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## Professor Jayanta Sahu

Academic Staff

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- Head of [Silica Fibre Fabrication](#)
- Member of [High Power Fibre Lasers](#)

Jayanta received a PhD from the Indian Institute of Technology in 1997 where he worked on the development of rare-earth doped optical fibres, the MCVD technique, and doped glasses using solgel techniques.

From 1997 to April 2000, he held a research engineer position at the Royal Institute of Technology, Stockholm, Sweden, where he was engaged in development of silica based planar waveguide devices, based on Plasma deposition and reactive ion etching.

Since he joined the ORC in May 2000, he has been with the silica fabrication group, where his current research interests are in optical materials and in high power fibre lasers. Jayanta was appointed a professor in the ORC in June 2012.

## Publications

**2018**

Lin, Huaqin, Feng, Yujun, Feng, Yutong, Barua, Pranabesh, Sahu, Jayanta and Nilsson, Johan (2018) [656W Er-doped, Yb-free large-core fiber laser](#). *Optics Letters*, 43 (13), 3080-3083. ([doi:10.1364/OL.43.003080](https://doi.org/10.1364/OL.43.003080)).

Jung, Y., Kang, Q., Shen, L., Chen, S., Wang, H., Yang, Y., Shi, K., Thomsen, B.C., Correa, R. Amezcua, Eznavesh, Z. Sanjabi, Zacarias, J. Carlos Alvarado, Antonio-Lopez, J., Barua, P., Sahu, J.K., Alam, S.U. and Richardson, D.J. (2018) [Few mode ring-core fibre amplifier for low differential modal gain](#). In *2017 European Conference on Optical Communication (ECOC)*. vol. 2017-September, Institute of Electrical and Electronics Engineers Inc. 3 pp, pp. 1-3. ([doi:10.1109/ECOC.2017.8345893](https://doi.org/10.1109/ECOC.2017.8345893)).

**2017**

Lin, Huaqin, Feng, Yujun, Barua, Pranabesh, Sahu, Jayanta and Nilsson, Johan (2017) [405 W Erbium-doped large-core fiber laser](#). *OSA Laser Congress: Advanced Solid State Lasers 2017, Nagoya, Japan. 01 - 05 Oct 2017*. 0 pp, ATh4A.2. ([doi:10.1364/ASSL.2017.ATh4A.2](https://doi.org/10.1364/ASSL.2017.ATh4A.2)).



Feng, Feng, Jin, Xianqing, O'Brien, Dominic, Payne, Frank, Jung, Yongmin, Kang, Qiongyue, Barua, Pranabesh, Sahu, Jayanta, Alam, Shaif-UI, Richardson, David and Wilkinson, Timothy (2017) All-optical mode-group multiplexed transmission over a graded-index ring-core fiber with single radial mode. *Optics Express*, 25 (12), 13773-13781. (doi:10.1364/OE.25.013773).

Thipparapu, Naresh Kumar, Chunyun, Guo, Umnikov, Andrey, Barua, Pranabesh, Taranta, Austin, Standish, Robert and Sahu, Jayanta (2017) Bi-doped fibre lasers and wideband amplifiers in the 1150-1500nm band. *At Beyond state of the art optical communications Beyond state of the art optical communications: UNLOC and Photonics Hyperhighway programmes to present their vision for the future*, London, United Kingdom. 02 Jun 2017.

Thipparapu, Naresh Kumar, Guo, Chunyun, Barua, Pranabesh, Umnikov, Andrey, Taranta, Austin and Sahu, Jayanta (2017) Bismuth-doped all-fiber mode-locked laser operating at 1340 nm. *Optics Letters*, 42 (24), 5102-5105. (doi:10.1364/OL.42.005102).

Donko, Andrei, Laszlo, Nunez Velazquez, Martin, Barua, Pranabesh, Guzman Cruz, Fernando, Alberto, Ismaeel, Rand, Lee, Timothy, Sahu, Jayanta, Beresna, Martynas and Brambilla, Gilberto (2017) Femtosecond inscription and thermal testing of Bragg gratings in high concentration (40 mol%) Germanium-doped optical fibre. *Optics Express*, 25 (26), 32879-32886. (doi:10.1364/OE.25.032879).

Jung, Yongmin, Kang, Qiongyue, Shen, Lei, Chen, Su, Wang, Honghai, Yang, Yucheng, Shi, Kai, Thomsen, Benn, Correa, Rodrigo, Eznavah, Zahoor, Zacarias, Juan, Antonio-Lopez, Jose, Barua, Pranabesh, Sahu, Jayanta, Alam, Shaif-UI and Richardson, David (2017) Few mode ring-core fiber amplifier for low differential modal gain. In *European Conference on Optical Communications*.

Shardlow, P.C., Simakov, N., Billaud, A., Daniel, J.M.O., Barua, P., Sahu, J., Hemming, A. and Clarkson, W.A. (2017) Holmium doped fibre optimised for resonant cladding pumping. *CLEO/Europe - EQEC 2017, Munich, Germany*. 25 - 29 Jun 2017.

Donko, A., Nuñez Velazquez, M., Barua, P., Sahu, J., Beresna, M. and Brambilla, G. (2017) Point-by-point femtosecond laser inscription of Bragg gratings in high NA (>0.4) germanium-doped optical fibre. *5th Workshop on Specialty Optical Fiber and Their Applications, Limassol, Cyprus*. 11 - 13 Oct 2017. 3 pp. (In Press)

Thipparapu, Naresh Kumar, Chunyun, Guo, Umnikov, Andrey, Barua, Pranabesh, Taranta, Austin, Alam, Shaif-UI and Sahu, Jayanta (2017) Self-mode-locked bismuth-doped fiber laser operating at 1340nm. *The European Conference on Lasers and Electro-Optics, Munich, Germany*. 25 - 29 Jun 2017. 1 pp, p. 1. (In Press)

Wang, Yun, He, Jing, Barua, Pranabesh, Chiodini, Norberto, Steigenberger, Sebastian, Abdul Khudus, Muhammad, Sahu, Jayanta, Beresna, Martynas and Brambilla, Gilberto (2017) UV luminescence in Gd-doped silica and phosphosilicate optical fibres. At *CLEO-Pacific Rim 2017 CLEO-Pacific Rim 2017, Singapore, Singapore*. 31 Jul - 04 Aug 2017. (In Press)

Wang, Yun, He, Jing, Barua, Pranabesh, Chiodini, Norberto, Steigenberger, Sebastian, Abdul Khudus, Muhammad, Sahu, Jayanta, Beresna, Martynas and Brambilla, Gilberto (2017) Ultraviolet photoluminescence in Gd-doped silica and phosphosilicate fibers. *APL Photonics*, 2 (4), 1-8.