ISA Ireland Section 2015 Honours and Awards



University College Cork Wednesday 9th December 2015

> e-mail: <u>info@isa.ie</u> <u>http://www.isa.ie</u>

About ISA Worldwide

ISA – The International Society of Automation has 35,000 members in 95 countries. The ISA is a global, nonprofit, educational organisation connecting people and ideas in automation and control. The Society fosters advancement in the theory, design, manufacture and use of sensors, instruments, computers and systems for automation and control in a wide variety of applications. In addition to hosting the largest conferences and exhibitions for automation and control. ISA is a leading technical training organisation and a respected publisher of books and standards.

ISA also serves the professional development and certification needs of industry professionals and practitioners with its Certified Automation Professional (CAP), Certified Control Systems Technician® (CCST®), Certified Industrial Maintenance Mechanics (CIMM) programs and the Control Systems Engineers (CSE) license.

Born as the Instrument Society of America in 1945, in Pittsburgh, Pennsylvania, USA. The society grew out of the desire of 18 local instrument societies to form a national organization. Membership grew from 900 in 1946 to 6,900 in 1953 to 30,000 in 2004.

Recognising ISA's international reach and the fact that its technical scope had grown beyond instruments, in 2008, the ISA Council of Society Delegates approved a name change to the International Society of Automation. Today, ISA has 155 regular Sections and 170 Student Sections throughout the world.

Today's Mission:

Maximise the effectiveness of ISA members and other practitioners and organizations worldwide to advance and apply the science, technology, and allied arts of instrumentation, systems, and automation in all industries and applications. Identify and promote emerging technologies and applications. Develop and deliver a wide variety of high-value information products and services to the global community.



ISA Ireland Section

The Ireland Section, which is voluntary with a membership of over 160, received its charter in 1978. Its purpose is to bring together all personnel involved in the instrumentation and related disciplines in order to enhance their capabilities in instrumentation design, manufacture and use.

The sections calendar of events, for the coming year will see:

- Two Seminars and Six Technical Talks
- Plant Tours
- Annual Honours & Awards ceremony.

ISA Ireland President Mr. Alan Bateman

I would like to welcome you all here this evening, to our 33rd annual Honours and Awards Ceremony. We hold this annual ceremony to acknowledge and encourage excellence for those training for careers in Instrumentation, Systems and Automation.

This year we have seven awards, four of which have been submitted by Third Level institutions and three industry awards. I would like to welcome the recipients and their families

We are delighted each sponsor is represented here this evening, this clearly shows the industry's awareness and support for promoting and awarding excellence.



I would like to thank University College Cork for allowing

use this very elegant and historic Common Room. I hope you all have a very relaxed and enjoyable evening as we celebrate excellence in our industry. I would like to wish you and your families a joyful Christmas and a prosperous new year.

Year Name Name Year 1977 / 1979 Mr. Fred Gilroy 1998 / 1999 Mr Declan Lordan 1979 / 1980 Dr. Liam McDonnell 1999 / 2000 Mr. Brian Curtis Mr. Maurice Radford 1980 / 1981 2000 / 2001 Mr. Eamon Creech 1981 / 1983 Mr. John Power 2001 / 2002 Mr. Tony Mahon 1983 / 1984 Mr. Malachy Hanley 2002 / 2003 Mr. Alan Edwards 1984 / 1985 Mr. Eoin O'Riain Mr. Peadar Walsh 2003 / 2004 1985 / 1986 Mr. Harvey Makin 2004 / 2005 Mr. Martin Almond 1986 / 1987 Mr. Frank Maher 2005 / 2006 Mr. Kevin Dignam 1987 / 1988 Mr. Brendan Barry 2006 / 2007 Mr. Brian Nolan 1988 / 1989 Dr. Liam McDonnell 2007 / 2008 Mr. Jim Long 1989/1990 Mr. Fred Gilroy 2008 / 2009 Mr. Michael Meade 1990 / 1991 Dr. Eamon Cashell 2009 / 2010 Mr. Kevin McCarthy Mr. Ger Dullea. 1991 / 1992 Mr. David O' Brien 2010 / 2011 1992 / 1994 Mr. John Lotty 2011 / 2012 Mr. John Downey 1994 / 1995 Mr. Robert Shine 2012 / 2013 Mr. Kieran Coughlan 1995 / 1996 Mr. John Farrell 2013 / 2014 Mr. Liam O'Brien 1996 / 1997 Mr. Aidan Howard 2015 / 2017 Mr. Alan Bateman 1997 / 1998 Mr. Billy Walsh

ISA IRELAND SECTION PRESIDENTS

Craft Person Award

Criteria:

To be awarded, on the nomination of Cork Training Centers and / or Carlow Institute of Technology, to the best final year instrumentation Apprentice for notable academic and practical achievements in instrumentation.

