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JONATHAN HEGAN, MBE
PRESIDENT 2013/2014

SIXTEENTH ANNUAL REPORT
APRIL 2013 – MARCH 2014
INCLUDING
THE OFFICIAL LIST OF MEMBERS
AT
31 MARCH 2014

Michael J. Higgins
Secretary
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Honorary Treasurer

Mr. Jonathan Hegan
President/Chairman

Mr. Tim Brick
Executive Director

Mr. Michael J. Higgins
Honorary Secretary
INTRODUCTION

This Annual Report reviews the activities of the Irish Academy of Engineering in its sixteenth as the Academy and its seventh year as a Company Limited by Guarantee and one which is recognised for Charitable Status. The report covers the year from April 1st, 2013 to March 31st, 2014. The financial year remains unchanged as the calendar year ending December 31st, 2013.
REVIEW OF THE YEAR

The primary aim of The Irish Academy of Engineering is to influence and inform decision makers, and the public in relation to the development of policies and strategies on engineering and related economic issues. Raising the profile of the Academy is essential in this regard. I would like to think that throughout the past year of my Presidency, your Council and Executive have remained focused on this primary aim and, as you will see from this Annual Report, have continued to demonstrate the influence of our Academy, not only on this island but further afield.

At the beginning of my Presidency, I promoted three goals for the Academy, namely:

- To increase our relationship with sister academies beyond these shores;
- To prepare a Strategic Plan to guide us through the next 3 years;
- To enhance and increase our Patrons’ support.

My end of year "school report" would probably record that progress was made to varying degrees in each of the goals but that there is more work to be done.

Other Academies

I believe that our relationship and reputation with other academies has improved throughout the past year. We have had an increased involvement with Euro-CASE, the body which gives voice to engineering academies throughout Europe. Our Honorary Secretary, Mr Michael Higgins, has represented us with distinction at the Euro-CASE council meetings and we have made significant contributions on two of their “platforms”. Our Executive Director, Mr Tim Brick, has represented the Academy on the Euro-CASE Innovation Platform and has been one of the more influential contributors. Additionally, Mr Kieran O’Brien has made significant contributions to the Energy Platform.

In addition, we have had separate meetings in London with the Royal Academy of Engineering and, closer to home, with our neighbours the Royal Irish Academy. The President of RIA expressed a desire to collaborate with us on future reports on subjects such as Energy and Technology in our society.

This ongoing dialogue can only improve our relations with these Academies for all of our benefits.

Strategic Plan

My second commitment was to develop a new Strategic Plan following on the good foundation work of Professor Eric Beatty’s Council in 2007. We have had significant discussions at Council and Executive on how our Academy is developing and how it is to be shaped over the next three years. I can report to you that an outline is in draft form at present. Among the key issues emerging are to have fewer but more active Standing Committees, establish Regional Branches and aim for an annual income of €250,000 by 2017.
Contributions from all of our members will be welcome in the formation of the Plan. Accordingly interim drafts will be circulated to keep members informed and to attract their constructive comments.

**Patrons**

The third goal of my tenure was to increase our Patron support. Whilst this has only marginally improved this year, there has been much activity by our Development Committee to retain the existing cohort of Patrons and to lobby potential new supporters. This year we have kept the Patrons' Group advised of our activities through regular reports on our Standing Committees and by holding Patron Group meetings in Dublin, Cork and Galway.

Our Patron support is vital for the sustainability of the Academy and so there will be an ongoing emphasis on growing this Group and assuring them of our influence and status with policymakers, Government agencies and sister academies. It is therefore, with some personal regret that we have not made much progress with new Patrons in the Northern Region, but I am hopeful of contributions in the near future.

**Publications**

Once again it has been a very good year for Academy publications. Early in the year we published a Policy Advisory on *Achieving Ireland’s Energy and CO₂ Reduction Targets – An Alternative Approach*, and then later in the year we issued an Interim Report on *the Future of Manufacturing in Ireland*. Both publications were widely acclaimed and in fact, the latter was presented to An Taoiseach, Mr. Enda Kenny, T.D., at a function organised by Prof. Gerry Byrne at UCD.

The influential INTEL Lecture Series was compiled and published in book form. It was launched by the Minister for Education and Skills, Mr Ruairi Quinn, T.D.

