

## Collaborative research partnerships at AMBER: Advanced Materials and Bioengineering Research Centre

Vision and Aims	AMBER is a multi-disciplinary, multi-partner centre for world class <b>materials</b> science research generating impacts for industry and society. We are headquartered in Trinity College Dublin and our researchers are based in 9 university partners in Ireland.
	Our mission is to perform world leading research in materials and bioengineering science and translate that research into economic and societal impact.
	Our expertise allows us to carry out world-class, challenging, collaborative R&D. Our research tackles critical and emerging sectors of the economy, such as ICT, MedTech, Sustainable Materials, Manufacturing Technologies and Energy. Our research clusters, brought together under our fundamental research themes, address current gaps in knowledge, drive advances in materials science and engineering, and translate research excellence into new sustainable products and technologies for society and industry. We work with over 60 industry partners, nationally and internationally on collaborative materials science projects. (Please see: solutions for industry.)
Target Audience	Academia / research Policy makers Industry / SMEs Civil society/Citizens
Key Features	AMBER's business model is focused on the formation of collaborative research partnerships co-funded by industry and this is our primary vehicle for translating our research and expertise into commercial impact. AMBER's success in Horizon Europe also provides a pathway for achieving knowledge valorisation in health, policy and public engagement arenas. Several impact case studies are available here: <a href="https://ambercentre.ie/impact/">https://ambercentre.ie/impact/</a> Since inception, AMBER has built a partner portfolio of over 65 companies and
	managed over 150 collaborative projects with industry. Our core value proposition is the international competitiveness of our research, coupled to industry-standard project and relationship management. Our approach has been to focus on sectors strongly aligned to our research strengths, targeting companies with a track record in R&D investment.

In addition to our Business Development, IP & Contracts, Research Funding Specialist Managers, Project Managers and Finance & HR team, the AMBER Operations Team also has a dedicated Education & Public Engagement Manager as well as a Communication & Public Affairs Manager, ensuring that Engaged Research is at the heart of our endeavours.

AMBER brings together Ireland's leading material science researchers working across the disciplines of Bioengineering, Chemistry, Engineering, Immunology, Medicine, Pharmacy and Physics. It is a partnership between 9 academic institutions in Ireland, headquartered at Trinity College Dublin. The Centre launched its second 6-year phase (2019-2025) in June 2019, receiving €40 million in funding through Science Foundation Ireland's (SFI) Research Centres Programme. This is coupled with €77 million in cash and in-kind contributions, which AMBER continues to raise in investment from non-exchequer sources (typically Horizon Europe funding) and industry (usually co-funded bilateral projects), and through other collaborative and international research activities.

## Achievements & Learnings

- Over 2,950 publications to date, including 11 Nature and Science publications and over 170 Nature and Science publishing group publications.
- No. of Industry Co-Publications: 245
- No. of Patents: 135+ patents awarded or filed, 200+ invention disclosures
- No. of Research Staff: Currently 286 researchers (88 investigators, 81 PDRA, 117 PG)
- No. of Trainees that moved to industry: 390+
- No. of Support Staff: 11 AMBER staff + 10 associated staff
- >€60M in international research funding
- €55M industry & matched funding. €13.5M commercialisation funding.
- 27 ERC awards

Ireland's International ranking in the field of Materials Science is 6<sup>th</sup> in the world for top papers as well as highly cited papers (Incites Essential Science indicators, May 2020).

## Launch Date & Duration

2013 (6 years); continued in 2019 (6 years)

## Partners/Sponsors

Partner institutions in Ireland: Trinity College Dublin (TCD), the Royal College of Surgeons in Ireland (RCSI), University College Cork (UCC), Dublin City University (DCU), University of Galway (UG) Technological University of the Shannon (TUS), the University of Limerick (UL), University College Dublin (UCD) and the Tyndall National Institute.

65 industry partners working on collaborative research projects: <a href="https://ambercentre.ie/collaborate/industry/">https://ambercentre.ie/collaborate/industry/</a>

	Sponsor: Funded by Science Foundation Ireland, with matched funding from a combination of non-exchequer and industry sources.
Further	https://ambercentre.ie/ and https://ambercentre.ie/collaborate/industry/
Information	
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