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## Editorial

The holiday and hazy days of summer have arrived. The IEEE Sweden will use this period to strategize with its numerous planned activities in autumn. Our focus is not just to win the award of best Section of the year but also to be the best happening Section where members are fully engaged. Therefore, excellence and integrity in our engineering practice and society participation are encouraged. We are committed to deliver as entrusted the dividing of

membership to members of IEEE Sweden Section. We urge every member to see the benefits of collaboration, sending in your activities for publication and participating in IEEE activities. The board is grateful to committed members of IEEE Sweden section. This year, the leadership has put in place strategies to connect with industries and academia's to boost the membership through educational conferences, collaborations with

Companies and workshops. IEEE Sweden section will continue to put our efforts to help with your career and personal development. This Newsletter is subject to continuous improvements and aims at sharing information with IEEE members. Hence, we kindly ask for contributions, feedback and involvement from our readers. Please submit to the Newsletter Editor, Dr. Celestine Iwendi [celestine.iwendi@ieee.org](mailto:celestine.iwendi@ieee.org)

## A message from the Sweden Section Chair

Dear IEEE Members,

I hope you had a great, much deserved summer break.

I want to start by expressing my heartfelt sorrow for the loss of Sweden's computer pioneer- Harold "Bud" Lawson, who breathed his last breath on June 10<sup>th</sup>, 2019. Our hearts reach out to his family in these tough times. Please join me in praying for Bud's soul.

During the past months, IEEE Sweden Section has grabbed the headlines

again by winning several prestigious awards, namely- Simon Ramo medal and the PES Uno Lamm HVDC award. Details on the awards and a short biography of the recipients ahead.

During October, we have line of events scheduled by chapters and affinity groups. One of them being the 3<sup>rd</sup> Nordic Students and Young Professionals Congress at the end of October, organized jointly by Finnish and Swedish Section. The 3-day event will happen on a boat in the Baltic Sea.

Meanwhile, the PES/PEL joint chapter has had short courses and distinguished

lectures at Chalmers and KTH respectively.

I invite you all to take part in these events and if you have suggestions to improve them in any way, please let us know. The section strives towards Advancing Technology for (the benefit of) Humanity.



**Samarth Deo,**  
Chair IEEE Sweden Section

## Industrial short course on Machine Learning in Power Systems by IEEE Sweden PE/PEL Joint Chapter

In mid-June the IEEE Sweden PE/PEL Joint Chapter arranged a Ph.D. and Industrial short course on Machine Learning in Power Systems, in cooperation with Chalmers University of Technology. The course was given by Prof [Lang Tong](#), a Fulbright Distinguished Chair in Alternative Energy from Cornell University, in a visit to Chalmers for a few months. During eight 1-hr lecture sessions in two days, the course covered some of the basic concepts and formulations in machine learning as well as selected power system applications. Specifically, Prof Tong introduced three types of machine learning problems with examples of their applications in power systems: (i) classification, with voltage instability detection as one power system application; (ii) regression, with state estimation as the grid-related example; and (iii) sequential learning, including virtual bidding in the electricity market as an example.

The course was concluded by a short presentation on a research paper related to machine learning techniques in power system, which was mainly targeting the PhD students. The course was well attended with a total of 28 participants, of which about half were IEEE members.



## Lecture on Resilient Distribution Systems by Professor Chen-Ching Liu

On March 14<sup>th</sup> at the KTH premises, Professor Chen-Ching Liu from Virginia Tech gave an interesting DLP lecture on “Resilient Distribution Systems”. The key topic of the lecture was the increased level of automation in the distribution grids in the recent years, which allows for efficient restoration after power outages. Professor Liu discussed his research on computational algorithms for utilization of smart meters and remote-control capabilities, along with more recent results on the role of microgrids in distribution system restoration. The lecture was arranged by Prof. Lina Bertling Tjernberg, Past Chair of the Sweden PES/PEL Chapter, and was well attended with a total of 25 participants, of which 14 members of IEEE/PES. The announcement was made in collaboration with the student representative in the chapter, with the focus of attracting many PhD and master students.



## 4 **Abhay Kumar recipient of 2019 IEEE PES Uno Lamm HVDC Award**

Abhay Kumar, Senior Principal Project Lead Engineers at ABB AB, has been selected to be recipient of 2019 IEEE PES Uno Lamm High Voltage Direct Current Award for his contributions on the development and application of 800 kV Ultra High Voltage Direct Current technology.

“It is really an honor to receive this prestigious award, which is named after Uno Lamm, an ABB icon, synonymous with this technology. I am thankful to ABB for providing me the platform and opportunities to work with this. Power transmission with UHVDC, means reduced losses and narrower right-of-way – a direct contribution to the greener planet and I am sure that this will become the backbone of global grid” says Abhay Kumar.

Abhay has been working actively with HVDC, right from beginning of his career, first as utility engineer since early 80's at NTPC, New Delhi, India, and continuing this after joining ABB India in 1995. In 2000 he moved to Sweden and has been working with HVDC mega projects.

Abhay was also awarded with Distinguished Member Award by Cigre in 2014.



Abhay has been deeply involved in marketing, tendering, execution and commissioning of the HVDC North-East Agra project in India, right from 2007 to 2017. The world's first multi-terminal HVDC project at 800 kV and having indoor 800 kV DC switchyard.

Presently Abhay is responsible for Raigarh – Pugalur 800 kV (RP800) HVDC link and working as Technical Director and is stationed at Gurgaon, India.

**Abhay will be receiving this award in August, during IEEE PES General Meeting.**

The award consists of a medal, a plaque, and an honorarium of \$1,000. The award is named for the man most responsible for the research and development that led to the first practical application of an HVDC connection between ac systems.

# Obituary

Life Member of IEEE, Fellow of ACM, Fellow of the International Council of Systems Engineering, INCOSE IEEE Charles Babbage Pioneer- **Harold “Bud” Lawson breathed his last breath on June 10<sup>th</sup>, 2019 in Stockholm.**

Among other awards, Bud was the recipient of 2019 IEEE Simon Ramo Medal; 2000 IEEE Computer Pioneer Award and is author of the book titled “A Journey Through the Systems Landscape”. Bud was the chief-architect of the fundamental and important International Standard ISO/IEC/IEEE 15288:2015 Systems and Software Engineering — System Life Cycle Processes. He was Inventor of the well-known Pointer Variable.

In Bud, Sweden has lost one of its computer pioneers. Our thoughts go with Bud’s family in this time of sorrow. We pray that his soul rest in peace.



## Upcoming Events in the section

- 1. IEEE Sweden Section Chapter Chairs Workshop**  
September 2<sup>nd</sup>  
Stockholm, Sweden
- 2. Optics & Photonics in Sweden (OPS) conference 2019**  
October 16<sup>th</sup> - October 17<sup>th</sup>  
Stockholm, Sweden
- 3. IEEE Nordic Student and Young Professionals Congress 2019**  
October 25<sup>th</sup> – October 27<sup>th</sup>  
Stockholm, Sweden & Helsinki, Finland
- 4. IEEE NMDC-2019 & the IEEE WIE event**  
October 27<sup>th</sup> - October 30<sup>th</sup>  
Stockholm, Sweden
- 5. Women in Innovation and Sustainability**  
October 27<sup>th</sup> - October 30<sup>th</sup>  
Stockholm, Sweden



**2018 Outstanding Section Membership  
Retention Performance  
Sweden Section**