#### **WIE Affinity Group Activities IEEE Bangladesh Section**

2017































































#### Activities of WIE Affinity Group, IEEE Bangladesh Section in 2017

#### 1. "WIE AG BDS Executive Committee Meeting" Organized by WIE AG, IEEE BDS

Women in Engineering (WIE) Affinity Group, IEEE Bangladesh Section arranged its first meeting of the year on 13 January, 2017 at Euprow Lab, ECE Building, BUET. The purpose of this meeting was to plan the whole year's activities and distribute responsibilities among executive members. Dr. Celia Shahnaz, Vice-Chair of IEEE Bangladesh Section led the meeting. Chair, Vice-Chair, Secretary, Treasurer and executive committee members of WIE Affinity Group Bangladesh Section were present in the meeting.



The committee members have discussed about different upcoming activities — seminars and workshops that are going to be held throughout the year. Some new workshops related to Advanced Microsoft Office, Simulink, COMSOL etc. have been added with previous ones. More industrial visits will be arranged in this year. Members also have discussed about publicity of WIECON which will be held in Dehradun, India at the end of the year. The whole meeting was fruitful and effective. Vice chair, IEEE Bangladesh Section personally talked with the executive committee members regarding their responsibilities. There was also a group photo session at the end of the program.

#### 2. "Interactive Forum of Graduate Study and Research Opportunities" Organized by WIE AG, IEEE BDS

IEEE Women in Engineering (WIE), Bangladesh Section organized its first event of the year "Interactive Forum of Graduate Study and Research Opportunities" on 15 January, 2017 at ECE Building, BUET. The key focus of the seminar was to enlighten the undergrad students as well as those who are interested to pursue their higher study in abroad about the overall scenario of the scopes for graduate study and research. The invited speakers were Rafatul Faria and Abdullah Al Noman Ovi, both currently working as research assistants at Purdue University.

The presented talks covered the entire journey of an applicant starting from self-preparation and process of applying to the research atmosphere in the foreign labs. The speakers discussed about the optimum score for GRE/TOEFL and the right time to sit for these exams. They also elaborated the points how to write statement of purpose (SOP) and letter of recommendation (LOR), how to choose research area and professor and how to know about the available funds under the individual professor.



There was also an interactive session with the audience. The speakers shared their experiences of graduate life in abroad. They talked about the living costs and difficulties faced in graduate study. They also answered the questions from the audience on their research topics and collaboration.

The whole program became wonderfully interactive by the enthusiastic and spontaneous participation from both sides of speakers and audience. The motivational talk given by the speakers encouraged the future research candidates to come forward to contribute in the emerging world of technology. There was also a group photo session and arrangement for refreshment at the end of the program.

#### 3. "Workshop on Simulink" Organized by WIE AG, IEEE AUST SB and WIE AG, IEEE BDS

A workshop on Simulink has been jointly organized by Women in Engineering Affinity Group, IEEE AUST Student Branch and Women in Engineering Affinity Group, IEEE Bangladesh Section on 23 January, 2017 at the Department of EEE of Ahsanullah University of Science and Technology (AUST).

The workshop was conducted by two enthusiastic researchers, Mr. Asir Intisar Khan and Mr. Tariqul Islam, who are currently serving as Lecturer in the Department of EEE, Bangladesh University of Engineering and Technology (BUET). Mr. Md. Masoodur Rahman Khan, IEEE AUST Student Branch Counselor and Mrs. Kazi Khurshidi Haque Dia, Advisor, WIE AG, IEEE AUST Student Branch and Secretary, WIE AG, IEEE Bangladesh Section supervised the workshop with the assistance of Ms. Silvia Tasnim, Mentor, IEEE AUST SB, Ms. Sarah Nahar Chowdhury, Newsletter Editor, WIE AG, IEEE Bangladesh Section and Ms. Maliha Noshin, Technical Activity Coordinator, WIE AG, IEEE Bangladesh Section who are currently serving as Lecturer in the Department of EEE, Ahsanullah University of Science and Technology.

Simulink, a customized graphical editor for modeling and simulating dynamic systems, is particularly essential for prospective engineers intending to work with physical systems. With a view to equip the students with the basics of

Simulink, the workshop stretched from designing elementary logic functions, virtual inputs and outputs to physical environment as well as controllers and different tools required for fault analysis in case of power system protection. Students also learnt to integrate Simulink with MATLAB as data can be easily transferred between the programs incorporating MATLAB. The trainees were enthralled to visualize the resultant 3D animation of their simulated physical provided valuable The instructors suggestions to the aspirants by furnishing comprehensive information to those seeking command in Simulink.



28 participants were awarded with certificates. There were 25 IEEE members among them. On behalf of WIE AG, IEEE AUST Student Branch, Mr. Md. Masoodur Rahman Khan expressed his gratitude to the instructors for their efforts to disseminate knowledge with a token of appreciation.

## 4. "Celebration of International Women's Day 2017" Organized by WIE AG, IEEE BDS and WIE AG, IEEE BUET SB

WIE AG, IEEE Bangladesh Section and BUET WIE Student Branch jointly hosted "Women's Day Celebration 2017" on 18 March, 2017 at ECE Building, BUET, in honor of all women working

relentlessly to prove themselves and also to inspire female engineering professionals and students to materialize their dreams by overcoming social barriers.

To make this celebration more vivid and alight, Mehnaz Kabir, Group Chief Marketing and Communications Officer, RANGS Group was present as key speaker throughout the event. Mehnaz Kabir started her career at Grameenphone Limited in 2003. She played significant roles as Head of Internal Communications at Grameenphone Limited in 2010, Head of Communications at Ericsson Bangladesh in 2014 and later as Chief Communications Officer at RanksTel Limited in 2016.

