

Title: " **Massive wavelength division network for ultra-low latency service using Hollow core fiber**"

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Abstract:

The future network will be a super multi-wavelength network with one wavelength per person. This will reduce the multiplexing delay required when multiple users share a single wavelength, and since the network can be implemented in a buffer-less wavelength-switched network, an ultra-low latency network can be created. To achieve this, we are considering expanding the wavelength band, narrowing the wavelength pitch, and developing a new low-power and cost effective wavelength network architecture. In this presentation, we report the results of our research on ultra-multiple wavelength networks, taking into account the application of hollow-core fiber, which is a new functional fiber.

Biography:

Dr. Yamanaka graduated from Keio University, Japan where he received B.E., M.E., and Ph. D. degrees in engineering in 1981, 1983 and 1991, respectively. In 1983 he joined Nippon Telegraph and Telephone Corporation's (NTT's) Communication Switching Laboratories, Tokyo, Japan. His research areas are Network Architecture in Optical Network, Cloud Computing, Smart Network, Communication Protocol, and Optical Switching System including Optical Devices. He was a director of Asia Pacific Board at IEEE Communications Society, and is now president of IEICE. He received best paper award from IEEE Trans on CPMT and IEICE Trans on Com and many best paper award from international conference. He is an IEEE Fellow, an IEICE Fellow, IPSJ senior member and IEEJ member.

ACKNOWLEDGEMENTS

This research was supported in part by the Ministry of Internal Affairs and Communications' Research and Development of Advanced Optical Transmission Technology Contributing to a Green Society (JPMI00316) and the National Institute of Information and Communications Technology (NICT) commissioned research (JPJ012368C08501). In addition, experiments and research were conducted at the Keio University Future Optical Network Open Research Centre. This new functional fiber was developed mainly by Furukawa Electric and Dr. Kazunori Mukasa.