



# IEEE WiE Newsletter, Bangalore Section

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http://WiE.ieeebangalore.org/ https://WiE.ieee.org/about/

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#### WiE Chair's Message

IEEE Bangalore Section, WiE Affinity Group has proven to be a resilient group of individuals through this distressful and horrific pandemic. Even during these difficult times, their continued hard work has helped the affinity group to grow connections, broaden avenues regarding various subject matters while incorporating their knowledge, patience, and courteous determination.

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Various STEM awareness talk series to provide equitable opportunity and to inspire young school students to explore STEM and other related topics such as health and wellness, environmental themes, various cultural, industrial research have been carried out. Having empathetic subjects and themes along with intellectual knowledge is salient to our current Pandemic circumstance as having the ability to empathize helps us understand the world around us. With this, we further help raise awareness to keep our community and society ethically safe. WiE team has successfully completed 32 events and continue to deliver the planned events for rest of the year.

The importance of spreading knowledge is to maintain a healthy and supportive team. Being supportive, inclusive with diversity, and reaching out to each other with kindness is key to growth, irrespective of our background. We encourage diversity and participation of everyone in leadership roles at the Student branch, various societies, and affinity groups.

#### **IEEE Bangalore Section WiE Mission and Vision**

The goal of WiE 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. Excellence in Networking is a powerful strategy to establish professional identity and connect with experts having similar technical interests & enables our WiE AGs to work together. With the excellent guidance from our mentors, we have envisaged our vision and roadmap.

Our WiE AG, would like to emphasize and enhance activities towards Professional & Technical Excellence of WiE Members. To improve the efficiency of the WiE activities multiple sub-sections are formed and aimed to streamline the activities. Giving prominence to the student branches to motivate and inspire their participation.

For more information on WiE, please visit <a href="https://WiE.ieee.org/about/">https://WiE.ieee.org/about/</a>







# **Activities conducted in January to July 2021**

# **WiE Parichaya**

WiE Parichaya is a networking event conducted in the month of February. The event had the presence of the Bangalore section chair and the past chairs of WiE, along with WiE members across the section. WiE calendar was unveiled, past chairs shared their experiences, introduction of the new WiE execom team and interaction with the WiE Student Branches, followed networking. The annual planning of events based on the calendar was discussed.





# **WiE Women's Day Celebrations:**

Various activities were conducted under the theme of "Choose to Challenge" - Women's Day Celebration across all sub-sections and student branches.

### Women's Day Celebrations - WiE Bangalore Section

- Women's role in Science and Engineering was organized at IIT, Delhi in collaboration with WIE, Bangalore section and India Chapter on March 9th, 2021.
- Release of e-book on "Celebrating Leaders of WiE AGs". Dr. Y.V.S Lakshmi, Dr. Deepa Shenoy, Mrs. Anandi Giridharan, Prof. T Srinivas from IEEE Bangalore section and Dr. Inderpreet Kaur were present during the event.
- A One-minute video recording of all WIE Execom members, past chairs, mentors on the theme "Choose to Challenge" will be uploaded to the WiE website. Link here - Choose to Challenge







IEEE Mangalore, Mysore And North Karnataka Subsections

Jointly Present with News Karnataka

Challenges Overcome and Faced in breaking the glass barrier - was there one to start with

