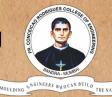


Fr. Conceicao Rodrigues College of Engineering Bandstand, Bandra



adwitigah 2

in a world where you can be anything, be yourself



adwitigah

Chalk and cheese, though different keys, unlock relevant doors, with ease.

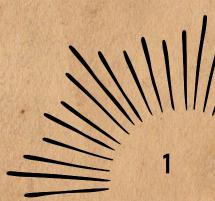
The word 'Adwitiyah' is a sanskrit word meaning 'Matchless'. Our world is programmed to stereotype people on the basis of appearance, gender, behaviour, mannerisms and the endless list goes on. You can be your matchless self only when you know and believe what is right for you rather than falling prey to the worldly brackets you fit into. No one who has ever lived or is to come has had your combination of abilities, talents, appearance, friends, acquaintances, burdens, sorrows, and opportunities.

A rainbow would've been lost if it were to be like the sky. And music would seem monotonous without different musical notes. Similarly, it is each person's treasured uniqueness that makes our world lively. All of us are unique, and have our own narrative to tell. Each one of us has a different way of reasoning and reacting to situations and we go through a unique combination of experiences making all of us unique in our own way.

No need to pretend so that you seem more like someone else. No need to lie to camouflage parts of you that aren't like anyone else. You weren't meant to be like someone else but were meant to shine like no one else. We need to let ourselves loose and learn to believe that we can achieve all that we dream to be. So, let's embrace our true 'adwitiyah' selves and encourage others to do so too because our time is limited and far too precious to live someone else's life.

adwitigah

स्थात्त्व अभ्युद्य



MESSAGE FROM THE DIRECTOR



REV. FR. VALERIAN D'GOUZA, SFX

Everyone is called to be an 'Adwitiya'.

Each one of us is unique in life. So there is no comparison between two persons. No two individuals are alike. Every human being is gifted by the author of life. He has created human beings with individual strengths and weaknesses. Each one has their own special features and talents. All of us need to pursue our goals and according to our upbringing and situations, there is no comparison. So one has to respond to one's goal in a given situation.

Fr. Conceicao Rodrigues College of Engineering (Fr. CRCE) provides an equal opportunity to everyone to excel in his or her chosen stream. One has to explore every available opportunity in the college and be an 'Adwitiya'. You have to be a matchless human being.

There is no need to imitate or pretend to be someone else. Don't try to ape a celebrity, be it a movie star or a sports icon. Be different, be unique, be yourself. Don't change, so people will like you. Be yourself and the right people will love the real you.

Celebrities themselves vouch that you should be yourself because an original is worth more than a copy. Don't copy their styles to impress people. "Always be yourself, express yourself, have faith in yourself, do not go out and look for a successful personality and duplicate it," said Bruce Lee. "Just be yourself, there is no one better," added Taylor Swift. "Beauty begins the moment you decide to be yourself," said Coco Chanel.

In the world of sports or movies, we find that many newcomers copy the playing or acting styles of successful people; only to realise it is best to have your own individual style. To do your own thing has led Thomas Alva Edison to invent the light bulb, Alexander Graham Bell to give the world a telephone, Alexander Fleming to discover penicillin; inventions and discoveries that have changed the world.

If we look around, we find that different professors teach different subjects in our very own college. A music band consists of different members, each one bringing their specific talent to the fore. Even nature has plants and trees, yielding different types of flowers and fruits. A rainbow would have lost its beauty had it to be of the same colours, as the sky.

Similarly, it is each person's treasured uniqueness that makes our world lively. All of us are unique and have our own narrative to tell. Each one of us has a different way of reasoning and reacting to situations. We go through a unique combination of experiences, making all of us unique in our own way.

Do your best in all your endeavours in order to be a matchless instrument. In a world where you can be anything, be yourself. It's time to carve your own niche. "The first step of being happy in life is to be true to oneself," said William Shakespeare. To be true to yourself really means to respect and love your own self.

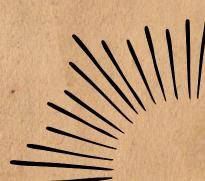
There is no need to pretend, so that you seem more like someone else. No need to lie to camouflage parts of you that aren't like anyone else. You weren't meant to be like someone else.

So, let's embrace our true 'Adwitiya' or matchless self and encourage others to do so too. As Steve Jobs rightly said, "Your time is limited, so don't waste it living someone else's life."

Oscar Wilde has summed it up beautifully. "Be yourself. Everyone else is already taken." Let us bring out the 'Adwitiya' within ourselves and be truly matchless, unique and rare.

Wishing each of you all the best in your quest in being 'Adwitiya'.





MESSAGE FROM THE ASSISTANT DIRECTOR



REV. FR. ELEUTERIO FERNANDES. SFX

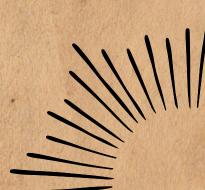
'Adwitiyah' is a wonderful theme chosen for 'Fragmag 2022'. Each individual is unique, matchless. We come to this realisation only when we attain maturity and it is a process in life.

A mature adult personality possesses reason, autonomy, personal responsibility and is characterized by an independent mastery of the way of life.

Sigmund Freud, an Austrian neurologist and the founder of psychoanalysis was once asked to describe the characteristics of maturity. And he replied "Lieben und Arbeiten" (German). A mature adult is one who can love and allow himself or herself to be loved and who can work productively, meaningfully and with satisfaction.

My sincere wishes are with you to discover your matchless and unique personality 'Adwitiyah'. This feeling of 'Adwitiyah' and the sense that only in relationships can you discover who and what you are is probably the central competence of leaders in the 21st century.





ANNUAL REPORT FROM PRINCIPAL



DR. GRIJA UNNIKRIGHNAN

"Education is the most powerful weapon which you can use to change the world" - Nelson Mandela

Rev. Fr. Conceicao Rodrigues, our founder, believed that quality technical education can make India self-reliant and prosperous. Following his vision, Fr. Conceicao Rodrigues College of Engineering (CRCE) is dedicated to 'Moulding Engineers who can build the Nation', training our students to be problem solvers and game changers with a passion to shape the future.

The academic year 2021-22 started in July 2021 in online mode and switched to offline mode only in February 2022. Our students and staff rose to the challenges posed by COVID 19, by maintaining the academic standards as well as organizing co-curricular and extra-curricular activities. No efforts were spared to ensure the holistic development of students.

- CRCE was ranked 44th among the Private Engineering Institutes in India by Education World Higher Education Rankings – 2021.
- Careers 360, India's largest career counseling organization, has graded CRCE in the top slot AAA+, in its 2021 rankings.
- Major recruiting companies TCS, Quantiphi, Carwale, Godrej, JP Morgan, Direct I, UBS, Deloitte, Amazon, L&T, Reliance Jio, Reliance Industries, Nerolac, Oracle, Accenture, Cognizant, Capgemini, Dolat Capital ----- to name some.
- Placement offers (as on 25th March 2022) 174 students placed out of 196 eligible and interested students. No. of Placement offers 296
- Internship Third year students also received internship offers from Barclays, UBS, Quantiphi.
- Many students and faculty have successfully completed NPTEL and other MOOC Courses, most of them with Elite grade at the national level.



- The seventh edition of our biennial International Conference on Computing, Communication and Control (ICAC3 '21) was held on December 3rd & 4th 2021. The papers presented in the Conference have been uploaded in the IEEE Explore Digital Library and are Scopus Indexed.
- Final year pass percentage in May June 2021 examinations was 100%, across all branches, with all students scoring SGPA of 7.75 and above.
- Two candidates received Ph.D Degree in Electronics Engineering Dr. Sanjeeve Ghosh and Dr. Preeti Jain.
- Six more candidates have submitted their thesis to University of Mumbai and are awaiting defense.
- Dr. Hemant Khanolkar was Resource person for National Chemistry Olympiad, organised by Department of Atomic Energy, Govt. of India.
- IIC (Institute Innovation Council), working as per MHRD guidelines, Govt. of India, received the maximum score of 4 stars in 2020-21 and is among the best performing IIC Chapters in the country as per their Annual Performance report.
- New Academic partnerships:
 - Linux Professional Institute.
 - EC Council, USA, for cyber security.
 - · Amazon Web Services
 - Codechef
 - · Coursera Campus Plan
- Team Abadha, fabricating the All Terrain Vehicle, participated in E-BAJA SAE India 2021 and was at the 17th position in the All India Ranking.

The team also participated in the Aravelli Terrain Vehicle Championship in October 2021 and was ranked AIR 2.

• Team CRCE Formula Racing bagged 19th rank out of 59 participating teams in Formula Bharat 2021



- Team Vaayushastra was ranked 14th globally in the SAE Aero 2021 Competition in the Advanced Class Category.
- Team Robocon participated and qualified in Level I of the Flipkart's Flagship Engineering Campus Challenge 2021.
- Project team 'Coconut Harvester' was among the finalists in the e-yantra competition 2022, funded by the Ministry of Education, Govt. of India.
- Scholarships through the college (other than Govt. and private trusts)
- Blue Star Foundation 8 students
- Stulz CHSPL Foundation 12 students
- We have partnered with 2 NGOs Katalyst and Nimaya who provide skill training, professional guidance and support to girl students.
- Regular academic curriculum is complemented by a variety of cocurricular and extra-curricular activities through the Student Council, various Student Chapters, departmental events and guest lectures.
- Prominent events held in 2021-22: National level Intercollegiate Fr. Conceicao Rodrigues Memorial Debate with the theme Emanation of unbecoming comportment, National level Hackathon Unscript, Technical festival Crescendo, Intra-collegiate sports events, Sports Day at the University Ground, Cultural festival Euphoria, College annual magazine Fragmag, TEDx talks, social activities through NSS, TEDx and Rotaract Chapters, placement trainings, Technical workshops in collaboration with Industry etc. IIC conducted a number of Innovation and Entrepreneurship oriented events.

Living up to our vision, we put in our best efforts to ensure that every CRCE student graduates as a competent engineer with an innovative mindset, leadership skills and concern for society.



FROM THE EDITOR'S DESK



ALISHA RAO

The word 'Adwitiyah' is a sanskrit word meaning 'Matchless'. Our world is programmed to stereotype people on the basis of appearance, gender, behavior, mannerisms and the endless list goes on. You can be your matchless self only when you know and believe what is right for you rather than falling prey to the worldly brackets you fit into. No one who has ever lived or is to come has had your combination of abilities, talents, appearance, friends, acquaintances, burdens, sorrows, and opportunities.

No need to pretend so that you seem more like someone else. No need to lie to camouflage parts of you that aren't like anyone else. You weren't meant to be like someone else but were meant to shine like no one else. We need to let ourselves loose and learn to believe that we can achieve all that we dream to be. So, let's embrace our true 'adwitiyah' selves and encourage others to do so too because our time is limited and far too precious to live someone else's life.

