

# ISA Ireland Section

## 2025 Honours and Awards



*South East Technological University - Carlow*  
*Wednesday 21st January 2026 6pm*  
*e-mail: [info@isa.ie](mailto:info@isa.ie)*  
*<http://www.isa.ie>*

## **About ISA Worldwide**

ISA – The International Society of Automation has 30,000 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 2000, the ISA Council approved a legal name change to ISA -The Instrumentation, Systems and Automation Society. Today worldwide, ISA consists of 150 Sections.

### **ISA Ireland Section**

The Ireland Section, which is voluntary with a membership of over 180, 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 Three Technical Talks

Plant Tours

Annual Honours & Awards ceremony.

### **Today's Mission**

The International Society of Automation (ISA)'s mission is to empower the global automation community through standards and knowledge sharing, creating a better world through automation by developing essential standards, providing education, offering certifications, publishing technical content, and facilitating networking for engineers, technicians, and managers. They aim to advance the profession and help individuals solve complex problems by being the trusted provider of automation resources and fostering career growth.

***Setting the Standard for Automation™***

## **Head (Carlow) Faculty of Engineering and Built Environment, Dr. Frances Hardiman**

I am delighted to be present here tonight at the ISA awards. This occasion is intended to acknowledge and encourage excellence and achievement amongst those involved in, and those training for careers in automation, instrumentation and related areas of technology.

When people involved in such diverse areas of technology achieve excellence and in the process produce quality work, it is only right that we should publicly acknowledge such success.



## **ISA Ireland President Mr. Patrick Corbett**

I would like to welcome you all here this evening, to our 44th 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 six awards, four of which have been submitted by Third Level institutions and two 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 South East Technological University Carlow for allowing the use of this very elegant facility. 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 healthy, happy and prosperous new year.



## **Apprenticeship Award**

### **Criteria:**

To be awarded, on the nomination of Cork Training Centers and / or South East Technological University, to the best final year instrumentation Apprentice for notable academic and practical achievements in instrumentation.

### **Recipient:**

Mr. Ronan Potterton  
South East Technological University, Carlow.

### **Nominated by:**

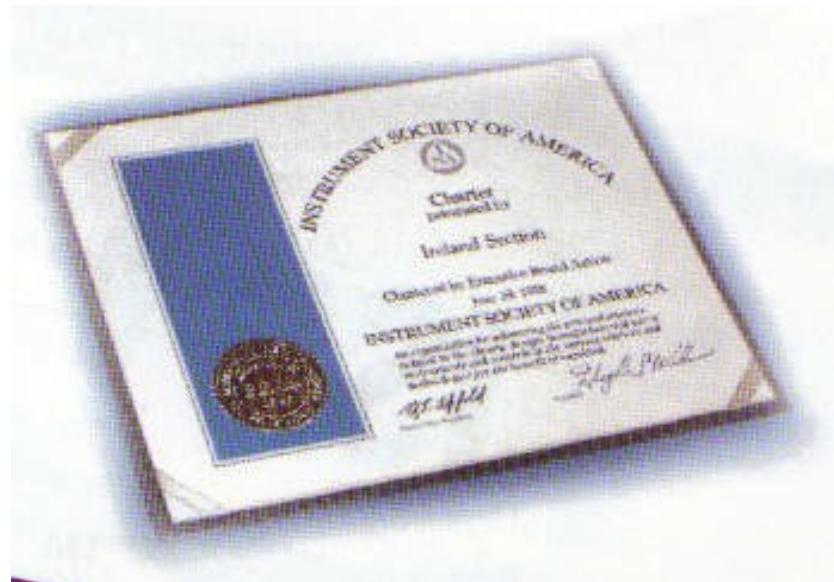
Mr. Robert Mooney, Lecturer at South East Technological University, Carlow.

Ronan is an excellent candidate to be put forward for this award. He has been consistently studious, polite, and always eager to help others. His final results in examinations, along with his attendance, work ethic, and attention to detail, were exemplary.