At 6:30 PM March 12

Live On: www.YouTube.com/NewsKarnataka



- The Women's Day celebration was organized by IEEE TEMS on title Choose to Challenge on 13<sup>th</sup> March 2021.
- Talk on Funding opportunities for women Dr Uma Raghunathan, Director, AICTE - between March 10th-15th.
- Panel Discussion by women leaders Breaking the Glass Ceiling was organized by IEEE Mysore Sub-section, North Karnataka sub-section and Mangalore Sub-section jointly. The Welcome address was given by WiE Chair Mrs. Anandi Giridharan and the vote of gratitude was placed on record by Dr. Kumudhini Ravindra. The event was moderated by Dr. Bindu Thomas.
- International Women in Engineering Day: The speaker was
  Dr. Deepa Shenoy, her address and her journey with IEEE WIE was an inspiring one to all. Dr. Sujatha, Dr.
  Annapurna Patil and Ms. Divya M G took us on a motivational path on how the WIE members can be
  instrumental in emphasizing the importance of technical competency and how one can contribute to it. Ms.
  Sadhana Attavar who was the immediate past WiE chair in 2020 spoke on how the challenges and
  opportunities that come creates an environment to be a team leader and a team player. The virtual event saw
  the presence of good number of participants across the state.

#### **Women's Day Celebrations - Student Branches**

- Dr. Shanthi, Gynaecologist "Awareness on Adolescence and Women Health along with BMSCE March 10th, 2021
- A talk on Stress Management by Dr. Romilla Shekhar organized by Canara Engineering college.
- A talk on Veda and Electronics by Dr. Mukund, Professor, Rochester Institute of Technology, organized by K S Institute of Technology.
- Three-day WIE Technodium was organized at Ramaiah institute of Technology. Women achievers wer e felicitated and they delivered inspirational talks to the students, panel discussion by Alumini who have excelled in various fields and technical events for students were part of the celebrations
- Women health and hygiene for high school girls organized by Gogte Institute of Technology.

# **WiE Cyber Security Awareness Initiatives**

The Cyber Security Awareness initiative was conducted on 30th April 2021, in collaboration with IEEE WIE Bangalore Section and The International Information System Security Certification Consortium (ISC²) Bangalore Chapter. The session was about Cyber Awareness session via the "Safe and Secure Program" of (ISC²) for various age groups. This session had two modules to discuss the vulnerabilities and common issues faced by each age group along with the awareness piece on it.

# Module1-Safe and Secure Program for parents of school-going children:

The content helped parents understand the cyber world and what the children are doing within it, and how best we can ensure their safety online.

#### **Module2-Safe and Secure Program - Seniors Edition:**

This module busted a lot of myths about the internet and was intended to build confidence in our seniors/elder citizens to not only use the internet safely but also to familiarize them with basic security concepts like internet hygiene, safe banking to name a few.









#### **Session Speakers:**

**Shilpa Iyer**, Membership Director, ISC<sup>2</sup> Bangalore Chapter Regional Security & Regulatory Compliance Manager at British Telecommunications Public Limited Company

**Prasanna Venkatesh**, Director of Learning, ISC<sup>2</sup> Bangalore Chapter Senior Manager - Information Security at Navi.

#### **WiE Mock Interviews Initiative**

Mock interview was held at JNN college of engineering (JNNCE), Shivamogga and Canara Engineering College (CEC), Benjanapadavu.

The first pilot event was conducted for 2 days, by IEEE Student Branch – JNNCE, with 125 student participants on June  $12^{th}$  and  $13^{th}$ , whereas the event at CEC was organized for one day, on June 26th with Over 80 students participants.

#### 1. Talk on "How to ace an Interview"

This talk was delivered by Dr Soma Pandey on May 26, and was benefited by 135 participants, who were guided on the **common do's and don'ts** while facing an interview. Dr Soma spoke about the way to present in technical round followed by what should be the attitude and body language and finally the important skills needed for an ECE and CSE student. The top trending technologies as of today in industries were also briefly discussed. This talk was a prequel to the pilot initiatives of mock interview.

#### 2. Pilot mock interview program:

SBMDC in association with ESC, WiE and IEEE MSS conducted a pilot program on "Mock Interview" aimed at training students regarding how to face second or final round of job interviews be it by technical or HR professionals. This initiative was mainly Intended for the rural/remote engineering colleges students of 6th and 8th semester and was conducted on WebEx platform.

Feedback was collected from participants from both SBs. Bangalore section SBMDC issued appreciation certificates to organizers SB coordinators and panelists. The general observations and feedback about the participants were shared by the panelists to the coordinators soon after the event. Both the events were open to students, both IEEE and non-Members.

