

Fr. Conceicao Rodrigues College Of Engineering Bandstand, Bandra West





Episode 2 OVER THE COURSE

2020 FRAGMAG

Institute Innovation Council (IIC-FrCRCE)

Ranked 5th out of 159 colleges in the western region

TEAM ABADHA

All India Rank 5, out of 82 teams, at SAE BAJA 2020, held at Chandigarh and brought home the Winning Trophy for the "Marketing Presentation Event"

Team CRCE Formula Racing

Secured an overall rank of 25 amongst 90 participating teams in the Formula Bharat 2020 held at the Kari Motor speedway, Coimbatore.

Team Vaayushastra

Secured 9th position internationally among top ranked foreign universities, 9th in the design report stage and 10th in the Technical Presentation at the SAE Aero Design (East) competition in advanced class held at Lakeland, FL USA in March

2020.

Mr. Vedant Sahai (TE Computer)

Was a member of the team that won the 5th position at the Singapore-India Hackathon, held at IIT Madras in September 2019. The team won the 'Prize of Encouragement' award for idea with potential

Mr. Noronha Alden Anil (TE Electronics)

Won gold medal in the 110m hurdles at the Khelo India Youth Games 2019 at Pune. He also won gold medal (with a timing of 14.267sec) at the All India Inter-University Athletics Championship in Jan 2020.

Sumedh Deshpande, Karan Rao, Yashom Dighe, Christo Thomas, Yash Turkar (Maverick UAS team)

Received the Just Joe sportsmanship award (\$500.00) in 17th annual Student Unmanned Air Systems Competition held at Webster field ,St Inigoes, Maryland USA, 12 -15 June 2019. 43rd. rank out of 75 International teams under guidance of Dr. Sunil Surve. Competition Name : AUVSI SUAS 2019.

CRCE Football Team

1st in Inter College Football Tournament organized by KJ Somaiya Medical College and Research Centre.

Mr. Erhard Fernandes (TE PRODUCTION) was awarded as the Player of the

Tournament

CRCE University Badminton Team

Achieved the 5th rank in the University Badminton tournament held by the Mumbai University. The team consisted of Nirav Sthalekar (captain from BE Production), Amandeep Singh Saini, Saumeel Gabhare, Vedant Sahai, Joyston Maslamani and Chris Fernandez.

Saloni Khanna and Pranay Bagrecha

Won the First Place in Intercollegiate Debate competition organized by Xavier Institute of Engineering.

Mr. Dhruvil Mataliya

was selected to participate in the Asia Youth International Model United Nations at Putrajaya, Malaysia in August 2019

Nehal Kalnad, Ashley Lobo and Kartick Hariharan (Final Year)

Selected for Final round of Prestigious all India level coding Competition by ICPC foundation, 26-28 December 2019.

Pranay Lobo, Pranay Bagrecha and Sahil Gupta (Third year)

Secured First position at TSEC 36 Hours CodeStorm Hackathon on "Blockchain & Social Courses", 20-21 September 2019, project Firestation.

> Vedant Sahai, Elvis Dsouza, Pratik Chowdhury, Shubham Pednekar, Jason D'Costa and Arpita Isaac (Third Year)

won the Smart India Hackathon 2019 in the Complex category for problem id AK2 given by the Ministry of Civil Aviation conducted on the 03/03/19 at Sathyabama Institute of Science and Technology , Chennai.

Elvis Dsouza, Kevlyn Kadamala, Pratik Chowdhury and Vedant Sahai (Third Year) secured 4th place in 72 hour Symbiosis AI Hackathon held on 29 September 2019.

Pranay Bagrecha and Kevin Ruffin (Third Year) Secured 2nd position in Sardar Patel College Of Engineering Annual Debate held on 4th-5th October,2019

Jason D'costa, Elvis Dsouza, Princeton Baretto (Third Year) Won Best Documentation Award at ByteCamp '20 held at SIES Graduate School of Technology.

Darlene Nazareth, Elita Menezes, Kevlyn Kadamala and Sherwyn D'souza (Third Year)

Won First prize at VCET HACKATHON 2019 on 27th and 28th September at Vidyavardhini's College of Engineering and Technology, Mumbai.

Pranay Lobo, Pranay Bagrecha and Sahil Gupta (Third year)

Won the Most Innovative Idea award at Hackathon , St. John Engineering College, Palghar in January 2020

Princeton Baretto, Elvis Dsouza, Pratik Chowdury, Amurto Basu (Third year) Won Second Prize at Codeshastra 6.0 Hackathon March 8, DJ Sanghvi, Mumbai.

Mayank Srivastava, Pratik Chowdhury and Devin Barboza (Third year) Presented an idea to MHRD during an Ideathon to fight Covid-19 held on 27-28 March 2020

Darlene Nazareth, Elita Menezes, Sherwyn D'souza, Kevlyn Kadamala (Third year)

Won first prize in Cyber Security Hackathon on 31st Jan-1st Feb 2020 at SPIT, Mumbai

Mehek Male, Albin Tharayil, Sanfer Noronha and Mayank Srivastava (Third year) Won Second Prize; 1st Runner Up in TSEC-HACKS2020, 5-6 February, 2020

Shubham Pednekar & Hardik Trivedi

Won SPIT Capture-The-Flag 2020 Security Penetration Competition.

Pranay Bagrecha, Sahil Gupta, Pranay Lobo 1st Runners Up at RGIT Hackathon. 14-15 March, 2020

Madhvendra Singh from First Year

1.achieved 4th rank in inter university archery tournament held at thane2.won 2 (one personal one for team Maharashtra) gold medal at mayor cup national level archery tournament

Shaileshkumar Mishra

2nd prize in Coding Competition (M.H. Saboo Siddik College of engineering) 13th,16th and 19th April 2020

No HALL OF FAME

2

3

1

2

3

1

2

3

EXAMINATION FIRST YEAR RANK 1

STUDENT NAME

Biswas Simran Amit Mascarenhas Nisha Nitin Dabre Chelsea Moses

Sharma Tushant Prashaant Purav Advait Chetan Haldankar Priyam Rajiv

Kar Sumanto Ashim Kumar Yash Ramesh Dhingra Urvashi Vikram

Menezes Elita Elroy Kadamala Kevlyn Stanly Sahai Vedant Sanjeev

Machado Karen Felix Chendekar Tejas Prasad Tanwar Priya Narendra

Khatu Riddhesh Digambar Kale Gandhar Sudesh Chavan Anurag Satish

Sheikh Aman Ahesan Pal Ashishkumar Devidas Poddar Gautam D

SECOND YEAR (PRODUCTION)

SECOND YEAR (ELECTRONICS)

SECOND YEAR (COMPUTER)

SECOND YEAR (INFORMATION TECH)

> THIRD YEAR (PRODUCTION)

> THIRD YEAR (ELECTRONICS)

2

3

1

2

3

1

2

3

1

2

3

1

MALL OF FAME

1

2

3

3

1

2

2

1

1

2

1

2

3

1

2

3

1

2

3

THIRD YEAR (COMPUTER)

THIRD YEAR (INFORMATION TECH)

FINAL YEAR (PRODUCTION)

FINAL YEAR (ELECTRONICS)

FINAL YEAR (COMPUTER)

FINAL YEAR (INFORMATION TECH) Sakhardande Vedant A Checker Juhi Vipin Mathias Jenell Herald Payapilly Merlin Kuruvilla

> Dsouza Lerisha Janice J Dcosta Arlene Antony Singh Anuj Kumar

Kadam Shwet Milind Rodrigues Vanessa Cletus Dedhia Yash Ketan

Dsouza Austin Albert Chaudhari Rohan D Ranim Tanvi Suhas

Borkar Pradnya K Pulinthitta Marilyn M Gharat Anisha Milind

Rathod Vikramsingh K Shah Priyank Sanjay Shetty Suparna Sudhakar

MR. PARESH SHETTY

BATCH OF 1992/93 President Enterprise Biz Vodafone Idea Cellular Ltd

An interview with Mr. Paresh Shetty Alumnus of Fr.CRCE

1. How would you describe your journey through engineering at CRCE?

I had a very lovely journey at CRCE. I was very active in all the events; I would say I was good in studies but not excellent at it. Engineering was never the first thing that I wanted to get into. It was Medicine or Army. I cleared the NDA entrance exam but due to my eyesight I couldn't get through the medical interview. What was a sudden decision turned out to be the best because of the memories I made in CRCE. I would like to give due credits to my friends & to the faculty members. I was also the General Secretary of the Students' Council for two years and Sports Secretary for a year which meant I had several responsibilities. These responsibilities helped me learn several things which I don't think I would learn just through academics.

2. What, according to you, differentiates Engineers from the rest?

Engineers are always preferred over others primarily for their analytical thinking. The highly valued skill that is respected in every organisation is problem solving and the way one looks at it. Regardless of a Core Job or a Non-Core Job description, the most important task is to find a solution to the problem at hand and map a way to efficiently execute it. The way we Engineers look at a problem and find a solution to it is what differentiates us from others.

3. What qualities of yours did you catalyse during your college days or at the start of your career to be who you are today?

I am currently heading the Vodafone- Idea Enterprise business.

I was always an analytical thinker. I liked creating and innovating right from my college days. During engineering, I always lead a team when it comes to the planning and execution of an event. This helped me to develop my management skills and that helped to build the leader in me. I can proudly say that it is due to these things that I have been in a leadership role for over 14 years now.

A mixture of both, the Engineering knowledge and the management skills, were the qualities I catalysed to be who am I today.

4. Do you miss CRCE? Could you share a few special moments that made Engineering at CRCE a memorable experience?

CRCE has a very special place in my heart. Whatever I am today is because of CRCE. Whenever I get an opportunity to contribute back, I love to! When I was in the Fourth year of my engineering that's when the Principal suggested an idea of starting an Alumni Chapter in the college. We started off from that year and I am so ecstatic to share with you that since then I have not missed a single Alumni Meet except once when I was in Malaysia on a very important project. CRCE was, is and will always be special to me.

5. What motivates you? What makes you go?

I've been a self-Motivator most of the time. I set goals for myself and try to achieve them. My Wife & my kids too are a reason for my motivation. One thing an individual learns with time is that you must be your own Motivator and your own critic. Appreciate yourself if you feel you have achieved something, find the reason why you couldn't achieve something.

One must also understand the importance of "self-zone", try to find the reasons that keep you happy. For me it's sports that help me to rejuvenate. I love sports and I occupy myself in multiple sports. To reduce one stress, you have to take up another one. The biggest way of destressing is to take up a new stress.

6 What message or advice would you like to convey to the students currently studying at CRCE?

An all-round development is what every student must focus on. Do not miss a single opportunity that you get in CRCE because you won't get them so easily in the Corporate World. Yes, they are available outside but they come with a price. Students must keep themselves open to the numerous fields and domains. It's of the utmost importance to stay updated on the latest Technological Advancements. Trends are changing every 4-5 years and soon they will change even faster. One should be able to adapt based on the changing trends. Align yourselves on the different interest areas and make sure you ace it.