The session started with an inspirational video showing the world's successful women and their courage and strength to fight major downfalls in their lives. The presented video clip intended to motivate every woman to discover and realize her true potential through a self-question: "What on earth am I here for?" It also highlighted the famous quote by Margaret Thatcher, Former Prime Minister of United Kingdom, "You turn [U-turn] if you want to. The lady's not for turning."



A woman is an epitome of beauty, wisdom and care. In conventional social system, a woman is someone's daughter, sister, wife or mother in various phases of her life. But surpassing all these identities, she is a person; an individual. The definition of womanhood is no more simply

bounded to 'beauty' and 'acquiesce'. That's why "Be bold for change"- was the theme of International Women's Day 2017. Now-a-days, a woman is more self-reliant, self-confident and selfconscious about their own rights responsibilities. But moving ahead in the way of life through ups and downs and facing challenges from both personal and professional life sometimes make life harsh and unfair. On the other hand, male dominated social orthodox creates an invisible barrier between men and women. Climbing up, crossing and breaking this barrier is never an easy task. "When life hits you, hit back harder"- keeping this motto on mind, a woman can conquer whatever hurdle comes in between her life. Mehnaz Kabir talked about all these challenges and shared her stories and experiences from both her personal and corporate life. She also mentioned that it would never be possible to come to this stage of her career without the utmost support of her family. To ensure women empowerment, we must change our traditional concept and perspective and this change has to be started with ourselves.

After the motivational session by Mehnaz Kabir, video message featuring the former WIE BDS volunteers and executive committee members was presented. The two hours' session ended with cutting cake and group photo-session to celebrate International Women's Day and to express solidarity with women empowerment.

## 5. "PCB Designing Workshop for Beginners" Organized by WIE AG, IEEE BUET SB and WIE AG, IEEE BDS

A workshop named "PCB Designing Workshop for Beginners" has been jointly organized by BUET WIE Student Branch Affinity Group and WIE Affinity Group, IEEE Bangladesh Section on 5 April, 2017 at the Department of EEE, Bangladesh University of Engineering and Technology (BUET).

A huge response from the participants eventually forced the instructors to carry out the sessions in

more details and with more care. Ms. Baishakhi Rani Biswas, Lecturer at Department of EEE, Green University and Mr. Ratul Das, Graduate Research Assistant, BUET were present as instructors. The dedication and enthusiasm shown by our instructors was truly inspiring. Ms. Shoilie Chakma, Lecturer, Department of EEE, BUET and Treasurer, WIE Affinity Group, IEEE Bangladesh Section guided the volunteers throughout the event ensuring that the participants get maximum possible support and care. The eagerness to learn more and the patience that the participants showed were motivating.

Getting the schematic from the computer screen or breadboard to Printed Circuit Board (PCB) is the most important part of manufacturing electronic devices, robotics and embedded systems. Moving to a PCB has a wide range of advantages. It makes the final design robust, durable, dependable and replicable. That's why our instructors started from the scratch of PCB designing using Proteus software.

At the end, all the participants were awarded with certificates. Last but not the least, a cheer up for the valiant leadership and dedication of our volunteers without which BUET WIE Student Branch Affinity Group is always incomplete.



### 6. "Workshop on Use of LaTeX" Organized by WIE AG, IEEE RUET SB and WIE AG, IEEE BDS

A workshop titled "Workshop on use of LaTeX" was organized by IEEE RUET WIE Student Branch Affinity Group in association with WIE AG, IEEE Bangladesh Section on 21 April, 2017 at ECE Seminar Room, ECE Building, RUET.

The workshop was conducted by Shoilie Chakma, Lecturer, Department of EEE, BUET and Treasurer, WIE AG, IEEE Bangladesh Section and Irtiza Haque, System Engineer, Service Operation, Grameenphone and Professional Activities Coordinator, WIE AG, IEEE Bangladesh Section. At the inauguration of the event, Professor Dr. S. M. Abdur Razzak, Advisor, IEEE RUET WIE Student Branch Affinity Group was present. He expressed his gratitude to WIE AG, IEEE Bangladesh Section for their assistance. There was then a short presentation on mission and vision of WIE which was presented by Azizun Nahar Arju, Student Coordinator of IEEE RUET WIE SB AG.

During three hours long workshop, the instructor introduced LaTeX and its features. After a short introduction to the basics, participants received a strategic guideline about how to write research paper in LaTeX, especially for conferences or journals of IEEE. 40 students including IEEE and non-IEEE members participated at the workshop. Participants were provided certificates at the end of the workshop for their participations.



### 7. "Workshop on PCB Design Using Proteus" Organized by WIE AG, IEEE BDS and WIE AG, IEEE RUET SB

A workshop on PCB Design was organized by WIE Affinity Group, IEEE Bangladesh Section and IEEE WIE Affinity Group RUET Student Branch on 22 April, 2017 at ECE Seminar Room, ECE Building, RUET.



The workshop was conducted by Shoilie Chakma, Lecturer, Department of EEE, BUET and Treasurer, WIE AG, IEEE Bangladesh Section and Irtiza Haque, System Engineer, Service Operation, Grameenphone and Professional Activities Coordinator, WIE AG, IEEE Bangladesh Section. At the beginning, the importance and goal of this workshop was discussed briefly. The participants were taught how to draw and simulate circuits using Proteus and then they learned how to simulate PCB design using it. Both the instructors and the participants enjoyed the full workshop.

At the end of workshop, Tasnim Binte Shawkat, Lecturer, Department of ECE, RUET gave a short presentation on WIE, IEEE BDS and its activities. At closing ceremony, Professor Dr. S. M. Abdur Razzak, on behalf of IEEE RUET WIE Student Branch Affinity Group, presented each instructor a crest as a token of appreciation. 40 students

including IEEE and non IEEE members participated at the workshop. Participants were provided certificates at the end of the workshop for their participation.

