First Polymer Training Skillnet,



## Celebrating 25 years of

First Polymer Training Skillnet



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# WELCOME TO 25 YEARS OF FIRST POLYMER TRAINING SKILLNET

"Through its dedication and passion for the Polymer Industry and commitment to developing people, First Polymer Training Skillnet continues to make a huge contribution to the growth of the Irish polymer sector which encompasses more than 230 companies.

It has developed progression pathways, accredited technical programmes and support networks for our industry over the past 25 years. It's unique Centre of Excellence in Athlone is testament to the huge goodwill and support from industry and machinery suppliers, to ensure they provide the best possible training and development outcomes for our people.

I wish the network continued success for many years to come."

Kenny O'Brien, Chairperson FPT Skillnet



"FPT Skillnet has been a tremendous success story for the Irish polymer industry and has made a hugely important contribution to the development and growth of the sector. Polymer companies make a deep and wide contribution across the Irish economy. Their products and capabilities are central to many high value supply chains.

To stay competitive, our polymer companies need to stay at the cutting edge of technology and invest heavily in their workforces. FPT Skillnet has played a central role in giving Ireland a world class polymer sector and workforce. Congratulations to FPT Skillnet on 25 years as a key partner to the polymer sector."

Mark McAuley, Director Polymer Technology Ireland (Promoter)



## A NOTE FROM SKILLNET IRELAND

When Skillnet Ireland was established in 1999, First Polymer Training Skillnet was one of our 10 founding Business Networks.

Through its unwavering commitment to excellence over this period, First Polymer Training Skillnet has championed the growth of the Irish polymer sector and supported the competitiveness of businesses operating within it through innovative training and upskilling programmes and initiatives.

Congratulations to First Polymer Training Skillnet on 25 years of remarkable service and dedication. This milestone stands as a testament to the Network's enduring impact and may it act as a springboard to its continued success in the future.

Aoife O'Sullivan, Head of Network Development and Innovation, Skillnet Ireland



# WHO ARE WE?

First Polymer Training (FPT) Skillnet

is a dedicated training network for the Irish polymer industry. Supported by Skillnet Ireland, the national talent development agency of the Government of Ireland, our objective is to provide world-class upskilling solutions tailored to the unique needs of the polymer sector in Ireland.





Established in 1999 by leading organisation Polymer Technology Ireland, FPT Skillnet offers an extensive array of QQI-accredited training programmes covering key areas such as polymer processing, design and materials, automation, sustainability, validation, metrology and more. FPT Skillnet also supports a number of part-time degree programmes in polymer technology.

Training is delivered at our state-ofthe-art Centre of Excellence in Athlone, online, or on-site at companies. Our experienced team is skilled in creating bespoke training programmes to address any specific organisational needs.

FPT Skillnet is guided by a voluntary Steering Group composed of industry leaders who provide strategic support and direction. Our management team includes Catherine Collins, Manager, and Alan Harrington, Training Specialist, both of whom bring extensive expertise to the Network.





1999 2005 2006 2007 2009 2011

FPT Skillnet is born

Pat Whyte appointed as Chairperson

New Fetac major award in Injection Moulding

Brendan Murtagh appointed as Chairperson



FPT Centre moves from The Polymer Development Centre to Blyry Business Park

B. Eng in Polymer Processing Kicks Off

John Goor appointed as Chairperson

Graduation of First B.Eng In Polymer Processing Cohort







FPT Skillnet Celebrates 20 Years

Kenny O'Brien appointed as Chairperson

FPT Skillnet Extends Training Facility and has a Virtual Launch



FPT Skillnet Celebrates 25 Years

Steering Group member Pet Whyte receives Outstanding Contribution Award from Skillnet Ireland



First L&DI Award

John Brennan appointed as Chairperson New Polymer Apprenticeship Established

2013

2014

2017

2019

2021

2024





1999, 201

# HELPING IRELAND'S PLASTICS INDUSTRY TO GROW AND COMPETE

Keeping pace with rapid technological advances is just one of the challenges facing the Irish polymer industry.

