

DTU Fotonik  
invites you to attend an

**Inaugural Lecture**  
**by Professor Jes Broeng**  
**16 January 2015**  
**2-4:30 PM**



Topic: **Photonics Technology Innovation**

When: **16 January 2015, 2-4:30 PM**

Where: **DTU Building 101, Meeting room 1, 2800 Lyngby**

#### **Abstract:**

Innovation is widely acknowledged as a key element for prosperity and growth of societies in a global world. As a source of new knowledge and highly educated candidates, universities play a crucial role in innovation and have a century long tradition of supporting Danish industry. When it comes to new high-tech ventures, however, the idea of the university as a proactive innovation player is much newer. Only the past decade has seen the rise of investor environments in close proximity to universities, student start-up and mentor programs, innovation agents, tech-transfer activities, etc. With such an innovation ecosystem starting to take shape in Denmark, it is natural to analyze how this can be strengthened further to bring out more successful companies - for example by providing more openness to the Universities and direct interaction with experienced high-tech entrepreneurs at the research level. Also it is worth investigating how innovation initiatives affect the individual researcher and best serve to help his/her long-term career and research visions. This talk will address these issues from a DTU perspective and draw upon experience from specific cases in order to present future innovation models for spin-outs.

#### **Biography and Research:**

Professor Jes Broeng is a Danish citizen, born 1971, married and he has four children. He was educated at DTU with a MSc degree in telecommunications (1996) and a PhD degree in Photonics (2000).

He has more than 300 publications (peer-reviewed articles, conference contributions, book chapters and patents). The quality and impact of the research results are reflected in more than 8700 citations and an h-index of 42. He is a co-author of the first textbook on Photonics Crystal Fibres (Kluwer Academic Press), and invited speaker at multiple conferences and events. His conference committee work includes SPIE Photonics West, Fiber Lasers (general chair, 2008), OSA Advances in Optical Materials, and OSA Workshop on Specialty optical Fibers. He is a Fellow of SPIE for achievements in photonic crystal fibers and high-power ultrafast lasers, and a member of ATV. He has served on the Advisory Board of DTU Fotonik and as a member of the board of DOPS (the Danish Optical Society). He has received the European Optics Prize from EOS and the annual award of DOPS. He has supervised 9 PhD students.

Over the years, Professor Broeng has had a continued focus on innovation and the interface between scientific research and industry. He is co-founder of Crystal Fibre, a spin-out from DTU in 2000, together with a strong team from DTU and the Danish industrial group NKT. He served Crystal Fibre until 2008 as Head of fiber R&D and Director of IPR, and played a central role in establishing the company as the world's leading supplier of microstructured fibers. The products have received international recognition; winning two Photonics Circle of Excellence Awards (for the photonics industry's top innovative products). In 2009, he joined NKT Photonics as part of the merger between Koheras and Crystal Fibre and was a member of the top management team with responsibility of IPR, fiber R&D, and government projects.

In 2012, he joined DTU Fotonik and has been instrumental in four spin-out companies. His role includes refining spin-out opportunities, providing business mentoring, establishing founding entrepreneurial teams, exploring early adopters, attracting start-up capital and leading business and IPR negotiation. Furthermore, in collaboration with DTU Chemistry and Industriens Fond, he has co-founded a new innovation model (Bridging the Gap) that brings experienced, external high-tech entrepreneurs in direct collaboration with research teams at DTU to enable more sustainable spin-out companies.

Best regards,  
Lars-Ulrik Aaen Andersen, Director