I would like to thank Rev. Fr. Valerian D'Souza, Rev. Fr. Eleuterio Fernandes, and our principal Dr. Srija Unnikrishnan for their constant support and guidance. I would extend my humble gratitude to Dr. Deepak V Bhoir (Dean of Students' Affairs) and Dr. Ketaki Joshi (convener) without whom the organization of the magazine would not have been possible. Hearty thanks to Dr. Joseph Rodrigues and Prof. Prahelika Pai (English Editors), Prof. Deepika Singh Singraur (Hindi Editor), and Mrs. Jyoti Kargutkar (Marathi Editor) for the assiduous support. I would extend my warm gratitude to the volunteers (Amaeza Rodrigues, Mohini Gautam, and Yashas Joglekar) for lending a helping hand.



The mesmerizing designs viewed further in the magazine have been the hardwork and ardent of the design team led by Nixon Lobo. A special thank you to Sachi Verma, along with the web masters (Ivan D'Silva & Tanuj Kumbhar) for the huge amount of efforts to create an enthralling website for the magazine. "Teamwork makes the dream work". The creation and organisation of this magazine has been a journey where I could not have reached the destination without the persistent support of my Students' Council. A very big thank you to the senior council for always having my back, and to my diligent junior council for their continuous ardent efforts every step of the way.

"Art washes away from the soul everyday life". FragMag aims to incorporate all pieces of art that set you free, that liberates you from the shackles of daily life. Every submission here is a adwitiyah expression of love, art, affection, or affectation. This is why I urge you all to read them and reach out to the authors if you love their submissions because every small deed of kindness can encourage someone enormously.

With that being said, I present to you all, FragMag 2022! Have an enthralling journey down this rabbit hole!



FROM THE ENGLISH EDITOR'S DESK

I have been fascinated by reading this quote by an anonymous writer that says: "Life is better when I get lost in natural beauty".

Nature has the mighty power to heal us psychologically as well as physically and has been an incredible magical wand to the city lungs. Any aged heart or lung's patient with effete health visits Doctor; will get an amazing advice to take a break from the impeded, impure and bustling city life and to relax amongst the nature. It may be a hill station or your remote village or any lovely place of your choice where you find peace of mind, happiness and the best medicine to recover your health.

Equally, newly married couples choose their honeymoon destination in the midst of the splendid nature and initiate their new journey of love life. Quality time spent with each other helps them to understand each other. Human being has the most complicated behavior pattern and every individual has different traits. Good and worse. Understanding each other and learning to live by making adjustments leads to harmonious life ahead. The destination remains evergreen for them. The stress-free life led in nature is captured in the fresh minds and remains as a wonderful memory to cherish throughout their lives.

For teenagers, as the teacher announces about a picnic to any historical place or museum, it acts as an ultimate stress buster from their regular studies. They start dreaming about this wonderful day and plan their games, food and enjoyment accordingly. Eager to learn more with growing age, they love exploring such places which teaches them about the past history and adds to their knowledge about the exhibits preserved from the past generation.

The archeologist's excavation of the Grandeur Ancient city Hampi at Karnataka was once the Vijayanagar Empire under Harihara kings. It rose and fell into ruins. The pillars and statues were mute witness to the unfortunate happenings and then later with ages it was taken over by the forces of Nature. Today, it stands as a magnificent work of India's ancient historical monument.



Let's talk about the College youth who prefer trekking to the mountains in the rainy season and trips for longer days in the winter season not only strengthens the friendship bond but also improves interpersonal skills like team spirit, adjustments, adaptability and the leadership qualities which lasts with them for their life time. Hence, along with exploring nature, they also learn so many important lessons of life. These days are the exciting moments of life where they get ample time to spend with their best buddies; trying to understand each other.

Never the less is the silver screen that gives us wonderful experiences of nature through songs and scenes. Not only from Kashmir to Kanyakumari but from all the seven continents of the world. The picturesque beauty adds to the film quality a lot. We have learnt in Geography book that Hollywood in Los Angles, California has been chosen as the film city because of the beautiful climate and scenic natural beauty. All the popular film production studios have sprung up here. In reality, Nature is very much associated in all paths of our life.

We find unmatched diversity from East to West and North to South. Everyone would love to enjoy ice of north at the fullest. The Frosting winter and snow of Kashmir, the tempting adventurous sports of Shimla, Manali and Nainital. The long rides to Ladakh on bike and the glimpse of coastal area with vast stretched beaches and blue seas of Goa and Kerala. Activities like Snorkelling and Scuba diving at Lakshadweep islands appeal us to observe underwater attractions. While a trip to Kala Pani islands called Andaman, you will experience standing amongst the herd of deer and peacocks on the tree tops at Subhash Chandra Bose Island. We fall short of words to watch the charming beauty of the cool sea till the horizon where the sky and earth meet each other to be one.

Nature's beauty has always enchanted human beings. He goes hand in hand with nature. Not only does he depend upon it but also takes complete comfort in Mother Nature's womb. Indeed, Human being has excellently connected in all aspects with Nature and hence it is 'Adwitiyah' contribution to us.

Dr. Joseph Rodrigues Prof. Prahelika Pai Ms. Ameaza Rodrigues



FROM THE हिंदी EDITOR'S DESK

अद्वितीय

यह मन अद्वितीय यह तन अद्वितीय जीवन अद्वितीय ब्रहमांड अद्वितीय है भाषा अद्वितीय हर आशा अद्वितीय नर अद्वितीय जानवर अद्वितीय जब कण - कण अद्वितीय हर प्रांगण अद्वितीय जब हर्ष अद्वितीय तो है क्यों विषाद अद्वितीय .. ऐ मानव! छोड़ यह विषाद ... आगे बढ़ ... क्योंकि ... तू है अद्वितीय।

इस तरह देखा जाए तो अद्वितीय व्यवहार्यत : किसी व्यक्ति या वस्तु की विशिष्टता को व्यक्त करता है। " तब तक लड़ना मन छोड़ो जब तक अपनी तय की हुई जगह पे ना पहुँच जाओ यही अनुपम , उपमारहित , अद्वितीय तुम हो। " – अब्दुल कलाम इसी "अद्वितीय तुम " की परिभाषा पर बखूबी प्रकाश डाला गया है प्रस्तुत आलेख में।

> ~ दिपीका सिंह, मोहिनी गौतम



FROM THE मराठी EDITOR'S DESK

संपादकीय..

वाचक हो!

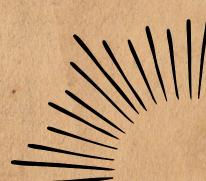
काही गोष्टी त्यांच्यासम त्याच असतात व त्याची तुलना आपण कशाशीही करू शकत नाही. ते शिवाजी महाराजांचं शौर्य असो किंवा नारळीकरांसारखा गणिती.

टाटांची उद्योजकता असो किंवा सचिनचे शतक... नारायण मुर्तींचा 'इन्फोसिस' चा प्रवास अथवा लता दीदींचं सुरेल गाणं. सर्व काही अपवादात्मक, विलक्षण आणि असाधारण!

तसेच, आपल्या आयुष्यातील काही अनुभवलेले प्रसंग अथवा आपल्या आयुष्यात आलेल्या काही व्यक्ती ज्या, आपल्या जगण्याला वेगळा अर्थ देऊन जातात, ते देखील अद्वितीय ठरतात.

मित्र हो ! हिच आपल्या 'फ्रॅगमॅग' ची ह्या वर्षीची संकल्पना आहे आणि या विषयावर आधारित गुंफलेला काही कथा व कवितांचा गुच्छ, मराठी विभागातर्फे तुमच्यापर्यंत पोहोचवताना मला संपादक म्हणून विशेष आनंद होत आहे आणि तोच आनंद वाचताना तुम्हालाही जाणवल्याशिवाय रहाणार नाही.

-संपादक मराठी विभाग ज्योती करगुटकर यशस जोगळेकर



COUNCIL REPORTS

CONCEICAO RODRIGUES MEMORIAL DEBATE 2021

In order to succeed, your desire of success should be greater than your fear of failure.

Overcoming all the challenges posed by the Covid-19, Fr. Conceicao Rodrigues College of Engineering has successfully hosted its Flagship event, Conceicao Rodrigues Memorial Debate (CRMD), from 8th to 10th of October, 2021. Again the event was held online but that did not take away the enthusiasm professed by the debaters or the judges who partook in this prestigious event.

Identifying the indifference between the set of practices and moral values prevalent in the modern world, the theme for CRMD 2021 was – "The Emanation of Unbecoming Comportment"

CRMD is an intermediate Oxford-style debate competition and has always been praised by people who have witnessed it. Teams from all over India eagerly anticipate bagging the esteemed trophy with their debating intrepidity. The event was hosted on two popular video conferencing platforms, Google Meet and Zoom. The Semi-finals and Final debates were live on YouTube as well to ensure an immersive experience for all our viewers.

The much-anticipated debate had 32 laudable teams from all over the nation, grappling with their words for the first prize of Rs. 50,000, second prize for 30,000 and Rs. 10,000 for the best speaker and the best adjudicator. Teams from more than 15 states competed hard through the league rounds to acquire their positions in the quarter-finals.

Not only centring on the strengths and weaknesses of an argument but also providing frank but constructive feedback to each team to help them better, our Judges, who included experts from the field of Communication, Education, and Corporate world, judged every debate with immense grace and eloquence. Weighing every argument with equanimity, and deciding rankings in the house, an Adjudicator plays a vital role. Our Adjudicators consciously noted down all considerable points put forth by the debaters and provided them with productive feedback for the same.



With astute arguments, the top 8 teams battled their way in quarters, putting forth excellent points. 4 teams emerged victoriously from the war of words and were qualified for the semifinals.

The panel of Judges for the semi-finals included -

Dr. Khushbu Trehan, is an Assistant Professor (Communication Skills), an Employability Trainer at D. J. Shanghvi College of Engineering Mumbai, India. Miss Meera Bharwani, is a senior faculty of Communication Skills at VJTI. She has taught at VJTI, Sardar Patel Institute of Technology, Xavier Institute of Engineering, Narsee Monjee Institute of Management Studies (NMIMS), Champlain College (Vermont, USA), Mumbai Campus, Thakur College of Engineering and Technology, and Ramnarain Ruia College among others.

Mr. Anirudh Srinivasan is currently a Marketing Manager with Fujitsu, a Japanese Digital Transformation company, where he focuses on Emerging Technology solutions such as Artificial Intelligence, Quantum Computing and Blockchain.

Dr.Arpita Pal Choudary is the Associate Professor and Head of the Department of Engineering Sciences at Ramrao Adik Institute of Technology, D.Y Patil Deemed to be University and have More than 25 years of experience in teaching and research.

Dr. Suma Shreedhar is currently working for AP Shah Institute of technology as Assistant Professor since 2016 and has Completed doctorate in English from JJTU and MS in counselling and psychotherapy from Chittor university having more than 16 years of teaching experience.

Mr.Sashankh Kale comes from a research and consulting background having close to 18 years of work experience and is currently in a corporate strategy role at Gainwell Technologies, a US healthcare IT solutions company.

The teams competed flawlessly in the semi-final rounds, proving their skills for the dialectic dispute. The finest 2 teams made their way to the finals.

