

[October 11, 2022]

The 2022 Third Meeting of Tokyo Section Executive Committee

The 2022 Third Meeting of Tokyo Section Executive Committee was held with hybrid-style (on-site and teleconference) from 3 pm, September 6, at Sumitomo Electric (Akasaka-mitsuke) with 21 participants including 3 observers.



[◆Minutes *Japanese-only](#)

Schedule for 2022

Fourth Meeting Thursday, December 1 Sumitomo Electric (Akasaka-mitsuke)

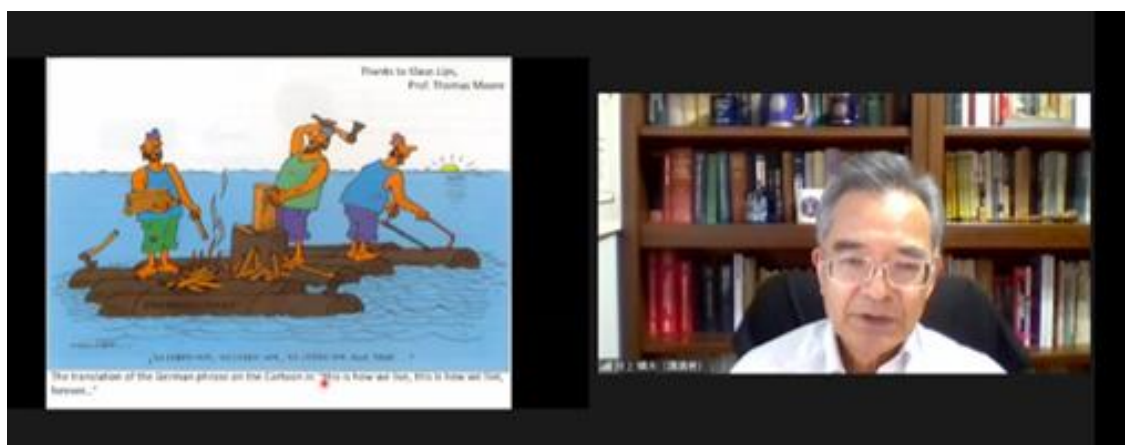
The 5th Lecture Meeting of Tokyo Section in 2022

This lecture was held at Zoom Webinar on July 13, 2022 (Wednesday) from 15:00, entitled as "Artificial Photosynthesis: State of the art and Future Prospect", sponsored by the Tokyo branch LMAG, co-hosted by the same TPC, and supported by the Institute of Electronics, Information and Communication Engineers. The speaker was Dr. Haruo Inoue (Professor Emeritus, Tokyo Metropolitan University), who spoke about expectations for new energy that does not emit carbon dioxide, and how to deal with CO₂ with chemistry as the subject of the lecture. There were 55 participants (including 46 IEEE members) online.

The specific items of the lecture are:

- Emergence of social demands and artificial photosynthesis
- Photosynthesis as a model for artificial photosynthesis
- What is artificial photosynthesis?
- Energy conversion by light: Electrons are pumped up by light
- Difference between solar cells and artificial photosynthesis
- History of modern artificial photosynthesis research
- Status and issues of artificial photosynthesis research
- Renewable energy factor
- Important perspective
- Prospects

He gave a detailed lecture on the current state of artificial photosynthesis research and challenges for social implementation.



A lecture slide and Dr. Inoue giving his lecture

(Reported by Life Members Affinity Group (LMAG-Tokyo) Secretary, Hideki Hayashi)

The 6th Lecture Meeting of Tokyo Section in 2022

On Wednesday, July 27, from 15:30 to 17:00, 2022, the Tokyo Section Technical Program Committee (TPC) hosted the 6th Tokyo Section Lecture Meeting with approximately 54 participants using the Zoom Webinar virtual meeting system (co-sponsored by the IEEE Tokyo Section LMAG (Life Members Affinity Group), co-sponsored by the Institute of Electronics, Information and Communications Technology). Dr. Shu Namiki, The National Institute of Advanced Industrial Science and Technology (AIST), Platform Photonics Research Center, Research Director, was invited to the lecture. Under the title of "Nonlinear fiber optics and their applications to communications", Dr. Namiki gave a lecture on optical fiber nonlinearity, especially the optical Kerr effect, from its basic principle to various applications to optical communications. The lecture was given in a tutorial style with selected topics, following the chronological order based on his research and experience.

This lecture was held as a virtual online meeting using Zoom Webinar. One of the characteristics of online meetings is that it is easy to participate, so we would like to continue to inform and announce so that many persons can participate.



(Reported by Technical Program Committee Secretary, Atsushi Matsumoto)

The 8th Lecture Meeting of Tokyo Section in 2022

On Friday, August 26th, from 15:30 to 17:00, 2022, the Tokyo Section Technical Program Committee (TPC) hosted the 8th Tokyo Section Lecture meeting with approximately 80 participants using the Zoom Webinar virtual meeting system (co-sponsored by the IEEE Tokyo Section LMAG (Life Members Affinity Group), co-sponsored by the Institute of Electronics, Information and Communications Technology). Prof. Toru Tanzawa, Faculty of Engineering Department of Electrical and Electronic Engineering, was invited to the lecture. Under the title of "R&D of On-chip High-Voltage Generator", he gave a lecture focusing on the excellent research results that have been demonstrated for the first time in the world on the smaller footprint and speed-up of high-voltage generation circuits, which are important for improving the performance of data rewriting, in the R&D on NAND flash memory that he was engaged in when he was a member of Toshiba ULSI Research Institute. He also gave an interesting talk about ongoing research, such as the research on energy harvesting devices that he started when he was assigned to Shizuoka University.

This time, we held only a virtual online conference using Zoom Webinar. Although the situation of the COVID19 in Japan was extremely deteriorating around the time, the outlook for the near future is extremely complicated, but we will continue to hold conference in a style that suits the situation.

最後に

$$I = \int_0^{now} \sum_j A_{ij}(t) dt$$

丹沢, 電子情報通信学会誌, 2018.

ご質問・コメントはぜひこちらへお送り下さい
toru.tanzawa@shizuoka.ac.jp

NANDフラッシュのセル構造

構造

コントロール・ゲート(CG)

CG-FG間絶縁膜 厚い誘電率高い

トンネル酸化膜 薄い

フローティングゲート(FG)

Pウエル

(Reported by Technical Program Committee Secretary, Atsushi Matsumoto)

IEEE Day Campaign Information

I would like to wish all the members a very happy and prosperous year. This year, October 4th is IEEE Day, and many events and campaigns are planned for this week. One of them is a special offers of membership fee, as described in the website below.

About the 2022 IEEE Day Campaign

<https://ieeeday.org/special-offers/>

Thank you for your cooperation.

(Reported by Membership Development Committee Chair, Tomoyuki Yokota)

Notice from IEEE Tokyo Section Office

Tokyo Bulletin is published via E-mail.

- Have you renewed your 2022 IEEE membership? You can easily [renew](#) your membership online.
- Tokyo Section encourages membership upgrade to Senior Membership. Visit IEEE website for [online application](#). For details, please refer to [Senior Member Application procedure](#).
- Please make sure to notify IEEE HQ of any changes in your address, etc. Online profile management is available on your [Web Account](#).

IEEE Tokyo Section welcomes any comments, requests or inquiries from our members. Please send them to tokyosec@ieee-jp.org.