These high profile endorsements demonstrate that we are slowly gaining traction with our political leaders. It is also worthy of note that each of these reports received complementary praise from our Euro-CASE cousins, some of whom will be recommending similar studies to their respective academies.

It certainly fills me with great pride when I see and read these outstanding evidence-based reports by our fellow members. I am sure all of you in the Academy must have similar feelings and are also grateful to the Standing Committees for devoting so much time and expertise into the delivery of such useful documents for the benefit of the people of the island of Ireland.
Finally...

Your Council and Executive have been very supportive and committed throughout the year. This Academy does benefit from having a very conscientious and loyal group of members at its core, who wholeheartedly give of their time, experience and expertise in the interests of the greater good. In turn, they also receive essential support from our hard-working, part-time Executive of Tim Brick and Síle McKay. I wish to thank them all for their wise counsel, guidance and support throughout my presidential year.

Finally, I would like to welcome our incoming President, Mr Don Moore. I wish him well and I have no doubt that the Academy will prosper and strengthen even more under his leadership.

Jonathan Hegan, MBE
President
STANDING COMMITTEES

MANUFACTURING

Chairman  Prof. Gerry Byrne

Members  Lionel Alexander
Dr. Norman Apsley
Dr. Tony Barry
Prof. Jim Browne
Dr. Liam Connellan
Martin Cronin
Don Godson
Joe Harford
Michael Hayden
Jonathan Hegan
Martin Lowery
John McGowan
David McIlhagger
Eoin O’Driscoll
Paddy Purcell
Dr. Don Thornhill

Advisers  Mark Coyne
Donal Hughes
John O’Dea

Facilitator  Tim Brick

ACTIVITIES

- Following on from meetings with over 20 manufacturing industries, Government
  Departments and State Agencies in 2012 and early 2013, work concentrated on six key
  sectors, namely:-

  - Life Sciences (including Pharma and Medical Devices)
  - Natural Resources
  - ICT
  - Energy and Environment
  - Manufacturing of Construction Related Materials
  - Machinery and Metal Products (including Aviation)

- Background working papers were produced on each of these sectors by sub-groups of the
  Committee. (These papers are available on our website).
• The Interim Report on the Future of Manufacturing in Ireland was presented to An Taoiseach, Mr. Enda Kenny, T.D., at the UCD Engineering Graduates Association meeting on 22nd October 2013. Follow-up meetings with his Department’s Secretary General and senior officials are pending, following An Taoiseach’s personal invitation to the IAE in January 2014 to do so.
(Note: Receipt of the report was acknowledged by a personal letter from An Taoiseach)

• The main events attended by representatives of the Committee in promoting their report are briefly:-

- 14.05.2013 - Meeting with Secretary General, DJEI, Dublin
- 16.05.2013 - InterTrade Ireland Trade Conference, Croke Park
- 04.09.2013 - Engineers for Advanced Manufacturing Conference at UCD
- 18.11.2013 - Presentation by Chairman of report to CEO of Science Foundation Ireland
- 10.03.2014 - Presentation by Chairman of Report to new CEO of Enterprise Ireland

• The interim report was also widely circulated to relevant Government departments, state sponsored bodies, business and commercial interests, academic centres and the media.

• The interim report drew favourable comments from our European sister Academies at the Euro-CASE meeting in Lisbon in late October 2013.
ENERGY

Chairman
Don Moore

Members
Gerry Duggan
Sean Finlay
Michael Hayden
Pat Lynch
Terry Nolan
Kieran O’Brien
Neil O’Carroll
Prof. Philip O’Kane
Brian Sweeney
Dr. David Timoney
Mr. Frank Turvey
Prof. Ed Walsh

Advisers
Dave Austin
Rory Broderick
Brian Cahill
Mark Coyne
David Kirwan
Gay Nolan
Jim O’Brien
Jim O’Sullivan
Brian Ryan
Henry Sheahan
Henry Smyth
Gary Treanor

Facilitator
Tim Brick

ACTIVITIES

• The four stranded approach on the development of Policy Advisories on the Export of Electricity (June 2012), the Future of Oil and Gas (February 2013), Energy Conservation and Efficiency and Transport, continued with the publication on the 5th July 2013 of the “Energy Policy Advisory – Achieving Ireland’s Energy and CO2 Reduction Targets – An Alternative Approach”.

