Irish Concrete Society | June 2018

# Annual report

Seminars • Awards • Education



# **Annual report June 2018**

The Irish Concrete Society is a not for profit learned society founded in 1973 to promote excellence in the use of concrete in Ireland. We are a cross-sectoral, independent, impartial, science and engineering based organisation concerned with the technical aspects of design and construction in concrete.

We have a stable membership base of more than 60 corporate members and many ordinary members that contribute to and support our activities.



The Society was founded with the following key objectives:

- The provision of information on all aspects of concrete by way of meetings, seminars and site visits.
- The circulation of papers and journals dealing with concrete matters.
- The promotion of excellence in the use of the material.
- The promotion of research and other scientific work regarding concrete materials technology.

We meet these objectives, in part, through our Annual Awards, our formal education programme, our technical seminars and the technical support and guidance we offer.

Since last year's AGM we are pleased to report that over 1000 people attended close to twenty events nationwide, with our Annual Awards evening attracting record numbers.

# Council 2017/2018

The Society is governed by a cross-sectoral Council of members, operated by a Board of Directors and managed by our full time Executive Officer.



Chairman	Mr Jim Mansfield	Kavanagh Mansfield
Vice-Chairman	Mr Derek Duffy	Oran Precast

k Duffy Oran Precast	
Irish Cement	
University College Dublin	
Transport Infrastructure Ireland	
Roughan O'Donovan	
John Paul Construction	
Ecocem	
Roadstone	
Mattest	
Dublin Institute of Technology	
Irish Concrete Federation	
ESBI	
Grafton Architecture	
Clifton, Scannell, Emerson &	
Associates	
Collen Construction	
GCP Applied Technologies	
Lagan Cement	

## **Activities**

Irish Concrete Society activities would not be possible without support from companies and individuals who offer their expertise on Council, in Subcommittees or by speaking at our events.



Our activities range from technical seminars, site visits, evening lectures, courses and social events including our Annual Awards evening.

## **Seminars**

#### September 2017

In September a half-day technical seminar titled "Architectural Concrete in Buildings" was held in Trinity College Dublin. Over 80 delegates listened to a panel of speakers from the UK and Ireland share their experiences of achieving high quality exposed concrete surface.



Chaired by Stephen Connolly of Grafton Architects the seminar included high quality presentations by representatives from Grimshaw Architects, heneghan peng architects, Herzog & de Meuron, Techrete and the UK Concrete Centre. The speakers looked at how to best achieve good results, how to manage expectations during the process including guidance on the parameters for acceptance and how to overcome challenges on site.

#### November 2017

In November we ran a half-day seminar titled "Cold Weather Concreting" in Aviva Stadium, Dublin. Our 50 delegates listened to an experienced panel of speakers from the UK and Ireland address the subject. The morning focused on the practical aspects of successfully placing concrete during cold weather.

Society chairman Jim Mansfield outlined that fresh concrete exposed to low temperatures can be permanently damaged and that appropriate precautions should be taken during the winter months to mitigate these risks.



Delegates at Aviva Stadium

Dr. Ted Kay, Consultant and past president of the U.K. Concrete Society shared his considerable experience on the subject with Dr. Ciaran McNally of UCD, Mr Peter Bryant of Kwik Structure and Mr Gerry Keane of Walls Construction completing the line-up.

#### February 2018

Our joint technical seminar with Engineers Ireland was entitled "Concrete Basements" and was held at 22, Clyde Road, Dublin. The event was fully booked with 121 delegates in attendance.



This day-long seminar looked at some of the challenges designers and contractors face in delivering concrete basements in Ireland, with content delivered by a highly experienced panel of speakers.



The event was Chaired by Paul Healy and our speaker line-up included representatives from The UK Concrete Centre, Dawson Wam, John Sisk and Son, Byrne Looby, Rascor, GCP Applied Technologies, Sika and Bakkala Consulting Engineers.

#### June 2018

In June we ran a half-day technical seminar titled "Concrete Restored" in DIT, Bolton Street. With 50 delegates in attendance, our expert panel of speakers outlined the key aspects of successfully repairing structural and non-structural concrete.



Chaired by Joe Kelly of Roughan O'Donovan our line-up included representatives from Fosroc, MC Building Chemicals, Flexcrete (UK), Structural Concrete Bonding Services and Equilibrant Consulting Engineers. The seminar provided a useful overview of EN 1504: *Products and systems for the protection and repair of concrete structures*.