Articulating the roots of beliefs and opinions, the 2 teams in the final round showcased their endowment of deploying lucid and logical arguments following the given motion -

"This house being the assembly of 1947 decides to pursue Ambedkar's vision of a completely urban model for Indian development via elimination of the rural social order and pursuit of urban systems of progress.."



Rtd. Brigadier Ajit Srivastav was the chief guest for the final round of CRMD' 21. After 38 years of meritorious service in Indian Army, Brigadier Ajit Srivastav is now the PRESIDENT of POORVI SAINIK SEVA PARISHAD of MUMBAI, THANE and KONKAN District and simultaneously nurturing his hobbies of painting, wood work and travelling and social work.

Following were the Judges for the Finals of CRMD' 21 -

Dr. Abha Jha, is presently teaching Business Communication and Ethics in THADOMAL Shahani Engineering college, Bandra. She has taught in FRCRCE between 2008-2011.

Mr.Jagjyot Singh is businessman by profession and has participated in this debate competition for 4 years and have won all four years consecutively and also won best speaker in all four years. He has had a very close relationship with the institute and it's professors and students over the years.

Mr. Mihir Karkare is an alumni of this college and have successfully completed computer engineering in the 2007 batch and has also been part of the CRCE debate team in his final year. He believes that the debating skills he developed during those days have served as a strong underpinning in his life and career.

In every battle there comes a time when both sides consider themselves beaten, then he who continues the attack wins. Side Opposition, Team CMD03 (NMIMS MPSTME) emerged triumphant in the prestigious battle of CRMD this year.

Offering an arduous debate, Side Proposition, Team CMD19 (Gujarat National Law University) were declared as the runners-up for CRMD'21.

Ms. Chahna Charles received the best Speaker award and Mr. Purav Bhardwaj received the best Adjudicator award.

The power of real debate is in the language and intellectual honesty of the debaters, alongside the engagement of spectators. The debates were lively, proposing and countering a plethora of ideologies. Providing a forum for today's youth to engage in various affairs experienced in daily life, CRMD was an indulgent treat for the debaters and the audience alike. A virtual debate experience was one of its kind and proved to be a boon as for the first time ever, our viewership was spread across the length and breadth of the country. This online affair in no way diminished the pleasure of the enticing war of words.

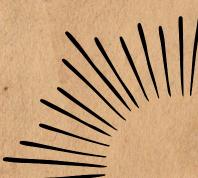


Every prosperous event is a result of the commitment to excellence, intelligent planning, and focused effort of everyone planning the event. My deepest appreciation to my professors in charge – Mrs. Garima Tripathi and Mrs. Parshvi Shah, and the professors who assisted me, Dr. Joseph Rodrigues, Mrs. Sundary Prabhavarthy, and Miss Prahelika Pal, for their constant support and guidance. I would like to extend my sincere gratitude to the organizing committee, the diligent Students' Council who strived to not only organize but also make it a transcendent experience. I would also like to thank our Local Superior Rev. Fr. Peter D'Souza, Director Rev. Fr. Valerian D'Souza, Assistant Director Rev. Fr. Eleuterio Fernandes and Principal Dr. Srija Unnikrishnan for all the love and support we received pre and post the event.

I extend, in abundance, my most exuberant appreciation to all the helping hands, who left no stone unturned to make this debate fruitful. Without all of your love, support, and dedication, CRMD 2021 would not have seen the success that it did.

Alisha Rao Editorial Secretary Student's Council, CRCE.





SPORTS REPORT

"Victory is having done your best. If you've done your best, you've won."

After two monotonous years of lockdown, we kickstarted 2022 with Athlead – our intra college sports event. We encountered a very enthusiastic participation from all the students.

For the month of february we had 4 intra events, We began with Intra Carrom, which had taken place in the ED HALL of our college. 5 matches were going on simultaneously. Where as Ground football for boys and throwball for girls was also Held on the 19th February. Semis and Finals of football and throwball were scheduled for 20th of February. There were 14 classes competing against each other for girls throwball amongst which the BE ELEX won the finals ,BE COMPS came 2nd and BE IT secured the 3rd place. For boys football SE COMPS A came 1st , BE IT came 2nd and TE ECS came 3rd.

The next event scheduled was Intra Chess on 26th February in library at 8 am. 5 matches took place simultaneously. TE COMPS A vs BE comps were competing against each other for boys finals, where TE COMPS A won the boys final. And for the girls finals BE PROD vs SE AI&DS competed with each other, where BE PROD won the final.

In the month of March, we organised Intra Badminton which was held on 6Th March at TSG Sports Arena, Borivali. It was a splendid event and everyone on the court had good time.

On 12th and 13th of March, It was an extremely hot and radiant day inspite of that, the participants showed up at the field with an enormous number and had alot of energy and played with an athletic soul. We had Rink football held on the college ground and Intra table tennis in the Boys' Common Room.

With alot of ups and down we successfully managed to end all our intra college event Athlead.

The next upcoming week we had celebrated sport day on 25 March in the prestigious Mumbai University Ground. The event commenced with various athletic events such as Races, Relay races, Shot putt and the Tug of War successfully completing, we managed to make Sports Day 2022 a memorable one.



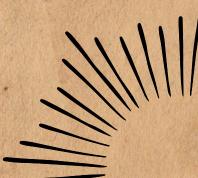
Participation and cooperation in sports was generally pointed toward bringing various benefits for students. The excitement and devotion that went in organizing an event as well as for the students to completely partake in the occasion allowing a fair opportunity to each class to fight it out for the points for Sports trophy ended up being the most difficult. Yet, with endless ideas from the students and the interminable help given to us during the hour of arrangements, each event was finished up successfully without a hitch.

Sincere thanks to our dean of students affair, Dr. Deepak Bhoir and sports incharges Prof. Dipali Bhise and Prof. Deepak Bauskar for constantly supporting us. Special thanks to our Students Council for working so tirelessly day and night to make all our events a successful one.

We, your sports secretaries Brenda Fernandes and Lance soares for the year 2021-2022 are signing off with sincere appreciation to each and everyone of you who made the sports event such memorable and a victorious one.

Lance Soares and Brenda Fernandes Sport Secretaries Student's Council, CRCE.





TECHNICAL REPORT

"Technology is best when it brings people together"

The Council always stood strong in the face of adversities, and this year together we successfully pulled off the technical events with complete determination and a strong sense of purpose. Starting off with the National Science Day Celebration which was held on the 7th of March, 2022 as Unit Tests were on during the 28th of February. The event saw a huge participation of students from all years and departments as it was the first day of normal college lectures after 2 years of being away from visiting college due to the pandemic situation. The speaker for the day was Dr. Ramesh Chandra Bindal, Outstanding Scientist and Head, Desalination Department, Bhabha Atomic Research Centre (BARC), with a fitting theme set as "The Advancements in Science and Technology in the past 75 years of Independence." Dr. R. C. Bindal began his speech by addressing the audience about the biggest and most impactful advancements in technology from the past, namely Pokhran - I also fondly known as Smiling Buddha Mission. He focused on making it known that such a day should be celebrated and the past scientists should be appreciated for their efforts and the future generations should take this forward and work towards the development of the nation. He mentioned how Technology gets a fair share of contribution but Science should also be taken forward as it lays the foundation for so many leaps and bounds that we have taken as a society with lots more to look forward to. The event ended as we felicitated Dr. Bindal for gracing the occasion and motivating our students with his words of wisdom. The students then proceeded for a poster making competition organized specially for this day as they showcased their artistic abilities with their interpretation on the theme for National Science Day. The aim to organize such an event was just to give knowledge to the students and develop their interest to research further than what they learn from books and it aimed to show the progress of the field of science in our country. We are sure that the participants left Samvaad with a new perspective about Science and honed their artistic skills with a new and fresh approach towards celebrating National Science Day.

With the arrival of offline college and the spirit of creating an atmosphere of creativity and innovation, the Students' Council for the first time ever held a hybrid version of Crescendo with a host of offline as well as online

events. Crescendo has always catered to the changing dynamic of the specializations included in our college and this year as well we put together an ensemble of events that covered the entire spectrum of engineering domains our college offers.

The first domain was 'Bits n Bytes' which covered the Computers domain. The first event under this domain was 'Codehunt' which was organized by Codelabs. The core of this event was to test the algorithm solving skills of the students. The next event under this domain was 'Mystery Query' which was organized by CSI. This event saw the students solving an SQL treasure hunt using queries to solve the mystery.

The next domain was 'Bring it Ohm' which had events for the electronics students. The first event in this domain was 'Tech Pep' organized by StuCo which had fun events like Just a Minute and Dumb Charades which were electronics oriented and tested the knowledge of the students. The next event was 'Just deal with it' organized by ACM, which was an electronics version of the famous game show 'Deal or no deal'.

'Mechaverse' was the domain which catered to the mechanical and production students. The first event in this domain was 'Maze Tandem' organized by ASME, which had hydraulic mazes and assembly exercises as tasks for the event. The next event in this domain was 'Engenius' organized by IIIE which had tasks such as parachute building and testing as well as building structures to withstand earthquakes.

The subsequent domain was 'Visionaries' that tested the Entrepreneurship abilities of the students. The first event in this domain was 'Formula Unicorn' organized by E-Cell, where companies were auctioned off and the students were expected to come up with a merger idea for the companies that they purchased in the auction. The next event in this domain was 'Out of the Box' organized by StuCo wherein the students were given a product and they had to come up with an unconventional use for it and make a brand out of it.



The domain that followed was 'Super-Novas' that covered events for Innovation and Creativity. The first event in this domain was 'Bazinga' organized by StuCo which had a fun aspect of throwing ping pong balls into glasses which determined which tasks they would get which tested their innovation and creativity skills. The next event in this domain was 'Innolette' organized by IEEE which tested how students can come up with innovative uses for the products assigned to them and write a report about the same.

The last domain was the 'Esports' domain which had events like Valorant and Fifa that helped lighten the mood and fulfill the thrill of an adrenaline rush amidst all the brainstorming.

Finally, coming to the biggest events of Crescendo 2022, our national level inter college Flagship events. our online flagship events brought back the most awaited 24 hr national level hackathon, and keeping up with the motive of creating a common ground for students of all departments to have an opportunity to explore their domains, we also had the 24 hr mechathon and for the first time ever we introduced the 24 hour elexathon.

The Hackathon included 3 problem statements which covered domains such as UI and UX, Machine Learning, Web Development and Blockchain. It saw participation of around 50 teams of students from different years and backgrounds that got an opportunity to showcase their skills.

The 2nd edition of the Mechathon had 2 problem statements that covered topics such as drone design and development as well as designing of a winch machine. It provided a chance to students from mechanical and production departments to further discover the application of their branch.

For the very first time, with the view of having an unbiased platform, we introduced the Elexathon. It had 2 problem statements, first based on the application of IoT in agriculture and another was the application of IoT in healthcare. As a new event, it still saw a good amount of participation as students were keen to explore this new event and understand the impact of the electronics domain.