### 8. "Workshop on LaTeX and its Application" Organized by WIE AG, IEEE BUBT SB and WIE AG, IEEE BDS

A workshop on LaTeX has been jointly organized by Women in Engineering Affinity Group, IEEE BUBT Student Branch and Women in Engineering Affinity Group, IEEE Bangladesh Section on 27 April, 2017 at VLSI Lab of Bangladesh University of Business and Technology. 25 students including 20 IEEE members participated at the workshop.



The workshop was conducted by Md. Abu Jahid, Assistant Professor, Bangladesh University of Business and Technology with the assistance of Farhana Afrin, Student Activities Coordinator, WIE AG, IEEE Bangladesh Section. Engr. M. Azharul Haque, Chairman, Department of EEE, BUBT inaugurated the event. Then a short presentation on LaTeX was presented by the instructor. The key points of using LaTeX were discussed in the presentation. Then an example containing most of the basic rules of the software was demonstrated by the instructor and the participants followed him. An assignment was given soon after the demonstration. Most of the

students could do it by themselves. There were 5 student volunteers to help them who were expert in this field. At the end, some more additional techniques of LaTeX were demonstrated by the instructor so that the participants can explore the software more in future.

At the end of workshop, Farhana Afrin, Lecturer, Department of EEE, BUBT delivered a short speech on WIE, IEEE BDS and its activities. The goal of the workshop was to get the participants familiar with the tool and teach them how to write a complete technical paper using LaTeX. The participants enjoyed the full workshop. Engr. M. Azharul Haque, Chairman, Department of EEE, BUBT expressed his gratitude to the instructor with a token of appreciation. Participants were provided certificates at the end of the workshop for their participation.

9. "Seminar on IEEE and its Role in Professional Development" Organized by Department of EEE, BUBT, WIE AG, IEEE BDS, IEEE BDS Young Professionals and IEEE BDS

On 3 May, 2017 a seminar was held at Bangladesh University of Business and Technology (BUBT) titled as "Seminar on IEEE and its role in Professional Development." The event was organized by Department of EEE, BUBT supported by IEEE Bangladesh Section, WIE Affinity group, IEEE Bangladesh Section and Young Professionals, IEEE Bangladesh Section. The seminar was hosted by Farhana Afrin, Lecturer, Department of EEE, BUBT. The respected speakers of the seminar were Abdullah Ash-Saki, HES Engineer, Chevron Bangladesh and Student Activities Coordinator, IEEE Bangladesh Section, Shams Shad Islam Khan, Junior System Engineer, Bangla Phone Limited and Chair, IEEE Young Professionals Bangladesh Section and Tasnim Binte Shawkat, Lecturer, Department of ECE, Rajshahi University of Engineering and

Technology and Graphic Designer, WIE AG, IEEE Bangladesh Section.

This seminar intended to grow awareness on IEEE membership and IEEE Student Branch among the students and faculty members of Department of EEE, BUBT. All the students and faculty members of Department of EEE, BUBT were encouraged to attend this seminar. The respected speakers from IEEE Bangladesh Section shared their knowledge and experience in this regard.



The seminar started by an opening speech by Dr. Mohammed Rubaiyet Chowdhury, Dean, Faculty of Applied Science and Engineering. Engr. M Azharul Haque, Chairman, Department of EEE, BUBT, encouraged the present students to focus on their studies as well as to join the IEEE sharing its benefits.

After this session, the speakers gave their speeches about IEEE and its role in professional development and also shared their ideas for getting the better output from a student branch and also suggested some activities to follow in future. There was a questionnaire session for the participants. The participants showed their interest in joining IEEE and WIE after they got the answers of their queries about IEEE and WIE.

At closing ceremony, Engr. M. Azharul Haque, presented each speaker a crest as a token of appreciation. At the very end, Farhana Afrin, Lecturer, Department of EEE, BUBT ended the seminar with her charming words towards all the guests, participants and volunteers who are working on the platform of IEEE for the betterment of the universe.

## 10. "Workshop on Introductory Graphic Design" Organized by WIE AG, IEEE BDS and WIE AG, IEEE Stamford University SB

On 6 May, 2017 WIE Affinity Group, IEEE Bangladesh Section and WIE Affinity Group, IEEE Stamford University Student Branch jointly organized a workshop titled "Workshop on Introductory Graphic Design" at MCL-C Lab of Stamford University Bangladesh with immense This workshop was a success. accomplishment with the participation of 37 students which included both IEEE members and non-IEEE members. Among them 31 were IEEE members and 6 were non-IEEE members. The workshop was two hours long from 4:00 pm to 6:00 pm.



The workshop was conducted by Rubia Siddiqua, Project Engineer, DBL group and Graphic Designer, WIE AG, IEEE BDS. She introduced and explained graphic design and its wide range of usefulness and significance in professional life.

She gave basic idea about the elements of graphic design, implementation and manipulation of different tools such as color space usage, shapes and drawings, grids, making logo, posters and other useful stuff. Rubia Siddiqua was very much pleased for enthusiastic participation and absolute dedication of the participants.

F. M. Anim Hossain, Senior Lecturer, Department of EEE, Stamford University Bangladesh and Branch Counselor, IEEE Stamford University Student Branch was present at the workshop. The workshop ended with the inspirational speech of Dr. Dilshad Mahjabeen, Associate Professor, Department of EEE, Stamford University Bangladesh and Branch Counselor, IEEE Stamford University Student Branch. Finally, Dr. Dilshad Mahjabeen thanked the instructor by a crest of appreciation. The workshop turned out to be a successful event.