#### **CONECCT 2021 - WiE Conference Track**

International Conference on Electronics, Computing and Communication Technologies, CONECCT is a flagship conference of the IEEE Bangalore Section, India. The CONECCT 2021 was the 7th edition and was held during JULY 9-11, 2021. The conference featured plenary talks, workshops and invited papers by distinguished researchers and technologists as well as from academia and industry professionals.

The CONECCT 2021 provided a platform for technologists, researchers, business captains and industry leaders across the globe to share their ideas on emerging technologies and newer solutions that can guide and lead towards a better tomorrow.

The IEEE WiE AG had a special track in the CONECCT 2021 conference including events like Tutorials, Call for Papers (presented by women author) and Technical session by experts.









#### **Tutorials**

The IEEE WiE team had hosted 4 tutorial sessions with eminent speakers for **IEEE CONECCT 2021** Conference on 9<sup>th</sup> July 2021. These tutorial sessions addressed the state-of-the-art theory and applications in the following fields:

Tutorials	Topic 1	Topic 2	Topic 3	Topic 4
Topic Title	Quantum computing	1-D and 2-D Bio signal Processing for Disease Detection	To Patent or Not to Patent?	Containerized Applications at Edge
Session Speaker	Mr. Praveen J and Ms. Priya J Nadkarni	Dr. Celia Shahnaz	Dr. Y. V.S Lakshmi	Mr. Chetan Kumar S Mr. Subash Mandal
Session Chair	Dr Veena Desai	Dr. Annapurna Patil	Mrs. Anandi Giridharan	Dr. Vijayalakshmi
WIE Bangalore Section Chair	Mrs. Anandi Giridharan	Mrs. Anandi Giridharan	Mrs. Anandi Giridharan	Mrs. Anandi Giridharan
Details of Discussion	Participants got to know about quantum computing and quantum communications with focus on mathematical foundations of quantum computing and information science.	Participants got to know about computer-based ECG denoising approaches by means of automatic reduction of noise and detection of abnormality, which is timesaving, and more accurate.	Participants got to know everything about Intellectual Property starting from inventions, literature study, artistic works to Intellectual Property Rights like Patent, Copyright, Trademark, Industrial Design, Integrated Circuit Layout, Geographical Indicators, and Trade Secrets.	Participants got to know everything about Intellectual Property starting from inventions, literature study, artistic works to Intellectual Property Rights like Patent, Copyright, Trademark, Industrial Design, Integrated Circuit Layout, Geographical Indicators, and Trade Secrets.

#### **Technical Session – Invited Talks:**

Technical Sessions	Session 1	Session 2
Session Title	Using Machine Learning for Chip Designing	Insights into Digital Twin Technology
Session Speaker	Ms. Viji Ranganna Senior Director, Engineering, Qualcomm	Dr. Seema Chopra Global Technical Leader/Principal Data Scientist, Boeing
Session Chair	Ms. Ashwini Holla	Ms. Reena Mamgain
WIE Bangalore Section Chair	Mrs. Anandi Giridharan	Mrs. Anandi Giridharan
Details of Discussion	Participants got to know about the Edge technology, its basics, and industrial uses and how AI and Edge Computing can empower the delivery of industrial solutions	Participants got to know about the digital twin technology, its benefits, and challenges along with real life use cases.







#### **WIE Panel Discussion**

**Discussion Topic:** How Secure are Smart Systems from Real-Life Cyber-attacks? **Panelist:** Dr. Kumudhini Ravindra, Dr. Soma Pandey, Dr. Annapurna Patil,

Ms. Gayathri Devi B R,

**Panel Moderator:** Ms. Manjula C

WiE Bangalore Section Chair: Mrs. Anandi Giridharan

Outcome of Panel Discussion: This panel discussion enabled audiences from academia, industry, government as well as students to get fair idea of security threat to smart sensors-based systems, the vulnerability to be addressed in future design as well as for future research in related areas.