Crescendo was a culmination of efforts put in not only by the Students' Council but also a few notable mentions. Firstly, extending my sincere gratitude to our Principal Ma'am, Dr. Srija Unnikrishnan, our Director, Fr. Valerian D'Souza and our Deputy Director Fr. Eleuterio Fernandes for giving us the platform to explore this new format of Crescendo 2022 and trusting us to carry it out in the way we imagined. I would also like to thank Dr. Deepak Bhoir, the Dean of Student Affairs, Prof. Swapnali Makdey, Crescendo Co-ordinator and Prof. Hitendra Vaishnav, Crescendo Co-ordinator for the support and guidance we received to pull off the offline format of Crescendo after 2 whole academic years. Extending thanks to all the co-ordinating councils for Crescendo - ACM, ASME, Codelabs, CSI, E-Cell, IEEE and IIIE. And finally, a huge thank you to the entire Students' Council who stopped at nothing to make Crescendo 2022 such a successful event.

Sachi Verma Technical Secretary Students' Council 21-22



INSTITUTE INNOVATION COUNCIL

Ministry of Education, Govt. of India has established an 'Innovation cell' (MIC) with a purpose of systematically fostering the culture of Innovation in all Higher Education Institutions (HEIs) across the country. 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-Fr.CRCE is an interface between MIC and Fr. CRCE to showcase various activities conducted within the institute. Our Institute is rated with 4.0 Stars which is one among top 44 colleges out of total 460 colleges in the western region.

The fourth version IIC4.0-Fr.CRCE initiated various innovation, start-up, entrepreneurship related activities such as Workshops, Boot Camps online, Seminars, Hackathons, **Idea Competition**, Mini Challenges success stories and interactions with professionals, Alumni Entrepreneurs, in the college in association with various Technical councils in the academic year 2021-2022.

IDEA COMPETITION 2022:-

IIC-FrCRCE in association with E-Cell organized institute level Idea competition in four phases.

- 1- Idea Invitation
- 2- Proof of Concept Competition
- 3 Business Model Canvas and Business Plan Competition
- 4 Poster Presentation with Demonstration.



Total 24 Teams submitted their Innovative Idea. The Teams were scrutinized at each Phase and finally following are the Teams who have cleared Phase 3(BMC and Business Plan).

- 1. Asthagraha
- 2. Pet Care
- 3.Coconut Harvester
- 4.D Byte Pharmacare
- 5.Clear It

ACTIVITIES

The academic year for IIC is divided into four quarters. Events inline with theme Startup, Entrepreneurship, IPR and Innovation throughout the academic year 2021-2022 were organized.

There are three types of activities conducted in the first two quarters of the academic year.

- 1. MIC Driven Organized by MIC for faculty and students participation:-3.
- 2. IIC Driven Organized by IIC as per the guidelines of MIC:-7.
- 3. Self Driven Organized as self-initiative by IIC:-10.
- 4.Celebration Activity:Organised By NSS ,Student council(Events Like National Education Day,National Science Day,World Earth Day):-3

Upcoming events will be conducted in third and fourth quarter.

INNOVATION AMBASSADOR TRAINING

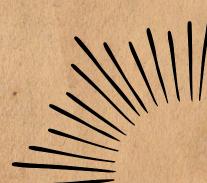
In this academic year Prof. Swati Ringe, Prof. Garima Tiwari and Prof. Hitendra Vaishnav successfully completed "Advanced Level Innovation Ambassador Training".

Prof. Roshni Padate, Prof. Kranti Wagle, Prof. Monali Shetty, Prof. Sangeeta Parshonikar, Prof. Heena Pendhari, Prof. Ashwini Pansare, Prof. Prajkta Bhangale, Prof Vaibhav Godbole and Prof.Saurabh Kulkarni successfully completed "Basic level Innovation Ambassador Training". IIC-FrCRCE organized the "Innovation Ambassador Lecture Series" and above faculty members have mentored the teams participated in Idea competition.

IIC-FrCRCE has funded Rs 30k for the Project "Coconut Harvester" and has planned to incubate this Project on-campus. IIC-FrCRCE has identified three Projects (1 Hardware & 2 Software) in Line with converting them into future Startup)

IIC-FrCRCE organized the first phase of Smart India Hackathon on 14th, 15th March 2022 mentoring total 22 teams participated and 15 teams are nominated.









































V=













MEET LINK:





Report By:

Prof.Kranti K.Wagle IIC-FrCRCE President,

ALUMNI ASSOCIATION OF FR. CRCE AND STUDENT ALUMNI COMMITTEE

The Alumni Association of Fr. Conceicao Rodrigues College of Engineering (Fr. CRCE) makes constant efforts to strengthen the bonds between the Alums and the current students of CRCE. The committee has organized various events such as the Alumni meet, the Alumni Spotlight series, Webinars which help to nurture the Alums and the current students of CRCE and the college indeed.

Alumni Spotlight:

The CRCE Alumni Spotlight brings to the forefront the successful journeys of the iconic personalities who graduated from our Institute. The Alumni Spotlight is a series of videos from the distinguished alumni of CRCE which bring to the light their successful journeys with the intention to motivate and spark action from the student and alumni base.

These videos are uploaded every month on our YouTube channel, Instagram and LinkedIn Account. Our purpose is that these stories may encourage you to keep striving towards your dreams. We have featured Alumni who have made marvellous contributions in their field of interest. We have featured the following alumni –

Mr. Paresh Shetty, Electronics - Batch 1993 (President (Sales), Cloud4C)

Mr. Nirmal Topiwala, Electronics - Batch 2012 (Cofounder, Ajackus)

Mr. Sanket Jack, Information Technology - Batch 2009 (Cofounder, India's 1st Cricket Fantasy gaming platform)

Mr. Deepal Dass, Electronics - Batch 2002 (VFX Team lead, YRF)

Mrs. Rashmi Nath, Electronics - Batch 1995 (Technical Director (Sales), INTEL)

Ms. Shivani Vartak, Production-Batch 2018 (Mechanical Engineer, Schlumberger)

Mr. Pavan Sawant, Production - Batch 1994 (Consultant CSR & Capacity building for NGOs, Visiting faculty with Management institute)

Mrs. Sonal Nangia, Electronics - Batch 1995 (Founder, Red Engine)

The Alumni Meet:

The Alumni Association of Fr. Conceicao Rodrigues College of Engineering (Fr. CRCE) organized its Annual Alumni Meet on Saturday, 26th February 2022. Since the restrictions imposed due to the COVID - 19 pandemic was subsided, the Committee was pleased to conduct the Alumni Meet offline after 2 years at CRCE Campus.

The Induction Ceremony was hosted by Ms. Mareena Fernandes, President of the Student Alumni Committee. The Alumni Meet commenced with a walk-through video displayed on the screen. In that video, we presented our Alumni with the various developments that have taken place in our college all these years and also with a campus tour. The host then invited our Principal, Dr. Srija Unnikrishnan who highlighted the various milestones reached in the past years by the Institute. The Chairperson of the Alumni Association, Dr. Sapna Prabhu in her address expressed her gratitude for the overwhelming response from the alumni. She introduced her concise report of the Alumni Association, which revealed that several alumni have been contributing to their alma mater by instituting awards, joint projects, course sponsorships, and donations. She then petitioned the other alumni for their valuable contribution too. In conclusion, she revealed the front cover of the 2nd edition of the 'CRCE Roots' Newsletter. Our Alumni Mr. Suresh Balakrishnan (Stulz CHSPL Foundation), Production batch 1995 was felicitated for his financial aid to meritorious and deserving students.

The second milestone of the event was the felicitation of the 'Batch of 1996'. Mr. Kaviraj Easwaran, Operations Head of the Student Alumni Committee hosted the Silver Jubilee Celebration. This year three branches, Production Engineering, Electronics Engineering, and Computer Engineering were felicitated by the respective dignitaries with a memento. It was a very proud moment to hear about their success and achievements, and also feel their respect towards their home 'FR. CRCE'.

The Distinguished Alumni Awards were hosted by Mr. Kris Corriea, a Member of the Student Alumni Committee. This year, similar to the last, the distinguished alumni awards are divided into different categories, in particular, CRCE Young Achiever, CRCE Entrepreneurial Leader, CRCE Social Impact Leader, and CRCE Top Entertainer. Each category was awarded the 'Distinguished Alumni Award' by our respective dignitaries.

Mr. Mihir Joshi, 'CRCE Top Entertainer 2022' graced the occasion with a surprise performance of his new single release. The various other alumni also entertained the audience during the karaoke session. In the end, Mr. Yohan Mhatre, Alumni Head of the Student Alumni Committee concluded the celebration with a vote of thanks. Overall, the event at the college campus was a huge success in its prime motive of



Connecting and Networking the alumni and the Institute. Find more pictures: click here!

Alumni Scholarships:

The Alumni Association of Fr.CRCE also supports the very livelihood of the college – the students. The Alumni Scholarships are awarded by our alumni to help the deserving students of Fr. CRCE in their education.

This year also like the last, Mr. Suresh BalaKrishnan, co-founder and joint managing director of STULZ India awarded Monetary Scholarship up to Rs 7 Lakhs to many economically backward and meritorious students.

We are grateful for his consideration and generosity towards our students.

AlmaConnect: Alumni Portal

The Alumni Association of Fr. CRCE works towards nurturing and fostering the CRCE Alumni Network through 'Alma connect' which is a private alumni network that helps all CRCEites network digitally. Alma Connect helps with a range of topics such as job referrals, career advice, recommendations, introductions, fundraising etc. We urge all alums and students to join the network.

Link: frcrce.almaconnect.com

To get updates on Alumni Activity and Contribute get in touch with us! linktr.ee/alumni.association

- Mareena Fernandes President, Student Alumni Committee



TEAM ABADHA CRCE

ABOUT US:

TEAM ABADHA CRCE is a cadre of ardent & assiduous students from Fr. Conceicao Rodrigues College of Engineering. Team Abadha CRCE builds a One-Manned Electric-All Terrain Vehicle which is capable of keeping its ground in the roughest of terrain and in the most challenging conditions. The team was founded in the year 2012 and is the oldest team in our college. It was initiated by inquisitive coterie of students under the guidance of Prof. D.S. Sudhakar. Living up to its name (Abadha means Unstoppable in Sanskrit) the team every year overcomes all the impediments and is achieving greater heights. We participate in SAE E-Baja Competition. Every year the team makes a fresh start and sedulous to achieve its goal. The performance graph over the years is improving at an remarkable rate. The team has come a long way from being Overall AIR 78 in its very first attempt to being Overall AIR 5 in 2020. The team also secured AIR 1 in Sales Presentation. With a set of stalwart individuals, the team this year aims to be in Top 3.

AIM:

Our aim is to provide technical knowledge to the individual with the supporting data and hands on experience throughout their tenure. Individuals are also made aware of various funding strategies and to deal with real market investors and traders.

2021-22 ANNUAL REPORT:

For BAJA 2021 the total strength of the team was 13 divided between 4 departments. To increase overall strength of the team, new members recruitment was started on 18th May. The total number members recruited in Phase 1 and Phase 2 were 29 students A new department called "Marketing and Multimedia" was introduced. We also had fundraising movement and also went for sponsorship through which we got a good responses. The Team kick started its September month by achieving an AIR 1 rank in the Memories challenge organized by BAJA. Also participated in ATVC competition and BAJA SAE INDIA PHASE 2 and secure great results in both the events. We look forward to phase 3 of the competition with the same grit and hunger for success. Phase 3 is scheduled on 5th May,2022 at Cambridge Institute of Technology, Bangalore.

