

IEEE SE MN2017 01

Special Interest Articles:

- Sweden Elects New Officers.
- IEEE Milestone Dedication Ceremony.
- Successful R8 Meeting

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Editorial

Year 2017 is pregnant with possibilities of IEEE activities and events in Sweden and outside Sweden, collaborations, conferences, workshop and lectures. The Chapters and Branches of the IEEE Sweden Section are set to make maximum impact with meetings mostly in the technical-scientific area. We shall keep you informed about these activities and we encourage everyone to become IEEE Sweden Evangelist in

winning and encouraging others to be part of us. We shall make lots of NEWS and noise this year to showcase the benefits of becoming a member to students, academia and our friends in the Industry. Please observe some important items in this Newsletter – events in the near future, important dates, important positions, and inputs from you as a member.

This newsletter aims at sharing information with the IEEE Sweden Section Members. The Newsletter is subject to continuous improvements. Hence we kindly ask for contributions, feedback and involvement from our readers. Please submit to the Newsletter Editors, Dr. Celestine Iwendi celestine.iwendi@ieee.org or Rune Persson rune.persson@computer.org or Sweden Section Chair Mats Edvinsson, mje@ieee.org

A message from the Sweden Section Chair

Dear IEEE Members,

From the IEEE Sweden perspective, 2017 has started as an exciting year with number of achievements and events.

Please find more information in the articles in this Newsletter, for instance:

- Eight Sweden members have been elevated to IEEE Fellow, the highest IEEE member grade
- The IEEE Region 8 Director 2017-2018 is Margaretha Ericsson, Sweden, first female R8 Director

- Sweden hosted the 108th IEEE Region 8 Committee meeting
- Sweden will receive the first ever IEEE Historical Milestone; the Gotland HVDC link from 1954

We continue to work on developing IEEE in Sweden. This include cooperate within and outside IEEE, and activities relevant to the industry. Where applicable, we try to blend and involve Students, Young

Professionals, Women in Engineering and Chapters in activities and events, both in Sweden and pan-Nordic. The IEEE Sweden approach and work has been observed by Region 8, as a source of inspiration

Spring is approaching, finally, after a long winter and a cold Easter Holiday.

Mats Edvinsson,
Chair
IEEE Sweden Section

15 May 2017: IEEE Milestone Dedication Ceremony for Gotland HVDC Link



Figure Mercury valves used in the Gotland HVDC transmission inaugurated in 1954

The stage is set for the dedication ceremony for Gotland HVDC Link. It was agreed that on May 15, 2017 a bronze plaque will be unveiled at the HVDC converter station at Ygne, Gotland, by the chair of IEEE Sweden Mats Edvinsson and representatives of Vattenfall and ABB. After the ceremony there will

be a guided tour of the station and a seminar with presentations by ABB, Vattenfall and IEEE Fellow Göran Andersson, professor emeritus at ETH Zürich. Instrumental in this process have been ABB and Vattenfall, from IEEE Prof Olof Samuelsson Lund Institute of Technology, PE/PEL chair Prof Lina Bertling

Tjernberg, and Sweden Section Chair Mats Edvinsson.

Welcome to attend the celebration! For more information and registration, contact Olof Samuelsson (046-2227504, olof.samuelsson@iea.lth.se), IEEE PE/PEL Sweden Chapter. Number of participants is limited.

*“Sweden must wake up and be competitive in Smart Grid if we must be exporter of Power”
Lina.”*



Seminar on Smart Grid by Professor Lina Bertling-Tjernberg

During the last AGM held on 15th March 2017, Lina Bertling Tjernberg a Professor in Power Grid Technology at KTH presented a seminar on Smart Grid. Her research aims to develop models for electric power solutions for the future

sustainable energy system - which is captured in the concept of Smart Grid. She is a lecturer of the IEEE Distinguished Lecturer Program and also a Senior Member of The IEEE.

IEEE Section Board 2017 – as Elected by AGM 15th March 2017

The following have been elected to serve for 2017 IEEE Sweden Section board.

Name

Mats Edvinsson - Chair
Samarth Deo - Executive vice chair
Yuxiang Zhu - Secretary
Christofer Silfvenius - Treasurer
Luis Martinez - IT System Development
Arnold Pears – Membership Development

Viacheslav Izosimov - Industrial Relations
Celestine Iwendi - Newsletter Editor
P Rune H Persson - Newsletter Editor & Membership Dev.