When it comes to organisations, the ones with high digital power will survive. Digital Power will be the amalgamation of 4 main things. Technology, Big Data, Artificial Intelligence, Internet of Things. Knowing these well or even having a gist of them will keep you a step ahead of others. Knowing the new trends is very important and thereby having a positive attitude towards these trends is also very important. If you wish to make it big in life then you must be willing to Learn, Unlearn & Relearn.

Cultural Report

"Teamwork is the ability to work together towards a common vision, the ability to direct individual accomplishments towards organizational objectives. It is the fuel that allows common people to attain uncommon results."

The Students' Council of Fr.CRCE for the year 2019-20 came into being on the 1st May 2019. A council fuelled full of diverse ideas and qualities. The year began even before the academic year started with a relaxing event 'Yoga Day' celebrated on 21st June 2019, as an attempt to cultivate discernment, awareness, self-regulation and higher consciousness in the students, to train their body and mind to self-observe.

Our next event was the Friendship Day that was held on 9th August 2019 with the release of the theme: VILLAINS, because who are villains if not our best friends. This event was intended to give students a stress-free evening away from studies and placements with friends and have a jolly time.

Then followed our flagship and most sought after event in all of India's debating circles, The Conceicao Rodrigues Memorial Debate, CRMD. The theme for the year Ideologies: Egocentrism Engendering Self Abatement was one of the most engaging themes we've had throughout the history of the competition. Thirty-two teams from various parts of the nation battled for the prestigious trophy with the debating prowess. We all take pride in how successful the event turned out to be.

Euphoria began with a storm; we had a website euphoria2020.stucocrce.com developed by our own Web-Master Sakshi Ghadigaonkar. An android app to stay up to date with all events and their intricacies too was also developed by a team led by Darlene Nazreth from TE Computers.

The most awaited festival of fun, music, drama and dance, EUPHORIA 2020, runs across three spirited and fun-filled days (or more) and has drawn a large number of participants from the city. The Cultural Festival is a great mix of events ranging from literary to performing arts, from creative to sports challenges. It is a mix of inter and intra collegiate events wherein the students of our college showcase their skills in the quest of winning the Cultural Trophy.

Students' Council Proudly Presented the Theme for EUPHORIA 2020:

Avatāra.

To Be or Not To Be Is The Question ¿

The theme refers to everyone who has different ideas, imaginations and expressions. Your Astitva. And also Every Artist Urges and Dreams of The Ultimate Stage, EUPHORIA!

Riya Gupta Cultural Secretary Students' Council CRCE

 \bigcirc

Cultural Report

Students' Council of FR. CRCE proudly presented a brand new intercollegiate event Junoon, where those who have skills to use chords and notes to express their emotions competed against each other to be the best. This was followed by Paridhaan the intercollegiate dance competition, where eight teams gave a cut-throat battle to bag the grand prize.

We also had intra collegiate events, Project Runway: The Fashion Show on 18th February where the divas and hunks of our college walked down the ramp to the theme: Avatara as they channelized their inner supermodels, and the most awaited event was The Intra Collegiate Dance Competition held on 20th February where the vivacious dancers set the floor on fire with their energetic performances, dancing their way to the Cultural Trophy. The drama club showcased a play along with the College Band performance which was followed by the prize distribution. BE IT won the best dance, best fashion show and were declared the overall winners of the cultural fest.

Although academics are important, it doesn't hurt once in a while to go out and have fun and discover new things and learn outside the classroom. I would like to thank Rev. Fr.Valerian D'Souza, Dr.Srija Unnikrishnan, Dr.Deepak V. Bhoir, the entire staff, faculty and every member from the Students' council and all the students of CRCE for their endless support and enthusiasm for making this year successful and memorable.

Signing Off...

Riya Gupta Cultural Secretary Students' Council CRCE

Sports Report

Talent wins games, but teamwork and intelligence win championships.

The sports year 2019 kick-started in July 2019 with the most awaited Intra Ground Football Tournament. The six-day tournament concluded with BE Production bagging the 1st place and BE Electronics, TE Computers claiming 2nd and 3rd places respectively.

In August 2019 our next event was the Intra Badminton tournament which took place at Andheri sports complex. The Month of September saw the table tennis enthusiasts battling it out at our third intra event. With TE Computers, BE Production and BE IT capturing the first, second and third position from the boys as well as BE IT, BE Electronics and BE Production winning in the girl's category. With these 3 intra events, our odd semester came to an end and the new semester was awaiting for many more exciting events that we planned to offer to students both, from our college and from outside. Months of hardwork and Meticulous planning for our annual Sports festival ATHLOS was underway. Our sports fest involved various sports like Throwball, basketball, ground football, rink football as well as numerous indoor games like Table Tennis, Chess and Carrom. From inviting over 30 colleges to participate in organizing these numerous events at different locations, Athlos was a complete and grand success.

Along with this, the even semester had various Intra events in store for our students. We organized various events in the month of January. Rink Football and Throwball events in the girl's category. Carrom in both the girl's as well as the boy's category. More importantly, after four years, we organized the intra cricket tournament which went on for over a span of 6 days. The zeal and teamwork shown by our students gave us our winners TE Electronics, BE Production and TE Production. Sports Day was conducted on 1st February at the famous Mumbai University Ground. The event commenced with various athletic events, Relay races, Shot putt and the Tug of War. With our final two events intra-Basketball and Intra-Volleyball, our sports year finally concluded. Participation in sports was always aimed at bringing numerous benefits for participants. The enthusiasm and dedication that went in not just organizing an event but also for the students to thoroughly enjoy the event giving a fair chance to each class to battle it out for the coveted Sports Trophy proved to be the most challenging. But with countless suggestions from the students and the endless support given to us during the time of preparations, every event concluded smoothly.

Sincere thanks to our dean of students' affairs, Dr. Deepak Bhoir and sports in charges Prof. Prasad Lalit and Dr. Dipak Bauskar for constantly supporting us. Special thanks to our Students' Council for working tirelessly day in and day out to make all our events a successful one. We, your sports secretaries Surya Pratap and Simran D'souza for the year 2019-2020 are signing off with earnest gratitude to each and every one of you who made the sports tenure a triumphant one.

Simran D'Souza Sports Secretary Students' Council CRCE Surya Pratap Shahi Sports Secretary Students' Council CRCE

Technical Report

"Technology works best when it brings people together." social distancing, please.

On 31st August 2019, the first major tech event, "Synergy Hackathon" was held. Hackathon's give Student developers an opportunity to come together, work collaboratively, tackle problems, and compete for fame and glory. The primary goal of this event was to raise awareness of technical talent and foster a competitive, yet cooperative, and congenial culture for talented individuals. It also allowed participants to connect with Industry personnel's, faculty mentors, and most importantly, with each other.

Problem statements ranged from an app (chatbot for college and parents interaction, healthcare for patients) to aid Machine learning to solve real life problems like skin disease detection, fake news prediction, and food classification for a healthy diet. Judges scored solutions' creativity, technical depth, challenge of doing the task in a short amount of time, and usefulness in the real world.

With 32 teams participating, we saw incredible competition amongst students to win the coveted prizes and everyone went home with a steep uphill climb on a rigorous learning curve.

Commencement of the even semester saw the college invite applications for the much anticipated Smart India Hackathon shortlisting process. This internal hackathon aimed to motivate teams to work on the prototype of their solutions for problem statements picked off the SIH website. The hackathon concluded with top 5 teams post judging rounds that got through to the next selection rounds for SIH 2020.

The climax of the academic year was all set to take place with the Technical Festival, Crescendo 2020. With the hit events from previous years, and new additions this year, Crescendo was going to be a grand affair where the strongest technical minds from all over the city come and compete for the much sought after Crescendo Best Technical Class Trophy and Best Contingent Trophy.

Right from Hack-athon, to Mech-athon, to Hog-athon, this year, Crescendo had it all. Keeping up with the times, this edition also saw the release of the Crescendo application with an integrated payment gateway to support all online/UPI payments making the event, registration, participation and point calculation a completely cashless and automated affair. A referral system put in place this year also aimed to boost participation amongst students.

Crescendo this year, like always, was to live up to its name and draw curtains to the year at the epitome of affairs.

Update: Crescendo 2020 was rescinded to contain the COVID-19 outbreak.

Absolutely gutted to see our technical fest not getting executed. The Council and Crescendo Team had worked really hard to put everything in order. Nevertheless, I see my juniors fervently learning and implementing technologies, that is my marker for knowing we are headed in the right direction. That's my cue to hand over the baton.

Signing off,

Pranay Bagrecha Technical Secretary Students' Council CRCE

Debate Report

Fr.CRCE hosted its Flagship event on the 27-28th of September 2019. The 21st edition of the annual National level Conceicao Rodrigues Memorial Debate 2019 fondly called as CRMD.

The theme for this year was

Ideologies: Egocentrism Engendering Self Abatement.

CRMD is an Oxford-style debate competition. It is lauded by people who have witnessed it. Teams from across India eagerly wait to bag the Prestigious Trophy with their debating prowess. Like always this year too, we witnessed 32 teams battling for the Grand prize. Teams from Hyderabad, Goa, Pune & Mumbai, battled hard through the league rounds to secure their position in the quarter-finals.

Dr. Meeran Chadha Borwankar (Ex. IPS Officer) was the chief guest for the inaugural ceremony on the 27th of September. She enlightened the audience with her thought-provoking ideas. She delightedly shared her debating experiences with everyone. One such experience was when she won a debate competition with her partner who is now the Chief Election Commissioner of India.

Our Judges included experts from the field of Communication, Education, & from the corporate world. An Adjudicator plays a vital role. Their valuable feedback post the debate helps the teams to analyse their mistakes and the areas of improvement. Our adjudicators judiciously noted down all the points they thought the participating teams should consider before moving for the next round. The top 8 teams battled their way in quarters. Four teams proved their debating skills and secured a position in the semi-finals. Following was the panel for the semi-final round:Mr Ganesh Dalvi, an expert in operations training, Mrs Anu Malla, a consultant and corporate trainer, Mrs. Deepa Panakkal, an assistant professor for communication skills at the St. Francis Institute of Technology, Mumbai.

The semi-final rounds saw the finest debates of this edition; however, in a debate, it's just the two teams having the strongest points & arguments that make it to the finals. After hours of meticulous planning on the motions, the following motion was selected for the Finale. "This House prefers a world where the conception of the afterlife is based on karmic balance, rather than divine mercy"

Mr Milind Wagle was the chief guest for the Finals of CRMD' 19. Mr Milind Wagle has been a commentator since 1975. He has been a commentator for five cricket world cups, 6 Olympic Games, 8 common-wealth and Asian games and 25 Olympic sports events.

