



**BASAVESHWAR ENGINEERING COLLEGE
BAGALKOTE - 587102
IEEE STUDENT BRANCH (35261)**

THE NEW DIMENSION



**B. V. V. SANGHA'S
BASAVESHWAR ENGINEERING COLLEGE**
[Govt. Aided AICTE Recognized, NAAC & NBA Accredited, Permanent Affiliation to VTU, Belagavi]
BAGALKOTE - 587102, KARNATAKA, INDIA

Editor's Message

It gives a great sense of achievement to introduce our BEC-IEEE through a national remembrancer “NOVUS’23”. It brings unity among the volunteers, efforts and skills to make such a national level episode. This edition includes brief description of IEEE and BEC-IEEE, activities done under BEC-IEEE, Affinity group, counting societies under BEC-IEEE and the respective activities. We hope you enjoy reading this remarkable edition as much as we are excited to give forth. We have given our best to include the recent technologies and expandable effort to convey the knowledge by the lecturers through tech-talk series.

We have briefed the activities conducted by the BEC-IEEE throughout the journey that has enhanced the skills, experience of the participants and broaden their knowledge and gave an impact on upbringing their proficiency about technology.

Preface

The awaited episode “NOVUS’23”, BEC-IEEE, a national remembrancer. The team of 2024 has put on their best to conduct this national level event. “Involve Evolve Create” is the main moto of this episode. Thus the souvenir is not the outcome of the effort put in by an individual, but is the immense effort put forward by first and foremost, Chairman of BVVS Dr. V. C. Charantimath , Honorary Secretery and Members of BVVS, Principal Dr. D. S. Jangamshetti, Ex-Branch Counselor; Dr. S. H. Jangamshetti,Vice Chancellor, Haveri University, Faculty Members, Staff and Students. At the end, the backbone of our Student Branch, Dr. B. F. Ronad, Branch Counselor, BEC-IEEE. Apart from providing the journey of BEC-IEEE this souvenir also provide insight into latest technological developments as contributed by our volunteers.

Chairman's Message



Dr. V. C. Charantimath
Chairman
B.V.V. Sangha, Bagalkote

It is a matter of great pleasure that BEC-IEEE is publishing its Souvenir for "NOVUS'23". I am sure that it will be a source of inspiration for the imbibing the knowledge of technical skills among the students and will direct their creativity to new dimensions.

In recent years, BEC-IEEE has achieved many milestones through the efforts of hard working team under the guidance of Dr. R. N. Herkal . I am also certain that at BEC-IEEE apart from regular academics, the students have also been equipped with traits of life to meet the challenges that they may face in their profession. I wish BEC-IEEE to reach new heights and achievements in the days to come.

I wish to congratulate all those who have contributed to the souvenir. My special congratulations to Principal, BEC-IEEE Branch counsellor, Souvenir committee members and its convener.

DTE'S Message



Dr. R. N. Herkal

Director, Technical Education
B.V.V. Sangha, Bagalkote

The Nation's future is defined by its technical & professional strengths. While technical competency is provided by institutions of higher studies, the professional competency is attained by the students by working with active professional societies.

IEEE is one such professional society that reaches to the students through its student branches across the globe. I am proud that our BEC-IEEE SB is consistently performing, not only to cater to their technical needs but also provides societal links. I am very happy about the progress made by BEC-IEEE SB over the last 28 years. I appreciate the efforts put by the students in bringing out this souvenir on NOVUS'23. I wish all the success to BEC-IEEE students.

Principal Message



Dr. D. S. Jangamshetti
Principal
BEC Bagalkote

Dear BEC-IEEE ians Greetings & Good Wishes.

I feel very happy about your rejuvenated zeal and enthusiasm. After a long gap, we are witnessing the competency of BEC-IEEE ians coming out in the form of a souvenir. I personally congratulate you all for the efforts. BEC-IEEE student is a neutral platform to develop yourself into a industry ready professional. You raise your standards to stand along with global student professionals. You are connected with other professionals through IEEE activities. I am aware that BEC-IEEE student members have excelled in their career.

BEC-IEEE is one of the best performing student branches in the country. The culture of running the student branch is unique in itself. At this juncture I must recall & appreciate the services of founder branch counselor Dr. Suresh Jangamshetti, present VC of Haveri University. His continued efforts have moved into formation of IEEE North Karnataka Subsection in 2020. Today BEC has, to its credit, four student branch chapters, viz. IEEE-PES, IEEE-CS, IEEE-Robotics and IEEE-Reliability society. Efforts of Dr. Vijayalakshmi Jigajinni, Dr. Basanagouda Ronad, Dr. Jayashree Gantimath and Dr. Sangmesh Goudappanavar are worth appreciation. I appeal to other faculty members of BEC to show keen interest in joining this professional society and expand their network globally.

On this occasion I feel happy to recall & acknowledge the support and encouragement by BVVS Chairman Dr. V. C. Charantimath ji, Secretary and members. I should mention that Dr. R. N. Herkal, former BEC Principal & present BVVS Technical Institutions Director, was an ardent supporter of IEEE activities on BEC campus. The encouragement & participation of all BEC-faculty is worth mentioning on this occasion. Once again I congratulate Srivatsav Gudi & his team in bringing this magazine on the eve of NOVUS-2023.

