

----- Special Section on Optical Access System for Social Life -----

The IEICE Transactions on Communications announces that it will publish a special section entitled "Special Section on Optical Access System for Social Life" in the **April 2018** issue.

Since the FTTH (Fiber To The Home) service kicked into gear in Japan in 2001, optical access systems have kept on advancing as economical technologies which enable broadband services to be enjoyed easily in customer's homes, and FTTH has been taking root as an essential social infrastructure. Additionally, owing to standardization activities and overseas developments, the optical access technologies have been widely spread as international technologies which are employed not only in Japan.

On the other hand, a rapid development of mobile services is driving the drastic increase of the data traffic of mobile network, and evolution of optical access technologies is expected toward applications to mobile backhaul and mobile fronthaul of the 5G mobile network, the services of which are expected to start from 2020. Furthermore, new technologies supporting social infrastructure, such as M2M and IoT, have been discussed actively, and expectations for optical access technologies supporting these applications are increasing. To meet such expectations, it is increasingly important to establish optical access technologies which will be essential in future social life.

Because of such reasons, a special section is being planned (scheduled to appear in the April 2018 issue) to further promote research and development of technologies on optical access system for social life

1. Scope

This special section aims at timely dissemination of research in these areas. Possible topics related to optical access system include, but are not limited to:

- Access network architecture
- PON technologies (QoS, DBA, Protection, Long-reach transmission, Low latency, Circuit emulation)
- Operation systems
- Video distribution in access network
- Optical-wireless convergence
- Optical access network for mobile network
- Network resilience
- Edge computing in access network
- Digital signal processing for optical access network
- Virtualization for optical access network
- Modulation formats
- Power saving
- Optical transceivers for access network
- Optical/Electronics devices for access network
- Applications across PON
- Impact of standardization

2. Submission Instructions

The standard number of pages is 8. The page charges are considerably higher for extra pages. Manuscripts should be prepared according to the guideline in the "Information for Authors." The latest version is available at the web site, http://www.ieice.org/eng/shiori/mokuji_cs.html. The term for revising the manuscript after acknowledgement of conditional acceptance for this special section could be shorter than that for regular issues (60 days) because of the tight review schedule.

This special section will accept papers only by electronic submission. Submit a manuscript and electronic source files (LaTeX/Word files, figures, authors' photos and biographies) via the IEICE Web site https://review.ieice.org/regist/regist_baseinfo_e.aspx by May 15th, 2017 (JST). Authors should choose the Optical Access System for Social Life as a "Journal/Section" on the online screen. Do not choose [Regular EB].

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