

The 4th Lecture Meeting of Tokyo Section in 2021

The 4th Lecture Meeting of the Tokyo Section in 2021 was hosted by Tokyo Technical Program Committee (TPC) from 3:00 p.m. to 4:30 p.m., Thursday, July 8, via the Web virtual conference system Zoom Webinar with about 80 attendees. This lecture meeting is co-sponsored by Tokyo Life Member Affinity Group (LMAG) and the Institute of Electronics, Information, and Communication Engineers (IEICE). Dr. Noriko Kawakami, Senior Fellow, Power Electronics Systems Division, Toshiba Mitsubishi-Electric Industrial Systems Corporation (TMEIC), gave the invited talk entitled “Contributions to a sustainable future through power electronics ~Road to the first Japanese female IEEE Fellow in heavy industry~.” She broadly talked about the power electronics and her carrier and gave messages to young engineers. We used Zoom Webinar as a virtual conference system. In the current situation, this online style obtains the understanding of attendees and helps to receive many attendees. We pursue to grope for the future Lecture meetings as considering the COVID-19 situations.



高効率を実現する技術

- 太陽光パネルから常に最大の電力を引き出す技術
 - 太陽光パネルの出力は運転点の選択で増減
 - MPPT制御: 最大電力点追従制御
 - MPPT効率: 98%達成 (FuzzyLogicによる制御)
MPPT (Maximum Power Point Tracking control)
- 高効率に直流電力を交流電力に変換する技術
 - キーポイント制御に準ずる電力損失を最小化
 - 最新の3レベル変換回路構成により、電力損失を従来比 85%削減
 - 最大変換効率: 99.1%達成

パワー半導体の電力損失 - 49%に削減
 太陽光パネルの電力損失削減
 最新の3レベル変換回路構成
 最新の3レベル変換回路構成による電力損失削減

若いエンジニアへのメッセージ

- 目の前の仕事にベストを尽くす**
 やさくみえる仕事も大きな仕事につながっている。無駄な仕事はひとつもない。
- チャンスが来たら積極的に生かす**
 小さなチャンスに見えても、後から大きなチャンスになることもある。
- 挑戦する**
 同じことを繰り返すだけでは進歩はない。エンジニアにはいつも挑戦すべき課題がある。新しい道具(パワー素子、制御素子、解析手段、計測手段)もある。失敗を恐れず、果敢に、大胆にかつ謙虚に挑戦する。
- 注目を浴びることを恐れない**
 注目を浴びることへ奮闘することを恐れない。あなたには努力に裏打ちされた能力がある。自信を持って。

(Reported by Technical Program Committee Secretary, Ryoko Matsuo)

The 5th Lecture Meeting of Tokyo Section in 2021

The 5th Lecture Meeting of the Tokyo Section in 2021 “Challenges and Future Vision of the Electric Power System toward Carbon Neutral and Resilience” was held on August 6th from 15:00 cosponsored by both LMAG-Tokyo and TPC of Tokyo section, and supported by IEICE and IEE Japan. The lecturer was Dr. Hiroshi Okamoto, Member of the Board and Executive Vice President of TEPCO Power Grid, Inc.

His lecture content was the topics about the facing subjects of current power companies, especially on the Carbon Neutral and the electric power systems. This meeting proceeded via Webinar.

The number of participants was 163, including 83 IEEE members.



Dr. Okamoto giving a lecture

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

IEEE Day Campaign Information

I would like to wish all the members a very happy and prosperous year.

This year, October 5th is IEEE Day, and many events and campaigns are planned for this week. One of them is a 50% discount on the membership fee for student members, as described in the website below. Please take advantage of this 50% discount.

About the 2021 IEEE Day Campaign

<https://ieeeday.org/ieee-day-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 2021 IEEE membership? You can easily [renew](#) your membership online with your [Web Account](#).
- 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 by registering your [Web Account](#).

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