### 11. "Workshop on Introductory PCB Design" Organized by IEEE University of Asia Pacific SB and WIE AG, IEEE BDS

IEEE University of Asia Pacific SB organized a two hour long workshop technically supported by Women in Engineering Affinity Group, IEEE Bangladesh Section on "Introductory PCB Design" on 20 May, 2017. Total 25 IEEE student members from both EEE and CSE of UAP participated in that workshop.



This workshop was conducted by two executive members of WIE AG of IEEE BDS, Shoilie Chakma, Lecturer, EEE, BUET and Treasurer, WIE AG, IEEE Bangladesh Section and Irtiza Haque, System Engineer, Service Operations, Grameenphone Ltd. and Professional Activities Coordinator, WIE AG of IEEE BDS. In this workshop, the participants were given hands on training to the introductory design of PCB layout using 'Labcenter Proteus' software. Dr. Tapan Kumar Chakraborty, Professor, Department of EEE, UAP was present in the workshop and awarded the trainers with certificates of appreciation on behalf of the IEEE UAP SB.

#### 12. "Workshop on Graphic Designing" Organized by IEEE EWU SB and WIE AG, IEEE BDS

IEEE EWU student branch and WIE AG, IEEE BDS organized a workshop on Graphic Designing on 10 June, 2017 at ICS Computer Lab, East West University. It was conducted by Rubia Siddiqua, Senior Executive, Supply Chain, Sanofi Bangladesh Ltd. She is also working as a Graphic Designer of WIE Affinity Group, IEEE Bangladesh Section. 12 IEEE members and 22 non-IEEE members were present at the workshop.

Ms. Rubia Siddiqua firstly briefed on how to use the software Adobe Illustrator CC 2017. Then she discussed about the important tools of this software and how to use them properly. She elucidated how to draw and edit different shapes as well as how to draw free hand objects using Adobe Illustrator. In the end, she gave an overview on how to make logos which are smarter and innovative. The participants made a specific logo during the workshop with her instructions.

In the final sessions, students got the chance to interact with the conductor through questions and expressing their thoughts. The questions proved that they have been very much influenced through the conductor's words and experiences. The conductor was provided with a token of

appreciation and the participants were given certificates to encourage them to take part in IEEE activities.



### 13. "Hand's on Session on Thesis Writing Tool" Organized by IEEE EWU SB and WIE AG, IEEE BDS

On 22 July 2017, IEEE EWU Student Branch and WIE AG, IEEE BDS jointly organized a workshop on LaTeX. It was a 3 hour long workshop that took place in the ICS Practice Lab of East West University. The workshop was conducted by Nafisa Zarrin Tasnim, Assistant Engineer, Energypac Engineering Ltd. and Professional Activities Coordinator, WIE AG, IEEE BDS and Syeda Iffat Naz, Assistant Engineer, Energypac Engineering Ltd. and Webmaster, WIE AG, IEEE BDS.



A total of 38 students participated in the workshop where they learnt about the basics of LaTeX. The number of IEEE and non-IEEE member in the workshop was 22 and 16 respectively and the participation of female in the workshop was above 35%. There were some participants from different institutions too.

At first, the conductors briefed about the software MiKTeX. They also showed how to install missing packages which is common problem for the software. In the first half, Ms. Syeda Iffat Naz instructed how to write code on MiKTeX and Ms. Nafisa Zarrin Tasnim assisted her by helping participants if they faced any problem. In the second half, they changed their role.

In the final session, students got the chance to interact with the conductor through questions and expressed their thoughts. The questions proved that they have been very much influenced through the conductors' words and experiences.

## 14. "Workshop on Graphic Design" Organized by Primeasia University EEE Club and WIE AG, IEEE BDS

Primeasia University EEE Club and WIE Affinity Group, IEEE Bangladesh Section jointly organized "Workshop on Graphic Design" on 28 July, 2017 at General Purpose Computer Lab, STAR Tower, Primeasia University. Rubia Siddiqua, Senior Executive, Sanofi Bangladesh Ltd. and Graphic Designer, WIE AG, IEEE Bangladesh Section was present as resource person throughout the workshop.

At the beginning of the workshop, Sharfuddin Ahmed, Convener of Students' Development Committee, Department of EEE, Primeasia University and Rajib Baran Roy, Head, Department of EEE, Primeasia University talked about the purpose of the workshop and the importance of graphic design in professional life, freelancing and promoting business.



At first, Rubia Siddiqua introduced the students to the basic elements and different tools (selection tools, drawing tools, reshaping tools, painting tools) of Adobe Illustrator CC 2017 and showed how to use them in drawing different shapes (rectangle, polygon, circle, half-circle, star) and free hand objects. She also answered and explained various questions on anchor points and vectors. Finally, Rubia Siddiqua showed some sample designs and artworks and demonstrated on adjusting thresholds and fills and strokes.

The two hours' workshop ended with certificate giving ceremony and group photo session. 20 students including 3 IEEE members participated in the workshop. The workshop put positive impact on students and faculties and the students expressed their interest in arranging such workshops in future.

## 15. "Workshop on Advanced Microsoft Tools" Organized by IEEE UIU WIE AG SB, IEEE UIU SB and WIE AG, IEEE BDS

IEEE UIU Women in Engineering (WIE) Affinity Group Student Branch in collaboration with IEEE UIU Student Branch and WIE Affinity Group, IEEE Bangladesh Section organized a workshop on "Advanced Microsoft Office Tools" on 17 August, 2017 at 4:00 pm in Computer Lab-9, United International University (UIU) main campus.

Microsoft Office Tools is a very handy and widely used platform when it comes to corporate culture. Almost every job requires handling Microsoft Office Tools to some extent. This workshop was organized to make the graduating students familiar and compatible with Microsoft Excel from beforehand.