Companies in the sector must also contend with a range of powerful disruptive forces including pressure to become ever more sustainable, rising raw material costs, unprecedented supply chain disruptions, as well as an evolving and an increasingly complex regulatory environment.

First Polymer Training (FPT) Skillnet supports companies to meet these challenges by offering funded training and education to help them acquire the talent and skillsets needed to utilise the latest technologies and processes as well as by providing market intelligence and insights to prepare them for future developments.



In 2024, almost 600 people participated in FPT Skillnet training and education programmes. Annually, 140 companies on average from across the industry avail of these programmes while 70 companies are regular participants.



The polymer industry in Ireland is made up of more than 200 highly innovative companies which between them generate sales of €1.7 billion and €1.25 billion in exports, according to Mark McAuley, Director of Polymer Technology Ireland, the Ibec trade association which represents the interests of the polymer industry in Ireland and which is the promoting body for FPT Skillnet.

"The sector is a significant employer paying out €266 million in wages annually to more than 6,500 people. It's a very advanced sector producing high quality precision products and components for high tech industries like ICT, MedTech, automotive, and aerospace," he says.

"The industry is in competition for highly skilled people like every other sector," McAuley adds.

"That's where the First Polymer Training Skillnet comes in. It provides high quality training and education programmes for industry employees and people seeking to enter the sector. Those courses simply aren't available anywhere else in Ireland." FPT Skillnet combines unrivalled training expertise with deep industry knowledge, says FPT Skillnet Network Manager Catherine Collins.

"We are able to leverage the resources of our promoting organisation - Polymer Technology Ireland, an Ibec industry association - to gain unique insights into the current and future skills needs of companies in the sector.

We also benefit from direct access to the resources of Ibec which is Ireland's largest lobby and business representative group with its extensive national and international reach. We are also very fortunate to be guided by a voluntary steering group made up of senior industry representatives," Collins explains.



"The steering group advises us on course content and development and highlights current and future problems for the industry which can be addressed through training and education. That direct industry input allows us to anticipate developments which might affect the industry in future and build timely solutions to help companies and their employees prepare for them. The group also monitors our performance to ensure that our programmes remain relevant to industry needs."



That breadth of expertise and knowledge is critically important in serving the needs of the Irish polymer industry which ranges from large multinational companies in the MedTech and automotive sectors to small indigenous polymer processors and manufacturers operating in intensely competitive global supply chains.

Those needs can be as seemingly straightforward as finding entry level production operatives or as complex as introducing cutting edge advanced manufacturing processes or incorporating the latest materials into those processes.

The common factor is skills. Without the people with the skills and qualifications to operate the production equipment, handle novel materials, manage existing processes and develop new ones, companies will fall behind their competitors both at home and overseas.



## A LONG HERITAGE

First Polymer Training Skillnet was one of the very first Skillnet networks established in Ireland.

A fundamental change to industrial training structures in Ireland led to the introduction of a public private partnership model geared towards meeting the needs of specific sectors through the establishment of industry based Skillnets.

"The exit in 1999 of the successful provider Plastics Training and Consultancy led by Pat Whyte, left a big void in injection moulding training provision. This prompted Ibec to apply for funding to establish a Skillnet specifically for the polymer industry," Collins explains. "FPT Skillnet was among the first tranche of Skillnets to receive funding and we are proud to be one of only three of those early pioneers to remain in existence today. In fact, two of those three Skillnets were founded by Ibec trade associations."

Based in Athlone, FPT Skillnet is the only Skillnet in the country to have its own training centre. The recently expanded centre features the very latest production equipment and machinery and offers the full range of training including injection moulding, extrusion, design, PLCs, robotics and automation, thermoforming, blow moulding, sustainability and much more.

"It is a centre of excellence for the polymer industry in Ireland," says McAuley. "It provides a range of training and upskilling courses which simply can't be found elsewhere in this country. If not for the Athlone centre the industry wouldn't be as competitive or innovative as it is."



