

Herwig van Hove interview, by Jose Pozo, 29 August 2025

Herwig van Hove is Founder & CEO at VAHOCA

Jose Pozo is Chief Technology Officer at Optica

Jose Pozo:

Hello, today we have a very special interview for you. I'm joined by Herwig van Hove, who you may know as the entrepreneur, investor, and one of the directors behind the newly established Thema Foundries. They are in the local news now because Thema has just officially taken over the former BelGaN factory in the town of Oudenarde in Belgium. BelGaN was trying to become a leading gallium nitrate foundry, but suddenly BelGaN went bankrupt last year when investors withdrew from the project. 440 jobs were lost. But now, the 10,000 square meter cleanroom is being transformed into a state-of-the-art photonic chip hub. Herwig's team is set to be investing more than 200 million euros. The plan could create 500 jobs and put Belgium and Europe at the center of photonics chip manufacturing. This is exactly what Europe needs to fit the demands of AI and data centers. Herwig will also join us as a panelist at the Optica Global Photonics Economic Forum in Malaga in October. Herwig, welcome. Let's dive into your vision for Thema Foundries. So please explain what happened and why are you investing in European photonics now?

Herwig van Hove:

Yes, so thank you, José. Well, this was up and coming for a while for us. As you know, we have invested in photonics for more than five years. We saw the first evolution and now revolution happen. Thanks also to people like yourself who have been preaching the gospel on photonics.

For us, we were always very energy conscious. So the fact that photonics could help solve the problem that data centers and AI is causing was a strong catalyst. And obviously, it was a strong catalyst when we invested. It became a much stronger catalyst when ChatGPT sort of went viral. And with that, the outburst of this AI revolution happened. What happened with the Foundry is that this Foundry is located in the town that my wife and I grew up in. And so when the bankruptcy was announced in the news we very acted very quickly we asked whether this foundry was convertible into a state-of-the-art full service open source photonic foundry we had some feasibility studies already from before for other projects and yeah it turned out that the previous owners had invested a lot in the infrastructure in new clean rooms, some of which actually were delivered in May of 2024. So brand new. So the infrastructure was very attractive. And so we spent about eight months trying to close the deal and I'm very happy to announce that last week we put our signatures in front of the notary we paid the acquisition price and we are now the proud owners of the site and we intend in the next 18 months as you mentioned to invest significant money to build a open source full service photonic foundry so uniquely dedicated to photonics.

Jose Pozo:

Let's start with Belgium, a country that has been in the age of innovation, the political capital of Europe. What convinced you that Belgium can become a photonic chip hub, and most important: is government support part of this equation?

Herwig van Hove:

So yeah Belgium... Part of our due diligence when we looked at the FAB infrastructure was obviously to see, can we find the talent pool required to populate the FAB and build such a future-proof venture? And Belgium has, under the influence of two very prominent professors, Roel Baets (Ghent University) and Professor Hugo Thienpont (Vrije Universiteit Brussel), really anchored a place globally in terms of R&D and being at the forefront of photonics. In addition, we have a world-class institution in Belgium called imec, which has also focused quite a bit on photonics. And so between the strong academic background and this behemoth of an R&D center, a very deep and broad bench of experienced photonic people grew up in Belgium. And so we are quite convinced we have what it takes to build it up.

Jose Pozo:

It does feel like it's the right place with IMEC as a leader in nanoelectronics, being there as a supporter for IP and then having Ghent University and VUB as a pipeline of talent. It does feel like a great data approach. How did this connection happen? How did you meet Professor Hugo Thienpont and Professor Roel Baets?

Herwig van Hove:

So we reached out, literally cold call, but fellow Belgian interested in photonics. So the connection was pretty easy to make. And we also obviously reached out to IMEC upfront, making our intentions clear around the site in Oudenaarde and asking that if we were to proceed with such a venture, would they be interested to partner up? Not surprisingly, the response from all parties was quite positive and optimistic. We have a lot of work to do, obviously, but they were very enthusiastic that such a venture would be built in Oudenaarde. They agreed that Belgium as a hub makes a lot of sense and I would see it a little bit larger than Belgium. As you know, Belgium and Holland have both been at the forefront of photonics. So we see this as another building block in that very successful ecosystem.

