



US Company Rockley Photonics to establish Irish R&D Centre at Tyndall

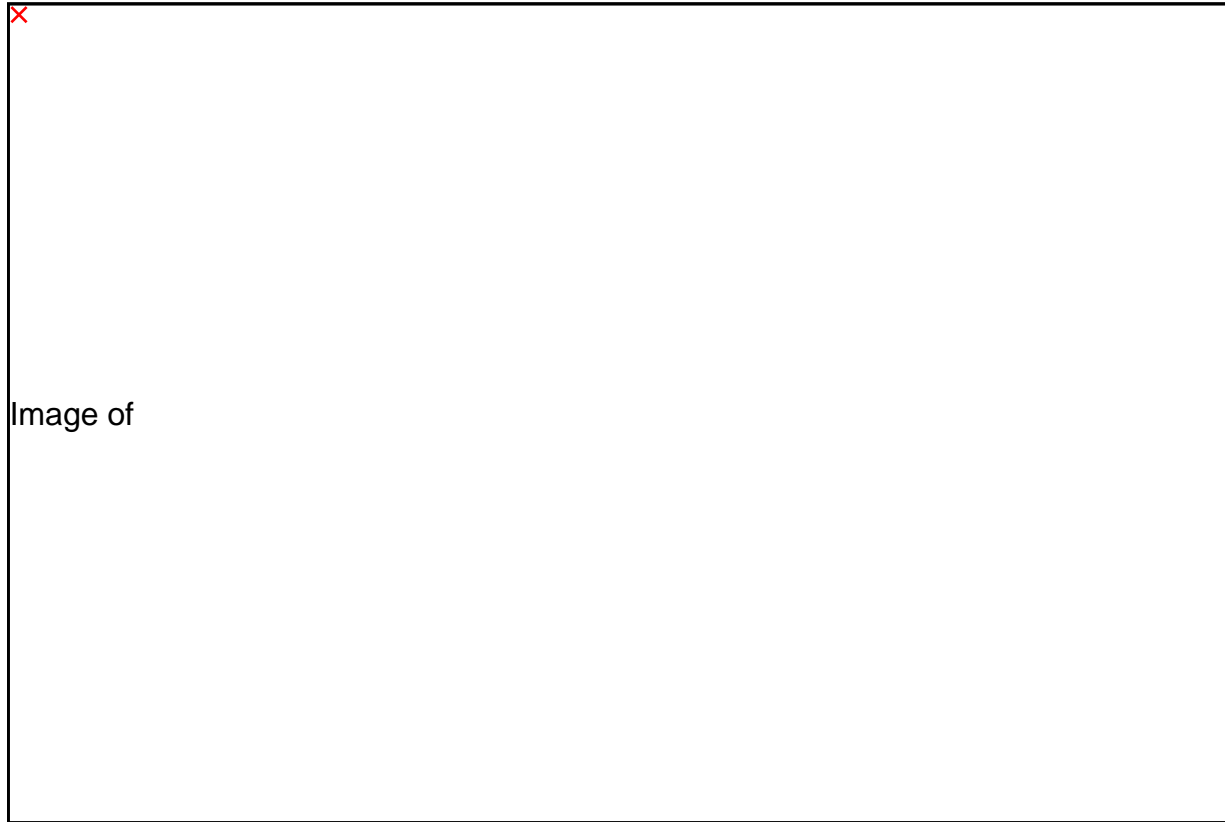


Image of

Pictured at the United States Institute of Peace, Washington DC, Prof Eoin O'Reilly, interim CEO of the Tyndall National Institute, Cork, with Dr Sunit Rikhi, Non-Executive Director & Executive Consultant for Rockley Photonics, Prof Mark Ferguson, Director General of Science Foundation Ireland and Chief Scientific Adviser to the Government of Ireland, An Taoiseach Leo Varadkar TD, and Dr Patrick Morrissey, Centre Manager of the SFI Research Centre IPIC.

An Taoiseach, Leo Varadkar TD, announced today that Rockley Photonics plans to establish an Irish R&D Centre at Tyndall National Institute, Cork. The Centre will support Rockley's growing global activities, in particular their Silicon Photonics research programme. The announcement was made at a Science Foundation Ireland (SFI) event in Washington DC to celebrate and build scientific collaboration between Ireland and the United States as part of the St Patrick's Day Festival.