The centre's location is no accident. Athlone has a long heritage as the epicentre of polymer industry training in Ireland. As far back as the early 1970s, Athlone Regional Technical College – the forerunner to Athlone Institute of Technology which is now the Technological University of the Shannon (TUS) – was the only third level institution in Ireland to offer polymer third level programmes.

FPT Skillnet maintains that leadership position today and remains Ireland's go to provider of training and education for the sector. Programmes offered span the full qualifications spectrum from Level 5 right the way through to Level 10 with degree level courses being provided in conjunction with partner institutions Technological University of the Shannon (TUS) Midlands and the Atlantic Technological University (Sligo).



## A UNIQUE AND VITAL NATIONAL RESOURCE

Without the services provided by First Polymer Training Skillnet, plastics companies would have no choice but to go abroad for training or pay to bring trainers in from overseas.

But that is simply not an option for smaller Irish companies operating on very tight margins.

That is not the only gap being filled. "When we established FPT Skillnet in 1999 there were very few further education and training programmes available to people working in the industry," says Collins. "And there was no opportunity to gain a significant polymer specific qualification while continuing to work full-time.

FPT Skillnet began by developing part-time programmes at Level 5 and Level 6 on the National Framework of Qualifications. That included the introduction of a Certificate in Polymer Technology jointly delivered with the Atlantic Technological University (ATU) in Sligo. That was followed by introduction of Level 7 degree options with ATU and TUS and subsequently programmes that can take people all the way up to doctorate level with TUS or ATU, if they wish.

"Over the years, that pathway has enabled people to transition from general operative to technician and onto engineering and leadership positions within companies in the industry," Collins points out.

That career progression and talent role is vitally important, according to McAuley. "Everyone is competing for the same people and companies in the polymer industry need to be able to attract and retain the brightest and the best.

FPT Skillnet helps by enabling companies to say to new recruits that they will help them develop their skillsets and support them in their career progression at every stage. That is very attractive to people in today's market."

FPT Skillnet also helps jobseekers and others to gain a foothold in the industry. This can see the Skillnet work in partnership with individual employers to meet their skills needs.

One company to benefit from such a partnership is Nordson Medical in Boyle, Co Roscommon which was struggling to recruit extrusion technicians. FPT Skillnet provided a 100% funded training programme delivered on the company's premises. For its part, the company provided paid internships for programme participants. The programme was a great success and the company was able to recruit eight trained junior technicians from the local community as a result.

At another level, FPT Skillnet offers conversion programmes for recently qualified engineering graduates. In the main, this sees mechanical engineering graduates adding polymer engineering expertise to their skillsets. The programme involves a two-week intensive course followed by an industry placement.

"Feedback from employers in relation to the quality of the graduates is overwhelmingly positive," says Collins.

"These tailored solutions are available to all companies in the sector," she continues. "Our expert trainers carry

out a training needs analysis and then design bespoke solutions to meet those needs. Flexibility is a hallmark of our programme delivery with the full range of full and part time, online, in person and blended options available."

"The training wildly exceeded our expectations. The training was done in-house on our machines and the FPT Skillnet trainers made it interesting, relevant and useful. FPT Skillnet has the ability to tailor courses to suit a company's individual needs and uses live examples and demonstrations to make learning much more interesting and enjoyable. The trainers are terrific at simplifying the processes to make it easier to understand for all levels."

#### ANN JEVENS, MD SMALLWARES.

"We are big fans of First Polymer Training Skillnet. They offer an absolutely fantastic service which we have availed of over the past eight years,"

### ANDREA CAWLEY, COMMERCIAL MANAGER AUTOMATIC PLASTICS.

The steering group has also helped build very strong relationships between FPT Skillnet and the equipment supply sector. "We now have in excess of half a million euro of state-of-the-art production equipment in our Athlone training centre, all donated at no cost by suppliers. This equipment is constantly updated as new versions become available and new technologies and processes are introduced. New suppliers continue to approach us with offers of machinery as they can see the benefits of having their equipment at our facility."