ACHIEVEMENTS:

• BAJA SAE INDIA PHASE 2:

Virtual Dynamic Event:

Brake Test: AIR 1; Stopping distance - 3.068 m Acceleration Test: AIR 1; Lap time - 4.155 secs

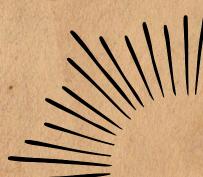
Overall: AIR 4

• Memories Challenge Event: AIR 1

• ATVC Event: AIR 2

Sahil Nikalje Team Abadha CRCE





TEAM CRCE FORMULA RACING

Team CRCE Formula Racing is Fr. Conceicao Rodrigues College of Engineering's Formula SAE team. A mutual passion for automobiles and a zeal to learn formed the essence of CRCE Formula Racing. 35 Fr. CRCE students from different engineering disciplines made up the 2021-22 CRCE Formula Racing team. Each student brought instrumental skills to the team, and like every year the union between diverse skills and strong teamwork formed the core of the team. The team strives to design and build the best prototype formula-style race car, with the best engineering practices employed.

After a highly successful Formula Bharat Virtuals February 2021, with a best-ever rank of 19th overall in the Combustion Vehicle category, the team was looking forward to manufacturing their car. But owing to the second wave of the COVID pandemic, the scheduled competition was shifted to a virtual platform yet again, with the competition being held in October 2021. The team had started recruiting in July 2021 those who were part of the team as volunteers. The new team members were taught the basics of the design and manufacture of a formula-style race car. Their selection into the team was done by taking online interviews, after which the members were allotted to their respective departments. The team secured 2nd place in the Formula Bharat rulebook test, which is mandatory to clear, to qualify for the competition, and this was the best rank that the team had achieved, to date. The team had to burn the midnight oil and spend long hours in front of laptops and phones for conference calls and online meetings. After having done numerous designs and simulations, the team was confident and ready with the best car they had created to date, with a lot of innovations and upgrades. The team participated in Formula Bharat Virtuals 2021, held in September-October 2021, and managed to achieve 5th position in business plan presentation event, 17th rank in engineering design presentation and an overall rank of 12th all over India, which is the best rank the team has achieved in all its history.

Team CFR has now switched to the electric category and will be manufacturing its first-ever electric race car in the upcoming months to participate in Formula Bharat 2023. The team looks forward to gaining more and more experience by participating in many more competitions and competing with Indian teams as well as international teams at the highest level in the near future and bringing laurels, even in the electric category.

Shibu Matthew Team CFR



TEAM VAAYUSHASTRA

Team Vaayushastra was established in 2012 to represent Fr. Conceicao Rodrigues College of Engineering in the SAE Aero Design Competition. This competition is held annually in the United States where teams from across the globe participate. Since the year 2013, we have participated annually in the advanced class of SAE Aero Design Competition, consistently securing a position in the top 10 teams, worldwide. We strongly go by the motto of our team i.e., Dream. Build. Fly.

The team is formed entirely of undergraduate students from the college who have the aptitude and interest conducive to the competition. We focus on aeromodelling, designing and building state of the art UAVs which are best suited to accomplish their respective missions. We have four sub departments each for specific tasks: Design & Modelling Dept. handles the designing, modelling, simulation and fabrication of the aircraft ensuring that the plane designed is competitive over other teams. DAS Dept. ensures various systems that propel and manoeuvre an airplane and provide important data such as altitude, velocity, location, First person view, etc. GUI Dept. makes the computer logic and codes necessary for the aircraft. GUI is a type of user interface that allows user to interact with electronic devices through graphics. Sponsorship and Documentation Dept. handles the financial and media accounts of the team. They look after all documentation works to ensure smooth functioning and also get in touch with potential investors.

Last year, due to the severe covid-19 situation, we were unable to participate in all stages of the competition, but we did our best to achieve good scores in the Design Report and Technical Presentation. Even though they we were unable to manufacture the plane due to Ccovid norms, we still managed to rank 14th in the Design Report and 11th in the Technical Presentation globally.

This year our problem statement (Advanced Class) is providing aid during a wildfire by delivering water and dropping a powered autonomous aircraft containing parts for a ground vehicle, at a designated location. Hence for SAE 2022 we developed three different vehicle types i.e. Primary Aircraft, a smaller autonomous aircraft (PADA) and a ground vehicle GTV. The PA is designed to carry water during its entire flight and to drop the PADA. The PADA was designed within a very small weight limit, and to have sufficient volume to carry GTV parts. We have completed manufacturing of the aircraft as of now and it is ready for its first test flight.

Noela Rodrigues



ROBOCON

Curfews, quiet streets, quarantine, lockdowns were the new normal this year. In all the chaotic silence caused by the coronavirus, a constant admiration for learning has driven Team Robocon CRCE students to Lab 709. We are excited to learn the progress of innovation, keep up with it, and apply them to real tasks.

Launched in 2013 to compete in Asia's largest competition, ABU Robocon, Robocon CRCE has since diversified into various competitions and research directions. We are a group of robotics enthusiasts with diverse technical backgrounds, constantly striving to solve real-life problems using artificial intelligence and robotics mechanisms. In every contest we participate in, we strive to bring something new to the world of robotics. Our team consists of computers, electronics, and production subsystems that work together to build a functioning and usable bot.

Our team is currently aiming to participate in the Robocon 2022 Competition. This year's ABU Robocon 2022 Tournament aims to play a unique Lagori game with two robots. The highlight of this game is how the robots work together to break and stack the Lagori pile while the opponent team's bots are trying to score for defense. The biggest and unique challenge of this game is to stack the Lagori discs in perfect order within the specified time of 60 seconds.

Building a robot that can overcome all the challenges outlined in the problem statement requires a lot of thought, testing of many mechanisms, skillful programming, and constant effort.

In addition, we are pleased to announce that our endless dedication and great efforts have paid off. You have successfully completed Stage 1 of the competition with AIR-7 (96/100)! However, we won't stop and will continue to work towards future rounds.

This year has been very eventful for the team since we managed to participate in various other competitions apart from our flagship one, like EYRC, Smart India Hackathon and Flipkart Grid 3.0. As a team, we also regularly hold basic robotics workshops to support and educate robotics enthusiasts. We aim to assist students who are interested in robotics and related fields but lack the knowledge needed to build robots.

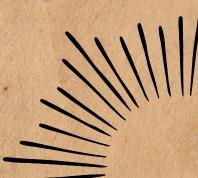
Now, as the competition draws closer, our team is going the extra mile to make the bots more efficient to compete for the Winner's title at Robocon 2022 IIT-Delhi. This year has brought new challenges to us, but with the conscious efforts of all team members, we have made it rewarding!

We would like to thank Rev. Fr. Valerian D'Souza, our principal Dr. Srija Unnikrishnan, Dr. Deepak Bhoir and Dr. Sapna Prabhu for their constant support behind the achievements we have made so far. We would also 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 to its vision -"Molding Engineers who can build the nation."

Aayushi Thakur (Team Captain)





PROJECT CELL

Established in 2014, PROJECT CELL is an endeavor 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 as pandemic struck and stalled everything but it couldn't stop Project cell from developing innovative and socially impactful projects, taking active participation at national level Competitions.

Activities carried out in cell throughout the year:

- 1.Project cell participated at Eyantra Robotics Challenge (2020-21) held at IIT Bombay, we reached the Finals of the Competition and secured an AIR 6 out of 470 teams in the Vargi Bots themes. The Project developed was 'Warehouse Management System Simulation'.
- 2. This year Project cell also participated at Eyantra Innovation challenge (2020-21) held at IIT Bombay and reached Pre-finals of the competition and stood amongst Top 15 teams that participated in the competition where the theme was 'Disaster Management' and project developed was 'Flood Monitoring, Alerting and Prevention System'.
- 3. Four Project Cell Team Members were selected for Eyantra Summer Internship Program in Computers Department at IIT Bombay based on their performance in the Competition.
- 4. Teaching in Project Cell was carried out using Project Based Approach, where team members were trained on Embedded System, IOT protocols, Deep Learning, Machine Learning, Android Development, Web Development and innovative projects were also developed during the learning phase. Simulation software Proteus and Tinker Cad was used in order to emulate the microcontroller.
- 5. Project Cell website development was completed this year using technologies such as React, Mongo DB, Node JS, Express which was successfully hosted, displaying all the projects, events that are carried out. Chat forum was developed for quick resolve of any query, subscription method was introduced such that an automatic mail will be sent to the users who wish to stay updated about the Ongoing Task in the cell. Further the hosted website was also displayed on college website.

- Further Multiple Android Apps were developed throughout the year, one of them was for 'Inventory Management' which shows all the items available also with the team member name who has issued the components. Remaining part of Interfacing with RFID and cupboard was not possible due to pandemic but hopefully completed in this term.
- Innovation Competition for FE's was carried out in order to get selected in the team for term 2021-2022. Students were trained on C programming Language and Basics of Micro Controller on Proteus for around 2 weeks and Idea Presentation with possible simulation on Proteus was displayed during the competition.
- IOT Workshop for FE's was carried out where they were trained on Basics of Arduino and Node Mcu with Protocols such as HTTP and MQTT and serial communication such as SPI and I2C.
- Project cell participated at Eyantra Robotics Challenge (2021-22) held at IIT Bombay, currently we have reached upto the hardware sprint after clearing the stage 3 of the Competition. The project we aim to develop is based on the ideology of sowing seeds and removing weeds using SWARM ROBOTICS and functional programming.
- This year Project cell also participated at Eyantra Innovation challenge (2021-22) held at IIT Bombay. As of now we have made it upto the prototype sprint after having cleared multiple past phases of the competition.
- This year we have worked on projects involving technologies like IoT , Machine Learning, Artificial Intelligence namely
- Facial Recognition Based Door Unlock
- Automatic Medicine Vending Machine
- Even in the tough times of Corona virus we tried to keep our learning and development curve constant. We conducted an online simulation based hardware hackathon where in we recruited and mentored juniors and we tried to give them an exposure to engaging simulation softwares which enhanced their logical thinking as well as hardware based concepts. This had lasted for about a month.

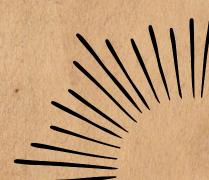
Future Initiatives:

- Effectively utilize the infrastructure and robotics facilities already available in college.
- To secure AIR 1 in both EYIC and EYRC competition

We would like to thank our Mentor Prof. Vaibhav Godbole for constant support, mentorship and guidance throughout the year. We, the current team are also thankful to the faculty and the HoD Dr. Sapna Prabhu of Electronics and Computer Science department, for guiding us in a proper way.

