

The ARMO2023 conference took place in Poznań, Poland this year. Positive energy was loud and clear throughout the largest European conference that takes place for the rotational molding industry. The attendees rated it nothing short of a grand success. Attendees were happy to come together once again after several years off due to the Covid pandemic.

Organized by Rotopol (Polish Rotomoulding Association) and BPF (British Plastics Federation), ARMO2023 was held September 10-12 at the new Poznań Congress Centre. The conference drew more than 570 attendees including rotomolders, suppliers, and other professionals. The education program was in high gear as industry hot topics were addressed and there was a big focus on creating a circular economy and sustainability within the industry. The ARMO Trade Exhibition featured more than 65 companies with their products and innovations on display. There was plenty of social and networking time allowing attendees to visit with colleagues and make new friends within the industry.

ARMO Chair Wayne Wiid kicked off the program with a warm welcome to the international audience. Rotopol Chair Marek Szostak extended his welcome and gave an interesting

overview of Poznań, which is the fifth largest city in Poland. "Poznań is a hotbed of the rotational moulding industry in Poland and a major centre for business and trade shows," Szostak said. This was followed by a welcome from Poznań's Director of City Relations, Ms. Anna Pavlovich. "On behalf of the city, I thank you for being here and creating a better future for us in Poznań," Poznań has IMM people in the total area including 20 universities and more than 1,000 companies," she said. Poznań is rich in history, education, and industry.

Anna Kozera-Szalkowska, Plastics Europe Polska, presented an overview of the plastics industry in Europe and specifically in Poland. "At the end of 2021, the plastics industry employed 1.5 million people, and was represented by 52,000 companies (most of which are SME's) distributed across the European Union," she said. "The European plastics industry had a 405 billion Euro turnover in 2021, but due to the energy crisis, high energy intensive manufacturing slowed down, and for the first time in many years the import of goods was bigger than the export," she said. In 2022, plastics production grew by 10.7% in Poland compared to the year prior. The most dynamic development came from the automotive sector, of which production increased by 18.6% compared to the year prior. "The numbers for 2023



Martin Coles welcomes attendees to the ARMO Gala.



Wayne Wiid, ARMO Chair

SUSTAINABILITY
AS BEING ABOUT
MAKING SURE THAT
WHAT WE USE AND
HOW WE USE IT
TODAY DOES NOT
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AND FUTURE
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ABILITY TO LIVE
PROSPEROUSLY ON
THIS PLANET."

may not be as good as the first few months have indicated a slowdown in Poland plastics production," she said.

Under the theme Sustainable Rotational Moulding many presenters took the stage to report on their progress in the areas of research and company dedication to a circular economy and sustainability to protect the future. Steve Harrington, Matrix Polymers, said, "We know that plastics are doing good things in the world. There is a surge in the number of executives working toward sustainability and who view this as critical to the future of their business. Sustainability is fulfilling the needs of the current generation in terms of energy, PCR, mass balance model, Hydrogen, PCR circular economy, new materials, and plastics pollution, to name a few." he said, Harrington reported Matrix initiatives include solar panels at production plants, energy, and water usage, and sponsoring a PhD program at Queens University Belfast. He urged attendees



Gala entertainment

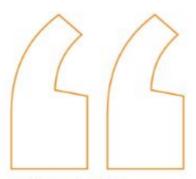
to think about what sustainability means to them and their businesses.

Dr. Nick Henwood, Rotomotive, presented a new family of rotomolding materials. offering alternative properties, options and grade extensions, and realistic pricing. The immediate opportunities for rotomoldable HIPS (high impact Polystyrene) include: 1) aesthetic items with moderate toughness needs; 2) the replacement of thermoformed HIPS parts; 3) automotive interiors; and 4) furniture and household goods. "PE is the main material used, but it has some limitations that keep us out of some application areas," Henwood said. "Other materials have not made a big dent in the market. There is a limit to how much stiffness and hardness you can get when talking about PE.," he said.

Rory Jones, La Plastecnica, intrigued the audience using as he discussed how change occurs. "We live in a world where people are simple, complicated, complex, and chaotic.

While simple might be your cup of tea, complicated might be the Japanese tea ceremony, complex might be when we think about raising a child, and chaotic might be when someone starts throwing bullets," he said. People feel more comfortable in one of these four situations, according to Jones.