Those relationships with the equipment supply sector deliver benefits to all involved. The industry gets the opportunity to train its people on the very latest machinery, FPT Skillnet retains its leadership position in talent development, and equipment suppliers have a live demonstrator for the industry to see their latest machinery in action.

## THE SUSTAINABILITY CHALLENGE

Every company, regardless of sector, needs to reduce its impact on the planet. Society demands it, as do investors, customers, and employees.

The global ambition is to achieve net zero carbon emissions by 2050 and many leading companies have set their own target of reaching that goal by 2030.

The sustainability journey will be all the more challenging for the polymer industry which has to address impacts all the way along the value chain and beyond. The challenge is made more difficult still by the importance of plastics in almost every area of our lives from medical devices through food packaging to transport and beyond.

"Modern society couldn't function without plastic and, in many cases, there really is no substitute for this hugely versatile material," says Collins. "We have developed a framework to assist companies in the polymer industry to develop their own sustainability strategies."

The framework, which is based on extensive research into best practice internationally, was piloted in 2023. It involved a series of masterclasses delivered by experts along with one-to-one mentoring for sustainability champions within companies who can then develop and implement appropriate strategies for their employers. Future cohorts of sustainability champions are planned to be supported in 2025.

Those strategies will assist companies to adopt more circular business models as envisaged by Circuleire - the National Platform for Circular Manufacturing. That will see companies become more sustainable throughout their entire operations from the supply chain, to the customer, through to the end use, reuse or recycling of the product.

FPT Skillnet's sustainability expertise was further enhanced by Steering Group member Louis Goor's participation in the Oceanic Society's Blue Habits programme, by being an ambassador vessel (Irene IV) which circumnavigated the world in 2022- 2023. Their mission was to assess the impact of plastics waste on the world's oceans and see how we, collectively can address this huge issue.

"Louis witnessed first hand the scale of the problem," says Collins. "He and his fellow crew members wore clothing made entirely from recycled plastics recovered from the oceans and engaged in a variety of activities including beach clean-ups during the voyage which lasted a year. They brought eyeglasses, solar lights, toothbrushes and school supplies as gifts to communities, as a thank you for allowing them to explore the many beautiful small islands and ports along their journey"

For more information on sustainability, visit www.firstpolymerskillnet.com

### **SUPPORTING INNOVATION** & INTERNATIONAL REACH

Innovation will play a critically important role in meeting the sustainability, productivity, technological, competitive, and other challenges faced by the industry.

In that context, a key element of FPT Skillnet's overall mission is to advance strategic innovation and business transformation across the industry.

That includes supporting the industry in the introduction of newer technologies like conformal cooling which can speed up cycle times significantly thereby improving productivity.

"We also work very closely with Enterprise Ireland/ IDA funded research centres such as the Applied Polymer Technology Gateway (APT) at TUS Athlone and Irish Manufacturing Research (IMR) in Mullingar to scan the horizon for upcoming technological developments," Collins adds.

That work has seen FPT Skillnet developing new programmes in areas such as Additive Manufacturing (3D printing), Conformal Cooling and the application of highly advanced new materials as part of its mandate to help companies become more innovative and competitive.

Collins points to Liquid Silicon Rubber (LSR)

as one example of a material which is showing increased popularity due to its high level of biocompatibility which makes it extremely useful for a range of medical devices. "It also maintains performance across an extremely broad temperature range making it suitable for automotive and aerospace applications," she notes. Up until now, there has been no training available in Ireland for LSR but APT Technology Gateway have stepped in to fill that gap, where APT have secured a new LSR moulding machine and FPT Skillnet will work in collaboration with them to support training provision for industry.

"At the other end of the spectrum, many firms have purchased very advanced machinery but are not getting a proper return on that investment, according to Collins. "In some cases, they may not be exploiting the full range of functions on the machines simply because they are not aware of them or because their staff haven't been fully trained on them. We develop programmes aimed at helping companies leverage the full range of

capabilities offered by expensive production equipment.