Ronak Upasham Team Captain, 2021-2022





ACM

The ACM Chapter of Fr.CRCE is known for organizing and conducting successful workshops and seminars related to Information Technology, it contributed to increasing the knowledge of students and kept them updated about new technologies in the market.

The first event of ACM in the year 2021-2022 was organized on 18th October 2021. It was a seminar for students to introduce them to Rest API, Microservices. The seminar was attended by 40 students from SE and TE. The speaker Mr Mohit Athani was an alumni of our college. He gave us insights into how the Rest API works and what are its uses in the real world. And also guided them about some good practices while coding.

The most anticipated event was the Unscript Rookies Hackathon 2K22, it was a Pan-India event conducted with our fellow technical council CSI-CRCE. The hackathon had three domains namely Web Development, App Development and AI/ML. We received more than 1000 registrations from colleges across India which were short-listed to 25 teams for Web Development, 20 teams for App Development and 14 teams for AI/ML. The coding began on 22nd January at 9:00 am and the judging round was on 23rd January at 11:30 am where the final five teams from each domain were given an opportunity to present their solution which was judged by industry experts. The winners from each domain were given a cash prize of Rs. 10,000, the First Runner-up with Rs. 5,000 and the Second Runner-up with Rs. 1,600.

The next event we organized was My Story - An Introduction to Deep Learning which was attended by SE and TE students. We had called upon our alumni Mr Tanmay Rane who is currently a Machine Learning Engineer at Quantiphi to provide guidance to the students. He shared his experiences in the college with the participants and also guided them with relevant courses and guidance to start exploring machine learning.

In Crescendo 2022, the council had organized an event 'Just Deal With It' on 17th March where two teams had to compete against each other to make the provided circuit in the shortest time. 8 teams participated in the event where we had two teams from SE, four teams from TE, and two

teams from BE. The winners were given a cash prize of Rs.2000 and the first Runner-up was given Rs. 1000.



Semi-Code is our annual PAN-India coding competition where students are called in teams of 2 to try and crack simple coding problems based on Data Structures and similar topics. This year this event was conducted in collaboration with other 3 chapters across India, MUJ ACM, S-CHAP Manipal University Jaipur and DITU ACM. The first round was conducted on 15th March, the second Round was on 20th March. The teams that qualified in the second round went on to compete in the Third round held on 21st March. We had around 100 teams in total where 16 teams were from our college. The prize pool was contributed to be Rs. 16,000 and then distributed as Rs. 10,000 for 1st place, Rs. 4500 for 2nd place and Rs. 1500 for 3rd place. They were also provided with certificates for participation.

We thank our faculty in charge Prof. Prajakta Dhamanskar 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 the least, we thank the FragMag team for giving us this opportunity to share our achievements with everyone.

Anushka Bobade, Secretary of ACM Fr.CRCE



CGI-CRCE

Computer Society of India (CSI), CRCE is a council that works best to expose the new trends and technologies used in industries to the students of our college. The council plans various informative and interactive events throughout the year to ensure that all the students are provided with a strong footing in the technical domain.

The council began the academic year by organizing a virtual session on My Story – Motivational Session By Successful Innovators on 25th September, 2021. Ms. Neelam Bhayre, Co-founder & CIO of WeWake IndiGreen Pvt. Ltd., was the speaker for the event. The objective of the event was to enlighten the young minds about entrepreneurship and start-ups.

The next event by the council was Cyber Security: Career and Business Opportunities which was conducted on 3rd October, 2021. It was a virtual session conducted on Microsoft Teams. Mr. Shuvamoy Roy, the founder & CEO of Abner Security, was the speaker for the event. The objective of the event was to help students understand the job, start-ups and entrepreneurship opportunities in 'Cyber Security' Domain.

Next a virtual workshop On Developing A CoronaVirus Tracker Software was conducted by the council on 23rd October, 2021. Mr. Swastik Sharma was the speaker for the event. The objective of the session was to introduce and explain young minds the various aspects of how to start developing a software that hits various APIs and displays the number of coronavirus cases in the response.

Furthermore, CSI in collaboration with ACM-CRCE organized the Fr. Conceicao Rodrigues Memorial Hackathon, Unscript Rookie's Hackathon, 2022. It was a virtual hackathon which was conducted on the 22nd and 23rd of January, 2022. The primary goal of this event was to boost the innovation culture and further establish the idea-sharing, effective collaboration and creativeness driven by enthusiasm towards a shared goal. The hackathon allowed the participants to connect with Industry personnel's, faculty mentors, and most importantly, with each other.

A virtual workshop on Prototype/ Process Design And Development was conducted by the council on 9th February, 2022. The objective of the event was to help the students to understand what exactly is process design and development (Prototyping) and also to enlighten the young minds about entrepreneurship and start ups by developing their own ideas and achieving success in it.

The council is currently preparing for their Crescendo event. Events will be held in the 3rd Week Of March (17th March, 2022). The idea for the event will be based on MySQL Murder Mystery. Thus CSI is ever ready and open to every mind in the institution thereby helping them become industry-ready. With a dedicated and talented council, sincerest efforts are made in order to ensure that participants and target audiences are always at the forefront while planning an event.

IEEE - WIE

IEEE in association with Women in Engineering (WIE), FR. C.R.C.E. is an esteemed Technical Coucil of our college in which we strive to bring out the innovative ideas within others. This thirst to further the bond and make known the entire council to the college we organized our first event after 2 years of pandemic (COVID-19) a webinar on Successful Startup Founders on 11th March 2022 from 08:00 pm to 08:45 pm. The objective of the webinar was to present a road map of Mr. Mohammed Ahmed Bhati on startup and for the entrepreneur qualities. This webinar was more an QnA session or doubt session where participants asked their doubt's related to the startup project, ideas and finance. Our speaker for the webinar were Mr. Mohammed Ahmed Bhati. A total of 40 participants attended the webinar. The mode of session delivery was Google Meet.

Mr. Mohammed Ahmed Bhati mentioned his college experience and the projects he completed during college years. He mentioned about his project "Paani Puri Vending Machine". He mentioned how he started the project, the research part and implementation idea, he also mentioned the economy crisis faced during the project completion. Our speaker mentioned the benefits for participating in the college clubs and council, college clubs helped him for a lot the projects. Our speaker explained the qualities for entrepreneur like problem solving, modest, etc. He also mentioned that by making new projects and completing and debugging the projects will gain the above qualities. A participant asked a question about the patent and certifications of the product or project. For certifications, the product should properly work in different criteria's and in environment conditions because the product goes through multiple tests and various process of experiments. And for patent, it is easiest thing for the product as it can be done easily and the cost for the patent varies on requirement duration.

The webinar was a success where the all participants were got cleared and got better vision to build a company and better implementation ideas for the project or product.

Naturally after the successful conduction of the event together we organized another webinar on Industrial Trends and Technology on 05th February 2022 from 11:00 am 12:00 pm. The objective of the webinar was to give basic overview of real time and real experience of current industry and their trends and technology through his presentation. Our speaker was Mr. Shailendra Phatak currently as Director of iTech Business Solutions Private Limited. A total of 45 participants attended the session. The mode of session delivery was Google Meet. He covered the points regarding Industrial Trends and the Technologies and their

problems.

Software Application Transition Over the years.
Trends – What is Hot Technology Stack
Allied Skills Sets/ Roles
What is Industry Looking for?
What should I Do?

Our speaker Mr. Shailendra Phatak mentioned about requirements in IT industry. He mentioned about the current trends going on and usage in industry. He also mentioned skills which are required for the industry and ways to achieve. Mr. Shailendra Phatak mentioned about the internship and the benefits of internship for the career. He also mentioned about the roles which are trending in the industry. He showed a proper way to get into the industry and told the small steps to acquire the requirements of the industry. The outcome of the event is to get better idea of industrial trends and technology from an experienced person. To get better idea and currents or on-going technology of industry.

Then came the most unexpected and the spectacular event none other than International Women's Day conducted by us on 08th March 2022 from 02:00 pm to 04:00 pm. The objective of the event successfully empowered and encouraged women and the youths on this occasion. A workshop was conducted in the event to teach the Self Defense techniques. Our guest for the event were Fr. Eleutrio Fernandes, Ms. Harshala Chavan, Ms. Parita and Mr. Akash. Our speaker for the event were Ms. Harshala Chavan and Ms. Parita. Workshop of Self-Defense was conducted by Mr. Akash. Fr. Eleutrio Fernandes is Deputy Director of our college. A total of 155 participants including the staff attended the session. Location of the event was settled in Samwaad Hall at 09th Floor. In event, we launched IEEE - WIE CRCE website officially where our host narrated all the features of website. They mentioned about the website and features of website like IEEE and WIE past events and upcoming events, about us page containing small introduction of the council, team members of the council and branch mentor and counsellor. Ms. Harshala Chavan topic for the event was about career and ways to achieve the goals for women and youths. She mentioned how the today's generation is wasting time and how they should invest their time in gaining knowledge on useful websites and applications. She also mentioned her real life experience and the difficulties faced by her. Our host requested Mrs. Sapna Prabhu as Branch Mentor of IEEE - CRCE to award a memento to Ms. Harshala Chavan as love of token. Our second speaker Ms. Parita continued the session by introducing herself. She spoke about the challenges faced in her real life. She mentioned about the struggle and her growth in career. She spoke about the ways the achieve the goals and problem-solving attitude.

She mentioned how to develop soft skills and problem-solving attitude. She also mentioned to be confident and calm in every situation. Our host requested Mrs. Sapna Prabhu as Branch Mentor of IEEE – CRCE to award a memento to Ms. Parita as token of love. Mr. Akash continued the workshop. The aim of the workshop was to promote someself-defence techniques for critical situation, abusive crime, etc. Mr. Akash started to teach some techniques on the stage. As Mr. Akash completed his wonderfuland real experience workshop, our host requested Mrs. Sushma Nagdeote as Branch Counsellor of WIE – CRCE to offer certificate to Mr. Akash and his team. Lastly, all participated students were offered snacks and beverages and sanitary pads sponsored by Whisper Company to all women's present in the event. The outcome of the event to encourage and empower the woman's strength. To spread the awareness of gender equality. To strengthen the power by physically and mentally by teaching the self-defense techniques.

October 2nd 2021, from 10.30AM to 2.00PM. The main objective of the workshop was to introduce students to website building and design thinking for web based projects. This workshop was conduced by Professor Kavita Devanand Bathe who is an Assistant professor at K J Somaiya Institute of Engineering and Information Technology in the department of Computer Engineering. The workshop was conducted through google meet and total of 15 participant participated for the same.

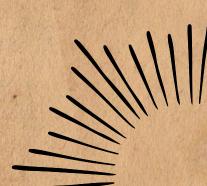
The following topics were covered in the session:

- 1. Website building using HTML.
- 2. WAMP server download and usage
- 3. Using CSS to beautify the website.
- 4. Using bootstrap in website.

Professor Kavita gave a detailed explanation of the design thinking in website building and the tools required. The speaker thought all the participants how to build a portfolio website. The participants built their resume in website along with the speaker and later were asked to presented their works.

The main outcome the event was to give app the participants an idea on front end web development give the proper idea on how and which step should be taken from the start while creating a webpage or web application.