• The Advisory was as usual circulated to all relevant Government departments and interested parties and triggered positive meetings with Minister Pat Rabbitte T.D., DCENR and officials (23rd July 2013) and also with the Regulator’s office.

• A meeting with Minister Fergus O’Dowd, DCENR was held on 22nd May 2013 on the earlier Advisory on Oil and Gas.

• Work is well advanced on the production of the final Advisory on Transport (due for publication within a month).
• A detailed scoping report has been completed for the Committee’s next major undertaking which will be a report on the Future Energy Scenario in Ireland (2035 – 2040).

• Mr. Kieran O’Brien continues to represent the IAE at the Euro-CASE Energy Platform meetings. Despite a restricted start, he reports that the agenda has now been broadened to encompass an overall review of the EU’s energy policy and future direction, taking account of competitiveness issues

ENGINEERING RESEARCH & ECONOMIC DEVELOPMENT

Chairman
Prof. John Kelly

Members of Task Force
Prof. Tom Brazil
Prof. Patrick Cunningham
Dr. Martin Curley
Prof. Paddy Dowling
Dr. Conor Hanley
Michael Hayden
Prof. Brian Hogg
Dr. Carl Jackson
Dr. Patricia Kieran
Don Moore
Prof. Brian Norton

Research Assistant
Dr. Gráinne Redmond (Intel Lecture Series publication)

Facilitator
Tim Brick

ACTIVITIES

• The public lectures on the theme of Engineering Research and Innovation, sponsored by Intel Labs Europe and delivered through 2011/2012, were assembled in a consolidated document which was published on 13th December 2013. Circulation as before.

• The document was formally launched at Clyde Road on the 12th December 2013 by Minister for Education and Skills, Mr. Ruairí Quinn, T.D., when he thanked the IAE for organising the lectures and invited their further engagement with his department on their subject matter.

• The IAE’s work with the German and Swedish Academies on the Euro-CASE Innovation Platform’s background papers culminated in the adoption of the 3 Academies’ Summary Report, for final sanction by the board of Euro-CASE this summer. Tim Brick attended the final drafting meeting in Paris on 17th March 2014 on behalf of the IAE. The final report will issue this autumn and be widely circulated.
• It is proposed to extend this initiative. Any further engagement by the IAE will be
dependent on winning sponsorship to do so.

• Events attended during the year associated with the current initiative were briefly:-

- 03.05.2013 - International Academy for Production Engineering
  (CIRP) U.K. and Ireland, UCD
- 14.05.2013 - Meeting with Secretary General, DJEI, Dublin
- 16.05.2013 - InterTrade Ireland Conference, Dublin
- 05 & 06.06.2013 - Euro-CASE Innovation Platform meeting, Madrid,
  Spain
- 17.07.2013 - Meeting with Principal Officer, DJEI, Dublin
- 06.08.2013 - Meeting with CEO, InterTrade Ireland at Newry offices
  Attended by IAE President and Executive Director
- 09.09.2013 - Meeting of Euro-CASE national academies’ presidents
  and EU Commission (R & D Directorate) in Brussels
- 30 & 31.10.2013 - Euro-CASE Innovation Platform meeting, Lisbon,
  Portugal
- 17.03.2014 - Euro-CASE Innovation Platform meeting, Paris, France

• Liaison continuing with the RIA in connection with the possible transfer to the IAE of the
award of the Parsons Medal to young engineers.

HERITAGE

Chairman
Dr. Finbar Callanan

Members
Brendan Clancy
Dr Ron Cox
Dr. Phil Donald
Dr. Gordon Millington
Aonghus O’hEocha
Walter Raftery
Brian Torpey (deceased 15.01.2014)

ACTIVITIES

• The compilation and final draft of the publication “Called to Serve” has been completed,
  ready for printing and the website. It comprises the biographies and presidential addresses
  of all of the Presidents of the Institution, from 1838 – 1969. In discussion with the Director
  General, Engineers Ireland, it has been agreed that it be published by Engineers Ireland, with
  an acknowledgement of the IAE’s involvement. Publication is being kindly sponsored by
  the ESB.