> Ruben Lobo Editorial Secretary Students' Council CRCE

Debate Report

Following were the Judges for the Finals of CRMD' 19:

Mr Jagjyot Singh, a name synonymous to Fr. CRCE is an Entrepreneur and a debater himself. He won the best speaker award from 2006-2009 in CRMD even bagging the prestigious CRMD trophy from 2006-2008. Mr Surajit Pal is a successful writer and a rank holder at the Pharma Asiamoney. Mrs Sakshi Chandraakar is the founder of Finesse, an image enhancement and skills enrichment academy.

Both teams gave a cut-throat competition. Side Opposition, Team CMD17 (Sardar Patel Institute of Technology) won the prestigious CRMD Trophy of 2019. Side Proposition, Team CMD32 (Mithibai College) were declared as the runners-up for CRMD'19. Mr Azain Jaffer received the best Speaker award, and Mr Purav Bharadwaj received the best Adjudicator award.

I want to extend my sincere gratitude to our Local Superior Rev.Fr. Peter D'Souza, Director Rev.Fr. Valerian D'Souza, Principal Dr Srija Unnikrishnan for all the love and support my team and I received pre and post the event.I cannot forget the pillars behind this year's grand success starting from Prof Supriya Kamoji and Prof Garima Tripathi, whose leadership made this year's edition the one to never forget! I would also like to thank, Dr Deepak Bhoir (Dean of Student Affairs) who made sure that the event is perfectly executed, to Prof Sundary Prabavathy, who helped us to conceptualize this year's edition based on her vast experience from previous CRMD's and to Prof. Khushbu Trehan, for brainstorming this year's theme and for recommending some of the best personalities as our esteemed judges. Finally I would like to appreciate the entire Students' Council for they were the ones who made sure the show runs without a single error. I thank each and every one of you from the bottom of my heart.

Finally, a big thank you to all the helping hands, without them, CRMD would not have been possible. While I sign off, all I want to tell you is that CRMD 2019 will always be this one Special Event in my life. After all I had the best team one can ever ask for.

> Ruben Lobo Editorial Secretary Students' Council CRCE



PR Report

When the year started, I was told by one of my seniors that my job would never go the way it has to. I will always have last-minute glitches, participants and teams backing out at the last minute and yet, I had to keep the show going.

Keeping these things in mind, I began my year as the Public Relations Head. I was given an overview of how my year would look like. The year started with the Induction Ceremony of the Students' Council, followed by Yoga Day 2019. Synergy, a fundraising event for all Councils, Clubs, and Teams was held in August 2019, followed by Friendship day 2019 which saw all the classes' battle out for points. The most prestigious Fr. Conceicao Rodrigues Memorial Debate took place on 27th and 28th September which witnessed 32 colleges from all over India. With this, all the events for our odd semester ended with huge success!

The even semester kick-started with the Alumni meet which saw an overwhelming participation this year. Our Inter-collegiate sports festival, Athlos 2020, was next on the list. This festival saw several sports events organized at different venues and witnessed colleges from all across Mumbai displaying their sportsmanship. Euphoria 2020, our annual cultural festival was held from 17th to 20th February 2020 and saw intra and inter-college events. Paridhan, our inter-college dance competition, and Junoon, our intercollege band competition witnessed colleges from all over Mumbai battle it out for the grand prize. The efforts put in by the council, and the FE volunteers were commendable and highly appreciated by the students as well as the faculty.

I find it very necessary to mention the fact of how great of an opportunity it is to be a part of the Students' Council of our college. The small things that fell under my duties, like circulating an important message to the class representatives, to resolving issues between the students, to taking calls and resolving the queries of external students. The days and nights invested in meeting the requirements of planning a festival. From the micro to macro planning of a fest developed a sense of responsibility in me. It taught me how to make quick, wise decisions, build my confidence and improve my patience. All of this would not have been possible without the guidance and support shown by our mentor and the dean of Students' Affairs, Dr. Bhoir, the confidence shown by our principal, Dr.Srija Unnikrishnan and the co-operation shown by all faculty members that stood as pillars for us throughout the year.

I am extremely thankful to all the faculty members that have shown faith in me and given me this fantastic opportunity that taught me things that no syllabus could and left me with so many unforgettable memories.

Rozebud Gonzalves PR Head Students' Council CRCE

ALUMNI Report

The Alumni Committee of Fr. Conceicao Rodrigues College of Engineering (Fr. CRCE) functions to strengthen the bond between the Institute and its Alumni. A strong Alumni base is one of the formidable strengths for any elite institute. Thereby, the Committee acts as a platform where the existing students and the Alumni can interact for a healthy and mutually beneficial relationship. Our prime objective is to foster relations between the Alumni and the Institute and strengthen the bond between Alumni and current students.

The Committee organizes various events such as the Annual Alumni Meet and interaction programs to keep the Alumni in constant touch with the institute and also help them in networking among themselves. The Committee also tracks and highlights the achievements and success of Alumni so as to provide impetus to the Institute and its students. Moreover, the committee acts as facilitator and provides administrative help to the Alumni.

EVENTS AND CONTRIBUTIONS

The Alumni Meet:

The Annual Alumni Meet was held on 4th January, 2020. The event was graced by many of our Alumni, ranging from various batches and parts of the country as well as from abroad. This year we also felicitated our Silver Jubilee Production and Electronics graduation batches of year 1994. We were greatly honoured to have the presence of many senior Alumni and senior professors during this event. Participation of younger Alumni has always been astonishing. The mood of the event was raised by amazing performances of the Alumni.

Alumni Contributions (Non financial):

Every year, the Association plans for various activities under which Alumni interact with students to share their knowledge and experience. Under this initiative, from last year we started the 'Alumni Speak-up Program' which has improved the students' interaction with our Alumni. This year too, under this program we saw many Alumni contributing through this program.

Our institute also involves the Alumni in various decision-making activities as members of the Department Advisory Board (DAB), Internal Quality Assurance Cell (IQAC) and Unnat Bharat Abhiyan (UBA). They equally participate in various technical and non technical events in the year. Mr. Mohan Cheroor, Batch 1988, (Production Engineering) was the Guest of Honour for the Fr Conceicao Rodrigues Memorial Debate (CRMD) and Mr. Zubin Dalal , Batch 1997(Computer Engineering) was the Guest of Honour during the College Cultural festival, Euphoria 2020. Ms. Suchitra Pilliai((Bollywood actress), Batch 2001(Electronics Engineering) captivated the crowd with her motivational speech during the salon event organized by TEDx. Mr. Prajakta Thakur, Batch 2005(Information Technology)and Mr. Ashwin Prabhu, Batch 2002(Electronics Engineering) guided our students in Hackathon competitions.

Alumni Committee Initiatives:

The Alumni Committee arranges for yearly donations towards the student project groups participating in various National/ International competitions. The Association also provided financial assistance of 1.5 Lakhs for procurement of sports equipment and

> Prof. Prachi Patil Secretary Fr.CRCE Alumni Association



ALUMNI Report

refurbishment of Students gymkhana, Boy's Common room and Girl's common room as contribution towards facility development for students. The gymkhana was inaugurated during the Alumni meet by Director Rev. Father Valerian D'Souza ,our Principal Dr. Srija Unnikrishnan, former Principal Dr. Sesha Iyer and Alumni present on the day.

Financial support from various Alumni:

It gives us immense pleasure to mention that this year like the last Mr. Suresh Balakrishnan, Production Batch 1995, gave a scholarship of Rs.5 Lakhs to meritorious students through his foundation. Our sincere thanks to the entire Production batch of 1994 who donated around Rs.1.35Lakhs towards facility development in our institute.

Our sincere thanks to our dear Alumni for their lasting support (Year 2019-20):

Thanks to Mr. Mohak Gogri (Batch- 2013), Mr. Ruben Montario(Batch-2017), Mr. Ashutosh Rao, Ms. Ipsita Bhattacharya (Batch- 2014) and Ms. Meryl Martis(Batch- 2017) our Alumni from Computers, Mr. Kartik Gandikota (Batch-2016) and Ms. Kadambari Saxena(Batch-2014) our Alumni from Information Technology, Mr. Parag Doshi (Batch-1992) and Mr. Jay Shah(Batch- 2008) our Alumni from Electronicsand Mr. Rajendra Gangan ,Alumni from Production department for being part of Department Advisory Board.

Thanks to Mr.Mohan Cheroor and Mr. Zubin Dalal for their presence in CRMD and Euphoria. Thanks to Mr. Pavan Sawant, Production batch 1994 for helping and encouraging us in Unnat Bharat Abhiyan Initiative. Thanks to Mr. Farhan Shaikh, Electronics -Batch 2011, Mr. Kushan Sen and Mr. Gaurav Sen, Computer Engineering -Batch 2014, Mr. Aditya Joshi, Production -Batch 2009 and Mr.Abhishek Kateliya, Computer Engineering-Batch 2018 for your enthusiastic participation in Alumni Speak-up program. A heartfelt thanks to various Alumni for extending help towards technical and non-technical teams in college.

Our sincere urge:

We request all our Alumni to connect us on frcrce.almaconnect.com and help us grow the CRCE network. We also request our students to join Almaconnect to reach Alumni for support/mentorships.



Prof. Prachi Patil Secretary Fr.CRCE Alumni Association

ICAC3 Report

The International Conference in Computing, Communication and Control (ICAC3) is a Biennial Conference organized by Fr. Conceicao Rodrigues College of Engineering, Bandra, Mumbai, India. The Sixth Edition of the Conference was conducted on December 20-21,2019. The previous five editions of the conference were organized in January 2009(In cooperation with Association for Computing Machinery (ACM), January 2011 (Springer), January 2013 (Springer), April 2015 (published in Procedia Computer Science and uploaded on Science Direct) and December 2017(IEEE) respectively. ICAC3 is a multidisciplinary conference whose primary goal is to promote research and development activities in Computing, Communication and Control in India and the rest of the world. The conference also aims to offer a collaborative platform for the people in Academics, Research and Industry to address emerging issues and solutions in the above-mentioned areas. Around 160 papers were received, of which 88 papers were selected and presented at ICAC3-2019. The papers spanned from areas like Artificial Intelligence and Machine learning to Control systems. All the accepted and presented papers will be published in the IEEE Xplore Digital Library.

The conference began with an Inaugural ceremony which was graced by Chief Guest, Mr George Menezes, Chief Operating Officer, Godrej Electricals, Guest of Honor, Dr S.V. Kulkarni, Professor, IITB, Director Rev. Fr. Valerian D'Souza and Principal Dr.Srija Unnikrishnan. This was followed by a well-delivered and informative Keynote Address by Dr. Shravan Hanasoge, TIFR on "The exciting applications of machine learning in science". The address was well appreciated by the audience consisting of delegates, faculty and students. Post-lunch, the paper presentations commenced in three venues. Each session was chaired by 2 session chairs who were chosen according to their area of expertise.