After this event they successfully organized a Workshop on "Women Healthcare Awareness" on February 6th 2022, from 2 pm to 4:15 p. The main objective of the event was to give all the female participants a brief information on women health care as well different kind of disease caused dur to lack of personal hygiene and Self-Care. This event was conducted by Dr, Pallavi Raut who has done MBBS, AFIH and diploma in gynaecology and obstetrics. This too was conducted online via Google Meet.

Dr Pallavi gave the participants the introduction about female reproductive system, its different parts, hormones productions and functions performed by it. She gave a brief introduction 'Polycystic Ovarian Syndrome' a Disease that can occur in female reproductive system its causes, symptoms and how to take proper precautions. She gave a detail information about how a person suffering from PCOS should keep their diet, hygiene and precautions to. Later, all the participants asked different questions related to female hygiene, menstruation and proper care in those days, etc.

The main outcome of the event created awareness among young girls on how they should keep a proper hygiene as well as how they should take precautions and steps while going through any kind of side effects they are facing during their menstrual cycle and if they are having or showing symptoms for any of the disease covered in the session.

Thus concludes our Report for the 2021-2022 Events. We will be back again spicing up events to bring out the best into our council and guiding them to a better future through our works and aspirations.

Thank You.

Robin Thomas (VC-IEEE) Arpita Kar (VC WIE) Advait Marde (VC IEEE)



CODELABS CRCE

We at CodeLabs CRCE aim to promote the interdisciplinary nature of coding amongst students irrespective of the field they belong to. We organize various events to achieve the same on an intra-college level. Following are the events that we organized over the course of this academic year:

Binary Talk:

Binary Talk Episode 1 was organized in order to make the students aware of topics that were trending from the recruiter's point of view. Amurto Basu, Candidate Master on CodeForces and owning 6 stars on CodeChef was the speaker of the event. We hosted this event for second and third year students to encourage them to start competitive coding. Such events motivate students to think unorthodoxically and come up with new techniques to find solutions to existing problems. We received excellent feedback from students regarding this webinar and we intend to continue this.

Algoholic 1.0:

Algoholic was a series of coding competitions we conducted to test students' coding capabilities. These competitions forced students to think out of the box and implement novel solutions to various problems. This, in turn, developed their problem-solving skills which enabled them to be prepared for coding interviews. It was conducted in the month of September. Many students participated in this event and they showed a lot of enthusiasm right from the onset of the competition until the results.

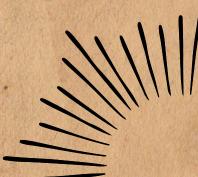
IIC Events:

We organized two events as part of IIC's initiative to increase innovation and entrepreneurship amongst students. The first session was conducted by Mr. Kashyap Sheth, a nominated member of Institution Innovation Council (IIC) on 'Design Thinking, Critical Thinking and Innovation Design' which enlightened the young minds about entrepreneurship and startups by developing their own ideas and achieving success in it. The second session was conducted by Professor Swati Ringe, faculty at Fr. CRCE on 'How to plan for start-up's ethical and legal steps. Students who attended these sessions gave us highly positive feedback.

Other than these events, CodeLabs CRCE along with Mozilla Campus Club CRCE organized a national level hackathon, "UNSCRIPT 2K22" in the month of January. Students across the nation participated in this Hackathon. The hackathon was a resounding success.

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.





IIIE X CRCE

During the academic year 2020-21, when we all were facing pandemic IIIExCRCE continued to fill in the gaps between the industry and the students. However the approach was quite different this year compared to past years as everything shifted to virtual mode, thus seminars became webinars. IIIExCRCE put in a lot of efforts to conserve the shift of momentum without compromising on the quality of knowledge shared.

Following are the detailed information about the webinars and events conducted by IIIExCRCE:

Webinar 1:- Webinar on Entrepreneurship by Mr. Devesh Chavla, Founder and CEO of Chatur Ideas was organised on 15th January 2022 virtually using Microsoft teams and 63 participants attended the webinar. The key take-aways were as follows:

Passion. A startup founder is often driven by the quest for deeper purpose beyond the sheer mechanics of operating a business

Perseverance. Entrepreneurs need to be able to deal with obstacles.

Resourcefulness. A vital ability for an entrepreneur is knowing how to make the most of what you have. Your assets as an entrepreneur will be limited, so use them to the fullest.

Webinar 2:- Webinar on Product Design and Development by Mr. Chirayu Jha was organised on 20th February 2021 virtually using Microsoft teams and a total of 38 participants attended the webinar. The key-points were as follows:

- 1.Idea Generation & Screening. This stage involves the search for new ideas about a new product.
- 2. Concept development. After selection of an idea, the company has to transform it into a concept.
- 3. Business analysis. Here the officials analyze the sales, profit and costs associated with the product. By this, they are able to understand whether the product is commercially feasible.
- 4. product development. If the product idea passes through all the previous stages, it is converted into a tangible product. This helps to check how well it might work in the market.

Webinar 3:- Webinar on Intellectual Property Rights by Dr. Shivagond Teli, Ph.D. Mechanical organized on 11th November 2021virtually on Microsoft teams and 28 participants attended the webinar.



Crescendo: An Event 'Engenius' was organized during Crescendo on 17 march 2022. Round 1-

Hold your cup- in this event participants were given a bag with special materials which they had to use to make a parachute which brings down payload without harming it in this case we used water as pay load and the lowest water spilled designs were selected for 10 team 2nd round

Round 2-

In 2nd round of Engenius top 10 team from first round were selected and we're given with another bag of special materials using which they had to make rigid structures that would survive a simulated earth quake environment and surviving team will be declared winners of Engenius event.

The flow of the event was as follows:

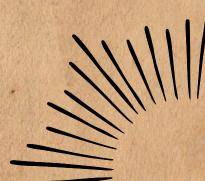
- The event started at where participants were informed about rules.
- · At this time participants were given the materials for the first round.
- The first round was started at this time and participants were supposed to finish their designs within this time.
- After the allotted time for every participant's were finished they were taken to drop site of their parachute design.
- All participants finished dropping their designs by this time.
- Top 10 teams were selected and announced by this time.
- 10 Teams were called to a hall where they were introduced to new rules for next round.
- Participants were given with materials for antilia this time.
- Participants began making structures and designs according to their creativity.
- After the round 3 time ended participants structure designs were collected and prepared for simulating.
- All the designs were tested and round 2 ended at this time.

Award distribution

On 2nd October there was prize distribution ceremony organized by IIIE Mumbai Chapter, This ceremony was organized to congratulate and appreciate the various student sections of IIIE for their exemplary work.

The criteria for award was contribution by student section in organizing activities for the development and betterment of students in their engineering course. The activities and their impact on students paved the way for the outstanding student section award. IIIExCRCE won the 'Best Student Chapter' award at NHQ, Belapur. The faculty incharges and students were also felicitated with excellence award trophies.





MOZILLA

We are a council that promotes the usage of open source technology. The main aim is to ensure that internet is a global public resource, open and accessible to all. Even during this pandemic, the club did not fall back from its duty. We are a group of students with a passion for technology who meet regularly to advance this mission by building and innovating on open source projects that keep the web open.

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

Design Validation Using Double Diamond Approach:

On 21st October, 2021, Mr. Umesh Rathod, Mentor at ICAI, Visiting Faculty at B-Schools, expertise in Marketing and Entrepreneurship, delivered a webinar on Design Validation using Double Diamond Approach. The main purpose of the session was to introduce the participants to the various design validation models, the process and the phases of the double diamond approach and its significance in the industry. The event marked its end with a question and answer session. A total number of 43 registrations were recorded for the session.

Linux Security and Hacking Workshop:

On 16th & 17th October 2021, Prof. Sunil Chaudhari, Fr.CRCE, Mr. Govind Gaundalkar, Upmanyu, Jha Prathamesh Adake, Vanessa D'mello, Ronald Patrick, Happy Cherian, conducted an online webinar on Linux Security and Hacking Workshop. The main aim of the event was to introduce the participants to Linux Security and its various domains thus highlight its highly growing significance. A total number of 70 students attended the session.

Game Development using Java and Unreal Engine:

On 4th December 2021, Charmi Tank, Santo Sunny, Sahil Bane, Jinish Varaiya, Hitesh Sharma, Naman Chouhan conducted a webinar on Game Development using Java and Unreal Engine. The objective of the event was to help the students to understand what exactly is game development. All the students were thrilled to learn and understand about Game Development. A total of 75 students from \$El and TE attended the session.

UnScript 2k22 (Mixed Hackathon):

On 22nd and 23rd January 2022, Fr. Conceicao Rodrigues Memorial Hackathon was held to provide student developers an opportunity to come together, work collaboratively, tackle problems and compete for fame and glory. The problem statement for the hackathon were based on Web/Mobile Development, Machine Learning/AI, Blockchain, Open Innovation. A total of 250+ registrations were received and 60 teams participated in the hackathon after the shortlisting process.

Prototype Validation - Converting a Prototype into a Startup:

Dr. Shilpa Kankonkar, globally recognized as a leading Start Up Specialist, mentor with Start –Up India, Govt Of India, strategist, Public Speaker, Mentor, Author, Researcher, and Education reformist, conducted a webinar on prototype validation on February 26th, 2022, which was attended by a total of 37 participants. The main agenda of the session was to introduce the participants to the importance identifying the problem and passion, validation of problem and prototype and validating the minimum variable product with customer which can help one to convert a prototype into a start-up.



E-CELL

The Entrepreneurship Cell (E-cell) firmly stands with the official motto of college which is - Moulding Engineers Who Can Build Nations. And in this ever changing world, engineers are essential and so are entrepreneurs. E-cell believes in creating and fostering entrepreneurial culture among budding engineers by identifying, training and motivating students to become entrepreneurs. And we shall strive relentlessly towards it. Our first event, one of the most awaited 'The Idea Competition' conducted online for the second time by E-Cell in collaboration with the IIC-FRCRCE Council on 9th October 2021, saw the participation of 23 teams. Professors from our college FrCRCE served on the panel of judges to guide the students in the right direction. Themes for the event were as suggested by the IIC comprising multiple domains. Ideas were shortlisted for final presentation on the basis of novelty, technologies used, technical and financial feasibility and market survey. All teams came up with innovative ideas. The team with maximum points was declared as the winner of the competition. Our next event was our very first online session 'Process of Innovation Development' on 6th/anuary 2022. The students gained insights from an eminent speaker Mr. Dinesh Israni of Naman Angels India Foundation. The objective was co-creating a culture of innovation among students. This session provided a platform for the students to share, interact and exchange their ideas with the speakers. Overall we experienced an overwhelming response for the session. The next session was another online session called 'Phases of Start-Up', which was taken by Prof. Prajakta Bhangale of FrCRCE on 4th February 2022. The session focused on the initial stages of a start-up and how to be an entrepreneur. The session was very insightful in relevance to the start-up culture and all the students thoroughly enjoyed it and definitely learned some things. Our last online session delivered was 'Lean Start-up and Minimum Viable Product' on 26th

February 2022. Mr. Aditya Arora, CEO Faad Network was invited to give an insightful session on such a complex topic. The 5 important stages in a lean start-up, and the fundamental principles of

a minimum viable product(MVP) were the key highlights of the session. This session was a huge

success thanks to the enthusiastic turnout of over 100 students.