Ronan was also great to have around the place, providing a calming voice in what can often be a stressful environment.

He has distinguished himself as a dedicated learner and a supportive peer, demonstrating both professional competence and personal integrity.

I am delighted to nominate Ronan for the 2026 ISA Craft Apprentice Award in recognition of his accomplishments.



## Degree Award

### Criteria:

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

### Recipient:

Mr. Brian Flanagan  
Technological University Dublin.

### Nominated by:

Ms Catherine Looby. Lecturer School of Electrical and Electronic Engineering.



This project, Optimizing Energy Efficiency in Dust Extraction System Through Intelligent Control, focused on the energy and cost savings that can be achieved in a Local Exhaust Ventilation System (LEV). The project was designed and modeled on a dust extraction system. This study aims to demonstrate that by incorporating the correct components that significant energy efficiency improvements can be achieved in LEV systems.

The Programmable Logic Controller (PLC) used was Siemens S7-1200 CPU 1215C (AC-DC-Rly). PI control was set up to control the loop and the speed of the extraction fan. The local control panel along with a human interface SCADA system was designed and developed using the software package Ignition V8.1. The extraction fan is controlled by an ABB ACS-880 variable speed drive.

This project provided an overview of the importance of energy efficiency in Local Exhaust Ventilation System (LEV), emphasizing the need for effective control mechanisms to optimize energy consumption and reduce costs. It highlighted through the opening and closing of duct vents the pressure drops within the extraction system and with intelligent control could adjust the speed of the fans to increase cost savings.

The opening and closing of the vents are carried out manually but in a large industrial scale these events would open on machine start up by means of pneumatic rams. On opening of a valve, the pressure within the duct work drops and the pressure transmitter relates this information back to the PLC via 0–10-volt signal.

The internal PI controller, which was set up, monitors this decrease in pressure and corrects the speed of the fan to get back to its set point. The reverse action happens when the valve closes, the pressure rises, and the PI controller adjusts the speed to the setpoint.

This speeding up and down of the fan as required is where we can make our savings. Example of this would be in a workshop where you have 10 machines working and the extraction fan at 85% of its max load. 5 machines shut down, the same volume of extraction is now not required, the pressure transmitter will see the rise in pressure and the controller will slow the fan down to its setpoint.

He showed exceptional tenacity and self-motivation, completing modules on the Blanchardstown and City campuses in order to complete the programme. He is currently working as an automation engineer with Irish Cement.

## **Honour's Degree Award**

### **Criteria:**

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

### **Recipient:**

Ms. Leanne Tormey  
Technological University of the Shannon (TUS).

### **Nominated by:**

Mr. Cian Bregazzi-Nevin and Supervising Lecturer  
Mr Padraig Cooke, TUS Midlands.



Leanne performed Target Adjustment and Calibration Technique using a six-axis ABB Robot. The research included an accurate, repeatable and reliable target adjustment system for robotic milling operations, developed in PEM Automation in Mullingar. The project was completed to fulfil an end-of-year project at the Technological University of the Shannon, Athlone, during the Automation and Robotics end-of-year programme.

The project aimed to simplify and expedite milling target adjustments by utilising calibration sensor feedback to adjust the cutter's length. The system underwent virtual testing using ABB RobotStudio and physical testing to demonstrate how the process enhances operator control and milling target repeatability. The solution combined a custom-built User Interface (UI), a non-touch Human-Machine Interface (HMI) and a fibre-optic sensor-based calibration method. The system enabled precise X, Y and Z axis modifications through predefined constraints, which both avoided operator mistakes and maintained a controlled operation. The system underwent robotic cell simulation before its deployment into real-world operations to prove the functionality of the project.

The ABB RobotStudio allowed developers to build a complete virtual model, which helped with early system planning and simulation-based error detection. The combination of a customised user interface enabled users to control target adjustments and cutter calibration directly through the IRC5 teach pendant. The system became more user-friendly because of this development. The system completed full calibration operations through a fibre-optic sensor because licensing restrictions prevented HMI screen implementation.

