

January 18th 2012: Rince Institute Research Day



Photonics Ireland Conference 2011²
7th - 9th September 2011. Held at the Grand Hotel Malahide.

Next presentation in the second
INSPIRE Nanophotonics Seminar series³

Inspirenano.com⁴ shortlisted for Best Technology Website in the 2009 **Irish Web Awards⁵**.....

INSPIRE Consortium Homepage:
(more)⁶

INSPIRE Programme

INSPIRE - Integrated NanoScience Platform for Ireland - is a **national collaborative research project involving 6 Irish Universities, and Dublin and Cork Institutes of Technology.** The research programme is funded by the Higher Education Authority through the Programme for Research in Third Level Institute (PRTL4 and PRTL5).

Control of matter at the nanoscale (dimensions sub-100nm) is fundamental to electronics, photonics, "bio-pharma", structural materials and environmental health and safety. As such, it impacts on a myriad of technologies that are key current and future wealth generators in the Irish economy.

This potential is harnessed by the coordinated National Nanotechnologies Initiative joining CRANN/TCD, CIT, DCU, DIT, NUIG, UCC/Tyndall, UCD and UL in research, graduate education, outreach and technology transfer.

This initiative, involving all Irish institutions with international strengths in nanoscience, photonics and relevant biosciences is designed to enable Ireland to engage in key new interdisciplinary areas.

Ireland has had considerable investment in nanoscience in the past five years. This investment has led to nanoscience research in Ireland making significant international impact. Critical to the evolution of the capabilities is a cohesive approach to access to large scale facilities nationally and education and training.

The INSPIRE initiative creates a

Recent Events

July 3-18, 2011: *Summer School on Nano-Optics⁷*; Erice, Sicily, Italy

September 13th: *The Laser at 50 Celebration⁸* at Queen's University Belfast. View ***Photos from the early days⁹***

August 18th: First series of *Nanophotonics Student Talks¹⁰* via Inspire Videoconferencing Technology ***See Listing¹¹***

Post-Graduate Open Evening:

¹²Thursday 12 May 2010

November 30-December 4, 2009, *Nano Week¹³* - a week-long programme of National events to promote the world class nanoscience activity in Ireland

November 30 2009; *Inspire 2009 National Scientific Meeting¹⁴*, Tyndall National Institute, Cork, Ireland.

November 11-13, *NCPST hosts 'Fusion EXPO' at DCU¹⁵*

November 12 2009; Tanaiste announces Nano Week; *read press release.....¹⁶*

October 15-16, 2009; Carlton Hotel, Cloghran, Dublin, Ireland *Ist*

national integrated nanoscience and nanotechnology activity which will result in building collaborations across the nanoscience community nationally, leveraging existing capabilities and elevating the national activity to be internationally leading.

Key programme aims include:

- *Development of shared national nanoscience graduate programmes*
- *Creation of a shared infrastructural capability*
- *Development of existing linkages to enable new collaborations; locally, regionally and nationally across institutions and across disciplines.*

International Conference on BioNano: Inspiring Responsible Development for Society and the Environment¹⁷

September 14-16, 2009, The premier national conference for photonics research in Ireland, at Photonics Research National Conference, Cork, Ireland *Photonics Ireland 2009*¹⁸

September 10-11, 2009, at DCU, Dublin: *International Symposium on Functional Nanomaterials*¹⁹

May 6-9, Dublin; PEARL 2009: 3rd International Workshop on 'Physics at Ebits and Advanced Research Light Sources' (*more*)²⁰

Main elements of the INSPIRE (DCU) project

Photonic Devices for next generation.

The development of optical systems with multi-Terabit capacity presents numerous challenges in the areas of light generation and propagation, non-linear optics, and photonic materials. In particular, next generation optical networks will require advanced photonic devices for the implementation of high-speed optical data processing networks.

Ultrafast short wavelength sources. The burgeoning field of Extreme-UV (EUV) optics and photonics is rapidly growing in technological importance. Critical, impending and future applications will see short wavelength systems move from the laboratory bench to the industrial tool.

Nano-materials growth, characterization and application. DCU has an established track record in the growth and optical characterization of wide band-gap semiconductor nanostructures, mainly ZnO and CuCl nanostructures.



Ireland's EU Structural Funds
Programmes 2007 - 2013

Co-funded by the Irish Government
and the European Union



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