Dharana Jayawardane, Matrix Polymers, and Nicolas Dufaure, Arkema, talked about opportunities in Hydrogen storage. "There are five major areas money is being spent in the Hydrogen Economy: Production;



IT'S TIME FOR
EVERY INDUSTRY TO
LAUNCH CIRCULAR
TRANSFORMATION
INITIATIVES TO
PROSPER AND
SURVIVE."



Marek and Barbara Szotsak take the dance floor during the ARMO Gala.

Storage; Transportation; Infrastructure; and Applications," he said. It is ethically right and there are bodies dedicated to driving down greenhouse gas emissions. CO2 emissions target a 15% reduction by 2025.

Mark McCourt, Queens University Belfast, presented research into Liquid Hydrogen Storage, Some of the reasons for considering Liquid Hydrogen are it has a higher volumetric energy density than Gaseous Hydrogen and Liquid Hydrogen is promising primarily as a net zero fuel for aviation. "The global LH2 market is growing and transforming. It is currently only used in niche applications, but this is expected to change in the medium- to long-term as its use in specific markets grows. The global LH2 market size was valued at \$33.5bn in 2019 and is expected to reach \$50.8B by 2027. Potential future use includes sectors: aviation, marine, land transport, energy storage, and long-distance energy transportation.

> Ronny Ervik, Nordic ARM and Norner, talked about whether to "Change or be Changed". He asked the rotomolders if they are prepared for what will come? "Almost 26 million tons of plastic waste is generated in Europe every year. 80% of this waste is in marine litter plastic. 87% of Europeans are worried about the impact of plastic products on the environment. The European Commission has defined what a successful circular economic system should look like, and recycling must

become a rewarding business for all parties concerned," Ervik said. "Sustainability is a choice and a business opportunity," he added. By 2030, all plastics packaging placed on the EU market must either be reusable or can be recycled in a cost-effective manner. By 2030, more than half of plastics waste generated in Europe will be recycled. Plastic recycling in Europe has increased by 17% in 2021 over 2020, reaching 11.3 million tons in 2021 and 8.7 billion in turnover. The EU aims to be climate-neutral by 2050 with net-zero greenhouse gas emissions. This initiative is at the heart of the European Green Deal and in line with EU's commitment to global climate action under the Paris Agreement.

group in the field of rotational molding include: Development of new groups of stabilizers for processing biodegradable polymers by rotational molding.

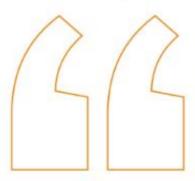
Dadi Valdimarsson, CEO Rotovia, presented the company's "Road to Sustainable Rotomolding". "Rotovia stands for our way to work for sustainable rotational molding," he said. The company's mission is "empowering customers by producing premium and sustainable solutions". Many of Rotovia's plants are about operating in their small communities, but Rotovia is an international company located in 7 countries and on 2 continents. They employ 60 rotomolding machines, manufacture products, 60% custom and 40% proprietary.



Marek Szostak and Martin Spencer



Chris Lefas, Rory Jones, and Dr. Carla Martins



SUSTAINABILITY IS A CHOICE AND A BUSINESS OPPORTUNITY."

Professor Mateusz Barczewski, Poznań University of Technology (21.000 students and 1.100 academic staff).

presented the University's current work in the Polymer Processing Laboratory. The University's Polymer Processing Division has 13 academic staff (6 professors, 5 doctors and 2 MSc.) and 7 PhD students. Marek Szostak is head of the group. Research topics realized by the PUT – Polymer research group in the field of rotational molding include: The use of waste fillers to produce polymer composites by rotational molding; Optimization of the pre-processing and surface modification of filler procedures to reduce negative technologic effects; and the use of waste fillers of plant origin with functional properties to produce self-stabilizing wood polymer composites (WPC). Other topic for research by the

"We have decided to change and go for the sustainable road, and we've established a 20-initiatives plan to achieve that goal," he said.

Ravi Kumar, Roots Multiclean, presented a look at the future in sustainability the India way. "Natural resources are turned into products that are ultimately destined to become waste because of the way they have been designed and manufactured," he said. The linear economy is one of take, make, use, and waste, but the big question is, "How long can this go on?" A circular economy is an economic system designed with the intention that maximizes the use of resources extracted from nature and minimizes waste. Natural resources are turned into products to consume and regenerates back to the resources autonomously to achieve a sustainable eco system. "Circularity is not a new concept. Governments and industries have been experimenting with circularity initiatives for quite some time, but mainly focused on recycling," he said. "We must go beyond just recycling and waste management. We must replace the end-of-life concept with restoration. The time is coming when it no longer makes

economic sense for business as usual. It's time for every industry to launch circular transformation initiatives to prosper and survive, even in times of disruption while achieving sustainable growth."