Alberto Lorente Leal, Chair Nominating Committee, a.lorenteal@gmail.com



Mats, Lina and Celestine

IEEE R8 Stockholm 23 – 26 March 2017 – ‘A Successful Meeting’

The feedback received from the participants of the IEEE Region 8 in Stockholm is overwhelming. According to IEEE R8 leaders, “this was the best organized and executed Region 8 meeting in a very long time”. The IEEE R8 Director, **Margaretha Eriksson**, thanked all in the IEEE Sweden Section for making it a huge success.

The IEEE R8 meeting was combined with the IEEE Ad Hoc Committee on African Activities (AHCAA) during 23 – 26 March. It was by far the biggest R8 committee meeting ever with 70+ nationalities represented by 220+ participants. The opening key note speakers on Friday evening 24 March provided inputs for the R8 discussions the following days.

Karin Mäntymäski, City of Stockholm, Director of Stockholm Convention Bureau, welcome all to Sweden and Stockholm. Her animated presentation highlighted ‘the heroes’ – individuals of many talents that contribute to mankind; which shows endurance and courage pays off. This ranges from entrepreneurs & innovators, music & culture etc. Other important aspects are quality of life & work, investor community etc. Stockholm produces ‘Unicorns’ per capita, only second to Silicon Valley.

Mats Edvinsson, Chair IEEE Sweden Section, started with a brief background of the Section (see ‘IEEE R8 Sweden 50yr summary - 2015 Dec 31.pdf’ on www.ieee.se). The Section has increasingly focused on cooperation across different entities – both within IEEE and outside IEEE. E.g when a Nobel Laureate is an IEEE member (e.g year 2000, 2009, 2013 & 2014), the Sweden Section arranges special seminars and events with the very Laureate(s) – well received by the Laureates and the members. We cooperate and blend Students, Young Professionals, Women in Engineering and Chapters in activities such as yearly planning workshops (every October), industry workshops (e.g on EMC, telecom trends etc), entrepreneurship (with funds, entrepreneur, academia) etc. Where applicable, we aim for Pan-Nordic participation in the events, as well as structures like Nordic SYP and Nordic E and CPMT chapters. In this context, we have re-structured financials & reporting, modernizing the web etc. Sweden has received quite some IEEE awards in recent years, to be continued. In 2017 Sweden will receive the

very first IEEE milestone = Gotland HVDC subsea cable, commercial since 1954. Finally, the Sweden TEAM took the stage; Samarth Deo, Alberto Lorento Leal Elena Vasieva and Pouya Peighami (Babak Taghavi and Andreas Nylander still travelling then) received applause for their efforts.

The key note speaker, **Tobias Degsell**, is a former curator at the Nobel Museum and now involved in entrepreneurship in organizations. He gave a splendid lecture on the history of the Nobel family, their innovations, and the entrepreneurship aspects of their truly international life and work. Alfred Nobel was a great inventor and acquired 355 patents. The Nobel family developed the business and local manufacturing all over the world, partly due to only a few dared to transport the dynamite by sea. In addition, the Nobel family oil production in Baku accounted for 10% of world oil production around year 1900. With no children, the accumulated wealth created by Alfred Nobel established the Nobel Prize. Tobias Degsell elaborated particularly on the Nobel Prize and why some receive the prize. One key point is Laureates interact with others, rather than working alone; this include cooperation, collaboration and networking in a wide sense.



R8. Awesome Student Activities Committee!



Team Sweden at the R8 Gala Dinner – Alberto (YP); Mats (Chair Sweden), Margaretha (R8 director), Elena (WIE), Andreas (SB Chalmers), Samarth (vice Chair Sweden)

“Sweden has received quite some IEEE awards in recent years”

IEEE R8 Stockholm 23 – 26 March 2017 Contd.

*“The IEEE R8 Director, **Margaretha Eriksson**, thanked all in the IEEE Sweden Section for making it R8 Meeting a huge success”*

Another parameter is disrespect, in a respectful way; i.e. respecting the individual, but dare to question the current established theory. Asking questions and learn are key in this context; particularly if the process of answering these questions are tricky.