And the final event for this year, but perhaps the most important one was 'Formula Unicorn'. E-cell's very own event in Crescendo this year was Formula Unicorn. Consisting of 2 rounds, this event was a blend of fun, excitement and learning. From auctioning in round 1 to presenting a product/service in front of judges, it had it all. Not to mention the exciting response we got from the

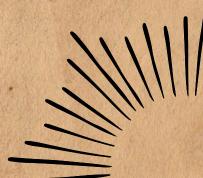
students and professors alike. Overall this event was also a huge success thanks to all the efforts by all the E-cell members.

Finally E-cell would like to express our sincerest gratitude to our teacher incharge Mrs. Prajakta Bhangale for her relentless support and guidance. With that being said this year would not have been a success if it wasn't for the passionate work done by our own E-cell members and for that

we deserve to pat ourselves on our backs and prepare to come out next year stronger and wiser

than ever.





ASME

Event Name: Electric Vehicles

Date: 11th November, 2021

Platform: Google Meet

American Society of Mechanical Engineers, Fr. C.R.C.E. organized a webinar on Electric Vehicles on 11th November, 2021. The objective of the event was to gain detailed knowledge about Electric Vehicles by the Electric vehicle's expert Mr. Suhas Joshi who is a part of Rosefield Team. Rosefield Team conducted this webinar under the Udgam Scheme which is supported by HPCL.

A total of 54 students from SE, TE and BE attended the session. The mode of session delivery was Zoom. Mr. Suhas Joshi explained various terminologies regarding Electric were Importance of EV, its types, charging, Battery Management System and learning opportunities. The entire session was presented with examples. His expertise in the given field not only provided with the complete knowledge but also gave us an overview of the EV field. The outcome of the event was that all the participants gained utmost knowledge about EV. The session also helped the students realize how important is Battery Management System when it comes to EV. It enlightened the students about what they should do in future. Good feedback was received from all the participants. An active participation by the speaker, council members and the participants made the webinar a grand success!

Event Name: Project Management

Date: 12th November, 2021

Platform: Google Meet

American Society of Mechanical Engineers, Fr. C.R.C.E. organized a webinar on Project Management on 12th November, 2021. The objective of the event was to gain detailed knowledge about Project Management in the field of Engineering Management as a Manager.

The speaker for the session was Mr. Gaurav Sen. Mr. Gaurav Sen is a project manager at IBM, Germany. He is an alumni of Fr. CRCE (Production Engineering, 2004). He worked in many companies before IBM and plans on working in HCL in a few years.

The session began with the speaker narrating his experiences as a student of CRCE and life after graduating from CRCE. In the first few minutes of the webinar, the

speaker chose to talk about importance of time and how to begin a webinar. Mr. Parag Save explained waterfall methodology and its importance in project management. He was kind enough to tell all the participants that if any of them visited Berlin, they may feel free to contact him and get his guidance if needed. He gave an example of guidance by comparing learning of Laplace method through YouTube and learning Laplace method by Prof. Sundary Ma'am. He learned Laplace method from Sundary Ma'am many years back, but it is still engraved in his memory. The outcome of the event was that all the students learned and cleared their doubts regarding Project Management and its uses regarding Corporate Sector. The session also helped the students realize how important is Time Management when it comes to personality building. It enlightened the students about what they should do in future.



N99-CRCE

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

-Anne Frank

NSS has always stood up to its strong spirit of serving the society., keeping in mind the motto "Not Me but You". Thus, the belief that we must strive for others is being realized through the selfless services of our unit who get into timely action, be it lending a helping hand to the needy or protecting and conserving the environment. We extend our gratitude tour Director Fr. Valerian Dsouza our Principal Dr. Srija Unnikrishnan our Program Officers Prof. Pradeep Singh, Prof.Deepika Singh and Prof. Sunil Yadavfor their encouraging bit of advice which proved beneficial to our volunteers through thick and thin of each event.

The year started with the welcoming of the 100 NSS volunteers into the NSS family. Events organized by NSS CRCE over the current year include documentary screenings, webinars, offline visits to places, etc. The first official event that the NSS volunteers participated in was the three-dayArt of Living workshop organized by the NSS cell of University of Mumbai. The first event organized by NSS CRCE was the Small Industries Day webinar with Ms. Noela Rodrigues. The first grand event that NSS CRCE organized was the teacher's day celebration with all teachers from Fr. CRCE. The next few events were the poster making competition for the Ganpati festival, documentary screening for World Peace Day and the Cardiac Doctor's talk in collaboration with NSS TSEC. The event that our volunteers participated was the Bhajan Sandhya on the occasion of Gandhi Jayanti organized by the University of Mumbai. The next three events that NSS CRCE organized were the Dog Collar webinar by Jatin Soni (Utkarsh Foundation), Marine Pollution webinar by the United Way foundation of Mumbai and the Art and Craft competition on account of the Diwali festival. The next event was the first offline event organized: Visit to a Vruddhashramin Uttan. Next, NSS CRCE organized a documentary screening about the COVID-19 pandemic. NSS CRCE then organized a nature walk in the Sanjay Gandhi National Park under the guidance of Prof. Jagdish Vakale. The next two events were a webinar about Sustainable living and Road Safety by the United Way foundation of Mumbai.

The new year started with the hope of the COVID-19 lockdown finally being lifted and NSS CRCE finally started to plan more offline events. The first three events, however, were online: the 'Say no to drugs' documentary, the Importance of Mangroves webinar by the WWF organization and the 'Say not to smog' documentary. An article writing competition was also organized on the occasion of Republic Day. NSS CRCE, following the instruction of our teachers, took up the herculean task of redesigning and painting of formally knows Euphoria Stairs. This task spanned over a period of a week followed by a tree plantation drive in the college premises. Once the 'NSS Stairs' we finally ready

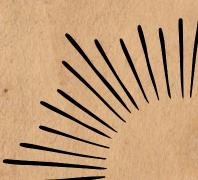
to welcome the returning folks of our college, NSS CRCE then organized a blood donation drive in collaboration with the Holy Family hospital of Bandra. To compensate for the volunteers who weren't able to attend the offline events so far, NSS CRCE then organized an event about Social Activism with Ms. Sonali Banerjee. The next task that NSS CRCE took up was planning the most awaited NSS Special Camp that NSS CRCE wasn't able to organize for the past two years due to the COVID-19 lockdown. This special camp took place in the first week of March and was a great success. After the camp, NSS CRCE in collaboration with Mr. George Remedious, organized a tree plantation and soil preparation workshop in the St. loseph's Convent in Bandra.

As a team we always prioritize 'YOU' before 'ME' spreading cheer and smile around. We sincerely thank our Principal, our Director and 'YOU' for appreciation the work we do.

Happy Serving!!

Gayatri Varma (President NSS-CRCE)





TEDXCRCE

With the motive to share ideas that are worth spreading, the TEDxCRCE council has been organising several events from its initiation in 2016. In the past 5 years various eloquent speakers like Radhakrishna Pillai, Raveena Tandon, have participated in the Main Event of our council. For the academic year 2021-2022 the following events were organized, namely the Ed- Weekend, Resume Building Workshop, and Internship Expo.

Commencing with the first event which was the Ed- Weekend held on 23rd October 2021. The event was organized with an aim to give a platform to young passionate speakers to share their ideas and experiences with fellow youth. Four speakers from varied fields of careers namely, Ms. Aanchal Bajwa who had been an anchor for the Pro Kabaddi League. Dr. Ojas Krishnani who has played a significant role in spreading Cancer awareness, Mrs.Richa Kumari Kashyap an author, and the National Level Athlete, Mr. Alden Noronha gave their talk on how to choose a life of meaning, how to know and believe in one's true capabilities and on how one can keep pace with both sports and academics. Every attendee had left learning some value to abide by in the future.

The next event was Internship Expo. As internships give a practical demonstration of what students have learnt, TedxCrce organized its 6th edition of the Internship Expo Event. The Expo commenced with a Resume Building Workshop which was held on 17th January 2022. Ms. Ipsita Bhattacharya an alumni from our college working as an HR Project Manager at JP Morgan Chase and Co. was invited for the event, she gave a talk on the how it is necessary to always keep our resumes updated and also shared a list of sample resumes that could be used as references to prepare one. This year's internship expo event gave a platform to 24 companies offering 600+ roles in the technical and non technical domain. Several undergraduate students from our college as well as other colleges across Mumbai participated in the expo.

TEDxCRCE council expresses its sincere gratitude to the management, teaching and non teaching staff for giving an opportunity to our council to conduct the events and for their constant support throughout the year. The council also awaits a huge participation for the upcoming Main event which will be held soon.



ROTARACT CLUB OF CRCE

The Rotaract Club of CRCE has been an integral part of Fr.CRCE. Our theme for the year 2021-2022 "Reinvigorate" helped us reignite the fizzle flames of zeal within us and do what we do best as Rotaractors. The philosophy that guides our work is "Service Above Self."

We started our tenure with 'The Installation Ceremony' which was conducted on 16th September 2021 under the guidance of our parent Rotary, Rotary Club of Bombay Bandra and Rotaract District 3141. The installation ceremony was conducted to welcome and hand over the responsibility of the Council to the incoming Rotaractors which is a ritual followed by all other Rotaract Clubs. On the 10th of October 2021, the Installation ceremony was followed by a Felicitation programme. The Felicitation Program was held to thank prior Rotaractors for their hard work and to congratulate them. All of the Ex council members received Rotary certificates and a letter of appreciation from the College Rotaract.

The Beach Clean-up was the first formal event held. On the 24th of October, it was held in partnership with 'Change is Us' on the Girgaum Chowpatty coastline. The cleanup effort drew more than 150 volunteers. Like ripples in a pond, our beach cleanup operation was a success. It helped to restore the beach while also preventing garbage from pouring back into the sea.

The Council organised a nature excursion dubbed "FootSlog" to Kothaligad, Karjat on February 12, 2022. The Footslog event drew a total of 200 hikers. The trail was 8.2 kilometres long and took about 6 hours to finish. The goal of this event was to nurture and deepen the spirit of adventure that is inherent in all humans. In addition, every individual should be encouraged to have confidence, cooperate, and work as a team.

We also partnered with 'IIC' and the Student Council for the celebration of 'National Science Day' on March 7, 2022. The event's theme was "Science and Technology Advancements in the Last 75 Years of Independence." Dr. Ramesh Chandra Bindal, Outstanding Scientist and Head, Desalination Department, Bhabha Atomic Research Center (BARC), was present at the occasion. After Dr. Bindal's inspiring speech, the students competed in a poster making competition, showcasing their artistic ability with their ideas of the National Science Day theme.

The MIC-DROP event is planned on April 6, 2022 to provide a platform for upcoming artists of various genres such as comedy, poetry, and music.

The FR. CRCE Rotaract Club aspires to "Make a Difference" by serving society in every possible way.