Andrew Byrne, Corcoran, presented a look at the Corcoran Group Polymer Division. Corcoran was established in 1939 and has been in business for 84 years. The distribution company has offices and distribution sites with 50 staff throughout Ireland, UK, and Europe. Markets include polymers, industrial applications, packaging, pharmaceutical and veterinary, cosmetics, food ingredients, and construction/installation. Corcoran focused on reduction of plastics waste since 2006 as a grinding facility. The

+ rotation + air movement + control system. The total energy expended is gas + electrical consumption. McDowell gave an example of heat energy required for a 1-cu. metre, 8mm wall aluminum tool with PE shot weight of 28kg (5mm wall). "Start with a measured response, making sure the oven is always full, consider slowing your arm rotation after the powder has been laid down, take steps to reduce wasted energy, improve electrical systems, and control your process," McDowell said. "As an industry it is easy to use a phenomenal amount of energy, but if we measure and maximize our process and efficiencies, transforming as much kg PE) per cycle as possible, then we can begin to establish an industry-



Barbara and Marek Szostak

company is now a full compounding facility with state-of-the art machinery. They are currently engaged in closed loop recycling programme trials.

Professor Xie Pengcheng, Beijing University of Chemical Technology, reported on important research on the design method and rotational molding process of the type IV Hydrogen Storage Tank Liner. "High pressure Gaseous Hydrogen storage is a more mature technology than others at this stage," he said. "High pressure tanks are an important carrier connecting the whole Hydrogen industrial network production, storage, transportation, refueling, and utilization." He gave a comparison between manufacturing the liners with rotational moulding and blow molding. China has mainly focused on using rotational molding, as has America and France. "Hydrogen barrier properties, temperature stability, resistance, toughness, melt index, homogeneity, etc. of the liner material are the key factors affecting the liner's processability and serviceability," he said. The advantages of rotomolding for the liners are that it is a simple molding process, has free molding size access, wall thickness, good edge strength, and is without internal stress. The challenges are strict requirements on raw particle size, complex dome part molding, wall thickness, and dimensional stability control.

Dr. Gareth McDowell, 493k, talked about where energy goes during rotomolding. The minimum energy required is for heat



Ravi Mehra

wide case that becomes quite defensible in the face of increasing energy usage audits."

David Smith, ARM and Muehlstein, talked about the North American Rotomolding industry. "The North American Rotomolding industry is strong, with numerous new molding firms in recent years," he said. The Association of Rotational Molders (ARM) has expanded its membership over the last year and experienced a 40% growth over the past 5 years. There is still a lot of industry consolidation with Tank Holding and Myers Industries adding to their portfolios to become North America's largest rotomolding entities. The average molding company in North America achieved a 15% annual growth in 2022. He presented the top custom rotomolders, top captive rotational molders, top proprietary rotational molders, and top rotational molders by total sales. The materials being used primarily in North America include PE, XLPE, PP, Nylon, and Acetal. The top market sectors include tanks, agriculture, industrial, recreational and sporting goods, non-tank industrial applications, lawn and garden, and consumer products. "The industry is strong, participants are increasing, materials are slowly diversifying, markets are increasing, and the future looks great," he said.

Wayne Wiid, ARMSA and Pioneer Plastics, presented an ARMO update including the introduction of Affiliate board members and



ARMO Trade Show

a look at the number of Affiliate members by region. He presented the ARMO sponsored Roto Trends by Riccardo Giovanetti Design Studio, ARMO Video Gallery of Marketing videos, the ARMO Newsletter by Anne de Lansalut (AFR), and the 2023 ARMO Showcase produced by JSJ Productions – all of which are downloadable at armo-global.org. Wiid reported on the upcoming new ARMO Problem Solving App, which will be made available only to ARMO Affiliate members. He thanked the 30 companies that contributed to the development of the Problem Solving App.