Recipient:

Mr. Rodger Condon Cork Training Centre, Cork.

Nominated by:

Mr. Pat Mc Carthy Cork Educational and Training Board.



Rodger Condon is completing his apprenticeship as an Electrical Instrumentation craftsperson and a can be seen from the attached took his studies very serious. He has achieved practically all credits in every subject for phase 2,4,6. Rodger took advise easily and is attending college by night to complete a degree in Applied Physics and Instrumentation.

Rodger has also completed other in house and external courses. Rodger in currently serving his apprenticeship with Dornan Engineering on several of their projects around Cork and

Rodger is currently studying for a degree in Applied Physics & Instrumentation by night

I have no hesitation in recommending him for this ISA award.

ISA IRELAND SECTION 2015 HONOURS AND AWARDS SPONSORS



Degree Award

Criteria:

To be awarded, on any nomination, to the best final year Degree student specialising in any area of Automation Instrumentation or Control.

Recipient:

Ms. Aoife Monahan Galway-Mayo Institute of Technology

Nominated by:

Mr. Gareth Roe Lecturer with Galway-Mayo Institute of Technology .



Aoife Aoife Monahan has been an outstanding student on the degree course in Physics & Instrumentation here at Galway-Mayo Institute of Technology. This is evidenced by her results from 1st year and 2nd year where she achieved overall results of 85.5% (GPA) and 90.2% (GPA) respectively and is further supported by her 3rd year degree results. In 3rd year Aoife's overall average was 80% with all her individual module results, bar one at 69%!, being at distinction level or well above and this in subjects ranging from Computerized Instrument Systems (79%) to Robotics & Automation(80%) to Physics (77%). Aoife displays a natural aptitude and enthusiasm combined with a determined persistence in her studies of both the theoretical and practical aspects of instrumentation and applied physics. Through her coursework and experience to date Aoife has a proven impressive ability in both the theory and then the practical implementation of instrument systems .

Aoife has also demonstrated a distinct ability for both individual project work and collaborative work as part of a team.

In her 2nd year individual project she took on the challenging task of building a working transmittance heart rate monitoring system. This involved constructing the sensor system and associated signal conditioning, interfacing the processed signal to a PC and then developing and using a LabViewTM program to interpret and display the incoming signal in terms of heart rate. The end result was a system that was not only fully functioning but was also delivered with significant attention to detail.

In conclusion I have no hesitation in nominating Aoife for the ISA Degree Award for the best final year degree student specializing in any area of Automation, Instrumentation or Control and I believe that if she is successful she would be a very worthy recipient

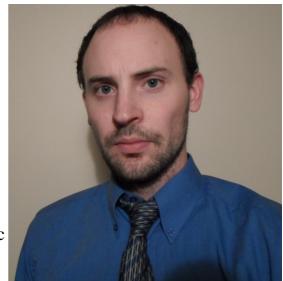
Honour's Degree Award

Criteria:

To be awarded, on any nomination, to the best final year Degree student specialising in any area of Automation, Instrumentation or Control.

Recipient: Mr. Colin Levis Cork Institute of Technology, Cork.

Nominated by: Mr. Gerard Geaney Lecturer with the department of Electrical & Electronic Engineering at Cork Institute of Technology.



Colin displayed the ability to analyse and develop a process. The process consisted of a Permanent Magnet Synchronous Generator simulating a wind turbine. The model emulated modern wind turbines used to reduce losses and provide a more efficient system. This model incorporated automation consisting of hardware such as Siemens S7-1200 PLC, Analog Input module, Analog output signal board, Siemens Sentron PAC 4200 energy meter, Allen Bradley Power flex 4M VFD, LEM current transducers, Kubler incremental encoder, Voltage rectifiers, 1 kW PMSG and a 2 kW induction motor. In order to obtain data and determine the capabilities of the PMSG the following software is used Simatic Step 7 V12, Kepware, Simulink/Matlab, Wonderware ArchestrA, MS Excel and MS Access.