• The preparation of an Advisory on the development of a National Policy on Engineering
  Heritage has been initiated.
• The process of collecting information and material for biographies and presidential addresses, from 1970 onwards has commenced with a view to ultimate publication.

• A request has issued to Council for members to assist in submitting biographies of all the IAE Fellows since its inception for the assembly of a consolidated record.

• Work is ongoing in promoting county-based (sponsored) pamphlets on Ireland’s Engineering Heritage, consideration of an IAE annual prize for a publication promoting engineering heritage and recording of Irish engineers’ works abroad.

CLIMATE CHANGE AND WATER RESOURCES

Chairman  Michael Hand

Members  Anne Butler
Philip Callery
Prof. Tom Casey
John Duffy
Jerry Grant
Peter Langford
Michael Philips
Tony Smyth

Advisers  John O’Flynn
Noel O’Keeffe

Facilitator  Tim Brick

ACTIVITIES

• The committee met on 4th July 2013 to consider their watching brief on the establishment of the Irish Water Authority.

• The possibility of a joint review with the Energy Committee on the nexus of Water and Waste services and energy demands remains under consideration.

• In view of the extreme weather experienced over this winter, copies of the IAE report “Ireland at Risk – Adaptation for Climate Change (Oct. 2009)” were re-circulated to relevant Government departments and state agencies in early March 2014. This met with a very positive response and an invitation to participate in the OPW’s Flood Risk Conference at Dublin Castle on 10th April 2014.

• No other significant activities to report during this period.
OTHER STANDING COMMITTEES

- The Spatial Planning and Infrastructure and ICT Standing Committees did not meet or engage in specific activities over the last year.

RECORD OF PUBLICATIONS

- IAE/Intel Labs Europe Lecture Series – Publication 13th Dec. 2013

PRIVATE DONORS

- To date 22 companies have generously provided sponsorship contributions to support the Academy’s activities

- The President and members of the IAE Council met with representatives of the sponsors on 3rd July 2013 and 18th December 2013 to brief them on the activities of the Academy. Their views and opinions on areas of interest to them which they may wish the Academy to examine were sought.

- Their main areas of interest were engineering/technical education and skills, maintaining/recovering competitiveness and better linkages with universities and R & D centres.

- Overall they were very supportive of the Academy’s endeavours.

- The IAE’s Development Plan calls for closer links with our sponsors, industry in general and other business representative bodies.
DIALOGUES

- The President and Executive Director met with the Royal Academy of Engineering in London on 5th November 2013. The purpose of the meeting was to discuss potential joint studies, our mutual engagement in Euro-CASE Platforms, governance and financing issues. The meeting was positive and informative.

- As part of establishing linkages with business representative bodies, a preliminary, explorative meeting was held with the American Chamber of Commerce (Ireland) on 5th February 2014. Follow-up meetings over the next months will be pursued.

- Via our engagement with Euro-CASE Platforms much useful experience and knowledge has and continues to be gleaned from our European sister Academies.

- The six-monthly formal liaison meetings between the President and Director General of Engineers Ireland and the IAE’s President and Executive Director continue to maintain our good working relationship.
HONORARY SECRETARY'S REPORT

New Members

Six (6) new members were elected during the year representing a wide range of engineering, scientific and technological interests on the island of Ireland and they will be conferred with Fellowship at the Annual Lunch after the Annual General Meeting of the Academy on May 6th, 2014. Full details are included later in this report.

Official List of Members

A full list of members as at March 31st, 2014, the official year end date, is also included in succeeding pages. Names only are quoted for reasons of confidentiality. Full details of all members are held in a recently completed official Membership Profile Register which is kept under secure conditions in the Administrative Office of the Academy at 22 Clyde Road. Access to the Register is normally restricted to the Officers of the Academy and the Executive Director and is made available, as required, to members of Council/Board of Directors, the Executive Committee and the Membership Committee either by the Administrative Assistant, Ms Sile McKay or the Honorary Secretary, Mr. Michael J. Higgins. New members are listed on the Register only after they have been formally conferred with Fellowship.

Euro-CASE

The Academy is committed to maintaining contact with and participating in the activities of Euro-CASE (the European Council of Academies of Applied Sciences, Technologies and Engineering), the umbrella organisation of engineering and scientific academies from twenty one (21) European countries with a network of more than 6,000 experts from the fields of technology and innovation.

