
Emberion Raises €6 Million for Its Infrared Imaging Business

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Graphene Flagship partner Emberion offers leading-edge VIS-SWIR cameras with a broad spectral range at a competitive cost. These devices meet the needs of the rapidly expanding global machine vision and surveillance markets.

Graphene Flagship and partner Emberion has raised €6 million in funding to further develop their infrared imaging business. Currently, Emberion is one of the leaders in the development of these technologies, enabled by graphene and other layered materials.

Graphene Flagship partner Emberion develops high-performance SWIR sensors for imaging technologies. These devices detect light in both the visible and short-wave infrared (SWIR) wavelengths, enabling new applications in machine vision – used in surveillance, autonomous driving, food processing, waste sorting, and more. Emberion also leads Graphene Flagship Spearhead Project GBIRCAM, to design cheaper and more efficient broadband infrared devices.

Now, Emberion has raised €6 million in funding from Nidoco AB, Tesi (Finnish Industry Investment Ltd) and Verso Capital, which showcases the industrial interest and market potential of imaging technologies enabled by graphene and other layered materials.

Jyrki Rosenberg, CEO of [Graphene Flagship](#) partner [Emberion](#), says: “We are disrupting multiple imaging markets by extending the wavelength range at a significantly more affordable cost. Our revolutionary sensor is designed to meet the needs of even the most challenging machine vision applications, such as plastic sorting. We look forward to helping customers access new information at infrared wavelengths, thereby critically enhancing their applications beyond today’s capabilities.”

Tapani Ryhänen, CTO of Graphene Flagship partner Emberion and Leader of the Graphene Flagship Spearhead project GBIRCAM, adds: “We have created a new generation of image sensors using layered materials. Our high-performance industrial cameras increase efficiency and reduce the loss of resources in many industrial processes. We innovate at all levels of camera design: materials, integrated circuit design, electronics, photonics and software. We are now stepping forward to expand our capacity to manufacture.”

With their patent-protected innovations, Graphene Flagship partner Emberion has built visible to short-wavelength cameras using the in-house developed sensors that provide superior responsivity with low noise and high dynamic range over a broad spectral range, from visible (400 nm) to short-wave infrared (SWIR, 2000 nm) wavelengths.

“We are appreciative of the high interest and trust towards our technology from investors and customers. With this funding, our next step is to increase our production capacity to be able to serve our customers’ needs. We will also intensify our efforts to further develop mid-wave infrared (MWIR) and broadband solutions to expand our offerings and to enhance the capabilities of our current VIS-SWIR product line”, added Rosenberg.

Kari Hjelt, Head of Innovation of the Graphene Flagship, adds: “This €6 million investment for Emberion testifies the high-market potential of graphene-enabled products. Emberion is partner of the Graphene Flagship project, funded by the European Commission to bring graphene and layered materials to the market. The Emberion products are a prime example of this development.”

Read the [original article](#) on Graphene Flagship.