## **Evening Lectures**

A joint lecture with Engineers Ireland and the Institute of Structural Engineers was held in November 2017 on the Design and Construction of Páirc Uí Chaoimh Stadium.

The lecture itself was held in the Stadium and was attended by over 190 people.



Presentations were given by Malachy Walsh and Partners and provided the audience with a comprehensive overview of the €80 million stadium redevelopment.

## Site Visits

In April 2018 a group of Society members visited the site of the new River Barrow Bridge, which is under construction near New Ross, Co. Wexford.



River Barrow Bridge under construction

The bridge has a total length of 887 meters, across seven piers and has two main spans of 230 meters. Upon completion it will be the world's longest concrete-only extradosed box-girder bridge.



## Joint Weekend

This year's joint weekend with our colleagues from the Northern Ireland branch of the UK Concrete Society took place in Belfast in September 2017 and was attended by over 50 people. The Golf tournament was held in Malone Golf Club Belfast and a separate group visited the salt mines in Carrickfergus.



Members enjoying a visit to Crumlin Road Gaol

Friday evenings meal took place in the Europa, followed by a casino evening. On Saturday the group visited the Crumlin Road Gaol and were treated to a guided tour of the building drawing to a close an enjoyable weekend.

## **Annual Awards**

Around 340 industry representatives attended this year's Irish Concrete Society Awards. The Awards recognise excellence in both design and construction in concrete and are adjudicated by a distinguished, independent jury of industry professionals.

This year, the main awards jury consisted of Michael Browne of Collen Construction, Séan Harrington of Séan Harrington Architects and Brian Kavanagh of Garland Consulting Engineers.

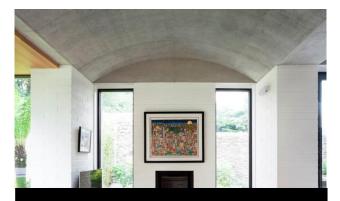


The jury reviewed a total of 27 projects nominated in three categories of main awards – Element, Infrastructure and Building. There were also eight projects nominated for the sixth International Award, which is sponsored by Enterprise Ireland. The winners of the annual Séan deCourcy Student Award and biennial Sculpture Award were also announced.

#### Winner - Element Category and Overall Winner

#### The Vaulted House, Dublin

The project involved the remaking of a two-storey semidetached dwelling and shop in Sandymount village as a family home. A large extension, part two-storey and part one-storey, is built to the side and rear, connecting the house to a generous hidden garden.



The Vaulted House

Exposed painted block-work piers at 4m centres support fair-faced concrete vaults that define each of the ground-floor living spaces, stepping down in section towards the rear of the site and culminating in a sunken living space in the garden. The ground floor is finished in a terrazzo, with reclaimed parquet floors defining certain areas. Board-marked concrete beams express the vaults externally.

The winner was chosen from a total of ten category entries and 27 entries for the overall award.



The awards jury said, "There are many architectural exposed concrete elements that could have been submitted: fair-faced walls, columns, soffits and beams; the dramatic board-marked beams internally and externally; the extensive use on terrazzo on the floors and stairs; and a concrete worktop and sink. The concrete theme continued into the garden with a board-marked concrete shed, planter boxes, barbeque and even an insitu concrete table.

The vaulted concrete ceiling could well have been overpowering and cold. However, the attention to detail in the design and the craftwork and passion from the contractor have resulted in an exceptional feature in a very beautiful modern home."

#### Winner - Infrastructure Category

#### Páirc Uí Chaoimh Stadium

This landmark project for Cork, a 45,000 capacity redevelopment of the iconic Páirc Uí Chaoimh in the heart of a municipal park, is the first stadium in Ireland designed to current spectator safety guidelines under the direction of the ground owner, Cork County GAA Board.



Seven projects entered this category. The jury said, "This is a project of scale and impact and it dominates the local area. The vertical concrete elements and the excellent precast cladding panels captured the jury's attention. There is also the row after row of precast concrete seating and terraces all completed to a high standard."



#### Winner - Building Category

#### Royal College of Surgeons, Dublin

The Building Category winner was chosen from a total of ten entries. The brief demanded a highly complex programme of spaces on a compact urban site, including technically advanced simulated environments for clinical and surgical training as well as a new library, auditorium and sports facility. The proposed mixed-use facility was to cover ten floors, four of which would be underground.



