

# IEEE WIE AFFINITY GROUP SWEDEN

Presenter: Amleset Kelati

Chair, Women In Engineering (WIE),

**IEEE Sweden Section** 

October 29, 2021
Annual General meeting of the IEEE Chapter





- PhD KTH, EECS, Electronics and Embedded Systems
- Chair, Women In Engineering (WIE), IEEE Sweden Section



SWEDEN
WIE AFFINITY GROUP



### Sudha Ramasamy

- Associate Senior Lecturer
   Automation Division in Högskolan
   Väst, Trollhattand
- Vice-chair, Women In Engineering (WIE), IEEE Sweden Section

### **Parnian Alikhani**

- Researcher KTH, EECS, Electrical Power and Energy System
- Secretary, Women In Engineering (WIE), IEEE Sweden Section





 Treasurer, Women In Engineering (WIE), IEEE Sweden Section



### .About IEEE

IEEE is the world's largest technical professional organization dedicated to advancing technology for the benefit of humanity.

### About IEEE WIE IEEE

- Women in Engineering (WIE) is a global network of IEEE members and volunteers dedicated to promoting women engineers and scientists, and inspiring girls around the world to follow their academic interests in a career in engineering and science.
- Our goal is to facilitate the recruitment and retention of women in technical disciplines globally. We envision a vibrant community of IEEE women and men collectively using their diverse talents to innovate for the benefit of humanity

### **Our main drivers for WIE in R8**

# SWEDEN WIE AFFINITY GROUP

Members = 45  $Senior\ member = 8$ Student = 22

- VITALITY
- AWARENESS & PRESENCE
- ENGAGEMENT
- ACTIVE PARTICIPATION
- DIRECT AND CONTINUOUS CONTACT TO MEMBERS



### **WIE ACTIVITY**

- IEEE WIE is dedicated to make change in engineering cultures worldwide
- Through meetings, representations and delivering reports on the activities
- By providing leading-edge professional development for mid-level and senior
- To develop and Implement transparent, systematic and sustainable strategies for pushing WIE's goals throughout the IEEE and beyond
- With its dedicated members who strongly believe in the power of women.
   and the IEEE

### **WIE Mission and Activity**

- Recognize the outstanding achievements of women in electrical and electronics engineering through IEEE Awards nominations.
- Organize workshops at major technical conferences to enhance networking and to promote membership in IEEE WIE.
- Advocate women in leadership roles in IEEE governance and career advancement for women in the profession
- Promote member grade advancement for women to the IEEE membership grades of Senior Member and Fellow.
- Facilitate the development of programs and activities that promote the entry into, and retention of, women in engineering programs.
- Administer the IEEE Student-Teacher and Research Engineer/Scientist (STAR) Program to mentor young women in junior high and high schools.

# SWEDEN AFFINITY GROUP WIE ACTIVITIES

### MARCH 8, 2021 IWD EVENT

International Women's Day 2021







#### **SPEAKERS**



Amleset Kelati

Topic: International Women's Day (IWD) Introductions and History

International Women's Day (IWD) is celebrated on March 8 every year. It is a focal point in the movement for women's rights. After the Socialist

Party of America organized a Women's Day on February 28, 1909, in New York, the 1910 International Socialist Woman's Conference suggested a Women's Day be held annually. After women gained suffrage in Soviet Russia in 1917, March 8 became a national holiday there. Including, the Charter of the United Nations, signed in 1945, was the first international agreement to affirm the principle of equality of women and men.

#### Biography:

Amleset Kelati received three Master of Science degrees in Electronics, Communication, and Electrical Engineering from the Universidad Central De las Villas, Chalmers University of Technology, and from the Royal Institute of Technology, 1986, 2001, and 2005, respectively. Amleset has more than two decades of industrial experience in the area of electronics system



Lina Bertling Tjernberg

Topic: Electric power systems developments for a sustainable society and discussions about recent power shortages

#### Abstract:

The energy system is in a global transition towards a sustainable society. Resource efficiency and environmental concerns push towards change into the use of renewable energy resources and to optimize the energy usage. This transition has been

motivated by climate and energy goals and a growth in energy needs.
The United Nations adapted a resolution for a sustainable development with
16 goals until 2030 and the European Commission has launched the targets

### 07 APR 2021



Marzieh Eini Keleshteri

Topic: How to Use LaTeX to Draft a Journal Paper, Part 1

In this workshop, you will learn how to....

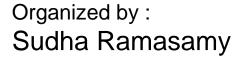
- define a preamble from scratch
- use proper packages
- add figures and tables
- set margins, headers, and footnotes
- insert equations and keep them organized by numbering
- cite references and create a bibliography using BibTeX
- and more!

#### Biography:

Dr. Marzieh Eini Keleshteri received an M.Sc. degree in pure mathematics from the University of Isfahan in Iran in 2007. She also received an M.Sc. degree in applied mathematics and computer sciences and a Ph.D. in mathematics from Eastern Mediterranean University, North Cyprus in 2011 and 2015, respectively. Currently, she is a Ph.D. candidate in electrical engineering at the University of Manitoba. She has acted as the vice-chair of the IEEE Women in Engineering (WIE), Winnipeg section since September 2019. She has been an active LaTeX user since 2006.

