

The International Partners in Glass Research (IPGR) organisation has been at the forefront of glass technology investigation for more than 30 years. The research association's members are nine of the world's leading glass container manufacturers as well as a major technology supplier to the sector, Bucher Emhart Glass.

Its aim is to increase the competitiveness of glass as a packaging material against other materials. While the association has been active at doing this, it has also in recent months completed a move to Aachen, Germany from its former home in Bulach, Switzerland.

On top of that it has also relaunched its website with a more modern, contemporary feel.

The move came about after the IPGR's General Manager, Christian Roos, received an offer of a professorship at the RWTH university in Aachen. He discussed the proposal with IPGR members who felt there was an advantage of being associated with such a strong university. Mr Roos would take over the professorship at the university while remaining General Manager at IPGR.

Mr Roos said: "It's worked very well so far. We've established ourselves in Aachen close to the university and are now just organising the legal and technical details about how the IPGR can be attached to the university."

Collaboration remains at the heart of the IPGR's ethos. Its members, all seemingly competitors in the glass market, come together to discuss how to move the glass packaging industry forward.

Mr Roos said: "What makes us different to other associations is that we don't do lobbying, we do pre-competitive to competitive R&D, which is very unique. There are some other associations that do pre-competitive work, but IPGR focuses on R&D and not on lobbying. We decide each year on a certain budget and a project and then some fundamental R&D for these projects.

"There is a very active atmosphere at IPGR, very progressive and pro-active and it's very enjoyable.

"Many of the IPGR companies are family owned and have a completely different approach to research and development and risk taking compared to large companies that are owned by shareholders."

The initial reason for the foundation of the IPGR 33 years ago in 1984 was the rise of PET as a competitor packaging material. The founding members wanted to make glass more competitive through research. At the time the initial research was increasing the strength of container glass packaging. While research remains at its core, the organisation has evolved to also commercialise its results and make them available to the rest of the glass industry.

The organisation has two working groups. One deals with furnaces, batch composition and glass composition while the other technical committee focuses on forming. Both groups officially meet twice a year and tend to meet more frequently

IPGR benefits from move to Aachen

The IPGR recently moved its headquarters to the German city of Aachen and has forged stringer links with the city's RWTH university. Here IPGR General Secretary Christian Roos discusses the recent move and updates on some of the research group's recent work.

IPGR member companies:

- Bucher Emhart Glass (Switzerland)
- Orora Glass (Australia)
- Fevisa (Mexico)
- Sisecam (Turkey)
- Gallo Glass (USA)
- Vetropack (Switzerland)





IPGR now hopes to commercialise the results.

"It's a huge reduction. We've implemented it at one member company and the results so far have been extremely good. So we will see how we can utilise and commercialise it. It helps fund IPGR and we hope it will have benefits for the industry too."

The IPGR is formed of nine member companies who each have two staff in both committees, so consists of 18 people.

One advantage the IPGR has is its ability to do testing at member companies, on a production line. "Again, it's a big benefit to have these family owned, mid-sized companies because it is much easier to get into the production areas, they are open to give you a section of an IS machine for testing, which is incredibly generous."

It is also made clear to all member companies about competition.

"If you ask a container glass manufacturer if he wants either a 5% of market share of a competitor or a 1.5% market share of the PET industry, the answer is clear. The competitor is the PET and plastic industry," states Mr Roos

IPGR
International Partners
in Glass Research

Mr Roos himself joined the IPGR in 2009 after working for Schott for 10 years. After a year's

- Vidrala (Spain)
- Wiegand-Glas (Germany)
- Nihon Yamamura Glass (Japan)

IPGR executive committee:

- Chairman: Gunter Lubitz
- Deputy chair: Oliver Wiegand
- General Manager: Christian Roos
- Project Manager: Mr Orzol
- Furnace Committee
- Technical Committee

when working on various projects.

The IPGR's executive committee will usually meet once a year, or twice a year if there are particularly important subjects to discuss.

Today's big talking points among members revolve around the environment and specifically energy and emission reduction. It started a large project three years ago focused on decreasing energy consumption in glass melting. That focus has since been expanded to decrease emissions as well. "If you decrease energy consumption then you obviously decrease emissions as well but there are also other special ways to work on the reduction of emissions, and that is what member companies are also focusing on," said Mr Roos.

It also has one project in the proof of production stage where it is investigating alternative raw materials that reduce energy consumption.

Its glass forming committee has developed a coating which decreases the amount of swabbing required in the container glassmaking and extended the non-swabbing period to about five days. The project began seven years ago and the

sabbatical traveling the world, he was offered the role at the IPGR.

"The attraction of the role was the high degree to form and shape an international association and to have the possibility to do strategic development in that field.

"I enjoy working here. We have a lot of opportunity to bring in our own ideas. There is also a real motivation among members to step into a project and bring about benefits to the glass industry. We have a short decision-making time: members meet, they see a proposal, discuss it and then say yes or no. There are no big hierarchies which slow you down, we have a rapid decision making process. Everyone is highly motivated, members really want to see the success of a project."

Mr Roos has worked in the industry for 18 years and his fascination with glass remains.

"There are still so many things to learn about glass. It is not an obvious material compared to metals or ceramics, it still has some niche areas to

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explore.

“Compared to other materials glass has a much broader application range and possibility of variations than is usually thought of. Because of that variation you can still learn a lot. “I particularly enjoy working with container glass and the IPGR members because the companies are willing to take risks. When a company is willing to take risks and step into R&D you can really move things forward. If you’re always cautious you will never take big steps.”

The IPGR is keen to remain small and agile. Its new look website is not necessarily to attract new members.

“If we grew to say 20 members, we lose the benefits of the rapid decision making process. The more members the slower it becomes to make an agreement among members. “The website is there to post some basic information about IPGR and give details about what we do.”

Now it has moved to Aachen it will forge stronger links with the RWTH, benefit from its knowledge in other areas and hopes to set up a testing facility in the future. A proposal is a prototype container glass production facility with a small, 2 tonnes furnace also capable of trials of coatings and mould materials for example. ■

IPGR, Aachen, Germany www.ipgr.com

