



Affinity Group  
(Women in Engineering)



Technical Chapter  
(Robotics and Automation  
Society)



Annual Report  
(Jan – Dec 2017)  
School Code – 60111706  
Student Branch Code – STB10039

Submitted by  
IEEE Student Branch  
Quantum School of Technology  
Village – Mandawar, Roorkee-247667  
Uttarakhand

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## Message from Branch Counselor

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I, on behalf of IEEE Students Branch, Quantum School of Technology, Roorkee, am presenting the annual report of the branch from January to December 2017.

Being an International Platform, IEEE with help of its Student Branches gives students the opportunity to meet and learn from the fellow students, faculty members and working professionals of their own field worldwide. It offers numerous advantages of IEEE membership through special projects, activities, meetings, tours and field trips on concessional basis. Students can engage themselves in various activities like participation in regional conferences, workshops, competitions, development of leadership, interpersonal and team building skills, participation in awards, scholarships and project/design programs and student paper contests. They can also access IEEE online services and resources.

In order to help students to be aware with the latest technologies in their engineering domain and take advantages of numerous opportunities under the umbrella of IEEE, IEEE Student Branch at Quantum School of Technology, Roorkee was established and approved (School Code – 60111706, Student Branch Code – STB10039) on 07.01.2017 with its interim Branch Counselor Mr. Sandeep Kumar and Branch Chair Mr. Aman Jha and working under IEEE UP section.

After the approval of the branch, we have also taken the membership of one affinity group (Women in Engineering, Approved in March 2017) and one technical chapter (Robotics and Automation Society, Approved in June 2017). The activities happened under this branch this year are as follows;

1. The 5 student members of the branch had gone to IIIT, Allahabad to attend the IEEE Computer Society India Symposium during 17 – 19 March 2017.
2. The Branch has organized a two days Symposium on 3D Printing and Allied Technologies during 21 – 22 April 2017.
3. The Branch has organized a debate competition on theme “Are We Messing up with the Nature in the name of development” on the occasion of IEEE Day 2017 on October 6, 2017.
4. The Branch has organized a Technology Enhancement Programme on Robotics (TEP – R) during 13 – 14 November 2017.

In July 2017 I have taken charge of Branch Counselor and I insures that the Branch will provide the best of opportunities to all the students, researchers and professionals who are keen to garner information and explore in the field of research and development.

Mr. Raunak Gupta  
Assistant Professor, Deptt. of Mech. Engg.  
Branch Counselor, Adviser (W.I.E Affinity Group and R.A.S Technical Chapter)  
IEEE Student Branch, Quantum School of Technology, Roorkee

December 31, 2017

## Meeting Reports

After the establishment of IEEE Student Branch, we have held total 6 meetings. The brief report of all the meetings are as follows;

1. The first meeting was held on 01.02.2017. The meeting was attended by all the branch members. The Department Head, Dr. Gulshan Chauhan congratulate the members for establishing the IEEE student branch. The interim Branch Counselor Mr. Sandeep Kumar shared the benefits of IEEE membership with the members. It was finalized that Mr. Sandeep Kumar and Mr. Aman Jha will continue as the Branch Counselor and Branch Chair respectively. The other responsibilities were also given to various members. A general discussion was focused on how to manage the activities throughout the year.
2. The second meeting was held on 22.02.2017. The meeting was attended by all the branch members. The meeting was focused on the establishment of one Affinity Group (Women in Engineering) and one Technical Chapter (Robotics and Automation Society) under the IEEE Student Branch.
3. The third meeting was held on 23.03.2017. The meeting was attended by all the branch members. The interim Affinity Group (W.I.E) adviser Mr. Raunak Gupta congratulate the members for establishing the Women in Engineering Affinity Group. It was finalized that Mr. Raunak Gupta and Ms. Divyangi Aggarwal will continue as Affinity Group Adviser and Affinity Group Chair respectively. The other responsibilities were also given to various members. The discussion was focused on the planning of two days “Symposium on 3D Printing and Allied Technologies” during 21 – 22 April 2017. The event was convened by Mr. Raunak Gupta.
4. The fourth meeting was held on 10.06.2017. The meeting was attended by all the branch members. The interim Technical Chapter (R.A.S) adviser Mr. Raunak Gupta congratulate the members for establishing the Robotics and Automation Society Chapter. It was finalized that Mr. Raunak Gupta and Mr. Kaushik Karan will continue as Technical Chapter Adviser and Technical Chapter Chair respectively. The other responsibilities were also given to various members.
5. The fifth meeting was held on 22.07.2017. The meeting was attended by all the branch members. Mr. Sandeep Kumar handed over the responsibilities of Branch Counselor to Mr. Raunak Gupta in the meeting. The discussion was focused on the planning of two days event on Robotics in November. The event would be convened by Mr. Raunak Gupta.
6. The sixth meeting was held on 18.11.2017. The meeting was attended by all the branch members. The agenda of the meeting was the successful completion of the TEP – R Event. The discussion was focused on the next year membership drive and the planning of events. The event would be convened by Mr. Raunak Gupta.