Royal College of Surgeons

The building showcases exposed concrete in various finishes throughout, revealing the structural anatomy of the building. Polished terrazzo, itself a concrete element, is common to circulation spaces tying the floors together and drawing light deep into the plan.

The awards jury commented, "The project team have combined to deliver a spectacular building that is alive with learning. The concrete challenges demanded a collaborative approach, which must have pushed the parties to their elastic limit at times.



Building Category winning team

From the raking columns, the jumbo corbel transfers, the dramatic board marked freestanding concrete walls and the challenges in the basement civil works, this project challenged practitioners in concrete on several fronts. The building that results is a vibrant living centre of education, which highlights the concrete frame of the building in a very positive light."

#### Winner of the Sixth International Award

#### Banagher Precast Concrete for The Royal Mint, London

This award that recognises Irish companies who export product or service off the island of Ireland. The award reflects the growing emphasis on export for all in Irish construction and is sponsored by Enterprise Ireland.



This year, the jury included Ed Hanlon, Engineer, Brian

O'Rourke, Architect and Donal Byrne from Enterprise Ireland. The winner was selected from eight entries.

The project for Royal Mint Gardens was for a precast encapsulation structure over the existing Docklands Light Railway lines at Bank Station exit tunnel. The completed structure extended for approximately 150m from the tunnel face.



International Award winner with Donal Byrne from Enterprise Ireland

The jury rewarded Banagher Precast for, "The ambition demonstrated by this Irish company to complete the encapsulation of an existing busy rail line and free up the valuable airspace overhead for much needed inner city residential accommodation was impressive.

The structural design life of 120 years, the capacity to withstand a train impact and the innovative design approach undertaken together with the collaborative research into the seismic capability of invisible connections was also impressive."

## Sculpture Award

Held every two years, this Award scheme enables the Society to acknowledge the work of sculptors who use concrete as a medium of expression. The jury included Bob Quinn, Sculptor and James Martin, Architect. Chosen from four entries, the winning piece was **Shards of Memory by Yvonne Casburn.** 



The jury noted, "Shards of Memory is, through the medium of concrete, a demonstration of the process of

architectural decay, and the layers of complexity associated with this deterioration. That which should have the weight of an industrial product is now a delicate gossamer curtain."

#### Séan deCourcy Student Award

This annual award is given to the best final year project on a concrete-related topic from the engineering faculties of third-level colleges. The award is named after the late Séan deCourcy, an inspirational professor for many years at University College Dublin and a former Chairman of the Irish Concrete Society.



The winner this year was **Steven Conroy of the National University of Ireland, Galway**, for his project 'Smart materials – structural testing and analysis of 'smart' precast concrete slabs'.

Our congratulations go to all the award winners.

## **Formal Education**

The Society's formal education programme includes courses for engineers and supervisors that lead to professional qualifications in concrete technology and construction. While the Concrete Ticket offers those who physically work with concrete an opportunity to have their skill and expertise recognised.

## **Fundamentals of Concrete Technology**

In October 2017 we ran our Fundamentals of Concrete Technology course. The course provided 25 participants with essential information on concrete technology and construction and includes two half-days of lectures and a half-day on site. Delegates also spend some time in a civil engineering laboratory carrying out some common tests.

We also provide delegates with the opportunity to gain formal recognition by taking a professional examination in concrete technology. Our congratulations go to 12 of those who subsequently sat the Institute of Concrete Technology stage 1 examination and passed the exam.

## **Concrete Ticket**

This major education initiative by the Society is a half-day course providing guidance on the correct handling, finishing, curing and ordering of concrete for construction. The course is suitable for all those who are involved and responsible for transporting, receiving, placing and finishing concrete after its arrival on site. It is also beneficial for those involved in the production of concrete.



Since our last AGM over 115 people have attended nine courses. This brings the total to over 260 people who have taken the course, have passed the test and are now eligible to hold a Concrete Ticket that will be valid for five years.

In December, Transport Infrastructure Ireland included a requirement for the Concrete Ticket or equivalent in their specification document "Specification for Road Works Series 1700 - Structural Concrete". Their requirement extends to those involved in the production and execution of concrete works on all TII funded schemes.