The announcement, which is part of a three-year collaboration with the SFI-funded Irish Photonic Integration Centre (IPIC), based at Tyndall, represents a joint investment of €3.4M by Rockley and Science Foundation Ireland to advance silicon photonics from the lab to market, addressing the growing demand for faster and more energy efficient data communications in data centres. Rockley intend to initially hire five highly skilled employees at their new R&D Centre.

Speaking at the event, An Taoiseach Leo Varadkar TD said: "This investment showcases the growing scientific and industrial collaborations between the US and Ireland. By establishing partnerships with innovative companies such as Rockley Photonics, Ireland continues to grow its

competitiveness in the area of ICT. Forging such strategic partnerships will help to facilitate the development of breakthrough technologies which have the potential to deliver huge societal and economic benefits.”

With the extraordinary growth in internet traffic, combined with the non-stop demand for cloud-based services, datacentres play a critical role in meeting the data explosion requirements. Integrated optical technologies that enable datacentres to operate faster, more economically and at greater scalability are necessary for the industry to continue to satisfy the demands of the new digital economy. Today’s market is shifting to transport rates of one-hundred gigabit per second (100GB), and this is expected to jump to 400GB in the near future – creating a major increase in energy usage as well as scalability issues unless new technologies, such as silicon photonics, are developed and deployed.

Dr Andrew Rickman, founder, CEO and chairman of Rockley Photonics, explained: “Our highly innovative silicon photonics technology is designed to address the optical I/O challenges facing next generation data centres – allowing network architects to take advantage of new high-density, low-power connectivity solutions and explore new network topologies and equipment design. This investment with the SFI Research Centre IPIC will enable us to combine our expertise and utilise Tyndall’s state of the art facilities to develop ground breaking early stage technologies, which will not only have a huge impact on the future architecture design of large data centres, but will also improve the power and computational capacity of new consumer devices and provide robust sensing solutions in the autonomous vehicles and consumer device sectors as well as others. We’re grateful for the support the project is receiving from Science Foundation Ireland.

IPIC Director and Head of Photonics Tyndall, Prof Paul Townsend highlighted: “The investment will not only advance IPIC’s optical modulator and photonics integration technologies into products designed for volume production, but will also strongly position both IPIC and Rockley to take competitive advantage in the datacomms market which is expected to reach \$6.4 Billion by 2023. I congratulate Frank Peters, IPIC lead Principal Investigator, and Professor at the Department of Physics, University College Cork, on his outstanding research that has led to this partnership and look forward to seeing the technology mature in future years.”

Science Foundation Ireland Director General and Chief Scientific Adviser to the Government of Ireland, Professor Mark Ferguson concluded, “SFI Research Centres such as IPIC are the driving force for connecting leading-edge industry with world-class researchers in Ireland. I welcome this partnership as it continues to elevate Ireland’s international reputation for research excellence with impact. Furthermore, by including a PhD training programme in the collaboration, IPIC is helping address the global demand for high skilled trainees in the area of photonics, while developing a competitive edge in the global photonics market. We look forward to the significant opportunities and outputs that this collaboration will create.”

IPIC and Tyndall Photonics Centre Manager Dr Patrick Morrissey, said: “The Rockley-Tyndall partnership enforces Ireland as a leading location for technology companies to efficiently develop and advance their technology, and represents the latest in a long history of industry partnerships that we have developed with leading multinationals and Irish SMEs, to take our leading-edge research from the lab to market.”

About Rockley Photonics

Rockley Photonics is a UK headquartered company with main engineering development office located in Pasadena, California, and additional offices in San Jose, California, Oxford, England and Northern Europe. Rockley Photonics are delivering the leading photonics platform with large scale,

integrated economical solutions to transform connectivity and sensing applications.
See <http://rockleyphotonics.com>

About Science Foundation Ireland (SFI)

Science Foundation Ireland funds research in the areas of science, technology, engineering, and mathematics (STEM) which promotes and assists the development and competitiveness of industry, enterprise and employment in Ireland. The Foundation also promotes and supports the study of, and engagement with STEM and promotes an awareness and understanding of the value of STEM to society and in particular to the growth of the economy. See www.ScienceFoundationIreland.ie.

About IPIC

IPIC is a Science Foundation Ireland (SFI) Research Centre that brings together over 100 researchers from the Tyndall National Institute, Cork Institute of Technology, Dublin City University and University College Cork to develop new light enabled technologies. Its work focuses on developing the next generation of highly-compact and miniaturised photonics technologies in order to tackle some of society's greatest challenges, especially in the areas of Information Communications Technology (ICT) and Health. For more information see www.ipic.ie