Address: University of Manitoba, Department of Electrical & Computer Engineering , E3-522, EITC, 75 Chancellor's Circle, , Winnipeg, Manitoba, Canada, R3T 5V6

# OCTOBER $5^{TH}$ , 2021







Dr, Nandhitha of Sathyabama Institute of Science and Technology

Topic: Feasibility of Deep learning techniques solving Real world problems

Biography:

**Dr.N.M.Nandhitha**, is currently Professor & Dean, School of Electrical and Electronics of Sathyabama Institute of Science and Technology. In her span of 23 years as a teacher, she held responsibilities as Head (Academics) for the Department of Electronics and Communication Engineering and Head (Research) for School of Electrical and Electronics.

She has completed her Masters in Power Electronics and Industrial Drives with a Gold Medal. She has completed her doctoral research in Thermal Image Processing and Soft Computing Techniques. She has successfully completed research projects sponsored from government and R & D institutions in India (DST, TNSCST, BRNS and BRFST). She is the recipient of CTS best faculty award and has delivered guest lectures on her areas of expertise in other Engineering colleges and Universities. She has 100 research articles indexed in Scopus and Web of Science.





Diana Rwegasira

### Topic: Adoption of CDE Approach under iGrid project, Tanzania

The talk will focus on the iGrid project specifically on demonstrating how the CDE (Challenge Driven Education) methodology has been used towards providing mutual benefits in developing and developing countries upon solving societal problems. I a nutshell, the area to be discussed under this project are control and monitoring aspects with Agent-Based System, Communication and Security with IoT, e-health, etc. Achievements and opportunities towards the use of CDE are also amongst the discussion.

Biography:

Assistant Lecturer, Diana Severine Rwegasira is a PhD student as a sandwich programme between University of Dar es salaam (UDSM) in Tanzania and Royal Institute of Technology (KTH) in Sweden (June, 2016 till present) focusing on enhancement of

agent based control on Solar driven DC microgrid system. She obtained her Bsc in Computer Engineering and IT at the University of Dar es salaam from Sept.2004- Dec. 2008. Thereafter, she went to University of Eastern Finland (UEF) in Finland and pursued her Msc in Computer Science from August. 2010 – Dec. 2011. She has been teaching different course at the University of Dar es salaam inducing programming courses, computer applications and e-commerce applications, supervising projects for final year students and practical training for continuing students.

# **Student and Young Professional Congress**







Dear Colleagues,

We hope that our message finds you well and in good health.

R8 Women in Engineering Subcommittee are happy to invite you to a meeting which is organized with all R8 Women in Engineering Affinity Group Chairs on October 14th 2021, 7-9 PM UTC+3. Connection details can be found at the end of this message. More details will follow up. If you have something that you would like to share with us, kindly send it to us at ma-wie@ieeer8.org

Please feel free to disseminate this information to other people that might be interested.

We really hope you will be able to join us on this occasion. Best regards

#### IEEE Region 8 Women in Engineering Sub-Committee













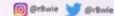


















Keynote Speakers

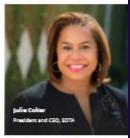
























Virtual: https://events.vtools.ieee.org/m/270092 IEEE WIE ILC Apr 27-30

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Written by: Carina Geldhauser

#### ELLIIT career talk #3 and women's fika

## From pure mathematician to data scientist

What can I do with a degree in mathematics? Who might be interested to employ me? How do I find my next job? How does my career advance? How much mathematics will I be using in a job in industry? And what do I have to if I (don't) want to keep working at a university? If any of these questions has crossed your mind previously, then come to our series of career talks to find out!

Current lineup for Wednesday, April 28th, 15:00h:

Salla Franzen, Chief Data Scientist at SEB Bank Stockholm

Salla got her PhD in pure mathematics at Stockholm University and started out into professional life with postdocs in Oslo and Sundsvall. Then she entered the finance sector as a risk- and portfolio analyst, before getting hired at SEB in 2011. She is Chief Data Scientist at SEB since 2017.

The events are sponsored by ELLIIT, the Linköping-Lund initiative on IT and mobile communication, gender funds. In addition to the talks, which are open to everyone, individuals of underrepresented gender have the opportunity to have a virtual "women's career fika" with the speakers in a small group directly after the talk.