The Concrete Ticket is an important development for the Irish Construction Industry and for the promotion of excellence in concrete. More information and booking details may be obtained from the dedicated booking website:

www.concreteticket.ie

# **Corporate Members Directory**

Mr Hugh Gray

**Arup Consulting Engineers** 

50 Ringsend Road, Dublin 4,

**Consulting Engineer** 

Mr. Peter Deegan

**Banagher Precast Concrete** 

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Precast manufacturer

Ms Mary Delaney

**Carlow IT Library** 

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Carlow

**Educational Body** 

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**Association** 

Mr Michael Holst

**Clifton Scannell Emerson Associates** 

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**Consulting Engineer** 

Mr John Sweeny

**Collen Construction** 

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**Main Contractor** 

Mr Eoghan Lehane

**Commissioners of Irish Lights** 

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Dun Laoghaire, Co. Dublin
Government Agency

Mr Des Quinn

**Concast Precast** 

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**Cork Institute of Technology** 

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**Educational Body** 

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DAA

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Client

Mr Erich Sumperhofer

**DOKA Ireland** 

Tinure Ind Complex, Monasterboice,

Co. Louth

Formwork Supplier

Dr. Niall Holmes

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**Educational Body** 

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**Consulting Engineer** 

Mr Jim Cromie

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**Consulting Engineer** 

Mr Robert Laird

**ESB International** 

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**Consulting Engineer** 

Mr John O'Connor

**Flood Precast** 

Hilltown, Oldcastle,

Co. Meath

**Precast Manufacturer** 

Mr Cathal Rigney

Garland

Garland House, 28-30 Rathmines Park,

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**Consulting Engineer** 

Mr Paul O'Sullivan

**GCP Applied Technologies** 

Castlejane Woods, Glanmire, Co Cork

**Admixture Supplier** 

Mr Richard Bradley

**Irish Cement** 

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Co. Louth

**Cement Manufacturer** 

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**Main Contractor** 

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**Main Contractor** 

Mr Jim Mansfield

**Kavanagh Mansfield & Partners** 

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Kilsaran

Piercetown, Dunboyne,

Co. Meath

**Concrete Producer** 

Mr Tom Molloy

KWIK Structures

73 Hermitage Road, Lucan, Co. Dublin Specialist Contractor

Mr Richard Browne

L and M Keating

Kilmihil, Co. Clare

**Main Contractor** 

Mr Tom McManus

**Lagan Cement** 

Kinnegad, Co. Meath

Cement manufacturer

Mr Ray Deegan Lagan Concrete

Midleton, Co.Cork

**Concrete Producer** 

Mr Karl Fagan

Logicwall

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Dublin 3

Formwork Supplier

Mr Declan Cremen

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**Consulting Engineer** 

Mr Barry Gilroy

Mattest

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Dublin 15

**Materials Testing** 

Mr Alan Duffy

**MC Building Chemicals** 

Killycard, Castleblaymey,

Co Monaghan

**Admixture Supplier** 

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O'Reilly Concrete

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Mr Sean Carrigy

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P M Group

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Mr Mark Lynch

P. J. Carey Contractors

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**Main Contractor** 

Mr. Tim Murnane

**PUNCH Consulting Engineers** 

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Co.Cavan

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Mr Ger Shortt

Rascor

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Co. Kildare

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**Shay Murtagh Precast** 

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**Techrete** 

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**Precast Manufacturer** 

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**TJ O'Connor & Associates** 

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Sandyford, Dublin 18

**Consulting Engineer** 

Mr John Iliff

**Transport Infrastructure Ireland** 

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**Government Agency** 

Prof. Roger West

**Trinity College Dublin** 

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**Educational Body** 

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**University College Dublin** 

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**Educational Body** 

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Malahide Road, Co. Dublin

**Main Contractor** 

Mr Stephen Wright

**Wright Concrete Products** 

Swanns Cross, Rockcorry,

Co. Monaghan

**Precast Manufacturer** 

























Photos (I-R): River Barrow Bridge under construction, Annual Awards guests, Royal College of Surgeons, Annual Awards guests, Vaulted House, Annual Awards guests, Course site visit, Annual Awards guests, Sculpture Award winner, Annual Awards guests, Vaulted House, Dublin, Páirc Uí Chaoimh under construction.

## **Irish Concrete Society**

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