Executive Director, Mr. Tim Brick is an active member of the Innovation Platform which is due to present a major report before the end of May 2014. Mr. Kieran O'Brien is serving on and contributing significantly to the Energy Platform. Honorary Secretary, Mr. Michael J. Higgins is the nominated Irish member of the Board of Directors of Euro-CASE.

Deceased Members

Finally and sadly, I must note the passing of two distinguished colleagues during the year – Mr. Brian Torpey, a long serving member both of the Council/Board of Directors and the Heritage Standing Committee and Mr. Bernard J. Tighe. We extend sincere sympathy to their families, colleagues and friends. Obituaries are included in succeeding pages.

Michael J. Higgins
Honorary Secretary
ORGANISATION AND MEMBERSHIP OF THE ACADEMY

ORGANISATION

The membership of the Council/Board of Directors, the Executive Committee and the Membership Committee at March 31st, 2014 is as follows:-

COUNCIL/BOARD OF DIRECTORS

Mr. Jonathan Hegan, President/Chairman
Dr. Anthony D. (Tony) Barry, Immediate Past President
Mr. Don Moore, President Elect
Mr. Patrick Lynch, Honorary Treasurer
Mr. Michael J. Higgins, Secretary
Dr. Norman Apsley
Mr. Martin Cronin
Prof. Orla Feely
Mr. Don Godson
Dr. John D. (Jack) Golden
Mr. Jerry Grant
Mr. Joe Harford
Mr. Michael Hayden
Prof. John Kelly
Prof. Adrian Long
Mr. Eoin O'Driscoll
Dr. Daniel O'Hare
Mr. Paddy Purcell
Mr. Tony Smyth
EXECUTIVE COMMITTEE

Mr. Jonathan Hegar, President
Dr. Anthony D. (Tony) Barry, Immediate Past President
Mr. Don Moore, President Elect
Mr. Patrick Lynch, Honorary Treasurer
Mr. Michael J. Higgins, Secretary
Mr. Martin Cronin
Dr. John D. (Jack) Golden
Mr. Michael Hayden
Prof. Adrian Long

MEMBERSHIP COMMITTEE

Mr. Paddy Purcell, Chairman
Mr. Liam Connellan
Mr. Michael Higgins (ex officio)
Mr. Peter Langford
Mr. William J. McCoubrey
Dr. Gordon Millington
ELECTION OF NEW FELLOWS

The following new members will be elected to Fellowship of the Academy and will receive their parchments at a Conferring Ceremony to be held in Engineers Ireland, 22 Clyde Road, Dublin 4 on Tuesday, May 6\textsuperscript{th}, 2014:-

Professor Mark W.J. Ferguson, BSc, BDS, PhD, DMedSc, FMedSc, FDS, FFD, CBE  
Director General, Science Foundation Ireland  
Chief Scientific Adviser to the Government of Ireland

Professor (Michael) Peter Kennedy, BE, MSc, PhD, DEng, CEng, FIEI, FIEEE, MRIA  
Professor of Microelectronic Engineering, University College Cork

Professor Gerard Kiely, BE, MSc (UNSW), MSc (CSU), PhD, DSc, CEng, FIEI  
Professor of Civil and Environmental Engineering, University College Cork

Mr. Paddy Larkin, BSc(MechEng)  
Chief Executive Officer, Mutual Energy Limited

Mr. (Richard James) Jim O’Brien, BE, MEngSc, CEng, FIEI, MIEEE, FIET  
CRH Group (retired)

Mr. Mike O’Flynn, BEng, MEng  
Managing Director and Vice President, Operations, Boston Scientific Galway
The Irish Academy of Engineering
22 Clyde Road, Ballsbridge, Dublin 4
Telephone: +353 1 665 1337
Email: academy@engineersireland.ie
www.iae.ie

IAE OFFICIAL LIST OF MEMBERS (as at March 31st, 2014)