The workshop was conducted by two instructors, the first one being Nafisa Zarrin Tasnim, Assistant Engineer (R&D), Energypac Engineering Limited and Professional Activities Coordinator of WIE Executive Committee, 2017 and the second one being Syeda Iffat Naz, Assistant Engineer (R&D), Energypac Engineering Limited and Webmaster of WIE Executive Committee, 2017. The Microsoft Office Tool used in the workshop was Microsoft Excel. The instructors demonstrated data entry, formatting of data, different built-in functions of Excel, plotting, etc. The instructors gave some exercises to the participants to make sure that the participants can apply the concepts to any given situation. The instructors also took questions from the participants. The workshop received a whooping attention from 20 attendees, out of which 8 were female.

The instructors were later acknowledged for their efforts and time by branch counselor Anomadorshi Barua Shuvro and branch mentor Sadia Anjum Tumpa.



#### 16. Outreach Program Organized by WIE AG, IEEE BDS and WIE AG, IEEE BUET SB

WIE Affinity Group, IEEE BUET Student Branch is pleased to announce the successful completion of the outreach program organized for upcoming university students held at Holy Cross College on 14 September, 2017.

The huge response and the enthusiasm of the participants were very overwhelming and it really encouraged to carry out the workshop in more detailed way. A total number of 40 students, divided into 7 groups, attended the program. Instructor Zahra Zahin, Chairperson, BUET WIE SB conducted the workshop successfully. All the volunteers were very supportive which made the workshop more appealing to the youngsters.

In the first session of the workshop, a short speech was given on the outstanding contribution of women in science and technology to motivate the students and to grow their interest in this field.

In the next session, a brief presentation was made on green technology, renewable energy and smart grid. Then in the practical session, students were provided with necessary first theoretical knowledge on decade counter and other components to implement the circuit. After that each group was given the components. Volunteers were always ready to help them. The spark seen in their eyes when the counter started counting after getting clock pulse is worth mentioning. At last, they got really excited when they saw the practical application of the theory they learned with their own eyes.

In the last session, an MCQ based test was taken and three highest mark obtainers were awarded.

Enthusiastic participants must be appreciated without whom the program held no meaning. Their eagerness and patience motivated the instructors to help them out with all the projects they wanted to implement. Principal Sister Shikha Gomes and the

teachers also gave the opportunity to the organizers to motivate the fresh minds to engineering profession and give them a practical vision of the theory they learned from their textbook.



#### 17. "Workshop on LaTeX" Organized by WIE AG, IEEE DU SB and WIE AG, IEEE BDS

A workshop on LaTeX was organized by WIE AG DU SB and WIE BDS on 16 September, 2017 at Institute of Information Technology, University of Dhaka. The instructors were Ms. Syeda Iffat Naz, Webmaster and Ms. Nafisa Zarrin Tasnim, Professional Activities Coordinator of WIE BDS Executive Committee 2017. This workshop is a consequence of the vision of Women in Engineering Bangladesh Section to arrange a series of workshops in different universities in collaboration with the IEEE student branches.

Participants included 7 women and 6 men from various backgrounds with little to no experience in LaTeX.

During the workshop, the instructors showed how to write a LaTeX document using basic MiKTeX. The instructors basically addressed the key steps required for writing a document, for example, title, authors, equations, inserting images, body, bibliography, etc. The instructors made sure that every participant was able to keep up with the content being covered. They looked into the problems faced by the participants and also took questions from them. The workshop was targeted for senior year students to make them compatible with LaTeX for writing thesis or conference papers.

The instructors were later recognized for their efforts and time by Ms. Lafifa Jamal, group advisor of DU SB WIE AG with a token of appreciation.



18. "Special WIE Track at ICAEE 2017" Organized by WIE AG, IEEE BDS

WIE Affinity Group, IEEE Bangladesh Section organized Special WIE Track on 29 September, 2017, the second day of 4th International Conference on Advances in Electrical Engineering (ICAEE) 2017 at Independent University Bangladesh. Four highly regarded and renowned academics were present as special guests throughout the whole event. They are Dr. Shamima K. Choudhury, Dr. Shahida Rafique, Shahida Sultana and Dr. Jesmin.

The event started with the technical session by Dr. Shamima K. Choudhury, Fellow, Bangladesh Physical Society (BPS), Team Leader, WIP, Bangladesh, Fellow, Bangladesh Society for Non-

Testing (BSNDT) and former Destructive Department Professor. of Physics, Dhaka University. She talked about structure, properties, deposition techniques applications. observation of some important parameters (refractive index, transmittance and absorption coefficient) with variation in semiconductor materials (GaAs, ZnO, ZnSe, CdTe, Tin Oxide) of thin film solar cell. Two deposition techniques are presently used in Bangladesh. One is Vacuum Deposition and another is Spray Pyrolysis. The equipments for these two techniques are installed at Atomic Energy Commission Dhaka (AECD) and Bangladesh University of Engineering and Technology (BUET) respectively. Shamima K. Choudhury also expressed her thanks to the Department of Physics, Dhaka University, Department of Physics, BUET, BCSIR and AECD for their cooperation in her researches.

The next speaker was Dr. Shahida Rafique, Professor, Dhaka University and Chairman, Board of Governors of Institute of Science and Technology, National University. She gave her talk on "Advances in EEE: Robotics." She talked about scales in robotic systems, sensors, effectors, actuators, controllers, hardware, angular rotation, seven degrees of freedom, artificial intelligence and latest advances in robotics like AEGIS and cognitive modeling for space. She also gave insight about mobile and manipulator robot, BEAM robot and EyeBot.