Eric Maziers, TotalEnergies, discussed the company's ambitions in the realm of Circular Economy for Plastics. "The routes to improve the sustainability of rotomolded parts include using more sustainable materials and optimizing rotomolded parts," he said. The company has set a goal of producing

30% circular polymers by
2030, including biopolymers
that are renewable, mechanical
recycling for re-use; and
advanced recycling for re-build.
TotalEnergies and the P' Institute
(CNRS/ISAE-Ensma/University
of Poitiers in France) are in
collaboration to develop a new
method for the characterization
of rotomolding material. One of
the goals for this collaboration
is to develop a method to
characterize static, creep, and

THE ROUTES TO
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-ERIC MAZIERS



Dhanu Patell, Shivinder Chawla, Rory Jones, and Paul and Orla Nugent

dynamic properties of rotomolded parts that is fast, accurate, and allows long term FEAs.

Krzysztof Sedziak and John Lennon, Kingspan, presented their learnings regarding the sustainability journey. Kingspan is a global leader in fuel storage solutions, was the world's first in bunded oil tanks, has four best-inclass production sites, and has 40+ years' experience. Their mission is to accelerate a net zero future build environment, with the wellbeing of the planet and its people. Kingspan engages in local projects such as PV Panels, rainwater harvesting, planting 2000 trees, PCR materials.

There were many leading industry suppliers at the conference who talked about their companies and innovative products, many of which are designed to promote a circular economy and sustainability within the rotational molding industry. Lukasz Bywalec,

MAUS, said the company was founded in 1925 as a pattern making business and they have been making rotational molding moulds since 1962. Fast forward in 2000, there was the introduction of BMC coatings. MAUS began the development of automation concepts in 2007, and in 2017, introduced electrically heated robomoulds. Mark Thometschek, The SDG Group, presented the company's future grades based on PCR

material, bio-based content, biodegradable materials, and lightweight foams. "Virgin polyethylene is the most used material in rotomolding, but there are many more other sustainable solutions," Thometschek said. Maisyn Picard, Ingenia Polymers, said the company started in 1986, and is a niche player in the rotational molding industry with a track record of developing innovative products including Rotolite", a one-shot foamable system, Rototuf*, an advanced linear system, and Superlink*, a high performance XLPE. Angelique Brocatus-Kooijmans, Lyondell Basell, presented the LyondellBasell rotational molding strategy for our changing world. "LyondellBasell is a leader in the global chemical industry creating solutions for everyday sustainable living, LyondellBassell is the global and the number one producer of PE and PP in Europe, supplying over 100 countries," she said. Jacopo Fort, Persico, presented a look at the Persico global footprint. Persico has been a family company since 1976, with its main headquarters in Nembro, Italy. The company employees 850. It has production facilities in Italy, USA, Mexico, Germany, and China with sales and service locations throughout the world, "Persico acquired Precision Mold Services, Inc. and their strategy is Quality, Timing, and Technical Support," he said.

Przemyslaw Orlik, CEO OREX, presented the company's hybrid machine, along with its opportunities and threats. "These machines are dedicated to customers with a renewable energy source such as wind turbines or photovoltaic installations, and those who want to be independent



ARMO Gala



Trade Exhibition Networking



Maisyn Picard

and emphasize care for the environment," he said. The Orex hybrid machines come in shuttle, carousel, and specialist machines, each designed for a different type of production and product. Frank Harleman, Modelmakerij Hengalo, talked about 'Automation for Higher Quality and Cost Reduction and Energy Efficiency. The company manufactures molds for the automotive industry, agricultural equipment, water treatment, medical sector, design products, and game consoles, as well as makes technical refined products for a vast range of industries. The company was founded in 1985, started making rotational molds in 2008, engaged in fully automatic robot production in 2017, and in 2021 began offering fully automatic opening systems. Johan Potargent, AMS Robotics, presented the AMS Robomold and automated box mfg, and highlighted AMS Design, SIM, and OEE and 4.0 software. "Rotomolding is changing. When we joined this organization in 2016, no one was talking about sustainability. Data driven is the most important program for the future. If you want to become sustainable in the future, AMS is capturing all the manufacturing data and plans to go to completely digital."

Dr. Konstantia Asteriadou, Lysis Technologies, talked about sustainability in the graphics industry: thoughts and opportunities. The company's product portfolio for the rotational molding industry includes labelfree graphics (post- and In-mold); finishing products; improvement products; repair products; and functional and decorative coatings. She defined sustainability as being about making sure that what we use and how we use it today does

not have negative impact on current and future generation's ability to live prosperously on this planet. "This is a need, not just a trend," she said.

