



IEEE

Foothill

MONTHLY NEWSLETTER

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IEEE Foothill Section April 2024 ExCom/OpCom Monthly Hybrid Meeting

Prepared by: Max Cherubin | Proofread by: Prof. Gerald Herder

The IEEE Foothill Section held its April ExCom/OpCom monthly hybrid meeting at DeVry University and its new online platform, Zoom. The chair started the meeting by correcting the minutes from the last meeting. The secretary and vice-chair shared their experience during the Region 6 General Meeting in Seattle.

Membership Development

Kim Mosley was not able to attend the meeting; however, for the past weeks, she has been sharing about Prof. Amr Magdy of UCR's Senior Elevation update.

Social Media and Website

Osman Ceylan shared the LinkedIn page. There were two members added. Meanwhile, our Facebook page has been suspended, and he is still working on finding out what happened. We also encourage members to be always updated in posting their activities not just on our social media pages but also on their personal accounts.

Technical Committees

Scott Wedge was not present during the meeting, but Osman reported on his behalf. He shared about the upcoming IMS 2024 Student Design Competition, which will be held in Washington, DC, from June 16-21, 2024. See the website for more details about the competition.

Nanotechnology, Prof. Jenny Yu was not present, but Addie Hasson, the CPP Hyperloop Secretary, shared about the ongoing activities of their workshop for the past months.

PES, Koji Yamashita, reported about their event last April 3rd with their speaker from Japan. Mr. Yusuke Kuniba from Okinawa Electric Power Company. His topic was the Overview of Demonstration Projects Aimed at Harnessing Renewable Energy on Remote Island. There were a total of 19 attendees. Their next webinar will be on May 15, and it will discuss the overview of an R&D for System Stability Aimed at the Mass Introduction of the Renewable Energy - Nedo Stream Project.

YP chair Pankaj Bhowmik will be having a joint event with the YP Hawaii Section on April 12, 2024. Their topic is Scientific Entrepreneurship: Taking Labs Results to Market Understanding the Process, Assessing Markets, and Securing Funding. Pankaj also shared that he is reaching out to different universities under our section for the TA Fusion Experiment or Fusion Power trip for the students. He also wants to have a mentorship program for Young Professionals. He is still reaching out to members for volunteers.

STUDENT ACTIVITY REPORT

UCR: University of California - Riverside

They will hold a general meeting for potential members. The YP Foothill Section Chair invited them to the TAE Electronics trip. The officer listing is not yet updated in vTools but they are working with the chair to be updated so that they receive updates.

CPP: California Polytechnic

They will also have a general meeting, and so far, 15 people have shown interest in the YP section chair's proposal to have a trip to TAE. The IoT RC Car Arcade is all so set for April 19th, which is a joint event with the CBU and ComSoc chapter. By May 4th of next month, they will be having a banquet at Bronco Student Center, and after two weeks, they will be having an Arduino Workshop.



CBU: California Baptist University

Daniel Aleksak, their student chair, mentioned that the university adviser, Jounsup Park, will be leaving CBU soon. He also emailed the section chair on how to order IEEE Pins for their members who will graduate. They were able to order 10 IEEE Student Pins and 3 IEEE Member Pins. They also ordered two banners, as you can see in the photo.

On behalf of the section, we want to congratulate all the graduates.

For student members who also want to order pins, you can **Order Here**. Just follow the steps, and we will reimburse you for the cost.

DeVry University - SoCal

By: Prof. Nazila Safavi | Submitted by: Prof. Moe Saouli

On April 6th, 2024, DeVry University SoCal IEEE student branch participated for the 7th consecutive year in the Los Angeles Maker Faire held at LA Historic Park. The LA Maker's Faire is a free and open-to-the-public event, marking Southern California's largest celebration of science, making, creativity, invention, and fun. DeVry University IEEE in SoCal provided engaging hands-on activities, such as creating a Night Light kit using a photocell to control the LED's on-off function. This activity was designed to teach students principles of photocell technology, utilizing a breadboard version of the 3200NLTKit Night Light Kit

Professors Safavi, Leung, and Wu were on hand at the DeVry University booth to guide the visiting children through step-by-step instructions, helping them identify components, assemble the unit, operate it, and troubleshoot any issues. The participating children had amazing experiences and had a lot of fun, as did the DeVry University SoCal crew.

