Room B (Grand Ballroom 2), 2F	Chair: Nguyen Linh Viet (University of South Australia)
Tu4B	June 30 (Tue), 2026
Fiber Amplifiers	15:00-16:30

Tu4B-1 **Invited** **15:00-15:30**

Advanced Cladding-Pumped Multi-Core Fiber Amplifier for Power-Efficient Transmission.

Taiji Sakamoto
NTT, inc.

The progress of cladding-pumped multicore fiber amplifiers for improving power efficiency is reviewed, and amplifier fiber designs and amplifier configuration techniques for achieving lower power consumption than conventional amplifiers are introduced.

Tu4B-2 **15:30-15:45**

Coupled 4-Core Erbium-Doped Fiber Amplifier with A Power Conversion Efficiency of 39 %

Masato Tanaka, Takafumi Ohtsuka, Koichi Shirahata, Hirotaka Sakuma, Takemi Hasegawa, Soichi Endo, Shintaro Mouri, Hidehisa Tazawa
Sumitomo Electric Industries, Ltd.

A coupled 4-core erbium-doped fiber amplifier (EDFA) with power conversion efficiency of 39.0 % is reported. The highest record in multi-core EDFAs is achieved using core pumping and multi-core fibers with a narrower core pitch.

Tu4B-3 **15:45-16:00**

High-Gain Lumped Raman Amplifier for 1614.2-1657.0 nm with Negligible Double Rayleigh Scattering Penalty

Shun Okada[1], Kyosuke Sone[1], Hidenobu Muranaka[1], Hiroki Ooi[1], Yu Tanaka[1], Shunya Hayashi[2], Junji Yoshida[2], Ryuichi Sugizaki[2], Shigehiro Takasaka[2], Michihiro Nakanishi[2], Masashi Abe[3], Shimpei Shimizu[3], Takushi Kazama[3], Takeshi Umeki[3], Takayuki Kobayashi[3], Yutaka Miyamoto[3], Takeshi Hoshida[1]
[1]1Finity Inc., [2]Furukawa Electric Co., Ltd., [3]NTT, inc.

We report a lumped Raman amplifier for 4.8 THz gain bandwidth across L- and U-bands achieving 40 dB average gain, 5 dB gain variation, 5 dB maximum noise figure, and negligible double Rayleigh scattering-induced penalty.

Tu4B-4 **Invited** **16:00-16:30**

Innovative Approach in Optical Fiber Fabrication Technologies for Enhanced Fiber Lasers

Jaesun Kim
Taihan Fiberoptics Co., Ltd.

Fibers in lasers are still concern to enhance power, beam quality and reliabilities of lasers for various applications, which drives the development of novel materials, design with innovative fiber fabrication technologies.