"And those capabilities are growing constantly as processes become increasingly more automated," she continues. That requires a training response which looks beyond traditional production processes. With the introduction of robotics to the

production line, people will need to broaden their skillset in order to multi-task as they interface with the



automated cells. Not only will they need to be adept in the use of PLC controls, but they will also need to understand robotics, machine vision systems, IoT networks and other technologies that support automation. We are supporting companies in the industry by providing training programmes in those and other important new technologies. We are also delighted to be supported by Mavarick AI.

Their unique AI driven system monitors the scope 2 carbon emissions of our four injection moulding machines providing valuable data to help track, report and reduce our emissions. Our trainees also get the benefit of this technology incorporating sustainability into their upskilling".

#### **BEYOND TRAINING**

At heart, FPT Skillnet is a solutions provider. FPT Skillnet identifies problems faced by the industry and develops solutions to them. In some cases, those solutions go beyond training. "Companies regularly come to us with technical issues they are having difficulties with," Collins explains. "Our trainers work with these companies to determine the precise nature of the issue and to develop a solution which they can implement."

#### INTERNATIONAL REACH

The depth of expertise and the quality of training and education offered have seen FPT Skillnet's reputation grow beyond Ireland. Requests for training are regularly received from the UK and beyond but FPT Skillnet is unable to respond positively as it can only offer a service to companies and individuals based here in Ireland.

Those international connections are useful, however. "They offer a direct line of sight into developments within the industry globally," Collins points out. "We are also fortunate that Ibec's International Business Division, Ibec Global has a strong presence in Brussels and is engaged in

monitoring the legislative and regulatory developments affecting the industry as well as working closely with other stakeholders to influence them.

#### THE POWER OF THE NETWORK



Catherine Collins, Network Manager explains that FPT Skillnet member companies have access to training and education resources beyond plastic and polymer technologies. "We meet training needs in those specialist areas, but our members have other needs as well and we recognise that. By becoming a member of FPT Skillnet (it's free to join), a company can also link into the other 10 Ibec promoted Skillnet networks across industries like engineering, ICT, and MedTech to avail of a vast range of different training solutions. There are more than 70 Skillnet networks in operation today throughout Ireland, working with industry in all sectors and regions and companies can access any of these to support their talent development". That's an immensely powerful network and it also provides valuable opportunities for companies to discuss shared challenges in areas like supply chain disruptions, the evolving regulatory environment, and the sustainability agenda.

## WHAT THE COMPANIES SAY

## Smallwares Est. 1936 INJECTION MOULDING.ie

The Louth based injection moulding company, Smallwares Ltd, began working with First Polymer Training Skillnet in 2020 motivated by a desire to increase capability and improve productivity.

"We are a small company but we have been around a long time having been founded in 1936," says Smallwares Managing Director Ann Jevens. "It was originally a button factory and in the 1960s we started manufacturing plastic coat hangers. We still manufacture coat hangers in addition to products for a wide range of sectors including construction, retail, the clothing industry and also promotional products.

According to Jevens, the company first became aware of FPT Skillnet in 2019. "We wanted to upskill and enable our people to have more expertise," she explains.

Since then, Smallwares employees have taken the Injection Moulding Module 1, Injection Moulding Module 2 and Plastic Material Selection courses.

"The training was done in-house on our machines and the FPT Skillnet trainers made it interesting, relevant and useful," says Jevens.

"FPT Skillnet has the ability to tailor courses to suit a company's individual needs and uses live examples and demonstrations to make learning much more interesting and enjoyable. They can engage and encourage at all levels of experience. The whole training process was very organised from the beginning. The trainers are terrific at simplifying the processes to make it easier to understand for all levels.

