



Professor Zabih Ghassemlooy, who has been elected a Fellow Member of The Optical Society (OSA)

Nov 08, 2019 11:22 GMT

## Professor honoured for optical communications research

[Zabih Ghassemlooy](#), Professor of Optical Communications at Northumbria University, has been elected a Fellow Member of The Optical Society ([OSA](#)) for his service in the advancement of optics in photonics.

Founded in 1916, OSA is the leading professional association in optics and photonics, and home to accomplished science, engineering, and business leaders from all over the world.

Through world-renowned publications, meetings, and membership programs, OSA provides inspiring information and interactions, which power success in the field of light.

As leader of Northumbria University's renowned [Optical Communications Research Group](#) (OCRG), Professor Ghassemlooy's work focuses on the theoretical investigation, simulation and practical implementation of devices, and systems for optical wireless communications, visible light communications, free space optical communications, and radio over fibre.

The work carried out by the OCRG, has resulted in the publication of six books, over 800 other publications and more than 55 PhD graduates.

It also led to Northumbria University being chosen as the only institution to be involved in the €3.75m (£3.44m) Visible Light Communications based Interoperability and Networking ([VisloN](#)) project, funded by the European Commission.

Professor Ghassemlooy is the project lead on this research, which looks at the use of visible light communication to transmit information – known as [LiFi technology](#).

LiFi uses LED lights, such as those found in the ceilings of buildings, which turn on and off at a very high speed, not visible to the human eye, allowing them to communicate with LEDs in phone or tablet screens.

The VisloN project uses low-cost, plastic all organic LEDs to develop the world's first complete visible light communications system.

Professor Ghassemlooy's research has shown many benefits to using LiFi – one being that users will not be exposed to radio frequency radiation as with WiFi, meaning it is safe to use in areas such as hospitals.

LiFi can also be used within homes and work places, as well as for car-to-car communications; underwater communications systems between various manned and unmanned platforms; for communication between handheld devices and as an enabler for local positioning systems.

Commenting on his election into The Optical Society's 2020 Fellows Class,

Professor Ghassemlooy said: “I am extremely honoured to be recognised for my contributions in the field of optical wireless communications by my peers.

“Working with scientists and researchers at a global level and through leading professional association of OSA has made it possible to have a large impact on the development of free space optics and visible light communications.”

The OSA Fellow Members Committee, led by Aref Chowdhury, Nokia Corporation, USA, reviewed more than 200 nominations submitted by current OSA Fellows and recommended candidates for election to the Awards Council and OSA Board of Directors.

No more than 10 percent of the total OSA membership may be Fellows at any given time, making each year’s honourees a highly selective group.

---

Northumbria is a research-rich, business-focused, professional university with a global reputation for academic excellence. To find out more about our courses go to [www.northumbria.ac.uk](http://www.northumbria.ac.uk)

If you have a media enquiry please contact our Media and Communications team at [media.communications@northumbria.ac.uk](mailto:media.communications@northumbria.ac.uk) or call 0191 227 4604.

## Contacts



### **Rik Kendall**

Press Contact

PR and Media Manager

Business and Law / Arts, Design & Social Sciences

[rik.kendall@northumbria.ac.uk](mailto:rik.kendall@northumbria.ac.uk)

07923 382339



**Andrea Slowey**

Press Contact

PR and Media Manager

Engineering and Environment / Health and Life Sciences

[andrea.slowey@northumbria.ac.uk](mailto:andrea.slowey@northumbria.ac.uk)

07708 509436



**Rachael Barwick**

Press Contact

PR and Media Manager

[rachael.barwick@northumbria.ac.uk](mailto:rachael.barwick@northumbria.ac.uk)

07377422415



**James Fox**

Press Contact

Student Communications Manager

[james2.fox@northumbria.ac.uk](mailto:james2.fox@northumbria.ac.uk)



**Kelly Elliott**

Press Contact

PR and Media Officer

[kelly2.elliott@northumbria.ac.uk](mailto:kelly2.elliott@northumbria.ac.uk)



**Gemma Brown**

Press Contact

PR and Media Officer

[gemma6.brown@northumbria.ac.uk](mailto:gemma6.brown@northumbria.ac.uk)