

## Annual Activity Report of IEICE Singapore Section

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### 1. Organization

Assembly of the Section

┌—Members of the Section: 12

└—Rep. Office — Rep.: Dr. Subramaniam Arulkumaran, NTU (SArulkumaran@pmail.ntu.edu.sg)

### 2. Strategy of the Section

From June 2015, the IEICE Singapore Section initiated mainly to mobilize more new members into IEICE Societies. The section has also encouraged students and industry people to join as a member in the society. The section has also been collaborating with local Universities, Research Institutes and Industries to get its roots into more members. Arranging special Seminars/Talks by Japanese/International experts in Singapore to create a strong worldwide network with the help of IEICE Singapore section.

### 3. Action Plan of the Section Stated in 2017 All Sections Meeting

- Membership drive at all IEICE/IEEE seminars in Singapore
- Briefing various transactions of IEICE and their topics at each seminar
- Joint workshop of industrial and academic researchers for a better networking among them
- A joint international workshop in Singapore sponsored by IEICE

### 4. Results of Activities during the Fiscal Year (Apr 2016 ~ Sept 2017)

#### 4.1 Conference/Symposium/Workshop

IEICE focused in organizing sponsored lectures. The conference/symposium/workshop will be planned in subsequent years provided enough available funds.

#### 4.2 Jointly Sponsored Lecture in Singapore

It was planned and executed to have two events in Singapore namely (i) Half-day special seminar on GaN Electronics and (ii) Nobel Laureate Lecture by Prof. Hiroshi Amano. The IEICE Singapore Section and NTU jointly organized both the activities.

1) The first special seminar on GaN electronics was held on 5<sup>th</sup> July 2016 at NTU. In this seminar, four speakers were delivered lectures on GaN electronics. One of the speakers **Prof. Daisuke Ueda** (Kyoto Institute of Technology, Japan) got IEICE's financial support (International travel plus two days stay).

- **Prof. Daisuke Ueda** (Kyoto Institute of Technology, Japan), "*Status Quo of GaN Power Device and System*" → *Travel Expenses, Stay Covered by IEICE*
- **Prof. Tetsu Kachi** (Nagoya University, Japan), "*GaN Transistors for Vehicles*"
- **Prof. Martin Kuball** (University of Bristol, United Kingdom), "*GaN Electronics: Heat, Diamond and further Miracles*"
- **Dr. Yohei Otoki** (SCIOCS, Sumitomo Chemical Group, Japan), "*Present situation of GaN material Development for Electrical Devices from view point of Industrialization and How to manage it. - Learn from the past of GaAs*"

Many delegates from academia (Students, Researchers and Faculty) and industry (Scientists, Engineers and Managers) joined for this half-day special seminar, and it gave a good platform to share their technical experiences with all the researchers in Singapore (The announcement is attached with this report). The due acknowledgement to IEICE was mentioned before his talk and also the IEICE logo was arranged to appear in all the events including publicity materials, Website and the Seminar Flyer.

2) The Nobel Laureate Seminar on 23<sup>rd</sup> Feb 2017 was jointly organized with NTU. Prof. Hiroshi Amano delivered a lecture at NTU. More than 200 delegates from NTU, other universities, Institutes and Industries were attended this special seminar. It was a big gathering with fruitful discussions.

#### 4.3 Improvement of the Section

To have more interaction in Singapore section, IEICE may jointly organize conference/symposium with the big IEEE Singapore section. This will also motivate the IEEE members to join in IEICE.

## **5 Review and Future Plan**

For the period 2017-2018, the IEICE Singapore Section would like to invite two Eminent Scientists/Researchers from Japan (Energy Harvesting, Power Electronics and Telecommunication) to share their experiences with Singapore Researchers. This can potentially motivate the local researchers to take part of the IEICE Singapore Section's current and future events. In addition, this will be a seed to have a closer interaction between both parties and/or to initiate the collaborative research between Singapore Universities/Industries and Japan Universities/Industries. Also it is planned to make the IEICE membership drive to recruit new members and give a talk on the IEICE membership benefits, as well.

## **6 Constructive Opinion / Requests / Proposal**

- If there is a possibility, IEICE can think of extending additional membership discount (~30%) to the existing IEEE members those who would like to join as an IEICE member.
- The section can also think of inviting the other country professionals to deliver lectures/course in Singapore with full or partial financial support of IEICE.
- IEICE can also think of providing Student Scholarship/Best Paper Award scheme for IEICE members.
- The section would like to request the IEICE, Japan to allot additional funds to support for refreshments when the IEICE sponsored to have a conference in Singapore.