



In this issue, LMAG-Tokyo General Assembly for 2018 and the associated lecture, the participation report in the study tour held by LMAG-Nagoya, and an evening salon are reported.

1. 2015 LMAG-Tokyo General Assembly

The LMAG-Tokyo General Assembly was held at Room 6, the 6th floor of Kikaishinko-Kaikan, from 14:00 to 14:30, March 29, Thursday. The assembly was presided by Prof. Imai, Secretary. Participants were 24 (delegated by 561 other members). At the beginning, Prof. Miki, Chair, gave his address, and continued to discuss the following agenda, and all of them were approved.

[1] Activities Report for 2017

Prof. Takano, Vice Chair, reported the following activities during 2017.

- LMAG General Meeting for 2017
- Lecture Meetings cosponsored by LMAG (approximately 450 participants in total)
 - General Assembly Lecture
 - Memorial Lectures after three IEEE Milestone presentation ceremonies
 - Lecture Meeting by IEEE History Committee/Center
- Technical Tours
 - Fujitsu Laboratory (37 participants)
 - Yosami Radio Transmission Station, recognized as IEEE Milestone in 2009 (13 participants)
- LMAG Evening Salon (30 participants) for the initial Trial, held at NEC Shiba Club
- Other co-sponsored/cooperated events
 - The 60th anniversary event of the former Tokyo Section
 - Foundation Meeting of LMAG in Nagoya Section
 - SYWL Workshop
 - TOWERS Workshop
- IEEE Region 10 events

- Participation to TENCON 2017
 - Contribution to the Region 10 Newsletter
 - Publication of LMAG Newsletter (3 issues)
- [2] Activities Plan for 2018
- Prof. Imai, Secretary, explained the following plan.
- General Meeting of LMAG-Tokyo on March 29, 2018.
 - Appointment of LMAG Officers for 2019-2020.
 - Announcement of officer candidates in Sept.
 - Voting will be omitted, if there are no other candidate proposals.
 - Lecture Meetings and Technical Tours.
 - More than four times of lecture meetings sponsored/co-sponsored by LMAG.
 - Technical tours including IEEE Milestone related one organized by LMAG.
 - Evening Salon.
 - Publication of LMAG Newsletters three times a year.
 - Each issue will be delivered by e-mail, and paper base copies will be sent at the end of the year.

2. Address of Prof. Tetsuya Miki, Chair, at the LMAG-Tokyo General Assembly

Following last year, Tetsuya Miki, Chair, Tadashi Takano, Vice Chair, and Hajime Imai, Secretary will serve as the officers of LMAG-Tokyo this year, so please ask for your cooperation.

Last year, we had many events, including the IEEE Milestone-related tour to the Yosami Transmission Station, Kariya, Aichi prefecture that was located outside the Tokyo Section area. As a new type of event, an Evening Salon was organized to exchange opinions based on the topic provided by the members. Another event was the establishment of LMAG in Nagoya Section, supported by LMAG-Tokyo.

As for Tokyo Section, we had also many events last year, including three IEEE Milestones presentations, "Map-Based automotive navigation system" of Honda, "Invention of a Temperature-Insensitive Quartz Oscillation Plate" of Tokyo Institute of Technology, and "Nobeyama 45-m Telescope" of the National Astronomical Observatory and Mitsubishi Electric Co. Other big event was the 60th anniversary of the former IEEE Tokyo Section (present Japan Council).

One thing we felt sad was the passed away of Kunio Tada, Professor Emeritus at the University of



Fig.1 Prof. Miki, Chair (center), Prof. Takano, Vice Chair (right) and Prof. Imai, Secretary (left)

Tokyo, on December 30, 2016, who served as the former Chair of LMAG-Tokyo and LM Coordinator for IEEE Region 10. We pray for his souls.

This year we will actively hold lectures and tours as last year, and we would like to hold the evening salon based on the topic provided by the members. We also plan to participate to MAW (Metro Area Workshop) 2018 to be held in the Fukuoka Section, and SYWL (Student Branches, Young Professionals, Women In Engineering, Life Members) exchange meeting.