Dr. Sapna Prabhu Program Chair ICAC3 2019

ICAC3 Report

The conference saw delegates, both National and International, enthusiastically present their results and having interesting question-answer sessions both with the session chairs as well as other fellow delegates. Day two of the conference also had multiple sessions spread across multiple parallel venues. Presentations using Skype were facilitated to some delegates.

The conference received a grant from AICTE and had sponsors like College Pond Educational Consultants and Around the Globe Holiday. Three best paper awards were announced at the end of Day 2 after consolidating the points awarded to papers by the session chairs.Mr Gaurav Patel from NIT, Raipur received the best paper award (First Position) while Christo Thomas from Fr. CRCE, Mumbai won the second prize. The three positions were shared by Mr Sanjeev Ghosh, Fr. CRCE and Mr Misbah Khan from Fr.Conceicao Rodrigues Institute of Technology, Mumbai. Certificates and cash prizes were given away to the winners.

In conclusion, ICAC3-2019 was conducted successfully, retaining the stringent selection ratio to present quality work and managed to hold brainstorming sessions to contribute to the field of Research.



Dr. Sapna Prabhu Program Chair ICAC3 2019

IIC Report

Ministry of Human Resource Development (MHRD), Govt. of India has established 'MHRD's Innovation Cell (MIC)' at AICTE to systematically foster the culture of Innovation amongst all Higher Education Institutions (HEIs). MIC has envisioned encouraging creation of 'Institution's Innovation Council (IICs)' across selected HEIs. The primary mandate of IIC is to encourage, inspire and nurture young students by supporting them to work with new ideas and transform them into prototypes while they are in formative years.

IIC-FrCRCE was established in November 2018 with objectives to

- Create a vibrant local innovation ecosystem.
- Support Start-up Mechanism in HEIs.
- Prepare institute for Atal Ranking of Institutions on Innovation Achievements.
- Establish Function Ecosystem for Scouting Ideas and Pre-incubation of Ideas.
- Develop better Cognitive Ability for Technology Students.

IIC-FrCRCE is an interface between MIC and Fr. CRCE to showcase various activities conducted within the institute. MIC ranked us 5th in Western Region with Four Star certificate in the academic year 2018-19.





The second version IIC2.0-FrCRCE initiated various innovation, start-up, entrepreneurship related activities such as Workshops, Industrial Visits, Seminars, Hackathons, Idea Competition, Mini Challenges, Innovation day celebrations, success stories and interactions with professionals, Science day celebrations in the college in association with various existing student councils in the academic year 2019-20.

- 1. My Story Entrepreneur's Life and Crossroads Motivational Speak: Mr. Tejas Suma Shyam, Founder - The Education Journey and Corporate Consultant.
- 2. Field Visit to MICA: aimed at exposing students with industry standard systems to understand skill-sets required today.
- 3. One Day Workshop On Problem Solving/Design thinking/Ideation Workshop: by IIT Mumbai Trainer mainly for IOT based projects.

Prof. Swati Ringe President IIC2.0-FrCRCE

IIC Report

- 4. Entrepreneurship and Innovation as Career Opportunity: A seminar organized to motivate students to think, plan and start their journey towards a successful Entrepreneurial life through innovation.
- 5. AI Campus Hackathon: initiated by Mozilla Students worked on AI problem statements to get innovative solutions.
- 6. Idea Validation, Business Opportunity Identification and Business Model Development: A seminar to explain students how to move forward with a business idea in order to convert it into a business.
- 7. Software Design Workshop: in association with CSI by Mr. Prajish Prasad Doctoral Research Scholar, IIT Bombay
- 8. Product Development Phases (Story Telling) in association with ACM by Mr. Ayush Jain, Director, UtopiaTech Pvt. Ltd.
- 9. Workshop on Product Design and Design Thinking: in association with E-Cell by Dr. Y. D. Venkatesh, Principal St. Xavier's Institute of Technology
- 10. Demo-Day Exhibition cum Demo for POCs & Mentorship Session for Innovator
- 11. Workshop on Firebase: self initiated by CSI
- 12. Field Activity on Waste Management for village: self initiated by NSS
- 13. Workshop on Advanced Deep Learning: in association with leadingIndia.ai initiated by Computer Department.
- 14. International Conference on Advances in Computing, Control and Communication
- 15. Workshop on Business Model Canvas (BMC) to Invite Innovative Business Models from Students: by Prof Prof. Hirtendra Vaishnav in association with SAE.
- 16. Awareness Session on IPR & IP Management for Innovation and Start-ups by Dr. Bhushan Patil in association with CSI.
- 17.SIH Internal Hackathon: in association with ACM to shortlist the teams which would be sent for Smart India Hackathon.
- 18. Innovation Day Celebration: All the Councils of the college organized innovative activities and top 3 innovative activities were given certificates.
- 19. Idea Competition: in association with E-Cell where students encouraged to present their innovative ideas.
- 20.Experiences Women in entrepreneurship: Celebration on women's day with WIE

We participated in Leadership Talk Series and 17 online sessions as an e-activity on various themes of Innovation, IPR and Entrepreneurship and Startup organized by IIC-MIC (21st April-22 May 2020) during lockdown period.

Prof. Swati Ringe President IIC2.0-FrCRCE

Industrial Visit Report

The much-awaited annual industrial visit of Fr. Conceicao Rodrigues College of Engineering, Mumbai took place with a centralized conglomerate of staff & students to Chandigarh, Shimla & Manali from the 27th December 2019 to 4th January 2020 with proposed industrial visit sites scheduled at Rajiv Gandhi Information Technology (IT) Park at Chandigarh, Micro Turners Group at Baddi, (Himachal Pradesh) & Jay Bee Transformers at Panchkula (Haryana). The industrial visit was organized by the technical councils of the college viz. IEEE-WIE, SAE, ACM & CSI who handled every detail. Right from the planning to execution. Leading the group were students Ricky Stanley of BE (Electronics Engineering), Akshay Dixit of TE (Production Engineering) & Sahil Gupta of TE (Computer Engineering). The complete arrangement of the tour was outsourced by the Students' council to Mr Nitish Parab of 'Around the Globe (ATG)' holidays who accompanied the group along with four of his associates.

A total of 145 students, mainly comprising second year, third year & final year engineering from all four branches viz. electronics, production, computer & information technology were accompanied by Dr. Brijmohan S. Daga (Professor & Head, Computer Engineering Department), Dr. Nilesh M. Patil (Assistant Professor, Information Technology), Prof. Unik B. Lokhande (Assistant Professor, Information Technology), Prof. Unik B. Lokhande (Assistant Professor, Information Technology), Prof. S. Kamoji (Assistant Professor, Computer Engineering), Prof (Mrs.) Dipali Y. Koshti (Assistant Professor, Computer Engineering), Prof Jayen Modi (Assistant Professor, Electronics Engineering) and Mr. Yogesh Chavan (Non-teaching staff).

Usually, the underlying objective of any industrial visit is for students to gather a first-hand experience of how the professional working methodology, various industrial processes, machinery & other related equipment are in place so that once they enter into the professional field, after the completion of their respective courses, so these industrial tours are an effort to bridge this gap of practical exposure.



Prof. Jayen Modi Assistant Professor Electronics Engineering

Industrial Visit Report

In view of these objectives, the following companies were visited during this industrial visit.

1. Visions Software Pvt. Ltd. (Chandigarh), a specialist in web design & development, customized standalone software development as well as Mobile Applications.

2. Auscan Academy of Information Technology (Chandigarh), one of the most reputed groups for technological education and research in Chandigarh. The company is into following services: Telecom Network Integration, Mechanical Engineering Solutions, Software Engineering Solutions, and Embedded & Automation Solutions.

3. Micro Turner Group, Baddi (Himachal Pradesh), one of the largest integrated automotive component manufacturers in India mainly involved in manufacturing of Transmission Gear Train Assembly, Kick Start Mechanism, Gear Shifting Towers & Forks, Sprockets, Ratchets, Pinions, Special Engine Fasteners, Different shafts, Bearing Races & Rings, Chassis Assembly, Fabricated Frames, Muffler Assembly, Swing Arms, Axles, Precision Ground Bushes and Special Turned Components.

4. Aar Kay Shawl Industries, Bhuntar – Kullu (Himachal Pradesh), involved in traditional shawl making & other garments manufacturing using simple automated machines & processes.

The students took back home a bunch of memories from the Industrial Visit. I would like to take this opportunity to thank the organizing committee on the success of the industrial visit.



Prof. Jayen Modi Assistant Professor Electronics Engineering

ABADHA CRCE Report

The name, Abadha, literally translating to "unbound", embodies the spirit of the team and its creation. Team Abadha builds a One-Manned All-Terrain Vehicle which is capable of keeping its ground in the roughest of terrain and the most challenging conditions, truly doing justice to its name. Each and every bit of the vehicle is designed, analysed, manufactured and tested on performance-based criteria by the engineering students themselves. The buggy built can be viewed as the closest approximation as well as an extreme adaptation of the actual automobile model in use currently.

Team Abadha CRCE participates in one of the largest annual under-graduate level technical competitions named BAJA SAE INDIA in which a large number of elite colleges compete. The buggy built by the team perfectly blends in seamless suspension systems with the powerful transmission which transforms a comparatively modest Briggs & Stratton Engine into a beast. Team Abadha CRCE, founded under the guidance of Prof. D.S.S. Sudhakar in 2012, and propelled to the rise by our faculty advisors, Prof. Hitendra Vaishnav and Prof. M.V.B. Rao as well as all the faculty members of the college, became the first technical team to represent Fr. CRCE at the national level as a pioneer of encouraging students to practically apply the knowledge acquired through the course of four academic years.

Back in the year 2015, the team participated in the International Series of Karting and won the BEST MANUFACTURING AWARD in its first attempt at that competition. In the year 2019, Team Abadha CRCE was able to secure an overall rank of 35th and 2nd in Mumbai in the same competition held in NATRAX, Pithampur. One of the most commendable achievements was that the year's buggy was the lightest, coming down from 480kgs in 2012 to 140kgs in 2019. However, the team brought real glory to the college in the year 2020, when they secured a thumping podium finish bagging an All India Rank FIFTH and bringing home the Winning Trophy for the "Marketing Presentation Event". In spite of being the smallest team at the competition member wise, the team managed to outclass the rest of the teams with their skill and determination and came out with flying colours in other events too:

> 4-hour Endurance Race: 8th Engineering Design: 4th Acceleration: 5th Cost Report: 12th Sledge Pull: 12th

Team Abadha CRCE will always strive to build the best All-Terrain Vehicle by putting into practice the practical knowledge the team has been bestowed with from the faculty advisors as well as our seniors. Next year we see ourselves once again, making it to the podium by securing the FIRST RANK. We look forward to your continuous support and encouragement.



Sharvil Khot Team Captain

CFR CRCE Report

Team CRCE Formula Racing is a formula student team of 35 students from Fr. Conceicao Rodrigues College of Engineering, Bandra which builds a Formula Student (FS) race car and participates in various Formula Student events held across India.

