2007 ATHLONE IT • BRAY INSTITUTE **OF FURTHER EDUCATION • CAR** LOW IT · CORK IT · DUBLIN IT GALWAY MAYO IT · LETTERFRACK COLLEGE • GRIFFITH COLLEGE DUBLIN · LIMERICK IT • NAT-IONAL COLLEGE OF DESIGN • NUI GALWAY • QUEEN'S UNIVERSITY BELFAST • SLIGO IT SRC NEWRY
UNIVERSITY OF **ULSTER • UNIVERSITY COLLEGE** DUBLIN • UNIVERSITY **ERICK • WATERFORD IT • UNIVER** 



# 3<sup>rd</sup> Level Student **WOOD AWARDS**

The Wood Marketing Federation

















## 2015 Third Level Student Wood Awards

Organised by the Wood Marketing Federation Main sponsors Coillte









Generous funding from COFORD Department of Agriculture, Food and the Marine Society of Irish Foresters

### ACKNOWLEDGEMENTS

Third Level Student Wood Awards Published by The Wood Marketing Federation, 2015 Wicklow, Ireland

PROJECT MANAGER Donal Magner

PROJECT CO-ORDINATOR Debbie Hackett

#### JURY

Duncan Stewart (chair), Director, Earth Horizons Productions; Simon O'Driscoll, Simon O'Driscoll Furniture; Des O'Toole, Biomass Business Development Manager, Coillte

EDITOR Donal Magner

DESIGN Magner Communications and Grasshopper Graphics

AWARDS PromoCraft

VENUE National Botanic Gardens

#### SPONSORS

Coillte (main sponsors of awards and other WMF projects); COFORD, Department of Agriculture, Food and the Marine (fund awards and wood promotional programme) and The Society of Irish Foresters (sponsor awards and collaborate with WMF in organising seminars).

We also acknowledge other organisations who supported the awards in the past especially Wood-ni.

#### MEMBERS AND SUPPORTERS

The following members and supporters of WMF ensure that we deliver a strong wood promotional and educational programme:

AHEC – American Hardwood Export Council; ECC Teoranta; Laois Sawmills; Lonza Wood Protection; Coillte; Coillte Panel Products; COFORD – National Council for Forest Research & Development, Department of Agriculture, Food and the Marine; Enterprise Ireland; Glennon Brothers; Murray Timber Group; Wood Coatings Ireland.

WOOD MARKETING FEDERATION Directors: Paul Harvey (Chairman), Gerard Murphy, Michael Lynn, Roy Dempsey. Vice Chairman: Declan Conlon Secretary: Donal Magner Registered No.167735 VAT No. 6567735Q



The awards were designed and made by PromoCraft from home-grown ash.



# CONTENTS

KNOWLEDGEMENTS	2
REWORD nister Tom Hayes	5
IAIRMANS WELCOMEul Harvey	7
DECADE OF GROWTH AND NOVATION IN WOOD chard Lowe	8
ED TO CHANGE ATTITUDES TO ISTAINABLE LIVING ncan Stewart	9
IRD LEVEL STUDENT WOOD AWARDS nal Magner	10
15 AWARD WINNERS nal Magner	12
ONSORS	22
RTICIPATING COLLEGES 2006 - 2015	24

The annual Third Level Student Wood Awards continue to be the flagship project of the Wood Marketing Federation and a great source of encouragement for our emerging architects, engineers, designers, innovators in wood, craftspeople and other students who look to wood as a versatile, renewable resource.

These awards have gone from strength to strength and I am confident that participating students will have worthwhile careers in their chosen fields specialising in wood construction and design.

The awards, organised by the Wood Marketing Federation and supported by my own Department recognise the outstanding efforts of students who specialise in working with timber in Ireland. The awards provide students with an opportunity to display their skills and talents at an early stage in their careers and I am sure they give students a great confidence boost to further develop their talents. I understand many previous award winners have gone on to exhibit their work at national and international level and to forge successful careers in their chosen fields.

It is fitting that the work of students is recognised by the Irish forestry sector not just because of the quality of their output, but because it serves to highlight Irish expertise and represents an investment in the future of the Irish forestry and forest products industry.

This year marks the 10th awards and I am delighted that my Department through COFORD continues to support this worthwhile project. I acknowledge the sustained wood promotional work of the Wood Marketing Federation and the support of Coillte, the main sponsors, and the Society of Irish Foresters.