In the pictures, you can see Dr. Ontal Lilbert, our San Diego campus Dean, along with Professors Alex Leung, Nazila Safavi, and Dr. Penn Wu.



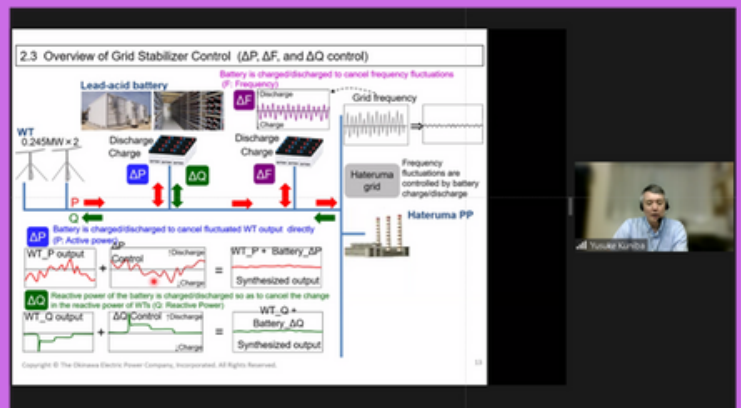
PES: Overview of Demonstration Projects Aimed at Harnessing Energy on Remote Islands

Submitted by: Koji Yamashita

The IEEE PES Foothill Seminar, titled "Overview of Demonstration Projects Aimed at Harnessing Renewable Energy on Remote Islands," was held online on April 03, 2024. Mr. Yusuke Kuniba from Okinawa Electric Power Company presented two results of the demonstration project. The first project achieved 10 consecutive days of 100% renewable operation in a commercial island grid using a motor-driven synchronous generator powered by renewable energy sources with batteries, and cons of battery controller. The second project enhanced the grid frequency mitigation using an advanced battery controller with both the active power and the grid frequency as input using another commercial island grid.

A total of 19 participants attended this webinar. During the session, participants were the unique attempt to cope with 100% renewable energy sources, retaining the synchronous generator's inherent capabilities, such as grid inertia, and overcoming operational lower limit constraints of diesel engine generators. Mr. Kumiba advocated that utility-scale solar PV's intermittency outputs could significantly deteriorate the grid frequency in a small island grid, and such small grids cannot be stabilized without proper batteries with frequency control capabilities.

The seminar was recorded and is available in MP4 format upon request. Interested individuals can contact Dr. Koji Yamashita at kyamashita@ucr.edu for access to the recording. The IEEE PES Foothill Section seminars consistently cover relevant topics related to grid-forming converter technologies. The upcoming webinar will showcase a project called "Future-generation Power Network Stabilization Technology Development for Utilization of Renewable Energy as the Major Power Source" in Japan on May 15, 2024, at 2:30 PM (Wed). Stay tuned for further updates.



Region 6 General Meeting



Our section secretary, Prof. Gerald Herder, and vice-chair Osman Ceylan attended the IEEE Region 6 General Meeting in Seattle, Washington, from March 15 to 17. It was reported that the average age of IEEE members is 55 in the USA. The number of members is decreasing, and there are very few benefits for young members. Also, the student members won't renew their membership after graduation. Volunteers are always hard to find, which has been an issue not just for the local sections but also for the corporate. In-person events are recommended that might be possible to attract volunteers.

Upcoming Events

- **IEEE Foothill Section May ExCom/OpCom Monthly Hybrid Meeting**
May 14, 2024
- **IEEE Consultants Network Meeting**
May 01, 2024
- **Overview of NEDO STREAM R&D: Project for System Stability Aimed at Mass Introduction of Renewable Energy**
May 15, 2024

We Welcome Volunteers!

If you want to be part of our growing section, you can email us at sec.foothill@ieee.org.



[Foothill Section LinkedIn Page](#)

Note: The section's Facebook page is still under maintenance.