Mr. Lionel Alexander
Mr. Geoff W. Allister
Dr. Norman Apsley
Mr. Brendan Barrett
Dr. Anthony Barry
Mr. Fred Barry
Prof. Muhammed Basheer
Prof. Eric Kirkland Beatty
Mr. Adrian Kennedy Bell
Mr. James Ingram Bill
Prof. Thomas Brazil
Prof. Jim Browne
Dr. Nael Bunni
Mr. Frank Burke
Ms. Anne Butler
Mr. Dermot Byrne
Prof. Gerry Byrne
Prof. John Byrne
Dr. Paddy Caffrey
Prof. James Calderwood
Dr. Finbar Callanan (Honorary)
Mr. Phil Callery
Mr. Gavin Campbell
Prof. Tom Casey
Mr. Kenneth Cheevers
Mr. Brendan Clancy
Mr. Liam Connellan
Mr. Alan Cooper
Dr. Ronald Cox
Mr. Martin Cronin
Prof. Patrick Cunningham
Dr. Martin G. Curley
Dr. Philip Donald
Prof. Patrick Dowling
Mr. John Duffy
Mr. Gerry Duggan
Prof. Orla Feely
Mr. Sean Finlay
Mr. William Fitzgerald
Mr. Noel Fogarty
Mr. Mark Gantly
Mr. Don Godson
Dr. John D. (Jack) Golden
Mr. Jerry Grant
Prof. Peter Gregson
Prof. Jane Grimson
Mr. Michael Hand
Dr. Tom Hardiman
Sir Patrick Haren
Mr. Joseph F. Harford
Mr. Michael C. Hayden
Mr. Jonathan Hegan
Mr. Michael J. Higgins
Dr. John Allan Hill
Prof. Brian William Hogg
Dr. Chris Horn
Mr. Patrick O. Jennings
Mr. Alfie Kane
Mr. John A. Kavanagh
Mr. Brian Kearney
Prof. John Kelly
Mr. Gerard P. Kilcommins
Dr. John J. Killeen (Honorary)
Mr. Peter Langford
Mr. Tom Leahy
Prof. John Court Levy
Prof. J. Owen Lewis
Prof. Adrian Long
Mr. Martin Lowery
Mr. Mark Lowry
Mr. Finn Lyden
Mr. Patrick J. Lynch
Prof. Brian MacCraith
Dr. Frank McCabe
Mr. Paul McCambridge
Prof. John Vincent McCanny
Dr. Daniel V. McCaughan
Mr. William James McCoubrey
Mr. Joseph McCullough
Mr. John McGowan
Mr. Patrick McGrath
Mr. David McIlhagger
Mr. Dan McInerney
Prof. James McLaughlin
Mr. Robert McLaughlin
Mr. Padraig McManus
Prof. Sean McNamara
Mr. James McQuaid
Mr. Don McQuillan
Prof. Ian Marison
Mr. John Martin
Mr. Jerry Mehigan
Dr. Gordon S. Millington (Honorary)
Mr. Anthony M. Moloney
Mr. Don Moore
Prof. J.W.O. Morrison
Prof. Noel Mulcahy
Mr. Sean Mulcahy
Mr. John Mullins
Dr. Brendan J. Murphy
Dr. Martin Naughton
Mr. Terry Nolan
Prof. Brian Norton
Mr. Kieran O'Brien
Prof. Deaglan O'Caoimh
Mr. Neil O'Carroll
Mr. Eoin O'Driscoll
An tUasal Aonghus Ó hEocha
Mr. Jim O'Hara  
Mr. Kenneth O'Hara  
Dr. Daniel O'Hare  
Prof. Philip O'Kane  
Mr. Liam O'Mahony  
Prof. Margaret O'Mahony  
Dr. David J. O'Reilly  
Mr. David Orr  
Sir John Parker  
Mr. Michael M. Phillips  
Mr. Paddy Power  
Prof. Patrick Prendergast  
Mr. Paddy Purcell  
Mr. Ian Quinn  
Mr. Walter Raftery  
Mr. P. J. Rudden  
Mr. Michael J. Ryan  
Mr. Robert (Bob) Savage  
Dr. Reg Shaw  
Mr. James Sheehan  
Mr. John Simington  
Mr. Eamonn Sinnott  
Mr. John A. (Tony) Smyth  
Mr. William Stafford  
Dr. Brian N. Sweeney  
Mr. Niall Sweeney  
Dr. Don Thornhill  
Dr. David J. Timoney  
Mr. Brendan Tuohy  
Mr. Francis J. Turvey  
Mr. John E. Wallace  
Dr. Ed Walsh  
Mr. David Waters  
Prof. Roger Whatmore  
Prof. Gerry Wrixon  

Total: 143 Members
OBITUARIES

Brian Torpey

Bernard Tighe
When Brian Torpey passed away in January of this year the engineering profession lost a dedicated, highly competent and innovative engineer whose career was an example to the many who were privileged to work with him and the wide circle of friends who knew and admired him. In every sense of the word he was the complete engineer whose love for his profession, its accomplishments and notable heritage, enriched his career and inspired others.