After two technical presentations, Shahida Sultana, Deputy Secretary (Innovation Specialist) of Prime Minister's Office gave her presentation on "Women and ICT." She talked about lack of access to basic education, science learning and social motivation. She also discussed about dilemma expectation between work and family responsibilities, discrimination and under representation as the reasons of career barriers for women. She also enlightened the audience about 'Access to Information Program' under which there are other programs like Women Innovation Camp (WIC), Service Innovation Fund (SIF), Solve-a-Thon and iLab. She also mentioned about Joyeeta, a virtual shop for women entrepreneurs, Joy App, an app to prevent terrorism against women and children and She Power Project which are some of the recent steps taken by the Government of the People's Republic of Bangladesh for ensuring the women empowerment in socio-economic sector.

The whole program was conducted by Tasnim Binte Shawkat, Graphic Designer, WIE AG, IEEE Bangladesh Section and Lecturer, Department of EEE, RUET. About 40 students and faculties including both IEEE and non-IEEE members participated in the event.



19. "Industrial Visit at Atomic Energy Research Establishment (AERE)" Organized by WIE AG, IEEE BDS and IEEE BDS

IEEE Women in Engineering, Bangladesh Section and IEEE Bangladesh Section jointly organized "Industrial Visit at Atomic Energy Research Establishment (AERE)" funded by IEEE Region 10 on 5 October, 2017.

The event was held at Atomic Energy Research Establishment (AERE), Savar. A total number of 38 participants enthusiastically performed the tour. Concerned authority of AERE guided the participants and lectured their activities along with demonstration. The transport was arranged by Bangladesh University of Engineering and

Technology under the supervision of Mr. Yeasir Arafat, Associate Professor, Department of EEE, BUET and Treasurer, IEEE Bangladesh Section.

Atomic Energy Research Establishment (AERE) is a major research set-up of Bangladesh Atomic Energy Commission (BAEC) with an aim of peaceful application of nuclear energy in various physical, biological and engineering fields. Established in 1975, this vast facility stands on 259 acres of land comprising different institutes. In the stated tour, only the units relevant to EEE were visited as majority of the participants were from that background.

The tour was initiated by visiting the Institute of Nuclear Science and Technology (INST) where the reactor along with its chamber and source were shown after a short briefing on their working action. Then came the visit in Institute of Electronics (IE), where the members had a chance to revise their idea about electronic circuitry and VLSI designing. Following that, the visitors were moved to Energy Institute (EI), where the complete production process of solar arrays in Bangladesh was demonstrated.

The final part of the visit was held in Central Engineering Facilities (CEF) which were an interdisciplinary unit of electrical and mechanical engineering. All hardwares related to the research are manufactured in this facility. Of course, the students got the chance to observe some of the mentioned procedures.

The whole event was conducted by Farhana Afrin, Nusrat Jahan and Farshina Nazrul, executive committee members of WIE AG, IEEE BDS. The event was closed by lunch and a group photo. With this event, the WIE student members of Bangladesh appropriated a great deal of knowledge about Atomic Energy Research and its applications in Bangladesh.



20. "Workshop on Robotutor" Organized by IEEE Stamford University SB and WIE AG, IEEE Stamford University SB

On 6 October, 2017 IEEE Stamford University Student Branch and WIE Affinity Group, IEEE Stamford University Student Branch jointly organized a daylong workshop titled "Workshop on Robotutor" at MCL-C Lab of Stamford University Bangladesh with immense success. This workshop was a tremendous accomplishment due to the participation of 32 students including 25 IEEE members and 7 non-IEEE members.

The workshop was successfully conducted by Muhammad Muntasir Hassan (BUET), Abir Ahsan Akib (BUET) and Mohammad Mahinur Rahman (BUET). They introduced the idea of robotutor and its wide range of application and significance both in our daily and professional life. They also explained the software 'Arduino' as a medium of code and activating robot brilliantly. The instructors were very much pleased by the enthusiastic participation and absolute dedication of the participants.

The great achievement of the workshop was to run a line follower robot. The participants also came to know how to make a logo, posters and other useful stuffs. The workshop was endowed with a massive response from all participants. This workshop was enjoyed by both the participants and the instructor.

The workshop ended with the inspirational speech of Dr. Dilshad Mahjabeen, Associate Professor, Department of EEE, Stamford University Bangladesh and Branch Counselor, IEEE Stamford University Student Branch. Finally, Dr. Dilshad Mahjabeen thanked the instructor by presenting a gift of appreciation. The workshop turned out to be a successful and inspiring event for the participants.



# 21. "IEEE DAY 2017: Leveraging Technology for a Better Tomorrow" Organized by WIE AG, IEEE BDS, IEEE DU SB and WIE AG, IEEE DU SB

Women in Engineering Affinity Group, IEEE Bangladesh Section in association with IEEE Student Branch, University of Dhaka and IEEE Women in Engineering Affinity Group Student Branch, University of Dhaka celebrated "IEEE Day 2017" on 11 October 2017 from 2:00 pm to 5:00 pm at Room 208, Department of Electrical and Electronic Engineering, University of Dhaka. The event was officially celebrated by all IEEE WIE Affinity Groups of Bangladesh. 60 participants including 35 IEEE members and 25 non-IEEE members joined the celebration.

The program was inaugurated by Dr. A. H. M. Asadul Huq, Chairman, Department of EEE, DU. Opening speech was given by Md. Zahidul Islam, Branch Counselor and Lecturer, Department of EEE, DU. Then Lafifa Jamal, Group Advisor, WIE



AG SB DU and Chairman, Department of Robotics and Mechatronics, DU, shared few words with the audience. Next, Samantha Lubaba Noor, Chair, WIE AG, IEEE BDS and Senior Lecturer, Department of EEE, East West University, enlightened about various activities of different student branches and affinity groups. Later, professional talk was given by Dr. Sharnali Islam, Lecturer, Department of EEE, DU and exemployee, Intel Corporation and a talk on entrepreneurship was given by Tasnim Sorwar Tropa, Lecturer, Department of EEE, Canadian University of Bangladesh and co-founder, Daisy's Cooking Hub. Next IEEE Spectrum Quiz Contest was held and later different affinity groups presented their activities and future plans. The guests handed certificates to the IEEE Day Photo Contest winners and IEEE Spectrum Quiz winners.

