School of Mechanical & Process Engineering.

Dr Brendan J. Murphy, President, CIT, welcomed and introduced Mr John Power, Director General, Engineers Ireland, who addressed the large industrial and exhibition audience in a most entertaining and informative speech, stressing the importance of innovation and entrepreneurship in engineering. Mr Power was particularly eloquent on the importance and huge strides achieved by the Irish Biomedical Sector on the international stage – proudly demonstrating that Irish Biomedical Engineers were not of the future, but were already significantly aiding mankind on the world stage.

Admission to the exhibition was free with funding provided by 22 Industrial Sponsors.



Assessment of Mud Bed Geothermal Ground Loop Performance by David McCarthy.



Cathal Gorey displays Hydrogen Generator Design and Development Mechanical Engineering Project.

Exhibition Theme: Biomedical Engineering - Engineers of the Future Aiding Mankind



The Stryker Ireland Stand, manned by Neil Murphy, Engineering Services Team Leader; and Peter Curtin, Design Engineer, actively sought applications from CIT students.



SafetyPot Childproof Cook Friendly Secure Saucepan Lid Development Team Daniel Collins, David Irwin, Maria O'Shea, Olivia Tobin, Damien O'Hea and Paul O'Sullivan.

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Non Invasive Cardiac Output Measurement Research and Development in conjunction with MEDIC by Andrew Hogan.



Biomedical Application Stainless Steel Pallet Analysis in association with TMC by David Chandler and Shane McDermot.



Hospital Bedside Touch Screen Terminal Mount Optimisation and Re-design by Bettina Stefancsik in conjunction with Lincor Solutions.



Highway Wind Power Generation by Mechanical Engineering student Osarenmwinda Kennedy Imasogie.

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Goal Line Technology Design and Development Stand by Brian Walsh and Ross Power was very popular.



Analysis of AHU Free Cooling Energy Saving in conjunction with EMC² by Paul Hurley.



Analysis, Design and Development of a Road Bowling Practice Device in conjunction with Ból Chumann na hÉireann by Anton Mamyk.

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SOSair Emergency Breathing Aid Development Multi-Discipline Start-Up Innovation Team: Robin Holbein, Jamie Hodnett, Isabel Rossiter, Brendan Weathers, and Eugene Byrne.

Catherine Hussey, Gavin O'Brien, and Eoin Lyons' Biomedical Engineering Project on Physiotherapy Knee Bending Exerciser demonstrated to Exhibition Organiser, Senior Lecturer Seán F O'Leary.



SweetDreamzz Adjustable Moses Basket Development Multi-Discipline Start-Up Innovation Team: Dale Cusack, Kevin Spillane, and Conor O'Regan.



Alec McAllister of Engineers Ireland discusses benefits of membership with final year Mechanical Engineering student Bettina Stefancsik.



CIT Prize for Innovation Award Winner 2011 Myles Murray demonstrates his final year Mechanical Engineering project on Surgical Patient Breath Count Recording.



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Bibly Mosa from Mayfield Community College and Dan Collins, Academic Administration & Student Affairs Manager, CIT, share a different perspective at the Exhibition.



Mechanical Engineering student Mark Quigley demonstrates his project on Contact Lens Manufacture Analysis and Design Optimisation in conjunction with Bausch + Lomb Ireland.

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Biomedical Masters Research student Davida O'Brien was very busy on the popular MEDIC stand.



3D Teat Sensing System for Teat Disinfectant Application Development of Robotic Manipulator Interface in conjunction with Teagasc by Martin O'Leary.



1400cc Engine Optimisation and Failure Investigation is demonstrated by Jamie Lahser to Dr Michael J. O'Mahony.



CIT Prize for Innovation Most Technically Innovative Award Winner 2011, Eamon Hayes, demonstrates his Project on Optimised Design of Highway Crash Barriers.

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The Robotina Design and Development Stand by Colm Delaney and Niall O'Driscoll was the focus of much public interest.

Rotary Radial Engine
Development by
Usama Akram.



Solar PV Carport
for CIT Campus by
Sustainable Energy
Engineering student
Paul Walsh.



Mechanical
Engineering student
Christopher O'Donovan
demonstrates his
project on Radiant
Heat Panel Redesign
in conjunction with
Mark Eire BV to
Alena Rybickova,
Erasmus Student
from Prague.



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Stone Daffodil Bulb Separator Design and Development final year Mechanical Engineering Project by Seán Hourihane and Michael Kearney.

A happy group of exhibiting Chemical and Biopharmaceutical Engineering Degree students, Sarah Flynn; Siobhán Lee; Laura O'Brien; and Adedoyin Badewa-Ekunga.



Advanced Applied Research Projects featured on the TEC Applied Research Centre CIT stand.



CIT's own Michael Coughlan demonstrates his highly acclaimed stand on Feasibility Study for a Combined Heat and Power installation in CIT to Seán F. O'Leary.



Prosthetic Sand Blasting Process Automation was carried out in conjunction with Croom Precision Medical by Patrick Byrnes, Richard Childs, and Danny Allen.



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Vintage and Classic Vehicles of Yesteryear Display 'CIT Mizen to Malin Fundraiser Drive' which was held in June for Suicide Aware.



Biogas Generation from Domestic Waste Stand demonstrated by Stephen Kelly.



Chair Ejector Design and Development Mechanical Engineering Project by John Harrington and Seán Cooke.

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Exhibition Outstanding Graduate Award Winners 2011: David Kelleher and William Holland received the Tim Sexton Memorial Award; Graham Canty received the Exhibition Special Guest of Honour Award; Dr Sharon Murphy and Ciara McKenna (accepted by twin sister Catriona McKenna), received the Richard Hale Memorial Award.

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