

Annual Section Report 2017

New Jersey Coast Section, IEEE

**NJ Coast Section Report**

NJ Coast is an illustrious section with a legacy with 65 years and a vibrant community of volunteers. We have approximately 1300 members in our section with more than 100 life members. We have made significant strides in serving our area members by continuing the diverse section/chapter/ affinity group activities and adding new ones. And we have an exciting plan and a motivated team working for year 2018. Please find below a summary of activities for 2017 and a plan for 2018.

**Executive Committee Meeting**

The Executive Committee meets once a month except summer months. It includes the Section Officers as well as Chairs and Vice Chairs of all the chapters and committees. The meeting is also open to general members. The Committee discusses the plans of actions for the Section, approves budgets and any new or changes in the policies.

Some of the issues/topics the Executive Committee is, or will be addressing are:

1. Section Leadership—Introduce interim officers
2. Elections - future officers
3. State of the Section Summary
4. Milestone
5. Section website
6. More participation and more talks
7. Getting Young Professionals involved

**Section Technical Conferences**

The Section is actively involved in organizing and supporting technical conferences in the region. In 2019 the Section supported the following conferences:

1. 2017 ACS Symposium

**Section Technical Meetings**

Various Society Chapters of the Section have organized technical meetings where distinguished experts both from academia and industry give lectures on the state-of-the-art technologies and research and developments.

1. For the year 2017 we had altogether 25+ talks held by the following chapters / affinity groups
   * Aerospace and Electronic systems / Engineering Management chapter (1)
   * Microwave Theory & Techniques / Electron devices / Laser & Electro optics chapter (3)
   * Communication society chapter (4)
   * Antenna Propagation/Vehicular Technology/Electro Magnetic Compatibility chapter (3)
   * Computer and Instrumentation Chapter (2)
   * Consultant Network Chapter (3)
   * Life Member (2)
   * Power and Energy (3)

In addition the following professional activities team also contributed **additional** talks:

* + Women In Engineering (3)
  + PACE (Professional Activities Committees for Engineers) (3)

**Awards Banquet**

The 2018 IEEE NJ Coast Awards banquet was held jointly with IEEE Princeton/Central Jersey Section in June at the Grand Ballroom, Colts Neck Inn, Colts Neck, NJ. The Princeton/Central Jersey Section and the NJ Coast Section organize this joint event to pay tribute to the new IEEE Fellows in the Sections, and to recognize accomplishments of engineers and computer scientists with significant contributions in our area. This year we honored two IEEE Fellows in our section, three IEEE Region 1 awardees and two Section awardees across all categories, who continue their excellence in enhancing the technological development of the society.

**Historical Milestone**

The IEEE Board of Directors has approved the NJ Coast Section’s proposal of an historic milestone for the use of Radar Signals Reflected from the Moon, January 10, 1946 at Camp Diana, Fort Monmouth, NJ. The achievement, which demonstrated the ability to communicate with extraterrestrial bodies beyond Earth, birthed radar astronomy and began the space age, creating requirements for the evolution to solid-state, and paving the way for satellite communications.An event will be held in the last quarter of 2018 to dedicate a plaque.

**WIE Society Chapter Mini Academy**

The consistent and dedicated work of our chapter volunteers Mihaela Dinu, Dru Reynolds, Margaret Lyons, Tima Shehadeh Gant resulted in the IEEE 4th annual Mini Engineering Academy sponsored by the NJ Coast taking place at Neptune High School in Neptune, NJ. There were over 50 participating high school students. Topics in the 6-week academy were Robotics, 3D printing, CleanEnergy, Smart Phone technology, breadboarding radio circuits green building design, and Pneumatic Rockets.

**PACE**

Summary of the proposal to fund our ICCDD project.

Engage Members from many Societies and Affinity Groups crossing domains to create a forward looking interdisciplinary Community Focused project, focused on including user groups with hearing loss, student engineers, and those with experience. In addition to Section Members, the project incorporates Stevens Institute of Technology, Gallaudet University, experts in Robotics, Biomedical Engineers, and others from fields of emerging import.

Participants will create an online presence for the project, meet with students and users, plan a hackathon, create a library of resources, repository of data, collaborate to program a robot, and engage in new engineering and business models and techniques such as open source code, building apps, machine learning, big data, cloud learning, engaging user groups, sharing results. Other projects will dovetail with this foundation project which is planned to serve the needs of the Members, prospective Members, and a Need of the Community who experience hearing loss or deafness.

**Membership Enhancement**

We have facilitated and promoted seven members to Senior Member level in 2017.

**IEEE Day**

TO celebrate the IEEE Day and have a team building event, we are planning a trip for the members of section to Liberty Science Center Sat Oct 6, 2018.

**2018 Plan**

For the year 2018 about 25 talks are planned more or less on similar lines as above.

# Report Prepared by Claude Martel