#### **Awards received under CONNECT 2021:**

#### **Best Paper Awards under WiE Track:**

There were 2 best paper awards given under IEEE Women in Engineering Track at IEEE CONECCT 2021:

#### Academia (Paper-ID: 390)

Title: High-Frequency and Low-Latency DSP Architecture for Information Matrix Fusion

Author/s: D S L Praharshita (NIT Karnataka, Surathkal) \*; Bethi Pardha Saradhi (NIT Karnataka, Surathkal); Pathipati Srihari (NIT Karnataka); U. Shripathi Acharya (NIT Karnataka, Surathkal); G.V.K Sharma (Gitam University)

#### Industry (Paper-ID: 133)

Title: Computation of minimum noise requirement at Analog to Digital Converter in Radar receiver

Author/s: Taniza Roy (Electronics and Radar Development Establishment) \*; LGM Prakasam (LRDE)



#### **Best Paper Awards received by Execom Team:**

IEEE WIE Bangalore Section EXECOM member Dr. Annapurna P Patil and her Team received the best paper award under the IEEE CONECCT 2021 Track "Information Theory" for the paper ID: 234 and Title: Using Inter Cloud Framework to migrate application and data between two public clouds.

#### **Technical Contribution Award to WIE Team Member:**

**Dr. K.R. Shobha** served as a track chair for Smart Sensors, Systems and their Applications track at IEEE CONECCT 2021 and was given special recognition and award for technical contributions









# **WiE World Sustainability and Humanitarian initiatives**

The Ecology and Environment event organized on 5<sup>th</sup> June 2021. The purpose of World Environment Day is to spread awareness about the threat to the environment due to rising pollution levels and climate change. The first World Environment Day was observed in 1974, giving a global platform for inspiring positive change in the environment. WiE AG celebrated Environment Day by inviting **Dr. T.V. Ramachandra, FIE, FIEE (UK), FNIE** is the Coordinator of the Energy and Wetlands Research Group (EWRG), and the Convener of the Environmental Information System at Centre for Ecological Sciences, IISc.



## **WiE Outreach Program**

IEEE Bangalore Section and IEEE Women in Engineering affinity Group on 19th of June 2021, organized a webinar on, "Possible career pathways for Engineering Graduates". Co-hosted by IEEE Mysore Sub-Section and Co-ordinated by IEEE MCE SB.

The Webinar delivered by **Ratnaprabha Sable, Founder and MD Vividhata,** covered the key topics on how students can leverage the LinkedIn/Social Media to find the right job and opportunities and to develop the skill sets based on demand in today's industries and to choose Design engineering as a career.

Advantages of cracking GATE and the benefits of apprenticeship in Government Organizations were detailed by **Dr. Y V S Lakshmi, Vice-chair WIE IEEE India Council, Chair IEEE TEMS** Bangalore Section.

#### **WiE Collaborative Inter - Cultural Events**

Japan Habba (Nihon Matsuri) was conducted on 28<sup>th</sup> Feb 2021. It is an Indo – Japan cultural exchange event held annually in Bangalore. It was the biggest celebration of Japanese Culture in India, attracting more than 7000 enthusiastic visitors. The festival was held at Indian Institute of Science (IISc), J N Tata Auditorium. Bangalore. Japan Habba helped to bring various cultural, industrial research communities to one platform to provide ample opportunities to be explored.

**National Science Day** was conducted on 27<sup>th</sup> Feb 2021. It was an event celebrated to commemorate the discovery of Raman Effect by Nobel laureate, physicist CV Raman on this day in 1928. To celebrate science day, WiE AG included lectures by scientists and industrialists. we had invited Dr Dipshikha Microbiologist from IISc and Chetan Co-founder of Aaikan labs India.









# **WiE Health and Mental Wellbeing Initiatives**

WIE health and mental Wellbeing initiatives were conducted in March by WIE along with Mysuru subsection.