My good wishes are ever with all IEEE members of BEC family.

Branch Counselor Message



Dr. B. F. Ronad

Branch Counselor
BEC IEEE SB

Dear IEEE Student Branch Members,

It is with great pleasure and pride that I extend my warmest greetings to each one of you through this souvenir. As the branch counselor, I am continually inspired by the passion, innovation, and dedication exhibited by our members.

Our journey together has been marked by numerous milestones, from groundbreaking technical talks to engaging workshops, impactful community initiatives, and the successful execution of various events. Each achievement reflects the collective effort, enthusiasm, and commitment of our vibrant IEEE community.

I want to express my heartfelt gratitude to every member who has contributed tirelessly to the success of our branch. Your curiosity, creativity, and resilience have played a pivotal role in making our IEEE Student Branch a dynamic hub of knowledge and innovation.

As we reflect on our accomplishments, let us also look forward to the exciting challenges and opportunities that lie ahead. Remember, it is through collaboration, learning, and a shared vision that we can continue to elevate our branch to greater heights.

I encourage each of you to stay engaged, embrace new ideas, and foster an inclusive environment that encourages growth and exploration. Together, we can make a lasting impact not only within our academic community but also in the broader technological landscape.

Thank you for your unwavering dedication, and here's to a future filled with even greater achievements and shared success.

SB Chair's Message



Shrivatsa Vaman Gudi

Chairman
BEC IEEE SB

Dear IEEE Student Branch Members,

It is both an honor and a pleasure to extend my warmest greetings to you through this souvenir. As the Student Chair, I am incredibly proud of the remarkable journey we have undertaken together, marked by innovation, collaboration, and continuous growth.

Our IEEE Student Branch has thrived due to the collective efforts of passionate and dedicated members like you. Your enthusiasm for learning, your commitment to excellence, and your willingness to embrace challenges have been the driving forces behind our success.

Throughout the year, we have witnessed inspiring events, engaging workshops, and insightful technical talks that have enriched our knowledge and expanded our horizons. These achievements underscore the vibrant and dynamic spirit of our IEEE community. I want to express my gratitude to each member for contributing to the success of our branch. Your creativity, teamwork, and resilience have created an environment where ideas flourish, and aspirations turn into reality.

Looking ahead, let us continue this journey with the same zeal and determination. Embrace the opportunities for learning, collaboration, and personal growth that lie ahead. As we move forward, let's remain united in our pursuit of knowledge, innovation, and service to our community.

I encourage you to actively participate, share your ideas, and inspire others to contribute to the success of our IEEE Student Branch. Together, we can shape the future of technology and make a positive impact on the world around us. The New Dimension is here.

“Do it for the people who want to see you FAIL”

Our Alumni Says

"Hardships often prepare ordinary people for an extraordinary destiny." In 2019, when I joined IEEE as a volunteer, my college life transformed from Ordinary to Extraordinary. IEEE added invaluable elements that made it an extraordinary experience for me. During my time here, I've learned that perseverance and a positive mindset pave the way for success. In this organization, every challenge was an opportunity to learn and grow. The journey taught me that teamwork and dedication are the cornerstones of achievement. IEEE has taught me the intricacies of corporate life and how to navigate its challenges.

I've always reminded juniors that success isn't solely about personal achievements but also about how you inspire others on your journey. Embrace every opportunity to learn and expand your horizons. Taking part in BEC-IEEE's diverse range of events not only enriches your academic journey but also shapes you into a well-rounded individual, ready to face real-world challenges.



Suresh S Gudagudi

Asst. System Engineer Trainee
Cognizant Technology Solutions
(Former Treasurer, BEC-IEEE)



Apoorva Chiniwar

System Engineer Trainee
Tata Consultancy Services
(Former WIE Chair, BEC-IEEE)

"Opportunities are like sunrises; if you wait too long, you might miss the beauty of their dawn."

The same thought made me join BEC-IEEE.

Joining BEC-IEEE as a volunteer during my first year of engineering marked the beginning of an incredible journey.

I still remember my first ever introduction in a meeting and also my first ever volunteering experience in "BLACKHAWK" and also many more events in those 4 years which led me learn a lot be it, managing participants, communicating the right way, team-work, networking, also making new friends. BEC-IEEE will always be the first step towards being a professional.

Stepping into leadership roles in my third year, I faced challenges head-on, learning valuable lessons in adaptability and problem-solving. By my final year, I had become a mentor, leaving a lasting impact while preparing to leverage the experiences, friendships, and skills gained for future endeavors.

Transitioning into my professional role, I embarked on a comprehensive training period that felt familiar in many ways due to my active involvement in BEC-IEEE during my student years.

BEC-IEEE wasn't just a student branch; it was a platform where I found confidence, made lasting friendships, and built a foundation for my personal and professional growth.