The system adjusted its cutter calibration procedure automatically when tools changed to deliver precise target contact and enhanced operational efficiency. Simulation tests allowed researchers to evaluate robot motions and user interface performance before implementing the system physically. The system achieved precise calibration and target adjustments through work object teaching and jig and sensor alignment, which was validated using dial clock measurements and feedback validation. The system operated within its specified operational boundaries because users received immediate UI responses when reaching these limits. The system underwent physical testing, which demonstrated its accuracy and reliability by verifying the proper processing of all essential targets and providing precise measurements of the new milling cutter length. The solution offers a robust and reliable method for robotic milling applications, enabling calibration and target adjustment while providing enhanced precision and control, as well as adaptability.

## Post Graduate Award

### Criteria:

To be awarded, on the nomination of any third-level institution, to the best Post Graduate student awarded PhD / Bsc in Instrumentation / Applied Physics in Ireland.

### Recipient:

Mr. Ajmal Thottoli  
Munster Technological University, Cork

### Nominated by:

Mr. William Whelan-Curtin Senior Lecturer,  
Department of Physical Sciences, Munster  
Technological University, Cork



Ajmal Thottoli has shown strong multidisciplinary ability and academic rigor during his double doctoral degree between the Politecnico di Bari (Electrical and Information Engineering) and Munster Technological University (Centre for Advanced Photonics and Process Analysis). His thesis, “Advanced Nanophotonics for Gas Spectroscopy”, targets compact, robust multi-gas sensing by uniting integrated photonics with photoacoustic / photothermal spectroscopy and shows a clear path from chip-level components to practical, ready-to-use sensing units with robust assembly and repeatable measurements.

Ajmal combines rigorous numerical simulation with disciplined experimental validation, showing equal strength at the workstation and the bench. He designed and validated a family of silicon-nitride photonic building blocks for multi-gas analysis: angled multimode-interference (MMI) duplexers, high-selectivity directional-coupler (DC) duplexers, and a cascaded DC triplexer. These devices combine multiplex relevant NIR wavelengths for key gases—ammonia, methane, and carbon dioxide—within a single chip.

He complemented these components with system-level work that brings spectroscopic detection closer to full integration. He demonstrated a semi-integrated sensing approach coupling on-chip waveguides with Quartz-Enhanced Photoacoustic Spectroscopy (QEPAS) and Light-Induced Thermoelastic Spectroscopy (LITES), and he explored side-polished fibres for water vapour and methane measurements using LITES. He also proposed and numerically validated a high-contrast-grating hollow-core waveguide that maintains high transmission while allowing gas flow through the sidewalls, specifically optimised for methane around  $3.27\text{ }\mu\text{m}$ —an elegant route toward compact, chip-scale interaction paths.

This work was carried out with device-fabrication support at Tyndall National Institute and within the H2020 PASSEPARTOUT project on portable photoacoustic/photothermal sensors for real-time outdoor air-pollution monitoring. Ajmal collaborated closely and effectively with Tyndall staff and PASSEPARTOUT partners, contributing chip designs and measurement data to shared deliverables and coordinating work across institutions and helped make the project a success. Overall, Ajmal’s thesis delivers both innovative devices and credible integration pathways. It advances practical multi-gas sensing by reducing size and complexity while preserving performance, and it sets a clear route to portable, real-time monitoring in industrial and environmental settings. These achievements make him a worthy nominee for recognition as an outstanding PhD researcher.

## Innovative Project Award

### 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:** Mr. John Downey, Mr. Ciaran O'Connor, Mr. Wesley Bateman and Mr Steven McSweeney MEP Engineering Services.