Team CFR started with the design phase of its latest Formula Student car, 'GODSPEED 2.0' in March 2019, followed by the manufacturing phase in July and the testing phase in December 2019. All parts of the car are designed, procured and manufactured by the team members itself. The team is expected to stick to a strict schedule throughout the making of their vehicle, the schedule for which is laid down by the competition officials. With about 90 participating teams, Time is a crucial element at the competition; and once again this year the team was prompt in following this schedule due to which the team was upgraded to a 'Tier 1' team. A 'tier 1' team over a 'tier 2' team benefits considerably by getting preference in any event queue.

The team participated in Formula Bharat 2020 held in January at the Kari Motor Speedway, Coimbatore. The car was judged on the engineering practices that were followed during its making and the cost and design considerations. There were a series of static and dynamic events and on that basis, points were given, and the overall rank of the team was decided. Team CRCE Formula Racing secured 25th overall on a national front amongst 90 participating teams. This project was a success because of the support of its sponsors and well-wishers.

There is a lot of scope for improvement and broad fields to excel for the Team CFR looks forward to performing it's best at the upcoming National and International Competitions. The team has the vision to switch to an electric vehicle in the next two years and take a leap forward towards a greener future.

New Projects bring new challenges which ultimately bring new responsibilities. We look forward to receiving support from all the students of Fr. CRCE.

Pradnyesh Dound Team Manager and Jt. Marketing Head Team CFR

Mavericks UAS Report

MavericksUAS was established to push the envelope of technological prowess. It is testimony to what a couple of engineering students can achieve with nothing much but a will to achieve success in fields which are beyond the scope of the engineering curriculum. We strive to innovate in the areas of unmanned flight systems and automation. We validate our efforts by participating in competitions which test our capabilities.

MavericksUAS is a technical team which works in the fields of aerial and groundbased drones. We are particularly skilled in the development of autonomous unmanned multirotor flight systems. We have also developed a Vertical take-Off and Landing plane, which is a fusion of fixed-wing and rotary-wing aircraft. Such innovation is only possible due to our endeavour to be on the bleeding edge of technology and research. We have also developed Quadcopters and Hexacopters which are capable of autonomous take-off, landing, flight, obstacle avoidance and package delivery. The projects we develop have unlimited potential in the avenues of search and rescue, disaster management, geographic mapping, etc.

During this year we participated in the Association for Unmanned Vehicle Systems International (AUVSI) Student Unmanned Aerial Systems (SUAS) competition, which has been conducted since 2003 each year. It was held from the 12th to the 15th June 2019 in Maryland, USA. The competition's problem statement states that an Unmanned Aerial System (UAS) must deliver a package to a customer. The UAS must avoid obstacles like buildings, identify potential drop locations, drop the package to a safe place and then move the package to the customer's location. In our very first year of attempting this competition with our limited resources, we succeeded in attaining a rank of 43rd overall out of the 75 teams which participated from universities all across the world. The breakdown of the overall rank is as follows: Mission Rank - 31, Flight Readiness Review Rank - 41 and Journal Rank - 34. We also won the Just Joe Sportsmanship Reward for demonstrating a helpful nature towards the other participating teams.

In addition to this, we also believe in imparting knowledge to our fellow students. The team hence plans on conducting workshops on cutting edge topics as we have in the past years. To wrap up we would like to show our gratitude to Rev. Fr. Valerian D'Souza and our principal Dr Srija Unnikrishnan for their constant support which enables us to succeed in our endeavours. We would especially like to thank our mentor Dr Sunil Surve and Mr Ajay Koli, for guiding us and helping us in our journey which was full of trials and tribulations. We hope to assist our college in fulfilling the goal of moulding engineers who build the nation.

Jason D'Costa Team Captain

Project Cell Report

Established in 2014, PROJECT CELL is an endeavour to promote innovative thinking amidst young minds. We work towards accomplishing tasks that could be gradually developed on a large scale and solve many social problems that exist today. At Project Cell, we tread towards learning new concepts, techniques and gaining practical experiences on implementation of creative ideas out. The main goal of the Cell is to learn new technologies while developing new projects. This year, the team actively participated and conducted the following activities:

1.) Hardware Hackathon: All students interested in e-yantra ideas were asked to form a team of 3-4 and make bots to complete the theme.The theme was Mining and Collecting BOT

2.) Sensor Workshop: We gave students some sensors and Arduino Board to code them.

3.) PCB Workshop: The participants were taught how to make a PCB and solder it

4.) Soldering Workshop for Fe's: This workshop was Compulsory for every Fe to attend. Hence it was conducted for a week, more than 220 students participated in the workshop

5.) Alumni Meet: All the Alumni, including the Team Founder and Co-Founders were invited, this was done in order for the junior team members to know about their seniors

6.) Simulation of Multisim: In this Workshop the implementation of Multisim to simulate the circuit was taught to the students

7.) RoboWars for Fe's: In this event all the selected candidates from the interview process were asked to participate in this. The teams consisted of 2-3 members and a mentor. More than 5 teams had participated in the event

8.) NBA Accreditation: To display our work we prepared around 11 projects in different domains including IoT, Image Processing, Automation etc

9.) NAAC Accreditation: We demonstrated 20 working projects all of different domains including ML, Android App development, Image Processing, Sensors etc.

Activities Carried out by Project Cell:

1. This year we declared the Project Cell as Team rather than council.

2. Project Cell Teaching: The students were taught sensor interfacing and sending data to the cloud. Different applications like Blynk, IFTTT and cloud protocol were taught in greater depth. The students were also guided in implementing their mini projects. The Students were also asked to focus on coding languages such as python. Different projects

> Mohammed ahmed Team Captain

Project Cell Report

on automation such as voice controlled light with Solar panels have been implemented this year. Many realistic projects such as board cleaner, automatic lights and automatic door opening system with RFiD Tag Card as well as Face Unlock were also implemented.

3. We stood in top 20 in e-yrc in one of the themes.

4. The project developed this year from the cell for eYIC was a self balanced walking machine which has a great social cause.

5. The front end of the project cell website was developed.

Future Initiatives:

- Effectively utilize the infrastructure and robotics facilities already available in college.
- Make a Project Database i.e. create a database of all projects developed at Project Cell and other curriculum projects, making them easily available to professors and students in future.
- To make our own marketing team and get sponsorships from sponsors.
- To win in e-yrc competition.

Last Note: We the current team are thankful to the faculty and the HoD of electronics dept for guiding us in a proper way, throughout the year. We also thank the director of the college for giving us permission to work in the night and also the department for giving us components i.e. funding in our projects etc. Lastly, bhoir sir for helping us in all possible way

> Mohammed Ahmed Team Captain

ROBOCON CRCE Report

During the preparation of college events like Euphoria, Athlos, Synergy or even during the days of exams and submissions, watching Agnelites run along the corridors in Fr. Crce is not a rare sight. But one room in the premises is left out of this chaos, be it a holiday or any other event day Lab no "709", the ROBOCON Lab is always seen buckling down, tinkering with the tools. We are driven by an acute zest for learning technological advancements and happenings in the modern world and endeavour in applying theoretical learning in realistic projects.

Robocon CRCE, initiated back in 2013 intending to participate in Asia's largest competition-ABU Robocon, we have since diversified into various other competitions and research avenues. We are a group of robotics enthusiasts from diverse engineering backgrounds who constantly strive to solve relevant, real-world problems using artificial intelligence and robotics mechanisms. With each competition that we take part in, we try to bring in something new to the world of robotics. Our team comprises of Computer, Electronics and Production subsystems which work in tandem to build working, usable bots.

Currently, our team is focusing on participating in the Robocon 2020 Suva, Fiji competition. The ABU Robocon 2020 Suva contest is to play rugby 7's game using two robots and five obstacles as five defending players. The highlight of this game is how the two robots collaborate to score Try and the Goal Kick. The main and unique challenge of this game will be Goal Kick, kicking the Kick Ball over the crossbar of the conversion post because of the unique shape of the rugby ball. Building a robot that can meet all the challenges sioned in the problem statement requires prolonged thinking, testing of many mechanisms, skilful programming and constant efforts.

Additionally we are happy to state that our unlimited undertakings and gigantic hard work have begun paying off. We have effectively cleared the stage 1 of the competition with AIR - 11. Furthermore, we are giving our best to make it for the further stages! Apart from this, We hold regular workshops of basic robotics to help and teach robotics enthusiasts. We intend to help students who are interested in robotics and related fields but lack the required knowledge to build the robot. Now, as the competition draws, closer our team is going the extra mile to make the BOTs more efficient to compete for the Winner's title at Robocon 2020 Suva, Fiji.

Lastly, we would like to thank Rev. Fr. Valerian D'Souza, our principal Dr.Srija Unnikrishnan and Dr.Deepak Bhoir for their constant support behind the achievements we have made so far. We also would especially thank our mentor Ms Kranti Wagle and Mr.Saurabh Korgaonkar for guiding us and helping us overcome every difficulty that we encountered along our journey so far. Finally, we hope to bring pride and prestige to our college and rightly live up to its vision : "Moulding Engineers who can build the nation."

> Shantanu Parab Team Captain

Vaayushastra Report

Team Vaayushastra is a premier Aero Design and Modelling team that has practical experience in the design and fabrication of Fixed Wing Unmanned Aerial Vehicles. Team Vaayushastra was formed in 2012 to represent Fr. Conceicao Rodrigues College of Engineering in SAE Aero Design Competitions. The team is composed entirely of college undergraduates with aptitude and interests helpful for the challenge. The members of the team are recruited through a progression of interviews and aptitude tests to check their technical calibre and fabricate different aspects of UAVs to contend in American skies.

The SAE Aero Design competition is intended to provide undergraduate and graduate engineering students with a genuine engineering challenge. The competition has been designed to provide exposure to the kinds of situations that engineers face in their real-life work environment. Since its initiation, the team has taken part in the advanced class of the competitions six times, continually enhancing its results. The theme for the advanced class spins around a subscale demonstration to colonize the surface of Mars. This necessitates the team to design a lot of reliable frameworks meeting standard pre-requisites of the class, including a Primary Aircraft, an Autonomous Glider and a Ground Station. The Autonomous Glider known as the Colonist Delivery Aircraft is released from the Primary Aircraft and houses humans that are represented by table tennis balls. Water Bottles and Habitat modules should likewise be released in the same flight, into the assigned landing zone, to sustain the humans on Mars and increase their days of habitability. All of this is ensured and executed using various sensors encompassing our Data Acquisition System coupled with a Graphical User Interface that predicts the trajectory of payloads, an Autonomous Control System that controls our CDA and parachutes to convey water bottles.