EXECOM 2022-23



Dr. D. S. Jangamshetti
Principal
Basaveshwar Engineering College, Bagalkote



Dr. S. H. Jangamashetti
Founder and Founding Chair IEEE NKSS
Vice Chancellor, Haveri University



Dr. B F Ronad
Branch Counselor IEEE SB
Basaveshwar Engineering College, Bagalkote



DR. V. S. JIGAJINNI
ADVISOR
RAS SOCIETY AND WIE
AFFINITY GROUP



DR. P. S. CHALLAGIDAD
ADVISOR
COMPUTER SOCIETY



Dr. S. Y. GOUDAPPANAVAR
ADVISOR
PES SOCIETY



Dr. J. G. GHANTIMATH
ADVISOR
AESS SOCIETY

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III year ECE
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Project Lead

Membership Development Team



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MDC Chair



Aniket H
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MDC Vice Chair



Kiran K
II year BT
Meeting Coordinator

Operating Committee



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Aishwaraya H
II year BT
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EXECOM 2022-23

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Webmaster



Harshita G
II year CSE
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Namrata S
II year CSE
Joint Secretary

Mission of IEEE

IEEE's core purpose is to foster technological innovation and excellence for the benefit of humanity.



Vision of IEEE

IEEE will be essential to the global technical community and to technical professionals everywhere, and be universally recognized for the contribution of technology and of technical professionals in improving global condition.

TECH-tonic

"What that means is that diamonds are probably everywhere", says Glenzer.

Siegfried Glenzer at SLAC National Accelerator Laboratory in California and his colleagues found that by using a simple plastic called PET- commonly used to make bottles and other containers-which contains carbon, hydrogen and oxygen, they could make diamond in much less extreme conditions.

Upon firing of powerful laser at the plastic, it heated up to temperature between 3200° C to 5800° C and the shock waves generated by the laser pulse brought the plastic to pressures upwards of 72 gigapascals – equal to one-fifth the pressure in Earth's core. This separates the hydrogen and oxygen from the carbon, leaving behind tiny diamonds a few nanometres across and a form of water called superionic water, which conducts electricity more easily than regular water.

This happened at lower pressures than in previous experiments using other materials, says Glenzer, and like PET, the interiors of giant planets contain oxygen as well as carbon and hydrogen.



We have heard about the diamond rain in the ice giant planets like Uranus and Neptune. You might have wondered how is it possible to have a diamond rain? Unlike in earth we get rain by the phenomenon of Water Cycle, is there anything similar like diamond cycle?

Well, we will look into it. Blasting plastic with powerful lasers can create tiny diamonds. Similar processes may occur at the high temperatures and pressures found within planets, which could help explain why Uranus and Neptune are so strange.

Recent laser shock experiments in combination with x-ray techniques have provided the first evidence for the formation of diamonds in compressed hydrocarbon at planetary relevant states in the laboratory. However, this requires extremely high amount of pressure.

Such diamonds forming in Neptune's mantle and then sinking towards its core, generating friction and heat in the process, could explain why the planet is unexpectedly hot. And within Uranus, pockets of superionic water left over from diamond formation could be conducting electric currents, which might have something to do with the strange shape of its magnetic field.

Similar materials are already used in industrial abrasive processes and could be useful in many scientific applications, but are generally produced by detonating explosives.

"In the other experiments, where the necessary pressure was much higher, the conditions were so extreme and dynamic that the diamonds ended up falling apart," says Glenzer. "Now that we've found a way to make the diamonds at lower pressure, we may have a chance to actually harvest the diamonds."



AUTHOR
BHAGYAVANTI HARALE
III YEAR EEE DEPT

"If future generations are to remember us more with gratitude than sorrow, we must achieve more than just the miracles of technology. We must also leave them a glimpse of the world as it was created, not just as it looked when we got through with it."

IEEE and BEC IEEE

IEEE, pronounced "Eye-triple-E", stands for Institute of Electrical and Electronics Engineers, Inc. USA. It is the world's largest technical professional society. Its activities are dedicated to advancing innovation and technological excellence for the benefit of humanity. It is designed to serve professionals involved in all aspects of the electrical, electronic and computing fields and related areas of science and technology (other engineering fields) that underlie modern civilization. IEEE and its members inspire a global community through its highly cited publications, conferences, technological standards, professional and educational activities.

Basaveshwar Engineering College IEEE Student Branch laid its foundation in the year 1994 under the leadership of Dr.S.H.Jangamshetti with the support of institutional head and the management. IEEE Student Branch was established to provide global platform to inspire, enable, develop and support students to become future leaders. Starting with the only 16 student members, BEC-IEEE has achieved milestones in making the students perfect technical and professional leaders. At present the student branch has 400+ student members and 15+ professional IEEE Members. BEC-IEEE SB has been hosting many technical and social events to foster technological innovation and excellence for the benefit of humanity under the guidance of Branch Counselor Dr.Basangouda F Ronad and with encouragement of Dr. D. S. Jangamshetti (Principal, BEC).





TECH TALK SERIES



"IEEE, presents an exceptional series of 60 tech talks, celebrating the diamond jubilee of our esteemed college, featuring pioneering advancements and breakthrough innovations across diverse fields."