## **Event Reports**

### **Symposium on 3D Printing and Allied Technologies**

IEEE Student Branch at Quantum School of Technology, Roorkee has organized a two days Symposium on 3D Printing and Allied Technologies as its debut event during 21<sup>st</sup> and 22<sup>nd</sup> April 2017. The inauguration of the symposium was done by Mr. Ajay Goyal (Chairman, Quantum Global Campus, Roorkee), Dr. S.C. Handa (Director General, Quantum Global Campus, Roorkee), Dr. Gulshan Chauhan (Director, Quantum School of Technology, Roorkee), Dr. Arun K. Lall (Professor, Deptt. of Mechanical Engineering, PEC University of Technology, Chandigarh) and Er. Ramnath Bhat (Engineer, Skyfi Education Labs Pvt. Ltd., Bengaluru) with the auspicious lamp lighting ceremony and the blessings of Mother Sarasvati, Goddess of Knowledge and Wisdom. Professor Dr. Arun K. Lall was the keynote speaker during the inaugural session.

In the start, Director General of the institute, Dr. S.C. Handa welcomed all the guests and delegates present in the symposium and aware them with the initiatives taken by the institute in the field of technical education followed by the introduction of IEEE Student Branch and the event by event convener Mr. Raunak Gupta. He insures that IEEE Student Branch will provide the best of opportunities to all the budding engineers, researchers and professors who are keen to garner information and explore in the field of R&D. The inaugural keynote speaker of the event Dr. Arun K. Lall presented his address on Product Development and Rapid Prototyping. He aware all the participants about the benefits of rapid prototyping and its associated techniques. He tells the participants about the various RP techniques such as Stereo Lithography, laminated Object Manufacturing, Selective Laser Sintering, Fused Deposition Modeling, Solid Ground Curing, 3D Printing and Laser Engineered Net Shaping. At the end of his speech he gives his best wishes to event organizers and the institute for the success of the event.

During the symposium Er. Ramnath Bhat makes the participants familiar with the technical and practical aspects of 3D printing. He had also printed few of the selected designs made by the participants during the symposium.

There were total 29 registered delegates for the symposium. After the symposium, an offline exam was conducted by the Skyfi Education Labs Pvt. Ltd., Bengaluru and on the basis of this exam they had provided the top 10 participants with distinction certificate.

At the end of the symposium, Director of the institute, Dr. Gulshan Chauhan presented vote of thanks to the management of the institute, event organizers, sponsors, dignitaries and all the delegates for the successful completion of the event. He also insured that IEEE student branch will also conduct many more events in the coming future related to the advancement of technology.

## **Event Reports**

### **IEEE Day Debate Competition**

IEEE Student Branch at Quantum School of Technology, Roorkee has organized a debate competition on theme “Are We Messing up with the Nature in the name of development” on the occasion of IEEE Day 2017 on October 6, 2017. Dr. Gulshan Chauhan (Director, Quantum School of Technology, Roorkee), Mr. Raunak Gupta (Branch Counselor, IEEE Student Branch, Quantum School of Technology, Roorkee), Mr. M. Kannan (Coordinator, Department of Mechanical and Mechatronics Engineering, Quantum School of Technology, Roorkee), Student Branch Members, Faculty and Students were present on this occasion.

In the beginning, Branch Counselor of IEEE Student Branch Mr. Raunak Gupta shared the importance of IEEE Day with the students. He told that, IEEE Day marks a very important event in the history of IEEE Community. It was celebrated for the first time in history when engineers worldwide and IEEE members gathered to share their technical ideas in 1884. IEEE Day’s theme is: “Leveraging Technology for a Better Tomorrow”. He also told that IEEE being the world’s largest professional organization provides the opportunity to connect all the like-minded members to make the world a better place. As an IEEE member, we must ensure to pave our path in creating technological solutions, which touches the lives of people. Mr. Aman Jha (Student, B.Tech in Mechatronics Engineering, III Yr.), Student Branch Chair shared the importance of IEEE Student Branch and its benefits among the students. He also shared the information about the upcoming events and activities being organized by IEEE and IEEE Student Branch among the students.

There were total 20 teams participated in the debate competition. Each team was having 2 members. There was a preliminary round held for all the 20 teams. After the preliminary round only 8 teams qualified for the final round of the event. The judges for the final round of the event was Mr. M. Kannan (Coordinator, Department of Mechanical and Mechatronics Engineering, Quantum School of Technology, Roorkee) and Mrs. Shivani (Expert, Personality Development and Soft Skills). All the 8 teams have shared their views in the favor / against on the theme of the debate. They were agreed that the development is the need of hour, but we should also care of the nature. The winner and runner up was awarded with the prizes and certificates. There was a surprise quiz and some gifts as well for the audience. After the debate, certificates were given to all the participants. The event was ended with the refreshment to all.