Well known for our amazing designs, ingenious avionics systems and having a stellar record, the team has earned quite a reputation in the international circuit. Last year the team stood 5th in the Technical Presentation and 9th place globally. This year at Lakeland, Florida we are proud to have stood 2nd in Asia and 9th among international teams with recognition from both the judging panel as well as our peers. In spite of the fact that we're uncertain about the status of the competition next year due to the pandemic, we promise to work sincerely and continue improving to make our college and country proud in the future. So watch us, join us and support us as we Dream, Build and Fly.

in @ **f**

Saumeel Gabhare Captain Team Vaayushastra

ACM CRCE Report

The ACM Chapter of Fr. CRCE is known for organizing and conducting successful workshops and seminars related to Information Technology; it has greatly contributed to increasing knowledge of students and keeping them updated about new technologies in the market. The first event of ACM for the year 2019-2020 was the 'Resume Building Workshop' for students from TE, where 69 students attended the session. The speaker was Mr. Sojan Chandy, the chairperson of the ACM council. Next, we organized a workshop on 'GitHub' as we knew how important it is to understand the necessary steps required to contribute to open-source projects on GitHub and in completing group projects.

In Synergy'19, ACM had organized an all-time favourite gaming event, PUBG tournament for all college students. The total number of participants in the event was 62, which included 36 for squads and 26 for duos. Gaming fanatics enjoyed the event and participated with enthusiasm. A cash prize of Rs. 2000 was given to the winner of Squad matches and Rs. 1000 was given to the winners of Duo matches.

Later in the year, a 'Software Design Workshop' was conducted by ACM in collaboration with IIT-B. It was taken by three professional members, namely Mr. Prajish Prasad, Senior PhD student at IIT-B, Mr. Bhupendar Singh, final year student pursuing BE IT and Ms Kinnari Gattare, a research assistant at IIT-B. The students were briefed about the software designing techniques and its advantages.

The year 2020 started with the 'Smart India Hackathon' (Internal college level). The judges judged the student teams on various factors such as presentation skills, idea solving, critical thinking and many such factors. After critical evaluation of all the teams by esteemed judges, the result was announced by Dr. Nilesh Patil (SPOC). A Case Study session was organized on 24th January 2020, for the students of class TE IT. The session was conducted by Mr. Sojan Chandy, the Chairperson of ACM council and was attended by 38 students. 'SemiCode' is an intercollege competitive coding competition similar to ACM-ICPC held across Mumbai every year. This year ACM-Fr.CRCE also joined hands with other ACM councils across Mumbai, namely ACM-MPSTME, ACM-SNDT, ACM-DBIT, ACM-Saboo Siddik and ACM-Vidyalankar. This competition helped students grasp the wider picture of a coding competition and know where they stand. We thank our faculty in-charge Prof. Prajakta Dhamanskar, our mentor Prof. Garima Tripathi and all the teaching and non-teaching staff for their endless support and encouragement. We would also like to thank the students for their participation and honest feedback. Last but not least, we appreciate the FragMag team for giving us this opportunity to share our achievements with everyone.

> Chinmay Gawde ACM Secretary



ASME Report

ASME (American Society of Mechanical Engineers) CRCE is a student's chapter that enables collaboration, knowledge sharing, career enrichment and skills development across all engineering disciplines. ASME council organizes several events around the year. During Crescendo 2019, ASME organized two events; SUSPENSION BRIDGE and TECHNICAL QUIZ UP.

TECHNICAL QUIZ-UP

The ASME chapter of CRCE held 'TECHNICAL QUIZ-UP' as one of its special events for the Technical Fest 'CRESCENDO 2019'. The event had several registrations and was a big hit. The event included the testing of time and knowledge of the participant's subject of interest. With a vast horizon of topics from Android, Computer Networking, Strength of Materials, etc., the participants had a great time quizzing their minds on their topics of interest.

SUSPENSION BRIDGE

The second event during the Technical Fest 'CRESCENDO 2019' was Suspension bridge. Teams from various classes competed to construct a suspended bridge out of the materials given by the council. The materials provided were popsicle sticks, thread and glue bottles. The game aimed to create a suspended bridge that could sustain maximum weight. The event was a success as many teams registered for the event and showed their distinct talent.

The event aimed at sharpening the technical side of the budding engineers by constructing a prototype of a suspended bridge using all their mechanical knowledge. With an endeavor to promote hands-on engineering among budding engineers, the event was one of its kinds. The council is thankful to the faculty advisors for their continuous support and encouragement.

> Prof. Deepika Singh Faculty Incharge ASME Fr.CRCE

Codelabs CRCE Report

Codelabs CRCE is a council powered by the well-known global organization HackerEarth. It aims at promoting the interdisciplinary nature of coding amongst students, irrespective of their fields. It organizes various technical and non-technical events for the same on an intra-college level. The council has provided students with multiple courses, free of cost, which would help them in their skills. Following are the events that were organized by the council:

Alogoholic 1.0:

It is a coding competition that is held online so that students can take part in the comforts of their houses and compete with various students, for exposure. Many students participated in this event, and there was a lot of enthusiasm among them for the results. This event saw participation from all branches.

Machine Learning Workshop:

The council conducted this workshop for Second Year students. An introduction to the Python language and in-depth knowledge on Machine Learning was the focus of the workshop. Students from all branches attended this workshop. We received excellent feedback from the students about this workshop.

Python and Introduction to Machine Learning:

This workshop was organized for the students from the First Year of engineering from all branches. Students were taught the basics right from scratch, and the main plan was to give a brief introduction to Artificial Intelligence. Students attended this workshop enthusiastically, and a great response was received.

Other than these events, Codelabs CRCE along with Mozilla Campus CRCE organized a State Level Hackathon, "UNSCRIPT 2019". Students across the state participated in this event. This event boosted the skills of coders and improved their programming skills. All the events throughout the year were organized successfully due to the hardworking members from the Codelabs council. Our main aim is to help several other students in their careers and raise the bars of programming in our college, and we will continuously try our level best to achieve this.

> Albin Tharayil Vice Chairperson



0

CSI CRCE Report

Computer Society of India (CSI), CRCE is a council that works at its best for the students to have an all-round development by taking part in the numerous activities planned all around the year while simultaneously keeping up with the trends as per industry standards. The council plans fun and interactive events throughout the year for its members to ensure that the First and SecondYear students are provided with a firm footing in the technical domain.

The council began the academic year by organizing the first non-technical event during our college fest Synergy, LAN Gaming (Counter-Strike 1.6), a multiplayer game that is played in the gaming battle zone. The tournament went on for a day with the participants battling it out till the ultimate showdown. A survey was conducted to understand the needs of all the members. Based on the results of the study, everal activities were held throughout the year. One common area of interest was chosen and based on that a workshop on ReactJS was conducted. It was a hands-on workshop led by Khalid Shaikh, the technical secretary of the council. The event enlightened the students about React, a frontend JavaScript library created by Facebook for building user interfaces.

Furthermore, CSI, in collaboration with the other councils namely, ACM, IEEE-WIE and SAE organized the Industrial Visit to Shimla, Manali and Chandigarh in December 2019. This semester, the council successfully hosted two events, Intellectual Property Rights (IPR) and Competitive Programming. The seminar on Intellectual Property Rights was conducted by Professor and Dean (Research and Development), Dr. Bhushan Patil. The purpose of this event was to host a seminar where students could be briefed on the importance and proper management of property rights through patents, copyrights, trademarks and trade secrets. The second event was an informative session on Competitive Programming hosted by the alumni of our college, Mr. Gaurav Sen and Mr. Khushan Sen. The course focused on guiding the students on how and when to begin competitive programming and the significant role it plays during placements.

A Poster Making Competition was conducted on Innovation Day in collaboration with the IIC. The participants were asked to make posters which would stand out based on ideas, design, entrepreneurship and innovation. Thus the CSI council is always ready and open to every mind in the institution, thereby helping them become industry-ready. With a bunch of dedicated and talented members in the council, sincerest efforts are made to ensure that participants and target audiences are always at the forefront while planning an event.

> Sahaana Iyer Documentation Head

DSC CRCE Report

Google collaborates with university students who are passionate about growing developer communities and supports them with starting student clubs on their campuses. Developer Student Clubs, Fr. CRCE Chapter stands in a uniquely arisen situation where Project Based Learning for the enhancement of required Industrial Knowledge for an individual to succeed in the rat race of Social Achievements, is not only Desired but also considered necessary in today's world and age.

Developer Student Clubs, being a worldwide Google Initiative, stands head strong with clear beliefs of equipping Students from the very foundation of their careers with resources to match the high driven standards of the Industry.

Developer Student Clubs, Fr. CRCE Chapter firmly adheres in its motto and plans towards harnessing the opportunity of Project Based Learning as presented by our college. Developer Student Clubs with support of Google Developer looks forward to inculcating the Growth of Tech Based Learning in the fresh minds of the core foundation of this college by organizing highly effective Workshops and Study Jams. Furthermore, Developer Student Clubs will be mentoring students inclined towards developing a project and Learning new fields of technology.

Events:

1. VR Maze Runner (Synergy)

As our first kickstart event, we organized a technical fun event at college fest (Synergy). A game called "Maze Chaser" but in a more digital world. And when we say digital, we mean Virtual Reality. So a game designed from scratch called VR Maze Runner.

We overall entertained 100 different attendees. And they gave us nice feedback!

2. GCP Crash Course

Our second event, which helped us increase our engagement in different colleges. As mentioned above, Developer Student Clubs, is Powered by Google Developers. Hence, the biggest product of Google Developers - Google Cloud Platform. Google Cloud runs on Google Cloud Platform. Almost all the companies in today's date have moved on Cloud. Now with abundant Cloud Services available in the market, it's essential for the students to not only just learn about Cloud Computing, but also get some hands-on experience on a Cloud Platform and to explore it's different services other than Compute. So we came up with a unique event wherein we gave our attendees free Training on Google Cloud Platform for a month on majorly three main tracks.

- Application Development
- Machine Learning
- Data

Chyankk Kumar Lead Developer Student Clubs.

0

DSC CRCE Report

Each Track consisted of mainly 5 Quests. Each Quests was made available on Qwiklabs -A platform to learn and get hands-on experience on Google Cloud Platform (GCP) and Amazon Web Services (AWS). The attendees were given the liberty to choose more than 1 track. And as a validation they were awarded with a digital badge after completing one single quest, which resembles how well the learner knows the particular quest. As a token of appreciation the attendee who completes at least one track, was given some sort of goodie from Google Cloud as a giveaway.

3. Firebase Workshop Seminar

Our final event was in collaboration with Google Developer Groups - Mumbai Application Developer (GDG MAD). This Firebase Workshop Seminar was organized with a set of view keeping in mind

- To show the attendees power of Application Development
- To teach them the flow on how to build a Mobile Application from scratch
- To connect the attendees with latest Google Product for App Development
- To teach the attendees on How-to "make cross platform native Mobile Application"

This was a 2 day interactive session for 6 hours each day. At the end of the day attendees came out with their own Mobile App (Chat App). This gave the attendees a wing to fly towards the trending technology of the world - Android & iOS Mobile Application Development.