Jose Pozo:

Good you mentioned the Netherlands, a fantastic country for photonics. There are other foundries that are being developed like Smart Photonics, there's an upcoming one called New Origin. How does Thema Foundries differ from these other foundries and do you see a room for collaboration?

Herwig van Hove:

I see a lot of room for collaboration and the good news is that actually several of those parties have already reached out to us. We think collaboration will be the name of the game if we want to as a European player participate and lead in this uh photonic revolution we will need to join forces so we very much see this as a game where it's both collaboration and obviously there will be competition um i think the the difference uh in in our approach of what we are trying to do is certainly scale. As you know, the site is pretty large, very significant clean rooms. And so we believe that this makes the site ideal to be future proof as people are starting to ramp up the scale of what is coming in photonics. You know, it always makes me smile when we read the consultant newspapers and the predictions they make every year, they need to revisit their predictions and make them much more optimistic. And then they do it again the year after. So that's pretty much what we see happening in photonics. And so to answer your question, we are certainly going to engage in very strong conversations with the companies you mentioned to make sure that we win as a team.

Jose Pozo:

One thing that is very frustrating for the European industry is that when it comes, for example, silicon photonics was invented in Europe, in Southampton, in the UK. photonic integrity circuits with indium phosphide active passive that was originated in first in Delft and then in Eindhoven. It was a very European technology, but when it came to volume production, then came companies like GlobalFoundries, like TSMC, like Tower. Do you think that partnerships with European foundries, European institutions could make having a volume production European foundry for photonics?

Herwig van Hove:

That's our vision. We believe that will be required. Unfortunately, as you know, currently the competition on chip production is getting further and further deglobalized. So I think as a European hub, we have the obligation to anticipate that trend to continue. And in addition, again, we believe that volumes will be much larger than anticipated. And so collaboration between the European players, Germany, Holland, Spain, Belgium, will be important, Switzerland obviously. So we are very open to conversations and we look forward to starting that very quickly.

Jose Pozo:

I think you started honestly at the right time. First of all, when it comes to global markets, we are going to have serious challenges from a European perspective to do business with US because of tariffs, from IP perspective to do business with other countries in Asia. At the same time in Europe right now we have opportunities for collaboration, taking into account that there will be a lot of your customers who will have geographically constrained supply chains. Was that part of your business strategy?

Herwig van Hove:

It wasn't part of our strategy initially, but it is certainly something that, I mean, to be fair, that's a two-edged sword. You know, we need to, on the one hand, take advantage of that, but on the other hand, anticipate that, for example, as far as supply chain goes, we need to make sure that the ecosystem in Europe vertically integrates all the way to the source. Thankfully, Europe is awake and is certainly supporting those efforts. And so you mentioned timing. I do think, and interestingly enough, another, how would I say, another visionary founder in

photonics, who unfortunately was a bit too early when I spoke to him and asked him about lessons learned. He smiled at me and he said that we couldn't get our timing more perfect if we tried. So hopefully he's right.

Jose Pozo:

Finally: Talent. What is your message for the young engineers, for the scientists? You are going to be hiring heavily in the coming years. Which skills are you demanding? Which skills does Thema Foundries demand from your future employee?

Herwig van Hove:

Obviously we will be hiring uh significantly uh in in the different uh disciplines between engineers and physicists and uh the um you know the the people from hopefully a lot of alumni from IMEC. But I would say in Europe, for the young newcomers, I would encourage people to have the courage to take risks and to have a vision and to join stories that, maybe you can, if you're at the top of your game, you will get offers from anyone, sometimes very large players that will always be very comfortable. But I think there will be a lot of upside to people who join European startups that are at the cusp of a new story.

Jose Pozo:

Herwig, thank you very much for sharing your vision. We look forward to hearing more from you at the stage of the Global Photonics Economic Forum in Malaga on the 7th and 8th of October. And I'm sure there will be lots of questions from the 400 executives in front of you. See you soon in Malaga. Thank you so much, Herwig.

Herwig van Hove:

Thank you. Thank you, José.