Since his appointment as Minister of State, Tom Haves has supported the Third Level Student Wood Awards as well as a wide range of Wood Marketing Federation initiatives. Here he meets the winning architecture students Mark Pringle and Philip Ryan, DIT in the National Botanic Gardens. Dublin in 2013 with their lecturer Sima Rouholamin.

Tom Haves TD

## Foreword







Paul Harvey Business Manager Arch Timber Protection Ireland a Lonza company



The students who have entered these awards have achieved a level of innovation and skill that reflects well on our colleges.

"

# Chairman's welcome

This year marks the 10th annual Third Level Student Wood Awards and follows our 25th anniversary last year when we organised the first ever Wood Awards Ireland, supported by the RIAI. We are back this year to encourage our third level students of architecture, engineering, design, craft/fabrication and innovation to explore wood as a 20th century versatile and sustainable construction and design medium.

While a quarter of a century is a short time in a forest and wood culture it much has changed over this period. We have seen a change in attitudes towards wood and wood products, especially in our third level colleges. We value the input of our colleges and we are delighted the way the Third Level Wood Awards have grown. The students who have entered these awards have achieved a level of innovation and skill that reflects well on our colleges.

However, more needs to be done at college level to promote wood, especially at a time when other countries are switching over to wood because of its ability to sequester carbon as well as providing a range of benefits in sustainable construction and design.

I offer my thanks to our main sponsor Coillte who have been with us since we planned our first awards. Sincere thanks too to the Minister and his staff in COFORD in the Department of Agriculture Food and the Marine for their support.

My thanks to the judges – Duncan Stewart, Des O'Toole and Simon O'Driscoll – for once again adjudicating the event. This is Duncan's 10th awards and we owe him a huge vote of thanks for his encouragement and his dedication in promoting wood and wood products. The jury's expertise in architecture, engineering, design and marketing is vital to the success of the awards.

I thank Donal Magner for organising all the awards since they were established and to Debbie Hackett for her contribution in acting as co-ordinator once again this year.

Above all thanks to our innovative students who continue to inspire and innovate.

We look forward to the next 10 years as we continue to promote wood and wood products.

Paul Harvey

# A decade of growth and innovation in wood

Coillte has supported the Wood Marketing Federation in many worthy initiatives since it was established in 1989 but the project that gives me the greatest personal satisfaction is the Third Level Student Wood Awards.

We are delighted to continue as the main sponsor especially this year, the 10th anniversary of the awards. We are also pleased that our marketing staff member. Debbie Hackett has acted as co-ordinator of the awards for the second year and has played a major role in the development of the project.

The awards have grown from strength to strength despite tough economic times especially during the early years but they have proved their resilience and have emerged all the stronger. Many of the early winners had no option but to emigrate. However, as the economy continues to improve we look forward to more and more winners staying at home and having worthwhile careers in wood construction and design in wood engineering, product development, renewable energy and the myriad of other innovative sustainable applications of wood and wood products.

Few would have foreseen, even ten years ago, some of the innovative board products that Coillte Panel Products have developed in recent times. For example, the revolutionary panel product Medite Tricoya will not only provide architects, engineers and designers with greater construction and design options but it also has huge environmental benefits. It will take the pressure off harvesting rain forests because Tricoya is as hard and durable as many tropical hardwoods and ideal for external applications.

We support our third level students because they have the ability to change our approach to sustainable living and produce new ways of engineering wood such as Tricova. They have the creativity and energy to continuously push the boundaries for innovative use of wood and take it to new and exciting directions. We are pleased to support the students and the Wood Marketing Federation in this voyage of discovery.

#### **Richard Lowe**

Head of Sales & Marketing, Coillte Facilitator. Third Level Student Wood Awards Need to change attitudes to sustainable living

The overall aim of programmes and projects I support is to give people an insight to a more sustainable way of life, and practical ways to achieve this aim.

I support the Third Level Student Wood Awards as I have great confidence in our new generation of architects, engineers, designer and other innovators who work in wood as they have the vision and expertise to change attitudes to sustainable living.

Our lifestyles, including the houses we live in and the cars we drive play a very important role in sustainable living. Over 25% of all Ireland's energy consumption and carbon dioxide emissions come from our homes, and the use of our private cars also contributes hugely to Ireland's emissions. Over the coming 10 years we need to build 250,000 homes and if we continue to build in predominantly concrete as we did during the boom years, these buildings alone will emit 20 million tonnes of carbon dioxide into the atmosphere.