Staff & College Co-operation:

As said that a country is nothing without a president, a Prime Minister and cabinet of ministers. A child is nothing without his/her parents. Similarly a student is nothing without his/her teacher(s). As our council established in July 2019. And our first event was held in August 2019. So it was quite a rush for us to handle the load between academics, community building, resume building, and conducting events. But our visionary was our Teacher In-charge, Prof. Merly Thomas. She directed us at every path. She gave us a map to follow our quest to build a community. She was the best connection between us (the students) and the higher authority Professors. We would also like to thank our respected Dean of Student Affairs (Dr. Prof. Deepak .V. Bhoir) and Dean of Academics (Dr. Prof. Sunil Surve), who granted us permission to hold such productive events. We would also like to thank our respected Training Placement Officer (Prof. Sharma), who believed in our system of bridging the gap between theory and practical. We would also like to thank our respected Principal Dr. Srija Unnikrishnan and Hon'ble Father Valerian D'Souza who guided us along the way in our journey for Project Based Learning. We would like to thank all the working and non-working staff, without whom none of our event would've been possible. Thanks a million times, to all!

> Chyankk Kumar Lead Developer Student Clubs.

IEEE Report

IEEE also known as Institute of Electrical and Electronics Engineers which is the world's leading professional organization dedicated to promoting engineers and scientists. The mission of IEEE is to inspire, engage, encourage, and empower engineers and scientists worldwide. IEEE-CRCE aims to inculcate the importance and advancements related to technology and social issues and solve them with a firm technical background for the benefit of humanity. Helping students adapt to technological aspects of the modern world and being in power with any other professional is our objective.

With the council formation in the month of July 2019, IEEE Council was formed under the leadership of Prof. Parshvi Shah as the Branch Counselor of IEEE. The Council members are Ricky Stanley as the Chairperson, Prashant Singh Rawat as the Vice Chairperson, Sheryl Serrao as the Technical Head, Joel Francis Paul as the Documentation Head, Komal Shinde as the Marketing Head, Shreya Bilonikar as the Junior Design Head, Urvashi Dhingra as the Web Master, Sheetal Sharma as the Second Year Representative. With this newly formed council, organizing various events were of paramount importance. The First event organized by IEEE was "How to write a Research paper", this session was explained by Dr. Sapna Prabhu (HOD of Electronics and Computer Science), in this session the students were made aware of the process of writing a research paper and how to write a well formatted research paper. The Second event was "Blind Art" which was held during "SYNERGY" which is our intra-college technical fest, in this event the participants were blind-folded and were to solve a riddle, the answer of the riddle had to be drawn on the board . The Third event of IEEE was the Field Visit to MICA Labs was organized by IEEE-WIE CRCE in association with IIC-Fr.CRCE. This field visit was attended by the faculty members of our college and other students from other departments. This visit was organized for the students so that they may have the knowledge of various Automation and Control Systems associated with the Marine Industrial Sector. The Fourth Event was the Industrial Visit 2019 where the students of Electronics, Production, Computer and Information Technology of Second, Third and Fourth Year had gone to Shimla-Manali, where they saw the industries related to their field and had gained knowledge about how the industry works. The Fifth event was CodeBreakers which was conducted by IEEE-WIE CRCE in coordination with IIC-Fr. CRCE, here the participants were given MCQs on Programming languages like C or Java and were made to solve them in a given time. The participants were mostly of Computer and IT Departments.

Joel Francis Paul Documentation Head

Prashant Singh Rawat Vice-Chairperson

0

IIIExCRCE Report

The Indian Institution of Industrial Engineering (IIIE) is a National Council founded in 1957 as a non-profit organisation and a Registered Society for propagating the profession of Industrial Engineering in India and is a Registered Public Trust under the Bombay Public Trust Act, 1950. It is dedicated to the advancement of Industrial Engineering Education and practice and to the application of such scientific knowledge to assist in the management of all endeavors. The Institution has Thirty-Four Chapters established all over India. The Government of India recognizes the Graduateship Examination conducted by the Institution as equivalent to a Bachelor's Degree in Industrial Engineering. The IIIE has Instituted many honors and awards for various achievements and outstanding contribution to the IE Profession.

The council was formed on 1st November 2017 and has since been active. The teachers in charge of the council activities are Prof. S.K.Das and Prof. M.V.B.Rao, who have been a powerful driving force for the IIIExCRCE council. The IIIExCRCE had a great feat in the year 2019-20. This accomplishment has been possible because of the determination, aspiration and a belief to work towards something that helps the students and the community as a whole by all the team members. The council organised various successful events throughout the year.

'Techno-talks' and 'paper planes' were the two events organised in the 'CRESCENDO 2019' technical fest and were acknowledged in enormous numbers.

The council had a great start to 2020 by organizing an industrial visit on 28th, 29th, 30th January at Central Railway workshop, Matunga. For innovation day, the council came up with an equally innovative idea 'Best Design Creator' and reached out to maximum students so that they were able to showcase their innovative skills. A certificate of appreciation in recognition of an 'outstanding innovative activity' on innovation day (30th January 2020) was awarded to the IIIExCRCE council (secured 3rd prize).

Because of these activities, the council members, as well as the participants, were able to prove their capabilities with innate capacities. These events served as an excellent example for the team spirit displayed by the IIIEx CRCE council. Altogether the year 2019-20, emerged to be victorious. The council would strive to work hard and organise many more successful activities to involve the students to have an all-round development.

> Khushi Mehta Vice - Chairperson

Mozilla Report

We are a council that promotes the usage of open source technology. The main aim is to ensure that the internet is free and accessible to all. The club organizes various technical and non-technical events throughout the year at an intra-college level. The council began the year with a membership drive. The aim of this drive was to get students to be a part of the council. Owing to it, we managed to get 58 students from the first, second and third years.

The following were the main events that were organised during this academic year:

Node JS:

Mr Thompson Naidu conducted a hands-on workshop attended by 47 students, a Software Developer at TIAA GBS on 3rd August 2019. The purpose of this event was to host an interactive session cum seminar, where students could learn to use it as a single programming language to write both front end and back end web applications. Students were also introduced to E6 and its features, understanding its core module.

Synergy Event:

During our college fest Synergy, which was held on 23rd August 2019, the council hosted a non-technical event: Classroom Cricket. It was a simple game where you could play cricket indoors without using a cricket bat. It was an innovative attempt to play an otherwise outdoor sport indoors.

MongoDB:

Mr Nehal Kalnad, Development Intern conducted this workshop at TIAA GBS on 29th August 2019. The purpose of this event was to host a seminar, where students get an opportunity to learn the basics of API in order to build one. It was a hands-on workshop attended by 29 students.

HTML, CSS & Bootstrap:

This workshop was conducted by Mr. Rathil Patel, Solutions Engineer, Browerstack on 25th January 2020. It was also administered by Samyak Gaur and Yameen Ajani, SE Computer, Fr. CRCE. The purpose of this event was to host a workshop where students could learn how to use HTML and CSS to make a website. It was a hands-on workshop attended by 42 students.

Innovation Day Event:

During our college Innovation Day, held on 30th January 2020, we hosted a nontechnical event, Image Capture. In this, the participants were given various images from Google Maps and a few related riddles. Using this information, the participant had to search for the place/monument referred to in the image using Google Maps. They were given a ten-minute deadline.



Rajesh Manjrekar Team Captain

 \bigcirc

SAE CRCE Report

Society of Automobile Engineers(SAE) International is a global association of more than 128,000 engineers and related technical experts in the aerospace, automotive and commercial-vehicle industries. Their core competencies are life-long learning and voluntary consensus standards development. SAEINDIA is a strategic alliance partner of SAE International registered in India as an Indian non-profit engineering and scientific society dedicated to the advancement of the mobility industry in India.

SAE INDIA is India's leading resource for mobility technology and is an individual member-driven society of mobility practitioners, which includes Engineers, Executives from Industry, Government Officials, Academics and Students. Our college has its SAE INDIA collegiate club which was founded in the academic year 2012-2013. Fr.CRCE SAE chapter provides students with SAE membership at a nominal fee which gives them access to SAE's technical publications. We also conduct a lot of talks, events and industrial visits, some of which are listed below.

An Industrial Visit to Shimla, Manali and Chandigarh for students from second year onward was held from the 27th of December, 2019 to the 4th of January, 2020.

Another Industrial Visit took place on the 8th of February, 2020 for students of Thirdyear Production Engineering. During the visit, students visited Vimal Steel plant and Capital Impex Factory in Vasai. Around 60 students attended the same.

30th of January, 2020 was observed as the Innovation Day. The SAE chapter at Fr.CRCE organized their event - 'Innovatesy'. The tag of the event was 'COME AND GIVE YOUR PROBLEMS TO US'. For the event, the participants had to select one domain from a list of 10 domains from climate change to healthcare and public transport. After selecting the domain participants needed to note down a problem in the following field and explain it briefly. What seemed a very simple, easy and short task, turned out to be challenging, even before finding the solution to problems in the respective domains and defining them. By the end of the event we successfully stood 2nd overall.

Jay Patel Secretary SAE

SME CRCE Report

SME (Society of Manufacturing Engineers) is a group of students and faculty who share a collaborative vision of an inspired, educated and prosperous manufacturing community. At the SME council, our aim, objective and mission are to try our best to promote manufacturing technology and develop the skills of our members, to advance manufacturing and attract future generations.

The council actively takes part in all the activities & festivals in the college like the technical festival CRESCENDO that was held in March 2019. The council has been preparing to give all the visitors a taste of Industrial Technology and fun by conducting one technical event and one non-technical event during Crescendo.

The first one was ourflagship event, i.e. CAD WARS. This event challenged the participants on how good they are with software such as AUTOCAD, NX, and SOLIDWORKS. For this event, the participants were given a problem statement. This problem statement was in terms of drawing, and they had to execute the same with the help of the softwares. Several students, including the ones from the First Years, participated in the event. The second non-technical event was called Tech Pong. It was a charade game in which players throw a ping pong ball across a table with the intent of landing the ball in a cup with a chit on the other end. The game typically consists of opposing teams of two players per side with 6 or 10 cups set up in a triangle formation on each side. The event was very successful, with a huge turnout of participants.

The SME council is thankful to Prof. D. S. S. Sudhakar for encouraging and guiding us in all the activities performed by the SME council. All in all, with a very successful year, we intend to develop even more and continue to have a positive impact on the manufacturing engineering community.

> Dr. Vasim A. Shaikh Faculty Inchargre SME

WIE CRCE Report

The 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. The mission of WIE is to inspire, engage, encourage, and empower women worldwide. WIE-CRCE aims to inculcate the importance and advancements related to technology and social issues to women to make them whole as an individual with a firm technical background for the benefit of humanity. Helping students adapt to technological aspects of modern world and being in power with any other professional is our objective.

The WIE council was formed with IEEE council of Fr.CRCE, The branch counsellor of the council is Prof. Sushma Nagdeote, who has been leading and assisting for WIE council. The council organized various successful events which were of paramount importance.