When these schedules are decided, we will send respective event notices to members by e-mail, so please consider to participate. Then, we will report the results of these events through the LMAG Newsletter, so we would be pleased if you could refer to it.

At present, about 650 LMs belong to the Tokyo Section, which number is about 3/4 of whole LMs in Japan. The activities of LMAG-Tokyo will represent the vitality of Japanese LMs, so your cooperation is appreciated.

3. Lecture by Assistant Prof. Keigo Hirakawa in 2018 Annual General Assembly

After the 2017 Annual General Assembly of Tokyo Section, the lecture by Assistant Prof. Keigo Hirakawa was held in the Kikaishinko-Kaikan building at 14:30 with 24 participants. Prof. Hirakawa is Assistant Professor of University of Dayton. University of Dayton is a private university located in Ohio,

Prof. Hirakawa belongs to Intelligent Signal System Laboratory, the Department of Electro-Optics and Photonics and is engaged in the research and development of the raw image sensor data compression. The lecture was entitled "Camera-Aware Multi-Resolution Analysis for Raw Image Sensor Data Compression".

He began his lecture by introducing data compression technology of high definition image. Recently the image data volume taken by high definition digital camera has increased year by year. It is important to compress these data without



Fig.2 Assistant Prof. Hirakawa giving his talk.

deteriorating the image quality. He explained his results about it using many examples.

The most popular technology for the static image compression is JPEG: Joint Photographic Experts Group. But this technology is not useful to obtain the good quality of raw image from the obtained JPEG data, because this JPEG compression technic lost the part of original data. It is impossible to retrieve the original high- quality image. Moreover, the boundary of picture elements arose Mosaic effect; adjacent elements did not conjunct smoothly. This caused the peculiar phenomenon when the raw image was largely compressed.

The important target of his research is that the almost raw image is obtained and Mosaic effect is suppressed. For these purposes the application of the color filter, especially the red color filter was used during the compression process. After that the picture was obtained very likely to the original raw picture image, and Mosaic effect was also remarkably suppressed. The data volume was apparently decreased compared with the available methods. Therefore the loss-less data transmission was easily performed owing to this method of the compression.

Currently the developed method is going to commercially available by the cooperation with industries.

4. Participation in the study tour held by LMAG-Nagoya

IEEE Nagoya Section and LMAG-Nagoya held the study tour on March 20, 2018 at MRJ Museum located at Toyoyama Town in Aichi Prefecture. This is their first event since this LMAG was established on October 7, 2017.

Vice Chair LMAG- Tokyo, Takano attended on the basis of LMAGs friendship that was agreed on the occasion of LMAG-Nagoya establishment. From LMAG- Kansai, Vice Chair Kobayashi attended.

The 14 participants gathered at the arrival lobby of Fuji Dream Airlines (FDA) in Prefectural Nagoya Airport. This airport was formerly called Komaki Airport. At present, the major user is FDA.

Vice Chair of LMAG-Nagoya, Ichikawa guided the group to the museum on foot in 5 minutes. At the lobby, they had the opening ceremony and the address by Chair Inagaki. Then at the meeting room of Mitsubishi Aircraft Co., Executive Vice President Kishi of the company and the Manager Masutani explained the outline of the company and the current development status of MRJ (Mitsubishi Regional Jet).

The group moved to the museum, and were easily explained about the constitution of MRJ, technological Chair Inagaki is at the center of the front line. around the manufacturing spot in the factory. The area and facilities are sufficient to manufacture 12planes at the same time at most. It is fantastic to see planes being manufactured. Even, child

participants enjoyed very much.

They returned to the meeting room in the excited status, and had discussion. Participants made many questions that were severe but warm as fans of MRJ. The questions covered wide range: the plane number of current order, the delivery time, the way to determine the price etc.

Finally, the participants expressed their gratitude to the relevant persons, and made a commemoration photo at the lobby. The closing time scheduled initially at 17:00 was already 17:30.