Some regions and sites are outstanding in receiving the Nobel Prize:

Cambridge is the leading university, with a culture of blending disciplines and meetings. One contributing factor is the mandatory common dinner, pushing people to meet and interact with those you not regularly meet.

Another Nobel Prize receiver mentioned was Bell Labs, a leading industrial player in combining competences

and contacts in practice; learn, share and grow.

In the discussions and at the dinner afterwards, it was apparent there may be some lessons for IEEE here. Obviously, the heterogenic Region 8 with 70+ nationalities forms a good ground for cooperation and interaction with people you don't regularly meet.

IEEE/ICES Workshop on Safety and Security for Autonomous Systems

Autonomous systems are viewed as a game changer in many industries; e.g. automotive, machinery, aerospace, consumer products: E.g. cars drive themselves, machines construct bridges and roads, robots do the dishes. However, at least two issues must be addressed - safety and security. E.g. not harm people, avoid economic damage due to errors, be able to withstand and deal with security intrusions, protecting themselves. Safety and security are often contradictory, yet even more often they come together. This workshop assembled 70 (incl 30 via IEEEweb) industry experts and researchers to discuss safety and security

aspects in different industries. The workshop started with brief introduction of IEEE and ICES (Innovative Centre for Embedded Systems) at KTH. Karl Norrman from Ericsson Research spoke on relations between safety, security and privacy goals in our connected society. The topic was extended by Stephan Baumgart, from Volvo CE and MdH, who targeted safety and security challenges in the context of autonomous construction equipment machines. After the coffee break and discussions, Jens-Olof Lindh from Saab Kockums,

addressed autonomous marine systems and talked about marine defense systems and their evolution in the path of autonomy in last decades.

Panos Papadimitratos, from KTH and leader of ICES Security Industrial Competence group, talked about securing large-scale cyber physical systems; in particular, looking into a security interplay between connectivity and autonomous functionality.

Finally, Prof. Elena Dubrova concluded the workshop by bringing reliability and security together, highlighting challenges and opportunities, not least in connected highly dependable autonomous systems.



“This workshop assembled 70 (incl 30 via IEEE web) industry experts and researchers to discuss safety and security aspects in different industries”
Viacheslav Izosimov,
Section Board,
Industrial Relations

Please find workshop presentations at

<http://www.ices.kth.se/events.aspx?pid=3&evtKeyId=d6a2bc5d3b7449b99c940a1e89f2515d>

The Research to Industry (R2i) Innovation Workshop– 18th May 2017.

The R2i-2017 Innovation Workshop provides opportunities for innovative researchers to present their work at this forum comprising a wide spectrum of interested parties. Attendees from business and industry may engage with innovators to take up promising innovations into further development or exploitation. This event bridges the gap between industry and research by:

1. Showcasing innovative technological research of potential value to Irish and UK

2. Identifying resources or competence in specific areas
3. Find specialists to support further or related research
4. Bridge skills gaps by discovering graduates to employ, second or sponsor

This innovative workshop builds on previous successful R2i initiatives. At R2i-2017 researchers will present short high impact illustrated narratives of their research achievements.

The four sessions are led by keynotes who are leaders in take-up and commercialisation of research.

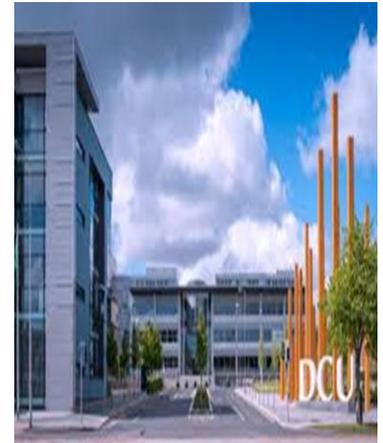
The Keynotes at R2i-2017 are:

Dr Tom Rowbotham, IEEE Life Fellow, Partner at Vesbridge Venture Capital.

Stephen McNulty, Chief Executive Officer, AmbiSense

Géraldine Andrieux Gustin CEO of BLUMORPHO
Paul Murray, Investment Director, Atlantic Bridge Capital.