TECH TALK- 1

Basaveshwar Engineering College
Bagalkote - 587102
IEEE STUDENT BRANCH (35261)

BEC-IEEE Tech-Talk Series on Research and Innovation

Tech Talk - 1
Optimum Site Matching of Wind Turbine Generators

Speaker
Dr. S. H. Jangamshetti
Dept. of E & E

Dr. S.H. Jangamshetti, Professor and HoD of EEE and Founder Chair of IEEE NKSS, a renowned wind energy expert, delivered a tech-talk on "Optimum Site Matching of Wind Turbine Generators". Students can take-up project/research works in the following areas:

- Development of software package to analyze wind speed data
- Development of software to interface
- WTG Power Data with SCADA System
- Finite Element Method of Analysis for Wind turbine Generators
- Development of Smart Battery Systems for WTG Systems

TECH TALK- 2

Dr. K. Shridhar, Professor and HoD of E&CE, delivered a tech-talk on "Recent trends in speech enhancement". Some of the important takeaway points to mention are:

- Recent trends in speech enhancement have seen significant advancements with the advent of deep learning and artificial intelligence.
- Sophisticated algorithms effectively enhance speech quality in various scenarios.
- Techniques like deep neural networks, generative adversarial networks, and recurrent neural networks suppress background noise and improve speech intelligibility.
- Overall user experience in speech communication is enhanced through clearer and more intelligible speech.

BASAVESHWAR ENGINEERING COLLEGE
BAGALKOTE - 587102
IEEE STUDENT BRANCH (35261)

Diamond Jubilee Celebrations
BEC IEEE TECH-TALK SERIES ON RESEARCH AND INNOVATION
IN ASSOCIATION WITH ACME

TECH TALK-02
Recent Trends in Speech Enhancement

Speaker
Dr. K. Shridhar
Dept. of ECE



TECH TALK SERIES



TECH TALK- 3

Basaveshwar Engineering College
Bagalkote - 587102

Diamond Jubilee Celebrations
BEC IEEE Tech-Talk Series on Research and Innovation
In association with IEEE-PES-8BC(95261A)

Speaker
Dr. Basanagouda Ronad
Dept. of E&EE

Tech Talk -3
Optimum Sizing of SPV Powered DC
Irrigation Pumps Based on Field Conditions

Date: 10-04-2023 Time: 11.15 am
Venue: Lecture Hall, 107

[f](#) [i](#) [t](#) [in](#) | BEC IEEE 8BC (95261A)

Dr. Basanagouda F. Ronad. Students can take-up project/research works in the following areas:

- Development of Mathematical Model for Representing “Water Tank” as “Battery”
- Investigation of Fatal Electric Accidents – Review and Survey of Faults
- Energy Storage Systems – Batteries for Effective DSM Implementation
- Design and Implementation of SPV Powered Novel Type Water Pump (Completion, Performance Analysis)

TECH TALK- 4

Dr.P. S. Challagidad started his research in the field of computer science. He has completed his PhD in the year 2020. His research area are in field of Cloud Computing, Information Security, Cyber Security, Internet of Things and Computer Networks. Some of the important takeaway points to mention are:

- Quantum Computing Paradigms
- Mobile Computing Paradigms
- Evolving Computing Paradigms for Artificial Intelligence
- Adapting to Heterogeneous Computing Paradigms

Basaveshwar Engineering College, Bagalkote
IEEE Student Branch (35261)
DIAMOND JUBILEE CELEBRATIONS
BEC IEEE TECH-TALK SERIES ON RESEARCH AND INNOVATION

TECH TALK- 4
COMPUTING PARADIGMS

18-04-2023
4:15pm - 5:15pm

Seminar hall
CSE Department

[f](#) [i](#) [t](#) [in](#) | BEC IEEE

Speaker
Dr. P. S. Challagidad
Dept. of CSE

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TECH TALK SERIES



TECH TALK- 5

Basaveshwar Engineering College, Bagalkote
IEEE Student Branch (35261)
DIAMOND JUBILEE CELEBRATIONS
BEC IEEE TECH-TALK SERIES ON RESEARCH AND INNOVATION

TECH TALK- 5
Biofuels and its opportunities

19-04-2023
5:30pm
Seminar hall
BT Department

Speaker
Dr. Bharati S. Meti

[Register Now](#)

W F I O @ |BEC-IEEE

Dr. Bharati S Meti's research focuses on biofuels production from organic waste, aiming to provide free biofuels to communities while exploring cost-effective purification methods and repurposing by-products for sustainability. Some of the important takeaway points to mention are:

- Production of biomass required for Biofuel production.
- Biofuel as an alternative for Fossil fuels.
- Utilization of byproducts produced from Biofuel.
- Utilization of residues as an useful product.