## 22. R10 Funded Program "Ladypreneurs, Let's Make an Entrepreneurial Leap" Organized by WIE AG, IEEE BDS and IEEE BDS

IEEE Women in Engineering, Bangladesh Section and IEEE Bangladesh Section jointly organized "Ladypreneurs, Let's Make an Entrepreneurial

Leap" funded by IEEE Region 10 on 13 October, 2017, Friday at White Board, Level-3, GP House. Zaved Parvez from "Dreams for Tomorrow" and Rini Eshan Khushboo from "Planeter Ltd." were present as key speakers in the event.



At first, Samantha Lubaba Noor, Chair, WIE AG, IEEE BDS and Senior Lecturer, East West University, gave her welcome speech. She talked about the purpose of WIE AG, IEEE BDS and the benefits of its membership. She also shared the joyous news of receiving "2017 Women in Engineering Affinity Group of the Year Award" which is the highest honorary award from IEEE WIE Global.

In the first session of the event, two entrepreneurs shared their entrepreneurial experiences with the participants. The first speaker was Zaved Parvez, writer, speaker, corporate trainer, certified professional, life coach and founder of "Dreams for Tomorrow," a non-profit organization with the target of building 2000 D4T centers around the whole country, a place of gathering and sharing knowledge, so that every student gets its facilities within 2 kilometers of his home. Before talking about his organization, he mentioned some of the common social factors that are constantly pulling down the quality of education and hindering the virtues of dreams, values and humanities which are necessary for the development of truly educated and responsible citizens of our country. Then he shared his stories about how he started "Dreams for Tomorrow", the challenges he faced and the strategies he followed and also told that funding or investment is not an important factor if one has a true purpose behind his action.

The second speaker was Rini Eshan Khushboo, CTO, Planeter Ltd., ex-LICT trainer on Internet of Things (IoT), ICT Division, Bangladesh and Certified Image Processing and Robotic Vision Specialist, Technophillia Ltd., Mumbai, India. She started her talk by suggesting the future entrepreneurs "Look before you leap." She shared about how she got the idea and started her entrepreneurial journey along with her co-founder from student life and then expanding her business and services through proper sales planning, prototyping, team building and publicity. She also told that the requirement of venture capitalist is a minor factor for a startup business and an entrepreneur can start with small amount of money to avoid the risk of loss. She also quoted 'entrepreneurship' as a symbol of freedom and expression of creativity. She further added, "People change the rules and entrepreneurs change the game."

The second segment of the event was debate on "Investing in Women is Smart." The participants were divided into two groups. Two participants from each group took part in the debate. After an open discussion and debate between two groups, the judges announced the winner of the debate. Rini Eshan Khushboo also shared her opinion in support of the title at the end of the debate session. She told that multi-tasking is a wonderful characteristic of a woman which makes her more efficient worker at her workplace. It is also scientifically proven that the women are kinder and more intuitive than men. After the debate, the judges gave prizes to both teams.

The whole event was conducted by Irtiza Haque, Professional Activities Coordinator, WIE AG, IEEE BDS and System Engineer, Service Operation Center, Grameenphone Ltd. The event was closed by refreshment and a group photo.

About 30 students and professionals including both IEEE and non-IEEE members participated in the event.

#### 23. "IEEE BDS SYW Congress 2017" Organized by IEEE BDS and IEEE NSU SB

The most awaited annual event of IEEE Bangladesh Section, IEEE BDS SYW Congress 2017 was held on 1 December, 2017 at North South University. The event was organized by IEEE North South University Student Branch sponsored by Adex Group.

The extravagant day-long event consisting of over 600 participants was initiated through an Ice Breaking Session at the Gallery of North South University. The session was arranged to make the participants familiar with each other and also with the event. Following the ice breaking was an opening ceremony. The opening ceremony was commenced by showing respect to our country through National Anthem and the recitation from The Holy Books. The ceremony included an opening note by Ms. Tanjila Farah, Branch Counselor, IEEE NSU SB. The show was synthesized into a more enthusiastic, informative and educative one by honorable guests including Pro Vice-Chancellor Dr. G. U. Ahsan, North South University, Nominations and Appointments Chair, Vice-Chair (activity) of IEEE BDS, YP Chair BDS, WIE Chair BDS, IEEE BDS Secretary and IEEE BDS Student Representative.

The event was then pursued by more sessions one of which was SAC Session which was based on communication skills, IEEE benefits and so on. It also included a research session that encouraged the participants more towards research sectors. To keep the audience charged up, refreshments were provided by the organizers in between sessions. The show was further continued by a session on IEEE Young Professionals with a view to helping fresher engineers achieve career goals and professional excellence with great motivation and urge. There was another interesting part, a short quiz contest to charge up the participants to another level. Later a technical session was arranged in order to bring the crowd and technology closer and also to showcase the rate of development of technology to the crowd present.

The technical session was followed by Women in Engineering (WIE) program which brought up the development of women in engineering sector in today's world and encouraged all, both men and women, to push the development a step higher by contributing their knowledge and ideas. The event did not stop right there, more compelling sessions were organized. One of the sessions was on Engineering Ethics, a value that every present and upcoming engineer should nurture within themselves. This session was imperative to let the future engineers to be able to judge themselves as well as their work. The show was lifted up by the presence of honorable chief guests Prof. Dr. Saiful Islam, Vice-Chancellor, Bangladesh University of Engineering and Technology (BUET) and also Pro Vice-Chancellor, North South University (NSU). The event was made more enthusiastic by a program on Humanitarian Activities, the aim of which was to build the urge in the participants to volunteer in activities that would prove to be helpful to the society and also in the establishment of partnerships with other entities sharing similar goals with respect to humanitarian efforts. Before bringing the event to the finish line, a Poster Presentation was arranged in the Exhibition Hall,

NSU. Lastly, a closing ceremony was organized to celebrate the success and to wind up the largest event of the IEEE Bangladesh Section, IEEE BDS SYW Congress 2017.