 WIWellness event was conducted on 13<sup>th</sup> March 2021 by Mangalore subsection. The speaker was Dr. Devaki Madhav, Therapist and Psychologist, Mysuru. Yoga for Wellness was also conducted in March by WIE along with Mysuru subsection. The speaker was Dr. Jasmine D'souza, consultant Australia. An interesting Face yoga session was delivered by Dr Deepa Shenoy, Chair-Elect Bangalore section.



- Health and wellness program was organized in April. The speakers were Mr. Ramesh Krishnan, Director, Intel corp. and Dr Seema Singh, Associate prof, IIIT Kharagpur and Mr. Sudheendra Kulkarni, General Manager, Accenture.
- An event titled "How to safeguard ourselves from Covid Using Ancient Indian Wisdom practices" was organized in May 2021. The speaker was Dr. Jinendra Jain, Holistic Healer & Happiness Coach.
- An event of "21 Days Wellness Challenge" conducted from 21<sup>st</sup> June 11<sup>th</sup> July 2021 organised by Dr. Kumudini Ravindra. The speaker was Dr. Lalitha Priya Consultant Nutritionist, Dietician and Weight Management Specialist, Prameya Health Pvt Ltd, Bangalore.

# **WiE Membership Details:**

WiE organizes membership drive in most of the technical sessions to support and inspire students and professionals across STEM technologies to join and benefit from the IEEE WiE Affinity Group.

No. of Members	Count
Total WiE Members, Bangalore Section	2,324
Senior Members	51
Members	105
Graduate Student Members	216
Student Members	1936

#### **WiE Student Volunteers:**



Nagalekha Ramesh - KS Institute of Technology



Poorvi Patil - Pursuing MTech, RVCE



Madhumati S Kuntoji -Pursuing MTech, RVCE



M. Sundarramurthi -Dayananda Sagar College of Engineering, Intern at IISc.



Shirish - Canara Engineering College







# **Important Upcoming Events:**

- 1. Technical talk in collaboration with Bangladesh Section on 21st to 22nd Aug 2021.
- Second International Conference on trends in Science, Engineering and Management on 17<sup>th</sup> & 18<sup>th</sup> of September 2021.
- Special WiE track in upcoming R10 HTC based on the theme "Reverse Innovation for Humanitarian Technology Solutions using Science, Technology, Engineering and Management (STEM)". September 30 to October 2, 2021. For further detail please visit - <a href="https://attend.ieee.org/r10htc-2021/">https://attend.ieee.org/r10htc-2021/</a>
- 4. Ada Lovelace Day Celebrations is planned to be hosted in Sep 2021.
- 5. Special WiE track in the upcoming IEEE BTC to be held on 29th 30th October 2021:

Bangalore Technology Conclave 2021 is flagship event of IEEE Bangalore section. The conclave objective is to bring together technology leaders, innovators, entrepreneurs & thought provokers who are passionate about addressing impactful problems by turning ideas into solutions. Industry stalwarts and technology practitioners, together, will share their vision on future technologies and how they will impact our way of working and living. The aim of this conclave is on "Clean production and clean materials". To know future technology and research areas form industry giants/experts. To create a learning ecosystem from industry practitioners across the globe who succeeded in creating Inclusive learning organizations. The conclave is exclusively focused on. It is designed with 4 tracks. The conclave includes keynote addresses, Plenary talk and Panel discussions from eminently personalities. Targeted audiences are from Corporate, Academia, and Industry.

- 6. Series of events (such as ongoing Rajeshwari series of lectures) to be organised by WISE IISc Student Branch, Bangalore.
- 7. A planned outreach program to be conducted in RV school.

# In Memory of the beloved:



IEEE WiE team would like to express condolences for the loss of one of our beloved friend and active Execom member, **Dr. Indumathi T S**. WiE IEEE Bangalore section will always be grateful for her contributions towards IEEE.

In her memory, WiE team has planned to provide one day meal to the children of an orphanage.

Regards,

**WIE Team** 