One of the events which were organized by WIE was Papparazzi during the TechFest of our college 'SYNERGY'. Many students from the college participated for the event and showed their enthusiasm. Another event of WIE was the Field Visit to MICA Labs was organized in association with IIC-Fr.CRCE. This field visit was attended by the faculty members of our college and many students from other departments. This visit was for the students who wanted to get knowledge of various Automation and Control Systems associated with the Marine Industrial Sector. The Industrial Visit 2019-20 was one of the great events which was conducted from 27th of December to 4th of January, where the students of all department of 2nd, 3rd and 4th Year had visited to Shimla-Manali, where many industries had been visited.

The most successful event was SPARKC event which was for orphanage children of 12 to 18 age range from Fr Agnel Ashram were explained the concepts of General Science like Electromagnetism and Reflection of light in water with practical demonstration. After the session the students were enlighten. Another event, Code Breakers was conducted by WIE in co-ordination with IIC- Fr.CRCE.

The last and most important event for the academic year 2019-20 was International Women's Day Celebration which was celebrated on 13th March. The theme for International Women's Day this year was, "Women in Entrepreneurship", which emphasizes innovation by women and girls, for women and girls, at the heart of efforts to ignite the passion of Entrepreneurship. The council hope to empower and promote women worldwide in technical field by inspiring and conducting many more activities in future.

Prof. Sushma Nagdeote Branch Counsellor WIE Ms. Jagruti Bhanushali Vice-Chairperson

E-CELL Report

Entrepreneur is someone who has a vision for something and a desire to create."

The Entrepreneurship Cell of Fr. CRCE has a similar vision of transforming engineers or helping them find the entrepreneur in them. Life is too short to work for someone else's dream. At E-CELL, we aim to create and mould a way to show future engineers how entrepreneurship is the path to their goals. In the previous years, we have held numerous activities like courses, workshops, seminars by inviting industry professionals to help students build their vision towards success. This year, we kick-started with the 'Financial Awareness' event, which was held on 26th August 2019. The speaker of the event was Mr. Amit Chawla. He spoke about various insurance policies and financial management. On 21st September 2019, we organized a field visit to MICA labs. The students came to know about multiple controllers like PLC, SCADA that are used for manufacturing processes in the industries. It was a good experience, and on receiving a positive response, we thought of having many such events. On 3rd October 2019, E-CELL and IIC-CRCE together held a session on 'Product Design' where we invited an exceptional speaker, an ex-professor of our college Dr Y. D. Venkatesh. The session was very informative and highly appreciated by the students who attended the same.

On 17th January 2020, the E-CELL organized a seminar on proposal writing. The speakers of the session were Prof.Vaibhav Godbole and Prof. Kranti Wagle. The session consisted of a briefing on the Idea Competition and its various levels. On 30th January 2020, the E-CELL conducted 'The Idea competition' for students to explore their interests and develop something unique that would benefit the common man. This year's event saw the participation of 17 teams from various colleges in the city. The panel of judges consisted of Mr Mustafa Fatakdawala, Data Scientist who is also an Associate Consultant from Tata Consultancy Services (TCS). Prof. Dileep Chandra, IIC Convener at Fr.CRCE. Prof. Hitendra Vaishnav, Startup Co-ordinator IIC at FR.CRCE. All teams pitched innovative ideas, and every team had a Wow factor in them. The team with maximum points was declared as the winner of the competition.

We wouldn't have been able to achieve this level of success without the continuous support of our faculty in-charges: Prof. Prachi Patil and Prof. Prajakta Bhangale. We look forward to new opportunities keeping in mind the spirit of entrepreneurship.

> Umayr Farooqui Editor E-Cell

NSS CRCE Report

"The happiest people I know, are those who lose themselves in the service of others" – Anne Frank.

The year commenced with the registration of 100 active volunteers across SE, TE and BE and kick-starting our array of activities; we began with a Tree Plantation Drive followed by an awareness program conducted by the Bisleri Association to put bottles into good use. Next were the Beach Cleanup programs at Chimbai in association with the NGO 'United Way'. In 2019, floods hit many parts of Maharashtra, and one of the most affected cities was Kolhapur. We organized a Donation Drive for flood relief which received an excellent response from the Staff and Students. It was followed by a Blood Donation drive where we witnessed active participation of our fellow Students and Staff members.

As the month of festivities commenced, Post Ganpati Visarjan beach cleanups were organized at Juhu and various other Beaches from 4th to the 13th of September which was a massive success. That was followed by a week-long Bandra fair volunteering cum crowd management where our members assisted the Mumbai Police. There were bouquet of events lined up like Plastic Ban Rally, an awareness seminar to throw light on child abuse, volunteering at the Read Carnival by United Way where the marginalized children were given an opportunity of reading to their heart's content, Walk for Freedom rally to stand against the inhumane practice of human trafficking, Beach cleanup in collaboration with Coco-Cola, disaster management workshop organized by Mumbai university and also a gender equality session arranged by Akshara Rao NGO.

This year NSS took a great initiative by planting fruit-bearing trees around the College Campus whose entire produce would go to the organization. The most exciting part was an 8-day camp to the Tandulwadi area of Palghar District. The aim was to educate the kids about various technologies and help them to get familiar with the basic and advanced technological advancement. The members engrossed themselves in painting the school walls bright, exploring the rural life, trekking up a hill and interacting with the villagers

On commencement of the Even Semester, A Nature Trail to Sanjay Gandhi National Park was organized which gave a fresh start to the year. Next a Blood Donation Drive was organized, which received a massive response again. We extend our gratitude to our Program Officers Prof. Saurabh Korgaonkar, Prof. Dipali Bhise and Prof. Pradeep Singh for their valuable inputs which proved beneficial to our volunteers through thick and thin of each event. As a team, we always prioritize 'You' before 'Me' spreading cheer and smiles around. We sincerely thank our Director, our Principal and 'YOU' for appreciating the work we do. Happy serving!

> Alden D'Souza Chairperson NSS

Rotaract Club of CRCE Report

The Rotaract Club has been an integral part of Fr.CRCE. This year our club was associated with two NGOs: "BIGGER Than Life" that works towards the education of underprivileged children and women empowerment and "The Swapna Vana Foundation" which works for the cause of reforestation. We work along the motto "Service above Self".

We started our tenure with The Installation ceremony on 24th August 2019 under the guidance of our parent Rotary, Rotary Club of Bombay Bandra and Rotaract District 3141. The installation ceremony was conducted to appreciate the hard work of the previous Rotaractors and felicitate them. The responsibility was then handed over to the incoming Rotaractors which is a ritual followed by all other Rotaract Clubs. We conducted two major events during our college fest, Synergy: Amazing Race and Foot pool. Amazing Race was a treasure hunt held across Bandra wherein the participants were given various clues that led them to the next location and eventually, the final location.Footpool, as the name suggests, is a combination of football and pool. Each participant was given a striker ball which they need to use to dunk the other balls in the pockets in a time limit of 90 seconds. The club then conducted its annual trek – FootSlog. It was conducted to give the students a break from their regular schedule and get closer to nature by enjoying the beautiful mountain top view of Visapur Fort.

These events were followed by Mic Drop 2.0 which was a multi-genre event that witnessed the performances of various artists like SamayRaina (Stand-Up Comedian), YedaAnna (Rapper), SimarSingh (poet) and few other upcoming comedians that were equally loved by the crowd. Along with these events, we've had ongoing NGO projects with the NGO Bigger Than Life (BTL) called Our Only Home. It was conducted in order to make the children of the BTL aware of the current global warming crisis.

The club conducted its annual charity run: The Heart and Sole Run 3 on 1st March 2020. Our charity run was conducted in order to spread awareness about the right to education for children and to raise awareness about the importance of planting more trees in order to have a better future. The academic year for our club comes to an end with the event 'Come Together' which will be conducted in order to celebrate the achievements of the club throughout the year and also felicitate our volunteers who have worked during different events conducted throughout the year.

The Rotaract Club of FR. CRCE aims to Make a Difference by helping society in every possible way.

Nachiket Nisal President Rotaract Club of Fr. CRCE



TEDxCRCE Report

TEDxCRCE believes that many new ideas find resemblances with similar concepts working well for different areas in the circle of development. On the 7th of October 2019, TEDxCRCE hosted its 'Salon Event' in the college. Speakers from diverse backgrounds came under one roof and spoke on ideas that hold the potential of bringing about a significant change, sharing the stage with a single mission of "Ideas Worth Spreading". The admirable personalities were Mr Jigar Rajpopat (self-taught drummer/percussionist),Mr Vinod More (speed artist and painter), Mrs Suchitra Pillai (actress and an alumnus of our college) and Mrs Sujata Deshmukh (HR expert). The event also had a segment called "Give Your Own TEDx Talk" where students from our college shared their views on various topics and gained an experience of delivering a real TEDx talk. Anish Dias from BE IT ,Chyankk Kumar from TE Electronics and Pranay Bagrecha from TE Computers spoke about their journey.

On the 29th of February 2020, TEDxCRCE organized one of CRCE's flagship events, the "Internship & Career Expo" hosting multiple companies at our college campus. The expo was attended by students from all branches of our college. Due to a wonderful response received by our college students, we kept the event open to students from other colleges as well. Having seen a fantastic response from companies and an equally resounding feedback from the students over the years, The Internship & Career Expo had 15 companies offering summer internships from technical as well as non-technical domains including Marketing, Graphic Designing, Photography, Business Analyst, Content Writing, Web and App Development, PHP Backend, Cloud Computing, AI, ML, Data Science, Blockchain, Full Stack Development, Embedded Systems Development, Smart Systems and Manufacturing.

On the 4th of April 2020, TEDxCRCE is set to host its fifth version of TEDx Talks. Our theme for the event is "Shifting Gears". This year we at TEDxCRCE believe that we humans are programmed to grow stronger, faster, and smarter. Our ability to think, learn and grow bigger has always taken us to heights that we never dreamed of, as we know that great things never came from comfort zones. One needs to adapt continuously to new things and move forward in order to grow and reach his goal.

We as a community also had the opportunity to work with the Mumbai Roti Bank Organization and have volunteered to help them conduct various food donation drives. We had arranged a session at 'The Welfare for Stray Dogs' for passionate animal lovers to do their part towards the dog community. We also conducted two sessions with the children of the 'Father Agnel Ashram'. We want to express our sincere gratitude to our Director Rev. Fr. Valerian D'Souza, Principal Dr.Srija Unnikrishnan, the college management, our Teacher-in-charges Prof. Prachi Patil, Prof. Monali Shetty, our faculty members and the student community for their unstinted, consistent support and encouragement in all our endeavours. I would like to extend my gratitude to my council members who have worked very hard and continued to make TEDxCRCE strive for more every year. Going forward, we at TEDxCRCE will endeavour to achieve a fresh new outlook for our projects and will raise the bar further in creating more powerful, professional and energetic communitycentric events.



Meera Ghaskadvi Co-organizer TEDxCRCE