TECH TALK- 6

Dr. Veerappa B. Pagi made a significant research contribution in the field of computer science by developing an AI-based system for fault diagnosis of motorcycles using engine sound analysis. Some of the important takeaway points to mention are:

- Crop Disease Identification
- Weed detection and Management
- Smart Irrigation Management
- Pest Detection and Control

Basaveshwar Engineering College Bagalkote
IEEE Student Branch (35261)
DIAMOND JUBILEE CELEBRATIONS
BEC IEEE TECH-TALK SERIES ON RESEARCH AND INNOVATION

TECH TALK- 6
AI APPLICATIONS TO AGRICULTURE

Speaker
Dr. Veerappa B. Pagi
Professor and Head,
Dept. of CSE

[Register Now](#)

20-04-2023
5:30pm - 6:30pm
Seminar hall
CSE Department

W F I O @ |BEC-IEEE



TECH TALK SERIES



TECH TALK- 7

Basaveshwar Engineering College, Bagalkote
IEEE Student Branch (35261)
DIAMOND JUBILEE CELEBRATIONS
BEC IEEE TECH-TALK SERIES ON RESEARCH AND INNOVATION

TECH TALK- 7
HYDROGEN LOADED CONCRETE MIXES FOR RADIATION SHIELDING

26-04-2023
10:30 AM
SEMINAR HALL,
CIVIL DEPARTMENT

ASSURED CERTIFICATES

REGISTER NOW
BEC IEEE

SPEAKER
Dr. Santhosh M. Malkapur

Dr. Santhosh M Malkapur, Professor in Civil Engineering, researched hydrogen-loaded concrete mixes funded by BRNS-DAE. His current work involves tree fall resisting systems, building thermal comfort, and alternative materials. Students who attended the tech talk, were addressed about his project on 'Hydrogen loaded concrete mixes for radiation shielding'

- Hydrogen loaded concrete mixes for radiation shielding' research was discussed.
- A new version of concrete that has the capacity to shield the radiation was introduced.

TECH TALK- 8

Dr. Vishwanath Kagawade, an exceptional researcher in biometrics, has contributed to symbolic modeling for iris recognition and fusion of facial and iris traits. His expertise also extends to radiation-shielding concrete and real-time biometric authentication. Canonical correlation analysis.

- Computation strategies and symbolic modeling data approach.
- Face and iris modalities.
- Real-time biometric enrolment and authentication environment.

Basaveshwar Engineering College, Bagalkote
IEEE Student Branch (35261)
DIAMOND JUBILEE CELEBRATIONS
BEC IEEE TECH-TALK SERIES ON RESEARCH AND INNOVATION

TECH TALK- 8
BIOMETRICS AND ITS RESEARCH AVENUES

REGISTER NOW

17-05-2023
4:30pm - 6:30pm
Seminar Hall
AIML Department

Speaker
Dr. V. C. Kagawade
Dept of AIML



TECH TALK SERIES



TECH TALK- 9

Dr. Vilas Naik started research in the field of Static video summarization, and gave an tech-talk on “Turning ideas into user-friendly software” - A minimum edge weight bipartite graph matching approach in 2018. A video summary is a series of static pictures that represent the information of a video in a manner that the viewer is quickly supplied with content in compact form preserving necessary message of the original video. There are many algorithms for video summarization they represent visual information of video in concise form.

Basaveshwar Engineering College Bagalkote
IEEE Student Branch (35261)
in association with FOCUS
DIAMOND JUBILEE CELEBRATIONS
BEC IEEE TECH-TALK SERIES ON RESEARCH AND INNOVATION

TECH TALK-09
USER INTERFACE DESIGN

Register Now

Speaker
Dr. Vilas Naik
Professor
Dept. of CSE

03-06-2023
5:15pm - 6:30pm
Seminar hall
CSE Department

Assured E-certificates

TECH TALK- 10

BASAVESHWAR ENGINEERING COLLEGE
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BEC IEEE TECH-TALK SERIES ON RESEARCH AND INNOVATION

TECH TALK- 10
Biofuels & Applied Enzymology

06 JUNE 2023 | 5:30 PM
BT SEMINAR HALL

Register Now

SPEAKER
Dr. Shilpa K. Jigajinni

Dr. Shilpa K Jigajinni started her research in the field of biofuels, and gave a tech-talk on “Biofuels and Applied Enzymology”-Growing environmental and economic concern about use of fossil fuels encourages to find alternative which should be renewable, ecofriendly, economically viable and sustainable which could meet growing energy demand. Biodiesel is one of the alternate promising fuel had the similar properties of diesel which could replace conventional diesel. Biodiesel can be produced by transesterification process using oil sources. Transesterification process catalyzed by chemical catalyst like NaOH/KOH and enzymes such as lipase. Enzymatic transesterification is one of the promising process over chemical transesterification for biodiesel production.



TECH TALK SERIES



TECH TALK- 11

Bryophyllum pinnatum, commonly known as the "Life Plant" or "Mother of Thousands," is a succulent plant with a long history of traditional medicinal use in various cultures. The bioactive molecules present in *Bryophyllum pinnatum* have attracted significant attention from researchers due to their potential therapeutic properties. Biochemical and pharmacological evaluations of these bioactive molecules aim to uncover the plant's medicinal potential and understand the mechanisms behind its traditional uses. Researchers typically isolate and analyze compounds such as alkaloids, flavonoids, terpenoids, and polysaccharides from *Bryophyllum pinnatum* to identify their structures and study their biological activities.