He was born on the north side of Dublin and was educated like so many others of the engineering profession by the Christian Brothers in the famous establishment of O’Connell School. He completed his education at O’Connell’s at age 16 and launched himself into engineering by taking a placement as an engineering trainee in a consulting engineering practice while continuing his studies in the College of Technology, Bolton Street, Dublin from where he eventually qualified by the examinations of the professional engineering institutions. He qualified for the Institution of Structural Engineers in 1959 and the Institution of Civil Engineers of Ireland in 1962. He subsequently completed extension courses in Heriot-Watt University Edinburgh and Trinity College Dublin.

He often looked back on the path of his education as “doing it the hard way” and saw considerable merit in the route he had chosen which combined with the variety of employments in his early years in the profession, was a decided advantage in his subsequent career.

His early experience commenced with Ove Arup and Partners in Edinburgh followed by a two year spell with Irishenco in Foynes on the Shannon Estuary. He spent a further two years with consultants De Leuw Chadwick and O’hEocha in Lagos, Nigeria followed by a period with Christiani and Nielsen on the construction of Platin Cement works in Drogheda. In those early years he was engaged mainly in heavy structural design, a branch of the profession which he loved.

In 1972 he joined the Dublin Port Company as Assistant Engineer and over the period 1972 to his retirement in 1999 he rose to the position of Chief Engineer to which he was appointed in 1989. In this position he felt himself privileged to be one of a long line of the many eminent engineers who held the post of Chief Engineer in Dublin Port during the centuries of its development.

Throughout his career in the Port he was involved in the civil/structural design requirements of a rapidly developing Port and was justly proud of the infrastructure works he designed and supervised during that time. Like all structural engineers he enjoyed discussing the intricacies of the works he had designed including what he considered his most memorable and challenging assignment which was the design and construction of the Ro- Ro ramps which are now an indispensable feature of all modern port handling facilities.

Additionally his commitment to the Port also encompassed his deep and all embracing regard for the history and heritage of the Port from the days of Captain William Bligh’s original survey to the construction of the South and North Walls and the gradual development of the Port as we know it today and the engineers who were involved including one of his most famous predecessors, the redoubtable Bindon Blood Stoney.
Brian was elected a Fellow of The Institution of Structural Engineers in 1989 and a Fellow of The Institution of Engineers of Ireland in 1990. In recognition of his distinguished career he was elected a Fellow of The Irish Academy of Engineering in 2001 (FIAE). In his retirement he was a constant assistance to his profession serving as he did on the Board of Examiners of Engineers Ireland as well as the Benevolent Fund. He also served on the Council of The Academy as well as the Heritage Group and the Spatial Strategy Standing Committee. Additionally he was a very committed member of The Railway Preservation Society along with his late brother Niall. Both of them had an encyclopaedic knowledge of the Irish Railway system.

In 1968 he married Deirdre (nee Merriman) the love of his life. As a couple they were great soul mates with shared interests and they reared a son and daughter (Stephen and Naomi) of whom they were very proud. The arrival of their first grandchild Emily, brought extra happiness to the family in recent years. Both of them had a deep interest in choral music and Brian sang with The Culwick Choral society and both of them sang in the Dalkey Active Retired Choir. Members of both choirs sang their tribute to Brian with the church choir at his very moving funeral mass.

For his family the loss is grievous and they have the sympathy of all who know them - and they are many. His friends will miss him greatly for the breadth of his knowledge, his kindly and gentlemanly demeanour, his enjoyment of a good party to which he always willingly contributed in song or a verse and his ever present smile. For most of his adult life he suffered the pains of rheumatoid arthritis but it never conquered or inhibited him in any way. In truth he was a unique man with a deep and abiding faith who, in spite of the cares and troubles of the world “Always Looked On The Bright Side of Life.”

