## **CSA Catapult celebrates fifth anniversary**

Highlights of CSA Catapult's first five years include delivering £14m of collaborative R&D projects; leveraging £177m of direct investment; and creating or safeguarding over 5000 jobs across the UK.

ompound Semiconductor Applications (CSA) Catapult is celebrating its five-year anniversary with the publication of an overview of its impact and achievements to date.

Established in 2017 by UK Government agency Innovate UK (which provides funding and support for business innovation as part of UK Research and Innovation), CSA Catapult is a not-for-profit organization focused on accelerating the adoption of compound semiconductors for three key areas (the road to Net Zero, future telecoms and intelligent sensing). Headquartered in South Wales, it works across the UK in a range of industry sectors, from automotive to medical, and from digital communications to aerospace.

The new document details the journey of CSA Catapult from 2018 to 2022, highlighting achievements that have included: delivering over £14m of collaborative R&D projects; leveraging over £177m of direct investment; and creating/safeguarding over 5000 jobs across the UK. CSA Catapult's function in the UK's compound semiconductor ecosystem is helping companies to fully embrace the power of compound semiconductor technology and bring their innovations to market.

During the last five years, CSA Catapult has focussed on leveraging research, eliminating barriers, minimizing risk, accelerating routes to market, and attracting investment for collaborators in industries ranging from vehicle electrification and future telecoms to smart energy grids.

In 2018, CSA Catapult set up an Innovation Centre in Newport, South Wales, offering innovation as a service and providing knowledge and expertise across four areas: power electronics; photonics; RF (radio frequency) and microwave; and advanced packaging. This has led to 180 collaborations with industrial partners, including BMW and McLaren Applied.



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In 2022, CSA Catapult entered a partnership with Siemens to deliver joint projects that accelerate the development of leadingedge power electronics, machines and drives technology, capability, skills and jobs across the UK. The Siemens Power Electronics Innovation Hub is now permanently located in CSA Catapult's Innovation Centre in Newport.

Throughout the first five years of its existence, CSA Catapult has also developed a wide-ranging skills program, starting in schools, and extending through to postgraduate-level and the workplace. Through its dedicated Skills Academy, it is developing initiatives to help create the workforce of the future that will develop the next generation of compound semiconductor technologies.

In the next five years, CSA Catapult aims to grow technology clusters and local supply chains across the UK, creating a network of regional support hubs in areas of significant national strength and importance, including quantum sensing, healthcare, defence and space.

CSA Catapult also aims to create more prototypes, building on experience in automotive power electronics technologies to address new market opportunities.

CSA Catapult's plays a "central convening role in building growth of supply chains working with industry," says interim chair Rob Bryan. "The Catapult must continue to grow academic collaborations; create new opportunities to work with industry; accelerate commercial scale-up; safeguard intellectual property; identify new international partners to address new and emerging markets. Upskilling a new generation is critical and I am particularly proud of our Skills Academy," he adds.

"I would like to take this opportunity to thank my predecessor, our first chair, Kevin Crofton, for his inspirational leadership during the Catapult's first years. He led us from start-up to become the leading neutral convener as well as the major commercial partner in the UK research and development ecosystem," continues Bryan.

"CSA Catapult is at the heart of the flourishing UK compound semiconductor ecosystem. We work with academia and industry to accelerate increasing product development, testing and evaluation," says CEO Martin McHugh. "We will identify significant new domestic and international markets and end-to-end supply chains," he adds. "In the next five years, we will support industry and supply chains and clusters, extending our footprint and contributing to the UK Government's levelling up agenda." Key achievements include:

• £14m of collaborative research and development (CR&D) projects won;



- £177m direct investment leveraged;
- £224m collaborative project pipeline established;
- 84 collaborations with universities and research institutes;
- 51 R&D projects delivered/underway/completed;
- 180 collaborations with industrial partners;
- 5093 UK jobs forecast to be created/safeguarded;
- 68% of project partners are academic;
- 10 international partners secured.

In Summer 2022, CSA Catapult surveyed its customers to understand its impact, with the following key findings: •93% said they would work with CSA Catapult again; •56% would not have been able to progress on new

- developments, or it would have taken longer or cost more, if they had not worked with the CSA Catapult (according to those who answered the question);
- 100% have been able to develop new partnerships;
- 20% agreed they have stronger international links;

• 30% agreed they have been able to target new markets because of working with the CSA Catapult.

## Analysis of public and private funding

In addition, internal analysis shows that 44% of the companies that had worked with CSA Catapult have secured public sector funding because of their direct or indirect engagement with the company. Companies that the Catapult has worked with are more than twice as likely to get private investment (36% versus 16%) and the average private investment raised by companies that work with it (per company per year) has also more than doubled, it is reckoned. ■