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BEC IEEE TECH-TALK SERIES ON RESEARCH AND INNOVATION

TECH TALK- 11
**Biochemical and Pharmacological
evaluation of bioactive molecules in
Bryophyllum Pinnatum**

07 JUNE 2023 | 5:30 PM
BT SEMINAR HALL

SPEAKER
Dr. Preeti S. Kumarmath

[Register Now](#)

TECH TALK- 12

Basaveshwar Engineering College Bagalkote
IEEE Student Branch (35261)
in association with FOCUS
DIAMOND JUBILEE CELEBRATIONS
BEC IEEE TECH-TALK SERIES ON RESEARCH AND INNOVATION

TECH TALK- 12
**ROADMAP TO WIRELESS
NETWORK**

Register Now

Speaker
Dr. S.V. Saboji
Professor
Dept. of CSE

10-08-2023
5:15pm - 6:30pm
Seminar hall
CSE Department

[Assured E-certificates](#)

Dr. S.V. Saboji's research spans traditional and smart farming, wireless networks, and blockchain. His tech talk covers the "Roadmap to Wireless Network." Research grants highlight work on location-aware routing, blockchain-based access control in healthcare, and privacy-protected access control frameworks in the cloud (supported by 5G). Additional expertise includes user credibility-based trust models, trustworthy paths in mobile ad-hoc networks, opportunistic routing in wireless sensor networks, and agriculture price prediction using data mining. Dr. Saboji also explores blockchain technology, ad-hoc wireless networks, storage area networks, computer graphics, web programming, computer networks, TCP/IP networking, operating system design, and C++ programming.



TECH TALK SERIES



TECH TALK- 13

Ancient India was technically and economically self-sufficient, and as a Vishwaguru, India was the world's leader". Science and technology have played a critical role in the evolution of human society. Since ancient times, India has had a glorious culture of education, science, and technology, and has made significant contributions in the fields of astronomy, arithmetic, geometry, metallurgy, the ayurvedic system of medicine, and surgery.

Undoubtedly, ancient India was technologically advanced in the fields of mathematics, medicine, physics, in the presence of scientists like Varahamihir, Aryabhatta, Nagarjuna. Contemporary civilizations of the Indus valley were not as scientific as the Indus. With this, in ancient India, almost India was technically and economically self-sufficient and was the leader of the entire world as a Vishwaguru

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Diamond Jubilee Celebrations
BEC IEEE TECH-TALK SERIES ON RESEARCH AND INNOVATION
IN ASSOCIATION WITH ACME

TECH TALK-13
Ancient India Science & Technology

[Register Now](#)

13/06/2023 | 5:45-6:45 PM | ECE SEMINAR HALL

Speaker
Dr. K. Nagarathna Rajur
Dept. of ECE

TECH TALK- 14

BASAVESHWAR ENGINEERING COLLEGE
BAGALKOTE - 587102
DIAMOND JUBILEE CELEBRATIONS
BEC IEEE TECH-TALK SERIES ON RESEARCH AND INNOVATION

TECH TALK- 14
Future world technology

SPEAKER
Dr. Manjula A. Sutagunda

14 JUNE 2023 | 5:30 PM
ECE DEPT SEMINAR HALL

[Register Now](#)

Dr. Manjula A. Sutagandar gave a tech talk on "Future World Technology". Emerging technologies, such as industrial robots, artificial intelligence, and machine learning, are advancing at a rapid pace. These developments can improve the speed, quality, and cost of goods and services, but they also displace large numbers of workers. "Wireless is freedom. It's about being unleashed from the telephone cord and having the ability to be virtually anywhere when you want to be."



TECH TALK- 15

Dr. S.G. Kambalimath, an experienced lecturer and Associate Professor at Basaveshwar Engineering College, excels in teaching and research with a focus on VLSI. Serving at the college since 1994, he also holds the position of Dean of Career Guidance & Placement. His expertise lies in encouraging student projects in software development for VLSI hardware, interfacing VLSI with real-world problems, and employing Finite Element Method analysis for VLSI fields. His dedication to education and research enhances the learning experience for students in Electronics & Communication Engineering at the college in Bagalkote, Karnataka.

BASAVESHWAR ENGINEERING COLLEGE
BAGALKOTE - 587102
IEEE STUDENT BRANCH (35241)

Diamond Jubilee Celebrations
BEC IEEE TECH-TALK SERIES ON RESEARCH AND INNOVATION
IN ASSOCIATION WITH ACME

TECH TALK-15
ROADMAP TO START CAREER IN VLSI

Register Now
20/04/2023
@ 5.00PM-6.15PM
MULTI MEDIA SEMINAR HALL

ASSURED E-CERTIFICATES

Speaker:
Dr. S. G. Kambalimath
Dept. of ECE

TECH TALK- 16

BASAVESHWAR ENGINEERING COLLEGE
BAGALKOTE - 587102
DIAMOND JUBILEE CELEBRATIONS
BEC IEEE TECH-TALK SERIES ON RESEARCH AND INNOVATION

TECH TALK- 16
Hydrogen as fuel

17 JULY 2023 | 5:30 PM
BT DEPT SEMINAR HALL

Register Now

SPEAKER
Dr. Madhumala Y.