Dr. Carlos Caro, Kunststoffe, talked about acrylic resin and customizing PMMA for rotational moulding applications. Kunststoffe is part of the GRAFE group of companies located in East Germany. They are a raw material supplier for rotomolding, powder coating, and 3D printing company. They produce PE and PP micro pellets. Their motivation is in the manufacture of highend lighting applications, and glass provides a luxurious look but is too heavy, brittle, and relatively inflexible. PE or PP are low cost, but also low in transparency. "PE specially looks just cheap for those consumers demanding high appearing designed elements," he said "Polycarbonate provides a better alternative, it looks like glass, has better impact resistance and is lighter. Yellowing is limited to light and weather fastness in outdoor conditions. It is sensitive to any kind of thermal degradation. The rotomolding process must be precise and accurate, and for best results use electrical heated tools instead of using conventional machines with a gas burner," he said. Lei Wang, Matrix Polymers, talked about research with the University of Portsmouth (the Royal Family Society). "It has been very difficult starting research on PP and post recycled PP," he said. The main takeaway on PP is that it is not tough enough, but they have achieved some important findings regarding crystallization of the polymer. Roto Rocket's takeaway was that crystallinity was increased with recycling PP content, which means high stiffness. Crystallinity increased the stiffness and increased the impact strength.

John Steele, Lyondell Bassell, presented a look at the company's Icorene 1490. He covered the company's view on sustainability and end customer desires, the story of Icorene 1490, and presented customer examples for the application, PIAT interpretation, technical tests done in the lab with Icorene 1490 12 melt, and CO2 calculations with customers. LyondellBassel is very active in developing sustainability solutions for the plastics industry with their Circulen(R) brand. "You can achieve real savings in CO2 for your company without any machinery investment using Icrorene 1490," Steele said. Walter Bonazzi, PSI Brand, talked about the automation, robotization, and monitoring of the rotational moulding process. He covered how to connect with customers, the proven methods, and gave some real-world examples. "Track and trace are the future of all manufacturing, and this is growing exponentially," he said. "Track and trace technology connects the product with the rotomolder and the customer, reduces cost and time, and increases sales and productivity. Venkit Mahadevan, Polimer Link, presented some new-age materials for automotive applications. Polimer Link was founded in 2014 as technical experts in polymer compounding raw material supply for rotational moulding, Headquartered in Malaysia, the company has additional facilities in India and Philippines with a team of over 60 dedicated professionals. "Sustainability challenges in the Asia Pacific region are that it is the epicenter of the world's mismanaged plastic waste, regulations, and a growing consumer demand," he said. Sustainable advancements in rotational moulding materials include their PCR and Bio Based grades, challenges and positives, and outlook. He

presented a list of specialty grades the company produces including their Hyperene™ Series and Crosslink Series. Gary Lategan, Roto Solutions, talked about ways to make your rotomolding plant sustainable. "You need to promote development that minimizes environmental problems while meeting your required needs and goals today, or as soon as possible, without compromising the quality of the environment for future generations," he said. "Since rotomolding is reliant on people, he urged molders to employ people with the correct attitude rather than employing cheap labor. Then invest in the best training for your people in every field: materials; moulds; and machines, etc. "A streamlined plant with well trained staff with a good understanding of the process and good equipment will deliver good quality parts on time and every time," he said.

Social and networking events for the conference were generous with an opening reception and several optional outings around the city. The ARMO Gala Dinner was the main highlight as attendees relaxed and enjoyed true Polish culture while a troupe of Polish dancers took the crowd back to an earlier time in Polish history by performing cultural dances in grand costumes. The atmosphere was one of great celebration and fun.

There was a pre-conference seminar offered on 'Controlling Your Cooling to Improve Part Quality and Dimensional Consistency', presented by Dr. Gareth McDowell, 493K, and Dr. Nick Henwood, Rotomotive. Areas discussed were cooling, where the moulder has the least amount of control, leading to a lack of control and inability to maintain part quality, especially in relation to dimensional tolerances and shape retention. Also discussed were variations in cooling time and how that makes process optimization difficult. Various cooling concepts were demonstrated in real time, using a bench top rotomolding machine.