**Nominated by:** Mr. Brian Curtis.



John Downey



Ciaran O'Connor



Wesley Bateman



Steven McSweeney

### WOODCHIP STEAM BOILER PROJECT, MEP Engineering Services, Cork, 2025"

This project demonstrates a new, integrated application of instrumentation and automation to a biomass boiler plant in Ireland. It improves steam reliability, safety, and efficiency by using flow, level, and pressure sensors in a coherent control strategy, visualised and governed through SCADA with remote capabilities.

The installation delivers substantial CO<sub>2</sub> reductions (~10,816 tCO<sub>2</sub>/year, ~70% vs. baseline) and operational savings supported by fuel economics and avoided carbon taxes, with grant potential.

Currently MEP is working with three multinational clients to replicate this biomass boiler technology with a project value of over € 90 million. It applies standard technologies in an innovative configuration that enables data driven operations and rapid fault response.

The project strengthens Ireland's decarbonisation of industrial heat while advancing the practice of instrumentation and control.

We respectfully submit this application for the Instrumentation, Automation, Measurement and Control Technology Award, recognising the team's significant achievement and its contribution to industrial sustainability in Ireland.

## **Pioneer Award**

### **Criteria:**

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

### **Recipient:**

Mr. Ivan Coombes, Munster Technological University (Ret.).

### **Nominated by:**

Mr. Declan Lordan, Douglas Controls and Automation.



Ivan Coombes and is a former Senior Technical Officer of the Applied Physics and Instrumentation Department in MTU. His story in Instrumentation began in 1976 when he studied for an NCEA Certificate in Instrument Physics at the then Cork RTC. Having completed the Certificate, he joined the staff of the department in 1978 as a technician.

To further his studies, he completed a Graduateship Diploma in Instrument Physics in 1988 and Bachelor of Science Degree in Applied Physics and Instrumentation in 1994. Ivan also lectured on a part time basis in Instrumentation, Calibration, Control and Automation.



## BOB SHINE - ISA Ireland Section Student Endowment Fund

Bob Shine has been a dedicated supporter of instrumentation and control in Ireland for many years, even before the founding of ISA Ireland Section 45 years ago. He served his apprenticeship and went on to study at night the City and Guilds examinations while working in Irish Refining.

Bob was one of the developers of the course curriculum within the Irish training board then called ANCO more recently named FAS and during that time he both developed and delivered these courses in Automation and Control.

Bob has continued his keen interest and support of students in the Control and Automation industry across Ireland to this day. The endowment is used to Award \$2,500 annually on the recommendation from the ISA Ireland Section to a student studying a curriculum which includes Automation and Control component subjects in any Third Level Educational Institution based in the Republic of Ireland.



## GER DULLEA BURSORY

The Honours Degree Award is the nomination of any third-level institution, to the best 4th year Honours Degree student studying Instrumentation / Applied Physics in Ireland. The award comprises a medallion and the Ger Dullea bursary of €750 which is to be used to assist postgraduate studies.

The award was established in recognition the late Ger Dullea, ISA Ireland Section President for his contributions to the ISA Ireland Section.