Dr. Madhumala Y. started her research in the field of Microbiology. She has worked in the field of Environmental Bioremediation with the topic Biofilm induced reduction of Hexavalent Chromium using indigenous microbes for her Ph.D

Hexavalent Chromium is one of the most carcinogenic element found in the waste water generated from tanneries, electroplating, cement, paint and many more industries. Biofilm producing bacteria was isolated and by Using these 14 indigenous species of bacteria removal of hexavalent chromium was optimized and kinetics of the reduction was also observed. These organisms can be used for bioremediation purpose which is one of the techniques which is required to protect our environment from chromium pollution. She has published 6 papers in International journals, 1 in International conference. She has guided more than 25 UG projects and 8 PG projects and have 5 funded project.



TECH TALK- 17

Dr. Jayachandra S Yaradoddi gave a tech talk on "Writing Scientific Manuscript" provided valuable insights into the art and science of crafting effective scientific papers. Attendees left the event with a deeper understanding of the manuscript writing process, from structuring their work to ensuring ethical integrity. This event was an invaluable resource for researchers and scientists aiming to communicate their work effectively in the scientific community. We express our gratitude to Dr. Yaradoddi for sharing his expertise and knowledge with us.

The poster for Tech Talk-17 features a header with logos of IEEE, PES, and other organizations. The main text reads: "BASAVESHWAR ENGINEERING COLLEGE BAGALKOTE - 587102 DIAMOND JUBILEE CELEBRATIONS REC IEEE TECH-TALK SERIES ON RESEARCH AND INNOVATION". The title "TECH TALK- 17 Writing Scientific Manuscript" is prominently displayed. The speaker's photo and name, "Dr. Jayachandra S. Yaradoddi", are on the right. The date and time "24 JULY 2023 | 5:30 PM" and location "BY DEPT SEMINAR HALL" are at the bottom left. A "Register Now" button is at the bottom right.

TECH TALK- 18

The poster for Tech Talk-18 features a header with logos of IEEE, PES, and other organizations. The main text reads: "Basaveshwar Engineering College, Bagalkote IEEE Student Branch (35261) DIAMOND JUBILEE CELEBRATIONS REC IEEE TECH-TALK SERIES ON RESEARCH AND INNOVATION". The title "TECH TALK- 17 DETERMINISTIC & PROBABILISTIC STUDIES ON RAINFALL INDUCED LANDSLIDES." is prominently displayed. The speaker's photo and name, "Dr. Adarsh Chatra", are on the right. The date and time "24/07/2023 05:00 PM" and location "SEMINAR HALL CIVIL DEPARTMENT" are at the bottom left. A "REGISTER NOW" button is at the bottom right.

Dr. Adarsh Chatra's research delves into deterministic and probabilistic studies, focusing on soil slope stability under rainfall infiltration. Utilizing experimental studies and numerical analyses with FLAC, variations in pore pressure, saturation, and factor of safety (FOS) were simulated. To address uncertainties, reliability analysis and a MATLAB code for evaluating failure probability were employed. The findings reveal that failure probability curves aid in predicting slope stability changes with varying rainfall intensity and duration. Dr. Chatra encourages student projects in AI models for landslide detection and prevention, as well as developing solutions for damages induced by landslides, offering valuable opportunities for further research and innovation.



TECH TALK- 19

Dr. Jayalatha N A is a dedicated researcher specializing in Biosurfactant Production, with a focus on sustainable environmental solutions. Her tech talk, "Biosurfactants: A Green Approach to Environmental Restoration," highlights her commitment. Demonstrating expertise, she utilizes diverse bacterial species for biosurfactant production and employs analytical techniques to ensure efficacy in environmental applications. Noteworthy grant submissions to SERB-POWER, SERB-STARTUP, and SERB-Core Research Grants underscore her dedication to wastewater management and predictive environmental modeling. Dr. Jayalatha's statistical proficiency is evident in optimizing soil for heavy metal removal, showcasing a comprehensive and impactful approach to addressing environmental challenges.

Basaveshwar Engineering College, Bagalkote
IEEE Student Branch (35261)

DIAMOND JUBILEE CELEBRATIONS
BEC IEEE TECH-TALK SERIES ON RESEARCH AND INNOVATION

TECH TALK- 19
"BIOSURFACTANTS: A GREEN
APPROACH TO ENVIRONMENTAL
RESTORATION"

02/08/2023
05:15 PM

SEMINAR HALL
CIVIL DEPARTMENT

ASSURED CERTIFICATES

REGISTER NOW
BEC IEEE

SPEAKER
Dr. JAYALATHA N A

TECH TALK- 20

Basaveshwar Engineering College
Bagalkote - 587102

Diamond Jubilee Celebrations
BEC IEEE Tech-Talk Series on Research and Innovation
in association with IEEE-PES-SBC(35261A)

Tech Talk -20
**MATLAB - SIMULINK
Programming**

REGISTER NOW

Speaker
Dr. R. L. Naik
Dept. of E&EE

Date: 05-08-2023 Time: 11:15 am
Venue: Main Building Room 107

BEC IEEE

Dr. R. L. Naik has given a tech-talk on "MATLAB - SIMULINK Programming". Below is the overall details in a nutshell.