The R2i-2017 Programme is at <http://www.ieee-ukandireland.org/event/the-research-to-industry-r2i-workshop/> :



Venue: Stokes Building, Dublin City University, Glasnevin, Dublin 9, Ireland

Senior Member Grade

The grade of Senior Member is the highest for which application may be made and shall require experience reflecting professional maturity. For admission or transfer to the grade of Senior Member, a candidate shall be an engineer, scientist, educator, technical executive, or originator in IEEE-designated fields for a total of 10 years **and** have demonstrated 5 years of

significant performance.

Since MNL 4 2016 21 new members have been elevated to the IEEE Senior Grade. Please have a look at the list below!

Zain U L Abdin	Halmstad
Ingvar Åberg-	Staffanstorp
Assadollay Abri	Linköping
Karl Åström	Lund
Johan Carlson	Luleå
Ove Edfors	Lund
Mats Gustafsson	Lund-Malmö
Gustaf H Hendeby	Linköping

Celestine O Iwendi	Uppsala
Christer Larsson	Linköping
Jacob Levison	Malmö
Tommy Linderstam	Linköping
Lars G Mollberg	Göteborg
Per M Ödling	Älvsjö
Petter N Ögren	Stockholm
Mattias Palm	Bara
Peter E Sjöblom	Lund
Mårten Sjöström	Sundsvall
Isaac Skog	Stockholm
Cheuk Wai Tai	Stockholm
James Taylor	Ludvika

Congratulations!

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We're on the Web!

See us at:

<http://sites.ieee.org/sweden/>

Fellow Grade

The grade of Fellow recognizes unusual distinction in the profession and shall be conferred only by invitation of the Board of Directors upon a person who has made important contributions to outstanding and individual contributions to extraordinary one or more of these qualifications and fields. experience in IEEE-

In 2016 two members were upgraded to the very prestigious IEEE Fellow Grade according to the list below.

Danica Kragic, Royal Institute of Technology KTH, Stockholm; *for contributions to vision-based systems and robotic object manipulation*

Erik G Larsson, Linköping University; *for contributions to the technology of multi-antenna wireless communications*

Until middle April 2017 eight new members have obtained the IEEE Fellow Grade according to the list below.

Gerald Cooray, Karolinska University Hospital, Stockholm; *for contributions to understanding of the physics of lightning and lightning protection*

Lennart Harnefors, ABB Corporate Research Vasteras
for contributions to control and dynamic analysis of power electronic system

Bengt Lennartson, Chalmers University of Technology Goteborg ; *for contributions to hybrid and discrete event systems for automation and sustainable production*

Leif Sörnmo, Lund University, Lund; *for contributions to biomedical signal processing in cardiac applications*

Vicenc Torra, University of Skövde; *for contributions to fuzzy sets, decision under uncertainty, and data privacy*

Fredrik Tufvesson, Lund University, Lund; *Sweden for contributions to measurement and modeling of wireless propagation channels*

Lars M Ulander, Swedish Defence Research Agency, Linköping; *for advances in VHF- and UHF-band synthetic aperture radar*

Jaap van de Beek, Lulea University of Technology, LTU; *for contributions to orthogonal frequency division multiplexing*

Congratulations!

About the IEEE Sweden Section moving to a new webpage...

IEEE Sweden is updating the web-platform and at the same time moving to a new web address. The new web page is <http://sites.ieee.org/sweden/>.

One new key feature is that each Chapter, Branch and Affinity Group now has its own webmaster (listed to the right), thus enabling each Chapter and Affinity Groups to directly enter news and update information directly.

Another new feature is a common Events Calendar for IEEE activities in Sweden, where each Chapter and Affinity Group can enter their future events.

We hope this will make information more updated and easier to access

If you have any comments or suggestions in general, please email to christofer.silfvenius.se@ieee.org

Below the new webmasters for each Chapter:

Kristian Sandahl (C)

Andreas Nylander (CPMT)

Carl Mikael Zetterling (ED)

Göran Salerud (EMB)

Christer Karlsson (EMC)

Philippe Tassin (P)

Nan Chen (PE/PEL)

Petter Ögren (RAS)

Ted Johansson (SSC/CAS)

Ravi Chandra Maheswaram (SIT)

Mikael Bergqvist (SIT)

Mathias Grudén (VT/COM/IT)

Luis Guillermo Martinez Ballesteros (Section)

Christofer Silfvenius (Section)