To control the speed of the motor a PI controller was designed using the Root Locus method. The controller designed has a conservative response to eliminate any system overshoot and have a stable response. This entailed deriving a transfer function for the motor within Simulink and Matlab from real time data. The designed controller and actual response were verified to show an accurate model was created. To visually display the results and effects of operating conditions by the use of SCADA software developed by Wonderware.

Setting the Standard for Automation**

Innovation Project Award

Criteria:

To recognise a project which has made a significant contribution to the advancement of industry in Ireland through the use of Automation Technology.

Recipient:

Grzegorz Perka & Adam Sikorzynski Vistakon Limerick.

Nominated by: Mr. Declan Fagan Vistakon Limerick.



The contributions for which the above named nominee and project should be recognized because; Grzegorz Perka and colleague Adam Sikorzynski recognised that extracting data from a complex process with no measurement systems built in was very difficult_x

Using a very clever design Grzegorz and Adam designed and built a process monitoring system built into a replica process pallet that could be used to navigate through the production line collecting information throughout its movement path. The replica process pallet used the same physical dimensions as a typical pallet however it had a purpose built PC board designed into the pallet to monitor and store process critical data.

Grzegorz then developed custom software to upload the data from the process pallet which could then be analysed offline to make critical process improvement changes.

The outcome from the project was a self-contained intelligent module which had the ability to Collect 10 measures per second (temperature and 3 axis acceleration) Measure acceleration 50 times per 100ms and store max value Time stamp for each record. Can show real-time data on the PC screen

This was truly a revolutionary step in that it was now possible the monitor and measure data in real time throughout the entire process which was previously impossible. Information such as forces applied to the product as well as temperature monitoring was extremely beneficial for process improvement and product improvement development.

Automation Champion Award

Criteria: XXXX

Recipient: Mr. Liam O'Brien

Enterprise System Partners

Nominated by: Mr. Dermot O'Callaghan.

Enterprise System Partners



Serialisation-Liam has more than 25 years experience managing IT/Automation companies supplying solutions to the life science sector. Over his career, the automation industry has benefited from his technical insights and execution & management of solutions, coupled with an unrivalled entrepreneurial flair to grow two world-class service companies in this field.

In 1994, Liam co-founded and managed ProsCon (now a Rockwell owned company), as the original automation integration company supporting life sciences in Ireland. Under his leadership, the company grew from zero to over 200 resources within a 5 year timeframe with an annual turnover greater than 15M euro per annum. He oversaw the development of a management team, project management team, quality system, infrastructure and premises including system build facility to provide full turnkey solutions for PLC/SCADA and DCS systems. The customer base included all the major pharmaceutical manufacturers primarily in Ireland, but also had begun development in the UK and Singapore. Today, the business has a global reach as a Rockwell automation company.

In 2003, Liam co-founded ESP and continues to act as Managing Director today. Liam identified the trend towards MES in the early 2000s and was involved in managing the first EBR implementation for Pfizer worldwide. During this project, ESP was born. Under his guidance, the company has grown to be the largest system integrator of MES in the life science industry worldwide, headquartered in Cork Ireland, with active projects throughout Europe, North America and Asia.

In addition, Liam has and continues to provide consulting support for some of the companies global clients including Pfizer, Genzyme (Sanofi) and AstraZeneca. Liam provides a unique blend of technical and commercial skills to support such clients in his visualisation, planning and commercial management of global system programs for these corporations requiring roll-out of multi-site manufacturing systems and their integration with the automation layer.

Pioneer Award

Criteria:

To be awarded, on the nomination of two or more Society members, in recognition of a lifetime devoted to Instrumentation / Automation in Ireland.

Recipient:

Mr. John Power The Power Group, **Ring, Dungarvan, Co. Waterford**

Nominated by:

Mr. Bob Shine (**Retired**) Mr. Billy Walsh (**UCC**).



John Power is founder and President of "The Power Group" and was one of the early presidents of ISA Ireland in the 1981 and 82. A native of Old Parish in county Waterford, John has a wealth of knowledge and experience in the control and automation sector going back longer than he would care to mention.

Having gained significant expertise and knowledge in Electrical Engineering and automation control with a variety of engineering and chemical companies in his early career John soon established several companies of his own to serve the sector.

By 1982 he had established The Power Grou**p** of companies, comprising; Powerflow Electronics, an Electronic design and manufacturing company, and Power Engineering, an Electrical engineering/automation company.