## **Event Reports**

### **Technology Enhancement Programme on Robotics (TEP – R)**

IEEE Student Branch at Quantum School of Technology, Roorkee has organized a two days Technology Enhancement Programme on Robotics (TEP – R) as its third event during 13th and 14th November 2017. The inauguration of the TEP – R was done by Dr. Gulshan Chauhan (Director, Quantum School of Technology, Roorkee), Er. M. S. Gupta (Dean Academics, Quantum School of Technology, Roorkee), Mr. Raunak Gupta (Branch Counselor, IEEE Student Branch), Mr. Mohd. Furqan Khan (Manager, KVCH, Noida) and Mr. Uma Shanker Yadav (Sr. Research Engineer, KVCH, Noida).

In the start, Mr. Raunak Gupta welcomed all the dignitaries and participants for the 2 days TEP – R. He told that this is the third event being organized by the IEEE Student Branch this year. He said that being the interdisciplinary field, robotics is having large number of applications in every walk of life like manufacturing, medical, aerospace and automotive industries etc. During the TEP – R, the participants learned the design, function and controlling of a basic robot.

Mr. Uma Shankar Yadav, Sr. Research Engineer from KVCH Noida told the participants about the components being used in making the robot. Students learned the robotics through the hands on practical session during TEP – R. They worked on various algorithms like Line Follower Robot, Edge Follower Robot etc. during TEP – R. During the last session of the TEP – R, A quiz was held to assess the knowledge of the participants and top 6 participants were given the Certificate of Merit.

At the end, Dr. Gulshan Chauhan, Director, Quantum School of Technology, presented the vote of thanks. He also insured that IEEE Student Branch will provide the best of opportunities to all the budding engineers, researchers and professors who are keen to garner information and explore in the field of R&D in the coming future.

There were total 31 registered participants for the TEP – R.

# Symposium on 3D Printing and Allied Technologies

(21<sup>st</sup> and 22<sup>nd</sup> April 2017)



Dignitaries on the Dias from Right to Left (Dr. S.C. Handa, Dr. Arun K. Lall, Mr. Ajay Goyal and Dr. Gulshan Chauhan)

Mr. Ajay Goyal, Chairman, Quantum Global Campus, presenting memento to Inaugural Keynote Speaker Dr. Arun K. Lall, Professor, Department of Mechanical Engineering, PEC University of Technology, Chandigarh



Inaugural Keynote Speaker, Dr. Arun K. Lall, Professor, Department of Mechanical Engineering, PEC University of Technology, Chandigarh, delivering the Keynote Address





# IEEE Day Debate Competition (06<sup>th</sup> October 2017)



Participants presenting their points on the theme of debate competition

Participant giving answer to question of audience



Judges presenting the certificates to the winners

# IEEE Day Debate Competition (06<sup>th</sup> October 2017)



Participants with the team of event and judges

# Technology Enhancement Programme on Robotics (TEP – R) (13<sup>th</sup> and 14<sup>th</sup> November 2017)



Er. M. S. Gupta (Dean Academics, QST, Roorkee) presenting bouquet to Mr. Uma Shanker Yadav (Sr. Research Engineer, KVCH, Noida)

Participants learning the skills of robotics during TEP – R



Participants along with the Event Team

## List of Present Members

S. No.	Member ID	Name of Member	Member Type	Designation
1	94144357	Dr. Gulshan Chauhan	Professional	Department Head
2	94144604	Mr. Raunak Gupta	Professional	Branch Counselor / R.A.S Chapter Advisor / W.I.E Affinity Group Advisor
3	94144684	Mr. Aman Jha	Student	Student Branch Chair
4	94145592	Mr. Himanshu Singh	Student	Student Member
5	94145554	Mr. Abhishek Shukla	Student	Student Member
6	93966455	Mr. Jatinder Singla	Student	Student Member
7	94144765	Mr. Kaushik Karan	Student	Technical Chapter (R.A.S) Chair
8	94144978	Mr. Prawin Jha	Student	Student Member
9	94145636	Mr. Faizy Ali	Student	Student Member
10	94144776	Mr. Atul Saini	Student	Student Member
11	94145667	Ms. Divyangi Aggarwal	Student	Affinity Group (W.I.E) Chair
12	94145649	Mr. Abhinandan Garg	Student	Student Member
13	94145634	Mr. Sourabh Mendoliya	Student	Student Member
14	94145627	Mr. Akarsh Pawar	Student	Student Member

## **Contact Details**

**Mr. Raunak Gupta**

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