While I am extremely pleased with the performance of our students and their lecturers in these awards. I believe that many third level colleges have not addressed sustainable

construction and design and continue to support nonrenewable materials at a time when our planet is under threat as never before. We need to articulate in a positive manner the need and urgency for more third level courses in wood to address the deficiencies in the knowledge of sustainable construction that currently exists among architects, engineers, designers, builders, planners and State agencies. I ask colleges to make timber mainstream in courses because of its renewable, aesthetic, sustainable and functional benefits. Too many colleges treat timber as a marginal medium instead of placing it at the heart of architecture, engineering and design courses. This has to change.

The enthusiastic, gifted and hardworking students who enter these awards deserve more encouragement and support from their colleges, State agencies, architectural, design and engineering organisations as well as the wider industry.

I congratulate the winners of the various awards and all those who entered for producing innovative projects in wood. I wish them well in promoting sustainable living.

Duncan Stewart



Richard Lowe (right), with JP Feeney, Queen's University Belfast winner of the 2009 architectural award.

Damien Kearns and Joseph Lucid, NUI Galway winners of the 2010 engineering award with Duncan Stewart, jury chair. Their project, researched new ways of reinforcing glue laminated timber



Chairperson Third Level Student Wood Awards Jury

# Third Level Student Wood Awards - a decade of

The objectives of the Third Level Student Wood Awards are to encourage and reward students who explore functional, aesthetic and design aspects of wood and wood products.

They are now regarded as the premier awards for third level students of architecture, engineering, design, innovation and craft in Ireland who specialise in making work and exploring ideas with wood as the main or only medium.

The awards are open to third level students who incorporate wood as an inherent element in their projects. Award winners have gone on to pursue successful careers in wood design and construction For example Cillian Warfield emigrated to Finland and today he is regarded as one of the country's most innovative architects. He is project architect at Gullsten-Inkinen Design & Architecture. Representing University College Dublin,

*Cillian Warfield, representing University College Dublin, won the architectural and overall award for his project entitled Woodland Centre in 2006. Cillian (inset) also received a bursary from the Wood Marketing Federation for research before emigrating to Finland where he now lives and works as project architect at Gullsten-Inkinen Design & Architecture.* 

Cillian won the overall award for his project entitled *Woodland Centre*. This demonstrated functional and innovative timber usage in designing a workshop and training centre for students of wood design, planned for the foothills of the Dublin Mountains using locally sourced timbers.

Aimee Hartshorn winner of a merit award in 2009 for designing and making mobile display units from wood sourced in Wicklow is currently working for Reed Studio, the practice run by the internationally acclaimed designer of furniture and interiors Jonathan Reed.

The exciting aspect of the awards is the innovation displayed or 'the shock of the new'. Anything is possible with wood. Students have engineered wood as convertible tops for sports cars, designed jewellery and demonstrated how wood could be the solution for building sustainable multi-storey apartments. Wood has been taken to the ocean's edge to



Above: Gerard Murphy, Managing Director Coillte Forest (left) was chairperson of the Wood Marketing Federation when the awards were launched, pictured with Paddy Bowes, Wood-ni, former judge of the awards who promoted the project especially in Northern Ireland.

Left: Sitka spruce to the seas: Max Brosi – Letterfrack Furniture College – designed a Sitka spruce laminated surfboard for the inaugural wood awards in 2006.

# promoting wood in construction and design

combat coastal erosion and Max Brosi – Letterfrack Furniture College – took wood into the ocean when he designed a laminated surfboard from Sitka spruce for the inaugural wood awards.

Wood can also be engineered and strengthened as Damien Kearns and Joseph Lucid, NUI Galway demonstrated in 2010. This award winning project involved the testing and design of glass fibre reinforced polymer rods in reinforced glue laminated timber.

This year is no different. In addition to architecture, engineering, design and innovation, we have added a new category – craft/fabrication. This was identified by Joseph Little of Dublin IT as a category worthy of support and the judges agree. The awards are judged by top professionals in their fields of architecture, engineering and design. In addition to the architect and television presenter/producer Duncan Stewart, the adjudicating panel comprises Simon O'Driscoll, Business De

The awards are essentially a partnership between these experts, colleges, students, sponsors – Coillte, COFORD and the Society of Irish Foresters – and the Wood Marketing Federation. These comprise individuals and organisations truly grounded in sustainable living with the visionary spirit to promote wood as a versatile and renewable natural resource.



Donal Magner Secretary, Wood Marketing Federation Project manager, Third Level Student Wood Awards



The awards are judged by top professionals in architecture, engineering and design. From left: architect and television presenter/producer Duncan Stewart, Des O'Toole, Biomass Business Development Manager, Coillte and Simon O'Driscoll, Simon O'Driscoll Furniture.