"The training wildly exceeded our expectations," she continues. "We covered a lot of topics in a relatively short time. Everyone who was on the course was upskilled and this has made our operations more efficient. FPT Skillnet has also provided ongoing support as and when required. They tailored existing courses to suit our business. We will certainly do more courses with them in the future. They have also been very helpful in introducing us to other companies that we could work with and have been very open to assisting with queries that we have from time to time. I would definitely recommend FPT Skillnet to other companies in the sector."



"We are big fans of First Polymer Training Skillnet," says Automatic Plastics Commercial Manager Andrea Cawley. They offer an absolutely fantastic service which we have availed of over the past eight years." Located in Tinahely, Co Wicklow Automatic Plastics, a Comar company, celebrated its 50th anniversary year in 2022. They are a custom injection moulding company which deliver millions of precision manufactured parts to the global medical device, pharmaceutical and food industries

"We have availed of many of the fantastic courses from FPT Skillnet such as Injection Moulding 1, 2 & 3, Injection Mould and Hot Runner Maintenance, Minitab and Design of Experiments," says Human Resources Manager Ciara Finnegan. "They also designed a Trainee Supervisor Course specifically for us. Approximately 30% of our 140 employees have availed of FPT Skillnet programmes directly."

In addition, up to 50 per cent of the company's employees have been able to access training from other Ibec Skillnets as a result of connections made by FPT Skillnet and the funding provided.

"We have upskilled our staff," Finnegan adds. "We have managed to develop excellent internal apprenticeship programmes using the training that FPT Skillnet offers. The training is exactly what we need for upskilling. It has helped improve our productivity and enabled us to promote from within and develop succession planning programmes for talented employees who lack experience, education or skills. The courses provided are completely relevant to our industry and are competitively priced."



"FPT Skillnet has provided us with a valuable service through their Polymer training and skills development programme. Over the past number of years, we have partnered with FPT Skillnet working together to upskill and technically train existing and new employees. The FPT Skillnet team have specialist trainers that provide a great service to industry through a number of successful and worthwhile programmes."

Tiernan Mongey, Head of Operations at Nordson Medical.



"FPT Skillnet supports the Polymer Industry at all levels; providing affordable, accessible, and essential training at a time when the industry really needs it."

Pat Whyte, CEO, Invermed.

# BECOME A NETWORK MEMBER

First Polymer Training Skillnet enhances the competitive position of its members by designing and delivering subsidised internationally recognised technical polymer programmes to address skills gaps within the sector. It also supports industry by regularly providing useful networking opportunities and specific technical seminars.

#### WHAT ARE THE BENEFITS?

- Subsidised training and events available online, in-person at our stateof-the-art Training Centre in Athlone and in-company focusing on best practice to save your company time and money and provide career progression for your employees
- Access to a panel of expert Irish and international trainers and FPT Staff who can design bespoke programmes to meet your company's individual needs at special member rates
- Leadership through our voluntary steering group of key industry leaders who drive the Network
- Skillnet Ireland funding to support your employees to engage on third level degree polymer programmes

- Priority participation on over 30
   validated and internationally
   recognised QQI polymer programmes
   as well as seminars and events
   across areas including injection
   moulding, extrusion, automation and
   electrical, thermoforming, design
   and materials, sustainability and
   green practices as well as leadership,
   entrepreneurship and many more
- Regular updates and news about the Irish polymer industry
- Networking opportunities with other like-minded member companies

#### **HOW TO JOIN?**

Registration is free and easy. Simply scan or click on the QR code to sign up.



# FPT SKILLNET GRATEFULLY ACKNOWLEDGES & APPRECIATES THE SUPPORT OF OUR SPONSORS.

The First Polymer Training Skillnet Steering Group are key industry representatives that give their time and support very generously, on a regular and voluntary basis, to ensure effective operations. Many have been involved since our inception in 1999 and our continued success is due to their support and to the support of promoting organisation Polymer Technology Ireland (Ibec).

























Companies who have very generously donated or given machinery on long term loan.















Companies who have very generously donated materials, moulds and ancillaries.































## **GALLERY -THROUGH THE YEARS**





The History of FPT and Partners







































Graduations and Awards





















Milestones



















































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