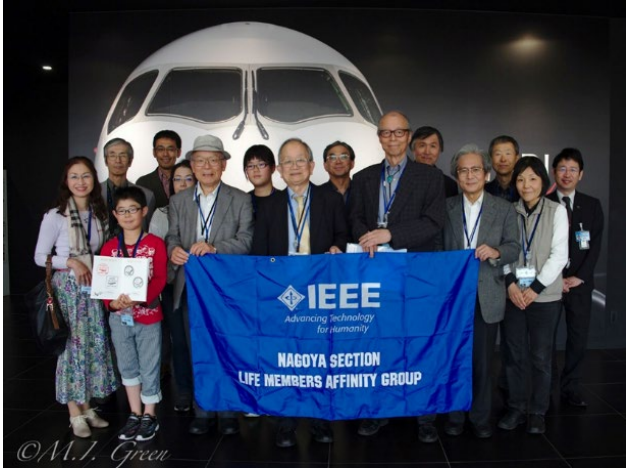


Fig.3 Group photo of the participants at MRJ Museum.

5. Evening Salon

The second meeting of Evening Salon LMAG-Tokyo was held at 18:00 to 21:00 on May 15th, Tuesday at the private room of New Tokyo on third basement floor of Kikai Shinko Kaikan, gathering 20 participants. The salon aims to offer a place where a member provides a topic on which all participants in a relatively small number exchange their opinions freely while eating and drinking.

Dr. Satoshi Naoi who was Fellow of Fujitsu Laboratories Ltd. and CEO of Fujitsu Research Development Center in China: FRDC was asked to be a topic provider. He provided a talk entitled "Current development of IT in China and Activities of FRDC."

All land property in China belongs to the national government, therefore the construction of infrastructures is rapidly progressing. Recently the intellectual property rights are the important policy of the government, and the number of patent application has increased largely which was larger than that of Japan. Also the number of academic papers submission and accept have increased. The most emphasized field is IT. Then the first salary of IT engineer freshmen is getting higher.

Research and Development in former China were to start from the imitation of other companies to the

cost reduction. Recently the originality was added. E-money and sharing economy are prevailed, especially for bikes and cars. 'Made in China 2025' is the most important slogan and the industries area in Shenzhen is to become the Chinese Silicon valley.

AI research and development are influential. Baidu, Inc. and Alibaba Group Holding Limited start from the basic research to the application engineering, however Tencent first develops the application to investigate the necessary basic research. AI business fields are coming to grow 1.6 trillion market in China.

FRDC in China are investigating AI, pattern recognition, and image processing as main research items. For examples, the recognition of raw hand writing by Chinese people which is difficult to recognize, the supervisory of the traffic conditions, and the restoration of ancient documents by scanner. They give the important results and obtain the popularity in these fields.



Fig.4 Scene of the talk by Dr. Naoi.



Fig.5 Group photo of the evening salon participants.

6. Near Future Events

The following events are planned. The details will be informed by e-mail. Your participation is encouraged.

6-1 Lecture Meeting "Sustainable energy: light and shade"

Lecture: Prof. Hiroshi Suzuki of Japan University of Economics

Date and Time: July 5, 2018, 15:00-17:30.

Place: Kikaishinko-Kaikan, B3, Room Kenshu1.
3-5-8 Shibakoen, Minato-ku, Tokyo

6-2 Technical Tour to IEEE Milestone Recipient

Date: September 20, 2018.

Place: Nobeyama Radio Observatory
462-2, Nobeyama, Minamimaki, Nagano.

6-3 Technical Tour and Lecture Meeting

Date: September 27, 2018.

Place: Electronic Navigation Research Institute
7-42-23, Jindaihigasi-machi, Chofu, Tokyo

IEEE Tokyo Section LMAG Newsletter

Issued by IEEE Tokyo Section Life Members Affinity Group

Kikai-Shinko-Kaikan Bldg., 517

3-5-8 Shibakoen, Minato-ku, Tokyo 105-0011 JAPAN

URL: <http://www.ieee-jp.org/section/tokyo/lmag/index.htm>

E-Mail: tokyosec@ieee-jp.org