Thank you to the companies who helped make this international conference possible including Matrix Polymers; LyondellBasell; OREX; Modelmakeij Hengalo; Ingenia; MAUS; Polymer Link; Rotovia, Persico; Dram srl; TotalEnergies; Kingspan; AlloyPlast; Ultra Polymers; rotospace; Resinex; Naroto; Poliplast; Gerbaldo Polimeri; Rotomachinery Group; and MPlast.

A huge thank you to ARMO for hosting this most beneficial conference for 2023. And a special shout out to Paul Baxter (BPF) and Anna Walorek (Rotopol) for their hard work and efforts to make the conference successful.

ARMO is comprised of 12 rotomolding organizations from around the world including: AFR (Association Francophone du Rotomoulage); ARM (Association Rotational Molders); ARMSA (Association of Rotational Moulders of Southern Africa); ARM-CE (Association of Rotational Moulding - Central Europe); Anipac (Asociacion National de Industrias del Plastico A.C.) IT-RO (Italia Rotazionale); BPF(British Plastics Federation); CCPIA (China Plastics Processing Industry Association); Nordic Arm (Scandanavia); StAR Asia (Society of Asian Rotomoulders), and Rotopol (Rotomoulding Association of Poland).

Save these dates for future ARMO Conferences including the 2024 Rotoplas in Chicago on September 24-26, 2024, RMO 2025/ Star Conference in Kerala on January 9-11, 2025; 9-11). Rotoplas 2026 (TBD); and ARMO2027 European event (TBD).





We Must Come Together to Fix Our Industry's Challenges

The ARMO conference in Poznań, Poland was a success, with 570 attendees from all over the world.

As usual the event provided a platform for networking, learning, and sharing of ideas. It was also a great opportunity to showcase the latest technological developments and innovations in the industry.

I was not surprised to hear that the theme of the ARMO conference was "Sustainable Rotational Moulding" and that most of the presentations focused on sustainability. This reflected the growing awareness and importance of sustainability in the rotational moulding industry.

Many rotomoulders I spoke to wanted to discuss about recycling their products, Post-Consumer Recycle, bio-materials, and reducing energy usage. Just a few years ago topics like these would have been considered fringe subjects, but today they are front and centre in most people's minds. This is a very positive development, as it shows that the industry is fully committed to reducing its environmental impact.

How the world has changed so quickly!

It is encouraging news that more and more rotational moulding companies are taking the "Operation Clean Sweep" (OCS) pledge. OCS is an international programme designed to prevent plastic resin loss and help keep our materials out of the marine environment.

The OCS programme provides valuable resources and guidelines for companies to follow to minimise plastic pellets and powder loss. This includes things like implementing best practices for handling, storage, and transporting of resin. In addition, it includes conducting regular inspections and clean-ups of production facilities.

The fact that polymer suppliers and rotomoulders are taking the OCS pledge is a further sign that the industry is committed to environmental stewardship. It is also a sign that the industry is aware of plastic pollution problems and is taking steps to address them.

We are moving in the right direction and is now wider interest in transitioning away from gas-fired ovens. Some moulders have begun to install electrically heated ovens, using renewable electricity.

Direct heating of moulds where no oven is required is also a key area of research and development. It is hoped that more affordable solutions will soon be available. Such innovation can help the industry massively improve its energy efficiency and greatly reduce its environmental impact.

There is substantial investment happening in the green energy



Image courtesy of Persico

space. A lot of people are getting interested in rotomoulding hydrogen tanks for transport and energy storage. Rotomoulded tanks which are then filament wound with carbon fibre are lightweight, durable, and corrosion resistant. This is a very positive development for the rotational moulding industry and represents a significant opportunity for growth.

Whilst the rotational moulding industry is facing many challenges, it is encouraging to see that many suppliers and moulders are investing heavily and co-operating to create innovative solutions. Sustainability issues are common to all of us and we need to come together as an industry to solve them.

I am excited to see how the rotomoulding industry develops in the coming years. We have the potential to be a leader in sustainability in the plastics industry. Our sector has the potential to make a significant contribution to the fight against climate change and the development of a more sustainable economy.

Forums like the ARMO conference and similar events held regionally around the world are an essential catalyst to create a more cooperation needed to address the challenges the rotational moulding industry faces. I encourage everyone in our industry to attend and fully support these events whenever possible. By working together, we will create a much more sustainable future for our industry and the planet.