# 24. IEEE WIECON-ECE 2017 Organized by IEEE Uttar Pradesh Section, IEEE Bangladesh Section, WIE AG, IEEE Uttar Pradesh Section and WIE AG, IEEE Bangladesh Section

The 2017 IEEE International Women in Engineering (WIE) Conference on Electrical and Computer Engineering (WIECON-ECE 2017) was organized for bringing together individuals conducting research and professional activities in the area of ECE to share and present their latest innovation and findings.

The conference was jointly organized by IEEE Uttar Pradesh Section and IEEE Bangladesh Section along with WIE Affinity Group of IEEE Uttar Pradesh Section and WIE Affinity Group of IEEE Bangladesh Section. The conference was held at Women Institute of Technology, Dehradun, Uttarkhand, India during 18-19 December, 2017.

Every WIECON-ECE ensures world-class keynote talks, invited talks, oral and poster sessions, special

sessions, humanitarian activity track, tutorials, workshops, student competitions, live demonstration, project show which will be offered by researchers and professionals working in academia, industry and research organizations.



#### 25. R10 Funded "IEEE R10 HTC 2017 WIE Track" Organized by WIE AG, IEEE BDS

WIE AG, IEEE Bangladesh Section organized "IEEE R10 HTC 2017 WIE Track" funded by R10 WIE, IEEE BDS on 21 December, 2017 at Room No-627, ECE Building, BUET. About 54 students and professionals including both IEEE and non-IEEE members participated in the event.

At first, Samantha Lubaba Noor, Chair, WIE AG, IEEE BDS gave her welcome speech. She talked about the purpose of WIE AG, IEEE BDS and the benefits of its membership.

Then she introduced Dr. Ramalatha Marimuthu, a role model for young female engineers, who also published six technical books and more than fifteen research papers in international conferences and journals and having 31 years of teaching experiences. She was one of the distinguished speakers.

Dr. Ramalatha delivered lectures on assistive technology in universities and conferences all over

the world and was invited to the Google Headquarters, Mountainview, California to deliver a speech on her research in assistive technology for people with special needs. Dr Marimuthu is a senior member of IEEE and founder chair of Madras IEEE Women in Engineering Affinity Group (2007-2014). She was R10 WIE Coordinator for 2008-2010 and Chair, IEEE Women in Engineering Committee for 2011 and 2012. She launched an exclusive project "Sangamam" for the transfer of technology to rural areas.

As per the title of her speech, "Is ethical leadership incompatible with God's design?" she talked about various aspects of women leadership and contribution of women in the field of technology. She mentioned about the scarcity of women leaders when it comes to occupy the top positions in companies and various other sectors. Her speech explored the reasons for it if the culture or society or the women themselves are responsible for this. And does it really need a solution? Later on, she also guided the participants in developing unique solutions for social problems like special needs and women empowerment.

In the second session, the top 5 teams of IEEE R10 HTC 2017 idea contest gave their oral presentation in front of the judges. Also the top 20 teams among the 51 teams participated in the poster presentation segment of idea contest in the morning of the same day. The judges of the contest were Dr. Ramalatha Marimuthu, Kumaraguru College of Technology, Norliza Mohd Noor, Associate Professor in UTM Razak School of Engineering and Advanced Technology, Universiti Teknologi Malaysia (UTM), Kuala Lumpur Campus, Sadia Afroz, Research Scientist at International Computer Science Institute (ICSI) and Suyog Vyawahare, CEO and founder of Suyog Technologies. The idea contest was organized with a view to finding out the solutions of the challenges and problems faced by women in Bangladesh.



After completing the presentation, champion teams were awarded with crests and certificates by Vincenzo Piuri, IEEE Fellow, 2015 IEEE Vice President for Technical Activities, Amarnath Raja, Founder and CEO, InApp and Dr. Ramalatha Marimuthu, Kumaraguru College of Technology. The two segments of idea contest along with the technical talk was conducted by Samantha Lubaba Noor, Chair, IEEE WIE BDS, Tasnim Binte Shawkat, Graphic Designer, IEEE WIE BDS and Raisa Fabiha, Newsletter Editor, IEEE WIE BDS.

### 26. "Special WIE Track at ICCIT 2017" Organized by WIE AG, IEEE BDS and IEEE UAP Student Branch

An inauguration of WIE AG, IEEE UAP SB was celebrated along with a WIE track "Women in Engineering, Entrepreneurship and Leadership" organized by IEEE WIE Bangladesh Section and supported by UAP IEEE Student Branch in the International Conference on Computer and Information Technology (ICCIT) 2017 at University of Asia Pacific, Dhaka, Bangladesh on 24 December, 2017.

In this event, Dr. Celia Shahnaz, Professor, Department of EEE, BUET, Mehjabeen Mahbub, Experienced Integration Engineer, LM Ericsson, Bangladesh and Syeda Kamrun Ahmed, co-founder and former CEO, BAGDOOM.com (former ekhoni.com) were present and shared their

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journey to excellence in academia, industry and entrepreneurship respectively.

This joyful event was attended by a huge number of students from different departments and faculties as well as some invited speakers and guests of ICCIT 2017.

IEEE UAP Student Branch got the approval to form WIE Affinity Group in Bangladesh Section in October 2017. Currently, this student branch has more than 55 student Members out of which over 15 are female student members.



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