#### Time plan:

- 15.00 15.05h arriving and intro
- 15.05h Salla's talk
- ca. 15.35h Q&A
- 15.40h-16h: women's fika

# **UNESCO** Report

loday at 18:00

https://ieeemeetings.webex.com/ieeemeetings/j MTID=m971293c84df158ff9cc4555a455ae794

Following slides from October 14<sup>th</sup> Region 8 WiE meeting

### Reference:

2nd UNESCO Engineering Report (2021), **Engineering for Sustainable Development,** Women in Engineering section, "Equal Opportunities for All"

https://unesdoc.unesco.org/ark:/48223/pf0000375644/P DF/375644eng.pdf.multi



Today at 18:00 https://ieeemeetings.webex.com/ieeemeetings MTID=m971293c84df158ff9cc4555a455ae79

# **Diversity and Inclusion**

- Diversity and Inclusion in Engineering
- Engineering for Sustainable Development
- Drivers for change
- Changing culture



Today at 18:00 https://ieeemeetings.webex.com/ieeemeetings/j.ph MTID=m971293c84df158ff9cc4555a455ae794

# **Drivers for change**

- Increasing recognition of the current and historic lack of equality in opportunities for all
- A skills shortage driven by an increasingly technical world, coupled with an ageing demographic (RAEng, 2019)
- Acknowledgement of the reality that innovation, profit and highquality engineering is improved with a more diverse team of engineers (Hunt, Layton and Prince, 2015)
- An increasing focus on the SDGs and what this means within the engineering sector

Today at 18:00 https://ieeemeetings.webex.com/ieeemeetings/j.php? MTID=m971293c84df158ff9cc4555a455ae794

# **Women in Engineering**

- Making engineering education, professional development opportunities, pay equity and career-life integration initiatives available to women are key to their engagement, retention, leadership growth and desire to stay in the workforce and make contributions to the profession (Montgomery, 2017; O'Meara and Campbell, 2011; Tull et al., 2017).
- Many existing barriers prevent women and girls accessing STEM subjects. In some countries, restrictions still exist that prevent girls from taking certain subjects at school including science (Agberagba, 2017).



R8 WIE meets leaders of R8 Section WIE AGs
Today at 18:00
https://leeemeetings.webex.com/leeemeetings/j.php?
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# **Women in Engineering**

- In order to address these barriers, clear progression pathways from all points in the education and employment system leading to a future career in engineering should be provided (UNESCO, 2017).
- In higher education, female students face barriers in progressing from education to professional employment. Yates and Rincon (2017) suggest that the retention of women in engineering and as entrepreneurs can be improved through work experience prior to graduation, as well as in the development of professional networks and external supports to assist with transition into the engineering workforce.

R8 WIE meets leaders of R8 Section WIE AGS

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# Women in Engineering

- Female academics are subject to institutional barriers resulting from major inhibitors, such as reduced success rates and often substantially lower grant funding, as well as barriers to research publication (RSC, 2019).
- These factors limit women's access to promotion and hence to progression to professoriate positions within engineering academia. Addressing and removing these barriers is critical to enabling women to progress equitably and to reach decisionmaking positions in academia.



Today at 18:00 https://ieeemeetings.webex.com/ieeemeetings/j.php? MTID=m971293c84df158ff9cc4555a455ae794

# **Women in Engineering**

 Women leaders with unique experiences and who have become what other women aspire to be, have significant power to influence women and girls of all ages. Women from all backgrounds, including those from marginalized or underrepresented groups and regions, need to be trained, hired and empowered to achieve their goals.



## Currently available opportunities to discover

- ▶ IEEE STEM Summit | 1-6 November 2021 | Free Registration
  - https://tryengineering.org/stemsummit/
- TryEngineering Month | November 2021 | Up to 250\$ Funding
  - https://tryengineering-month.ieee.org/
- ▶ Celebrate IEEE Day with IEEE EA | 10 courses for US\$10 each | Offer until 31 October
  - https://innovationatwork.ieee.org/whats-new/
- Women in Science & Technology: Volunteering to Lead | 20 October
  - <a href="https://ieeer8.org/category/member-activities/women-in-engineering/news-women-in-engineering/">https://ieeer8.org/category/member-activities/women-in-engineering/news-women-in-engineering/</a>
- Empowering Women in the Triple Helix Model | October 26
  - <a href="https://ieeer8.org/category/member-activities/women-in-engineering/news-women-in-engineering/">https://ieeer8.org/category/member-activities/women-in-engineering/news-women-in-engineering/</a>



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# Few things to remember

 WIE believes collaboration is the key to increase publicity and get more members

 WIE organizes many events in collaboration with affinity groups at globally, Internationally, and other IEEE chapters

Remember the Report on:

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# **UNESCO** Report

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2nd UNESCO Engineering Report (2021), **Engineering for Sustainable Development,** Women in Engineering section, "Equal Opportunities for All"

https://unesdoc.unesco.org/ark:/48223/pf0000375644/P DF/375644eng.pdf.multi



## **COMING ACTIVITY**

Lunch seminar at Chalmers:

- THE CULTURAL AND SOCIAL CHALLENGE OF PROMOTING THE PROFESSIONAL VALUE OF PARENTHOOD

Organized by Silvia Muceli

Date: Mid of November

Location: Chalmers University of Technology

https://r8.ieee.org/sweden/women-in-engineering-wie-affinity/



# **THANK YOU**



SWEDEN WIE AFFINITY GROUP