What are the key figures of R&D at imec?

As a global team of over 6,000 talented employees from more than 100 nationalities, we are headquartered in Flanders, Belgium and have distributed R&D groups at all Flemish universities, as well as in a number in the Netherlands, the USA, and representation in 3 continents. Our collaborative approach bridges the gap between academia and industry, facilitating the rapid transfer of knowledge and technology from the research lab to the market.

Could you introduce your expertise?

The combination of top talent, unique infrastructure, and our worldwide partner network makes us a world leader in nanoelectronics and digital technologies. Since our inception, 40 years ago, we are at the forefront of advancing semiconductor technology to smaller nodes at higher performance at affordable cost and more sustainable. Every smartphone includes microchip technology invented by imec.

While microchip technology is at the core of what we do, our impact extends significantly across key application domains. We play a vital role in advancing innovation in health, automotive, agritech and energy. Our R&D expertise is dedicated to driving disruptive changes and advancements within these crucial application domains and beyond.

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How is imec collaborating with companies across the world?

We offer R&D partnerships as well as innovation services. We firmly believe in the synergy of R&D collaboration. Together with universities, companies and public stakeholders, we aim to maximize knowledge and expertise to push technology forward. All our R&D partners benefit from the unique assets that imec offers such as our state-of-the-art infrastructure, our top-of-the-class international talent with multidisciplinary scientific background, our unique IP, and our one-of-a-kind ecosystem of local and global partners including universities and world-leading companies from a multitude of industries.

Our unique environment ensures more interactions, higher creativity and better integrated technologies. Next to our R&D program offering, we also work together with companies on a bilateral basis, for private research. This can be an R&D collaboration supporting companies with the development of technological solutions to innovate their products and services. But this is not limited to R&D support: we offer support throughout the entire lifecycle of the innovation process. Whether it is hardware, software, or both. And for innovators from around the world, as well as for local initiatives in Flanders.

The NanoIC booth and a part of the team, as presented at ITF World 2025, imec’s flagship technology event, in Antwerp, Belgium. © imec

Is imec involved in the EU Chips Act and how?

With the **NanoIC project,** imec hosts one of the EU’s most ambitious initiatives for advancing chip innovation and achieving global leadership in semiconductor innovation. We are significantly expanding the capacity and capability of our 300mm cleanroom with new advanced equipment for beyond-2nm system-on-chip (SoC). The project will give European industry players, suppliers, and researchers **training and access** to state-of-

the-art platforms for developing and testing new innovations that will significantly impact critical markets such as automotive, consumer electronics, high-performance computing, and healthcare. We are proud to partner with top European research institutes CEA-Leti (France), Fraunhofer (Germany), VTT (Finland), CSSNT-UPB (Romania), and Tyndall (Ireland) for this project.

Our participation in other EU pilot lines, focusing on different aspects of advancing semiconductor technologies, ensures alignment on European efforts; the FAMES pilot line on low power FD-SOI (coordinated by CEA-Leti), the APECS Pilot Line on heterogeneous system integration (Fraunhofer-Gesellschaft) and PIXEurope on photonic integrated circuits (ICFO), the Qu-PILOT line for quantum technologies (VTT), with the sixth WBG pilot line (CNR) focusing on new wide band gap materials.

Moreover, imec is coordinating the **EU Chips Design platform**, which will facilitate access to advanced semiconductor design infrastructure (such as the imec pilot line), training, and capital for fabless semiconductor startups, small and medium enterprises and research organizations. By providing the necessary resources, the initiative aims to democratize and foster semiconductor innovation across Europe, specifically for chip design.

With these combined initiatives, imec supports European innovation and competitiveness across the value chain – from semiconductor materials and design to applications and education. Together, we will accelerate R&D and advance technologies.