O'Driscoll Furniture and Des O'Toole, engineer and Biomass Business Development Manager, with Coillte.



# 3<sup>rd</sup> Level Student WOOD AWARDS



#### CATEGORY ARCHITECTURE

CATEGORY WINNER Liam Farrelly

#### UNIVERSITY COLLEGE DUBLIN

Lecturer Orla Murphy

Course co-ordinator Elizabeth Shotton

Title Lifecycle: A Timber Framework

My thesis explores the use of timber in construction as a more sustainable alternative to concrete and steel. Based in the Dublin Docklands, my project consists of a multi-storey flexible framework incorporating numerous types of accommodation. Constructed almost entirely from timber, and designed for the parameters of natural daylight and ventilation, my project acts as a more sustainable option to the typical modern-day office block.



#### CATEGORY ARCHITECTURE

COMMENDED James Ward

#### DUBLIN INSTITUTE OF TECHNOLOGY

Lecturer Paul Kelly

Course co-ordinator Paul Kelly

Title **Timber Housing Project** 



The idea of adaptable living is also seen as an internal experience as the timber structure allows for built in furniture and fittings that are retractable to the spaces.



CATEGORY ENGINEERING

CATEGORY WINNER Graham Watson

#### QUEENS UNIVERSITY BELFAST

Lecturer Dr. Daniel McPolin

Course co-ordinator Dr. Shane Donohue

Title Timber Composite Floor Cassettes

The research project was to create a lightweight, low cost timber floor cassette (1.2m x 5m span) that could compete structurally with the more common precast concrete floor units. The floor units were designed to behave compositely when the timber I-Joists were reinforced with high tensile steel bars and clad in various sheeting materials.





# Timber Composite Floor

Steel Reinforced MgSi clad

Un-Reinforced Cassette/ Elastic test of IJoists / Tensioned

Poststeel reinforced

Steel Reinforced OSB/3 clad

#### CATEGORY DESIGN

CATEGORY WINNER Stuart Hayes

DUBLIN INSTITUTE OF TECHNOLOGY

Lecturers Jennifer Byrne/ Aidan Ryan

Course co-ordinator Joseph Little

Title Incognito' - An Occasional Table

The project brief was to create a design over three weeks of an Occasional Table with storage and a further 10 weeks to produce working drawings and the finished article. An aspect of the final design, was to use offcuts of timber of various species (mixing native and exotic) generally discarded within a normal enterprise, offering the potential to utilise waste and add commercial value.



WOOD	MARKETING	FEDERAT	TION
	www.wood.ie		

and Same days adapted by

Statement of the local division of the local

No Real Manager Indonesia any Cardin Ia Statute and an a second line attention of another second second for significant and body is cardined to description of body is cardined to description of

station is required and independent



### CATEGORY DESIGN

HIGHLY COMMENDED Paul Sweeney

### GALWAY- MAYO IT LETTERFRACK COLLEGE

Lecturer Jeremy Madden

Course co-ordinator Jeremy Madden/Kevin Maye

Title Wooden Bowties



WoodBows is a collection of wooden bow ties designed and manufactured in Co. Galway. They were sourced from a range of hardwoods – home grown and imported – complemented by textile design details. WoodBows incorporate the use of the newest CNC technologies to cut out the bow ties along with the use of hand sanding and hand stitching to finish the product to the highest possible standards.



#### CATEGORY INNOVATION

CATEGORY WINNER Sean Burns

### GALWAY- MAYO IT LETTERFRACK COLLEGE

Lecturer Jeremy Madden

Course co-ordinator Jeremy Madden/Kevin Maye

Title Furniture Design & Manufacturing

The objective was to achieve a process that would allow curved forms to be achieved with the utilisation of modern technology. This was initiated using CAD software to unfold curved and organic 3D computer models where 2D geometry of the unfolded form was generated and used to determine the path for a CNC to follow.





## Hexagonal Pattern

......

Lecturer Javier Burón

LIMERICK

Course co-ordinator Michael Mc Loughlin

**UNIVERSITY OF** 

Title CNC 'Puzzel' Joint





#### CATEGORY INNOVATION

COMMENDATION Maeve Curley/ Sarah Mannion As part of a digital fabrication study in Fab Lab Limerick we were involved in studying and remaking "50 Digital Wood Joints" designed by Jochen Gros. This study led to design our own joint. We considered both the traditional timber joinery techniques and techniques suited to CNC routing we learned from studying Jochen Gros.