*Setting the Standard for Automation™*

## ISA IRELAND SECTION PRESIDENTS

Year	Name	Year	Name
1977 / 1979	Mr. Fred Gilroy	2003 / 2004	Mr. Peadar Walsh
1979 / 1980	Dr. Liam McDonnell	2004 / 2005	Mr. Martin Almond
1980 / 1981	Mr. Maurice Radford	2005 / 2006	Mr. Kevin Dignam
1981 / 1983	Mr. John Power	2006 / 2007	Mr. Brian Nolan
1983 / 1984	Mr. Malachy Hanley	2007 / 2008	Mr. Jim Long
1984 / 1985	Mr. Eoin O'Riain	2008 / 2009	Mr. Michael Meade
1985 / 1986	Mr. Harvey Makin	2009 / 2010	Mr. Kevin McCarthy
1986 / 1987	Mr. Frank Maher	2010 / 2011	Mr. David O'Brien
1987 / 1988	Mr. Brendan Barry	2011 / 2012	Mr. John Downey
1988 / 1989	Dr. Liam McDonnell	2012 / 2013	Mr. Kieran Coughlan
1989 / 1990	Mr. Fred Gilroy	2013 / 2014	Mr. Liam O'Brien
1990 / 1991	Dr. Eamon Cashell	2014 / 2015	Mr. Alan Bateman
1991 / 1992	Mr. Ger Dullea.	2015 / 2016	Mr. Alan Bateman
1992 / 1994	Mr. John Lotty	2016 / 2017	Mr. John Murphy
1994 / 1995	Mr. Robert Shine	2017 / 2018	Mr. John Murphy
1995 / 1996	Mr. John Farrell	2018 / 2019	Mr. Edmund Cuffe
1996 / 1997	Mr. Aidan Howard	2019 / 2020	Mr. Edmund Cuffe
1997 / 1998	Mr. Billy Walsh	2022 / 2021	Mr. Rory Moloney
1998 / 1999	Mr. Declan Lordan	2022 / 2023	Mr. Rory Moloney
1999 / 2000	Mr. Brian Curtis	2023 / 2024	Mr. Patrick Bonner
2000 / 2001	Mr. Eamon Creech	2024 / 2025	Mr. Patrick Bonner
2002 / 2003	Mr. Alan Edwards	2025 / 2026	Mr. Patrick Corbett



This historic photo of ISA Ireland Presidents was taken at the 30th Anniversary of Charter Dinner held on 8th November 2008.

Seated Left to Right: Éamonn Creech (2000), Billy Walsh (1997), Brian Nolan (2006), Mick Meade (2008), Stephen Adderson, US Embassy, Tim Feldman, ISA Headquarters, Peadar Walsh (2003).  
 Back Row: LtoR: John Lotty (1992, 1993), Declan Lordan (1998), Brian Curtis (1999), Brendan Barry (1987), Bob Shine (1994), Liam McDonnell (1979, 1988), Jim Long (2007), Harvey Makim (1985), John Power (1981), Frank Maher (1986), Eoin Ó Riain (1984), Alan Edwards (2002), Kevin Dignam (2005), Martin Almond (2004).

## **Honours & Awards 15th January 2026 Program of Events**

*Munster Technological University, Administration Centre, Council Room (2nd Floor)*

**18:10** Past President Mr David O'Brien will begin proceedings.

**18:15** Formal opening by Frances Hardiman, HoF, Engineering & Built Environment.

**18:20** Response from the President of ISA Ireland Section Mr. Patrick Corbett.

**18:25** Presentation of Awards.

Apprenticeship Award	Mr. Ronan Potterton, South East Technological University
Degree Award	Mr. Brian Flanagan, Technological University Dublin
Honours Degree Award	Ms. Leanne Tormey, Technological University of the Shannon
Post Graduate Award	Mr. Ajmal Thottoli, Munster Technological University
Innovative Project Award	MEP Engineering Services, Cork
Pioneer Award	Mr. Ivan Coombes, Munster Technological University (Ret.)

**18:55** Response from the Winner of Pioneer Award, Mr. Ivan Coombes.

**19:01** Photographs of Award winners with the ISA President.

**19:15** Photographs of Sponsors with the ISA President.

**19:30** Reception.

**20:30** Close of Honours and Awards Reception.

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.

Thanks to our H&A Chairman Mr. Aidan O Connell, Munster Technological University, our Nominations Review Board including Mr. Patrick Bonner and ISA Ireland Section Committee members.

A special thanks and appreciation to our education centres for the time and effort of the lecturers and students for submitting nominations.

**South East Technological University**

**Technological University Dublin**

**Technological University of the Shannon**

**Dublin City University**

**Atlantic Technological University**

**Trinity College Dublin**

**Dundalk Institute of Technology**

**University College Dublin**

**University College Cork**

**University College Galway**

**Munster Technological University**