



Advisory Council for Science
Technology and Innovation
An Comhairle Eolaíochta

PRESS RELEASE

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Employing PhD Graduates Benefits Irish Enterprise

Availability of advanced researcher skills is critical to attracting investment - Advisory Science Council

A new report launched today by the Advisory Council for Science, Technology and Innovation (ACSTI) has found that Irish R&D firms employing PhD researchers have rates of patenting 2.5 times greater than similarly active firms which do not employ PhD researchers and have vastly higher collaboration rates with both Higher Education Institutes and other firms. While only 29% of R&D active firms employed PhD researchers in 2007, these companies accounted for 70% of business expenditure on R&D. The report, *the Role of PhDs in the Smart Economy*, highlights Ireland's need to maintain a competitive output of PhDs in relevant disciplines in line with other developed countries and sets out a list of recommendations to maximise the development of 4th level education in Ireland and its critical relevance to enterprise and society.

Launching the report, Conor Lenihan T.D., Minister for Science, Technology and Innovation said "This report on the Role of PhDs in the Smart Economy is timely in that it highlights the benefits that PhD graduates bring to firms and sheds much light on the role they can play as we strive to build Ireland's knowledge economy. The confirmation of ongoing STI investment announced in last week's Budget reaffirms Government's continued commitment to the flourishing of the knowledge-based economy on this island. A supply of PhD qualified researchers with skills closely aligned to broader economic and social needs will best position Ireland to take advantage of the global upturn."

Chairman of the ACSTI, Tom McCarthy commented "The ready supply of graduates in Ireland enabled us to exploit opportunities for growth that came with the expansion of the world economy after 1991. In the coming decade a capacity to produce graduates with advanced researcher skills will be critical in expanding the mandate of foreign multinationals already located here and attracting globally mobile R&D investment. Restoring competitiveness to indigenous enterprise requires the stimulation of R&D intensity and the adoption of appropriate technologies. The alignment of PhD training with the needs of SMEs will therefore be essential if we are to sustain export growth. Despite the economic downturn, the ACSTI strongly advocates the need to maintain investment in PhD education as an underpinning driver of innovation in the enterprise sector."

The recommendations of the report are:

- Funding for structured PhD programmes should be broadly aligned with the sectors of the economy where there is a strong demand for PhD qualified researchers

- Structured PhD programmes should embody the “Inverted T” shaped model whereby they develop PhD students’ understanding of the discipline as well as in-depth knowledge of research approaches, techniques and methods which are critical to the value of PhDs for enterprise.
- Higher Education Institutions should adopt systematic and formal consultation with enterprise in the development of structured PhD programmes at discipline level within the institutions, ideally with the involvement of enterprise boards to oversee structured programmes, where appropriate.
- A user-friendly, centralised system should be developed to allow employers or potential employers to access information on the number of PhD students in the pipeline and the broad theme of the research
- The Council strongly endorses the Enterprise Partnership Scheme, which links private enterprise and eligible public bodies to co-fund postgraduate scholarships and postdoctoral fellowships, and recommends that resources are made available to scale up the programme.
- Ireland should develop an Enterprise PhD programme building on the model of the Danish Industrial PhD programme whereby an employee earns a PhD based on research relevant to their company.
- Beginning with the PhD education and training period and continuing through to early postdoctoral research stage there should be an integrated programme of support and training specifically targeted at PhD students and early postdoctoral researchers to enable them to commercialise their research.

The full report can be downloaded from the Advisory Science Council website, www.sciencecouncil.ie

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Note to Editors:

The Advisory Council for Science, Technology and Innovation is the Irish Government’s high-level advisory body on Science, Technology and Innovation (STI) policy issues. It serves as the primary interface between stakeholders and policymakers in the STI arena.

The Council’s remit is to contribute to the development and delivery of a coherent and effective national strategy for STI and to provide advice to Government on medium and long-term policy for STI and related matters.

Earlier this month, the Council published a Statement on Investment in R&D which highlights a number of areas that should receive the immediate attention of Government in order to maximise the impact of public investment in R&D. The full statement is available at www.sciencecouncil.ie