CATEGORY CRAFT/ FABRICATION

CATEGORY WINNER Barry Flanagan

### BRAY INSTITUTE OF FURTHER EDUCATION

Lecturer Bernadette Walsh

Course co-ordinator Joe Whyte

Title Scaffold Furniture

The concept was to take a material that was destined to be scrapped and give it a new lease of life. Using scaffolding boards has greatly influenced the overall design Including the metal handles and the scaffold tube legs.







CATEGORY CRAFT/ FABRICATION

COMMENDATION Christoper Foley

DUBLIN INSTITUTE OF TECHNOLOGY

Lecturers Jennifer Byrne/ Aidan Ryan

Course co-ordinator Joseph Little

Title Bow Back Windsor Rocking Chair This incorporated many complex components such as turnings, a shaped seat, crest rail and armrest. The chair is fitted together entirely by means of compound angles.





## SPONSORS OF THIRD LEVEL STUDENT WOOD AWARDS 2015

#### COILLTE

Coillte is a state-owned commercial company operating in forestry, land based businesses, renewable energy and panel products. Established in 1988, the company employs over 1,000 people to manage its businesses and 445,000ha estate. It supplies 2.3 million cubic metres of logs annually to Irish sawmill and its own board mills Coillte Panel Products who produce:

- Medite the most recognised brand of quality medium density fibreboard (MDF) in Europe.
- SmartPly oriented strand board (OSB), a quality, cost effective and environmentally friendly alternative to other board products.
- Medite Tricoya represents one of the biggest advances in panel products since the 1980s because of its durability and versatility.

www.coillte.ie

COFORD

COFORD - the Programme of Competitive Forestry Research for Development - is based in the Research Division of the Department of Agriculture, Food & Marine. Established in 1993, it is funded by the Irish Government under the National Development Plan.

COFORD's mission is to:

- · Establish and strengthen links between research and industry.
- · Determine forest research and development needs to optimise international competitiveness, sustainable employment, innovation and environmental harmony.
- Evaluate R&D progress and transfer technology to ensure maximum benefit.

COFORD is responsible for the development of national forest R&D policy and priorities, the formulation and implementation of programmes that address these priorities, and transferring the knowledge generated into practice.

#### THE SOCIETY OF IRISH FORESTERS

The Society of Irish Foresters is an all-island organisation which was founded in September 1942. Its main aims are to spread knowledge of forestry and to improve professional standards in the Irish forestry industry. To that end the Society publishes an annual scientific journal and a twice yearly newsletter, organises four field days, two public lectures, conferences and an international study tour each year.

The Society regularly makes submissions to government on policy initiatives which are likely to impact on the forestry industry and it is represented on several interdepartmental working parties. Our Continuous Professional Development (CDP) programme provides an opportunity for members to engage in the lifelong acquisition of knowledge and skills.

The Society currently has almost 700 members, most of whom are professional foresters who work across the whole spectrum of Ireland's forest industry. There are five categories of membership: Technical, Retired Technical, Associate, Student and Honorary.

Further information m + 353 (0)86 2582240 e sif@eircom.net

WMF was founded in 1989 to promote wood as a renewable, sustainable and versatile natural material. The WMF programme promotes wood in construction, design and treatment from traditional applications to product innovation.

Projects include:

- Timber in Ireland hosted by COFORD (www.woodspec.ie).
- wood as the inherent medium in their projects.

Further information: www.wood.ie











WOOD MARKETING

FEDERATION

• Publication of Woodspec – A Guide to Designing, Detailing and Specifying

Wood Awards Ireland, aimed at architects, engineers and designers using

 Third Level Student Wood Awards – aimed at students of architecture. engineering and design who incorporate wood in their projects.

· Conferences and symposiums on wood usage and design.

• Wood promotional and educational initiatives including literature, posters, website and Talking Timber series on wood treatment and standards.

· Irish Timber Information Centre planned for 2015 and hosted by NUIG.

## PARTICIPATING COLLEGES 2006 - 2015

The following third level colleges have submitted entries to the Third Level Student Wood Awards since the project was established in 2006:

Athlone IT Bray Institute of Further Education **Carlow IT** Cork IT **Dublin IT** Galway-Mayo IT **GMIT Letterfrack College Griffith College Dublin** Limerick IT National College of Art & Design **NUI** Galway **Queen's University Belfast** Sligo IT SRC Newry University of Ulster University College Dublin **University of Limerick** Waterford IT