PFC
Bernard Tighe ME BSc CEng FIEI FIAE
1919 – 2014

It is with sadness that we announce the death on 11th February 2014 of Bernard (Bernie) Tighe in his 95th year. He had a distinguished engineering career, principally in local government.

A native of Galway, he served in the earlier part of his career in a number of local authorities, the Turf Development Board and Mianrai Teoranta.

In 1950 he joined the then Department of Local Government as an Engineering Inspector, Environment, and for a number of years, was the Department’s Technical Advisor in the development of water and waste water facilities in a number of counties. In 1970 he was appointed as Assistant Chief Engineering Advisor and in 1976 was appointed Deputy Chief Engineering Advisor with responsibility for all sanitary services development in the local authority system.

He was appointed as Chief Engineering Advisor in 1980 with overall responsibility for all engineering and technical services in local authorities on behalf of the Department of the Environment and Local Government. He served with distinction in that post until his retirement in 1984.

In addition to his passion for Engineering, Bernie had a long and distinguished association with Elm Park Golf Club. He joined Elm Park in 1951 and was appointed Club Captain in 1962. He subsequently became President in 1970 and was made an Honorary Life Member of the club by the acclamation of the members in 2011.

His involvement in Elm Park as a member, where he gave of his time on a considerable voluntary basis was very much appreciated. He took part in many of the course projects over the years, which included redesigns of elements of the course and the considerable and extensive drainage systems which were installed in the early 1960’s, to name but a few.

This activity did not inhibit him in his golfing prowess, winning Golfer of the Year and two President’s prizes together with numerous other team events. He was also renowned for his bridge expertise.

He was elected a Fellow of the Academy in its first year of existence, 1997, in recognition of his considerable engineering achievements and contributions to the profession which he served with distinction.

He was much appreciated and respected by all those who knew him, professionally or socially.

*Ar dheis Dé go raibh a anam dílis.*

PJL
## Irish Academy of Engineering

### Income and Expenditure Account
#### January 1st to December 31st 2013

<table>
<thead>
<tr>
<th>Bank Balance January 1st 2013</th>
<th>€</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>48,040.32</td>
<td></td>
</tr>
</tbody>
</table>

### Income

<table>
<thead>
<tr>
<th>Description</th>
<th>€</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conferring Dinner/ Annual Fellows Lunch</td>
<td>5,741.83</td>
</tr>
<tr>
<td>Setting up of No.2 Bank Account</td>
<td>10,000.00</td>
</tr>
<tr>
<td>Subscriptions</td>
<td>38,127.00</td>
</tr>
<tr>
<td>Special Contributions</td>
<td>12,000.00</td>
</tr>
<tr>
<td>Project Income</td>
<td>2,916.20</td>
</tr>
<tr>
<td>Corporate Income</td>
<td>69,250.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Miscellaneous</th>
<th>138,035.03</th>
<th>138,035.03</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expenditure</td>
<td>186,075.35</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Description</th>
<th>€</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conferring Dinner / Annual Fellows Lunch</td>
<td>4,432.00</td>
</tr>
<tr>
<td>Printing/Telephone/Postage</td>
<td>1,963.20</td>
</tr>
<tr>
<td>Euro Case 2012 Fee</td>
<td>3,228.00</td>
</tr>
<tr>
<td>Bank Charges and Government Fees</td>
<td>133.73</td>
</tr>
<tr>
<td>Meetings &amp; Travel</td>
<td>10,045.78</td>
</tr>
<tr>
<td>Website and Computer Charges</td>
<td>736.77</td>
</tr>
<tr>
<td>Administration</td>
<td>3,863.12</td>
</tr>
<tr>
<td>Personnel Costs</td>
<td>82,713.00</td>
</tr>
<tr>
<td>Setting up No.2 Bank Account</td>
<td>10,000.00</td>
</tr>
<tr>
<td>General Project Expenditure</td>
<td>4,722.26</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Expenditure</th>
<th>121,837.86</th>
<th>121,837.86</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank Balance at 31st December, 2013</td>
<td></td>
<td>64,237.49</td>
</tr>
</tbody>
</table>