One of the pivotal moments in John's career was the invention and successful worldwide patenting of a range of electronic timers for switching and controlling solenoid valves. These original products proved to be highly successful, revolutionising the compressed air condensate market, and paved the way for the development of a comprehensive range of control and automation equipment. Powerflow continue to develop and manufacture at their headquarters in Waterford, supplying many of the world's leading automation companies and exporting to more than sixty countries Worldwide.

As well as the company's own range of branded products, designed and manufactured in house, the group also work in conjunction with global leaders in the field of instrumentation and process control, to develop and integrate cutting edge solutions for today's modern manufacturing and process control environment.

John's formative years involved a keen interest in electrical engineering and automation, which eventually led to him joining MF Kent Electrical contractors of Clonmel. During this time he worked on the installation and commissioning of large scale industrial plants throughout Ireland, proving valuable experience for the years ahead.

Following his time with MF Kent John was employed by Pfizer's Quigley Magnesite division for 13 years as Electrical and Automation Engineering Manager at their facility in Dungarvan, and also covering the Tivoli plant in Cork and the mining / quarrying facility in Kilkenny. During his period with Pfizer-Quigley Magnesite, which was a unique plant in Ireland, producing synthetic magnesia, John and his team pioneered many new methods and technologies, including the measurement of mass flow density and inline rock weighing systems, using nuclear radiation sources, magnetic flow meters and speed encoders. Some of those developments revolutionised the efficiency of the plant, and subsequently went on to be used widely in the industry. John describes the plant "as a wonderful place to work. You could nearly class it as a production laboratory and test facility, with a new challenge to overcome every day, in power distribution and automation. The facility encompassed almost every aspect of measurement and control". It proved to be a fabulous environment to develop his analytical and problem solving skills, which he would go on to use throughout his career.

Following the closure of the Pfizer-Quigley plant in Ireland, John was keen to utilise the skills and knowledge acquired so began work as a Consultant Engineer and was instrumental in the design and construction of several high-tech multinational manufacturing facilities in the Cork area, in the early eighties. It was also during this period that the Power Groups' Electrical and Automation division Power Engineering was founded. Now with more than three decades of experience John is proud to say that his company has designed and manufactured Power Distribution systems, automation control panels and SCADA solutions for most of the larger manufacturing plants in Ireland, such as, Boston Scientific, GSK, Lake Region, The Dawn Group, Glanbia, as well as projects in the U.K. and France.

Today the Power Group remain at the forefront of technology and John continues to head up a dedicated team, developing and patenting several new products annually, and he continues to combine his passion for instrumentation, innovation

ISA IRELAND SECTION 2015 / 2016 CORPORATE SPONSORS















PJBONNER











SIEMENS

Honours & Awards 2015 Program of Events

University College Cork, Wednesday 9th December 2015

- 18:00 Arrival of Lord Mayor Councillor (Chris O'Leary).
- **18:10** ISA Ireland Committee Member Dave O'Connor will begin proceedings.
- 18:15 Formal opening by Lord Mayor Councillor (Chris O'Leary).
- **18:20** Response from the President of ISA Ireland Section Mr. Alan Bateman.
- **18:25** Presentation of Awards.

Ir. Rodger Condon		
Is. Aoife Monahan		
Ir. Colin Levis		
Ir. Grzegorz Perka /		
Ir. Adam Sikorzynski		
Automation Champion Award Mr. Liam O'Brien		
r. John Power		
1		

19:00	Response from the Winner of Pioneer Award, Mr. John Power.
19:01	Photographs of Award winners with the Lord Mayor.
19:15	Photographs of Sponsors with the Lord Mayor.
19:30	Reception.

20:30 Close of Honours and Awards Reception.

Cork Training Centre Galway-Mayo Institute of Technology Cork Institute of Technology Vistakon, Limerick.

Enterprise System Partners Ltd , Ireland The Power Group, Ring, Dungarvan, Co. Waterford.



The Ireland section of ISA has conducted an annual Honours & Awards programme since 1980. This programme is intended to acknowledge and encourage excellence amongst those involved in, and those training for careers in Automation, Instrumentation and related areas of technology.

Cork Institute of Technology Dublin City University Galway Mayo Institute of Technology Institute of Technology Carlow, Waterford Institute of Technology Limerick Institute of Technology Cork Education Training Centre