Matlab-Simulink programming is a powerful tool used for modeling, simulating, and analyzing dynamic systems. It's widely employed in various fields, particularly in engineering and science.

This programming is a versatile platform that combines the computational capabilities of Matlab with the modeling and simulation capabilities of Simulink. It's widely used in academia and industry for applications like control system design, signal processing, image processing, and much more, where dynamic system modeling and simulation are essential.



TECH TALK- 21

Dr. Preeti S. K. pioneers nanoscience research, drawing inspiration from nature's designs for innovative nanomaterials, devices, and systems. Leveraging millions of years of evolution, she aims to create efficient nanoscale structures using nature's blueprints. For instance, mimicking the lotus leaf's self-cleaning micro and nanoscale roughness has led to superhydrophobic surfaces, repelling water and contaminants. The gecko's clinging ability inspired nanoscale adhesives with applications in robotics and medical devices. In medicine, biomimicry at the nanoscale has spurred the development of drug delivery systems inspired by biological processes. Dr. Preeti's work showcases a transformative approach to nanoscience applications through nature-inspired innovation.

BASAVESHWAR ENGINEERING COLLEGE
BAGALKOTE - 587102
DIAMOND JUBILEE CELEBRATIONS
BEC IEEE TECH-TALK SERIES ON RESEARCH AND INNOVATION

TECH TALK- 21
Biomimicry in
Nanosciences

09 AUGUST 2023 | 5:30 PM
BT DEPT SEMINAR HALL

[Register Now](#)

SPEAKER
Dr. Preeti S. K.

TECH TALK- 22

BASAVESHWAR ENGINEERING COLLEGE
BAGALKOTE - 587102
IEEE STUDENT BRANCH (35241)

Diamond Jubilee Celebrations
BEC IEEE TECH-TALK SERIES ON RESEARCH AND INNOVATION
IN ASSOCIATION WITH ACME

TECH TALK-22
GREEN CHEMISTRY

[Register Now](#)

10/08/2023
5:30PM-6:30
EEE SEMINAR HALL

ASSURED E-CERTIFICATES

Speaker
Dr. P. L. Timmatagoudar
Dept. of Chemistry

The BEC IEEE Green Chemistry Tech Talk delivered insightful outcomes, offering participants a comprehensive insight into sustainable materials, energy efficiency, and waste reduction. Attendees gained practical knowledge and concrete examples of successful projects aligning with green chemistry principles. The emphasis on inspiring environmentally conscious approaches had a tangible impact, fostering heightened awareness among engineers and technologists about their pivotal role in promoting sustainability. The session equipped participants with the knowledge and inspiration to integrate eco-friendly practices into their projects, reflecting the event's success in fostering a commitment to environmental responsibility among the engineering community.



TECH TALK- 23

Dr. Shaila U. Duragadsimi initiated research on X-ray Diffractions and Interferences, offering a simplified introduction to these physics fundamentals for a diverse audience. The session elucidated the role of X-ray diffractions in studying crystal structures, unraveling material mysteries. Attendees gained insights into how X-rays unveil atomic arrangements within crystals. Exploring interferences, the talk highlighted their crucial role in understanding wave behaviors, with practical applications across scientific fields. The Tech Talk aimed to demystify these concepts, ensuring participants left with a foundational understanding of X-ray Diffractions and Interferences, fostering broader accessibility to these intriguing subjects in the realm of physics.

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TECH TALK-23
X-RAY DIFFRACTION AND ITS INFERENCES

Register Now

16/08/2023
5:30PM-6:30PM
IEEE SEMINAR HALL

Speaker:
Dr. Shaila U. Duragadsimi
Dept. of Physics

ASSURED E-CERTIFICATES





World Environmental Day



The event started by addressing the thoughts of the dignitaries which were very effective. Participants were asked to pledge to take care of the environment and bring innovative ideas to start a plastic free environment. The event had a lots of objectives that includes that included increasing the awareness among the people and promoting sustainable development and practices to make the campus and the local area greenery. This day served as a platform to address several environmental issues and know the actual cause and how to reduce them and bring up effective living. The event was continued with the plantation by plating 20 saplings by the participants and also the teaching and non-teaching staff. Later, participants volunteers of BEC-IEEE SB, non-teaching staff and the professional staff carried out a rally around the campus holding the slogans of the environment day spreading awareness about planting a tree which the slogan quoted as "Each one Teach one How to plant one".





The Google Sites website building workshop for BEC IEEE volunteers at BEC IEEE chapter, was a concise and insightful session. Yohith N provided clear guidance on creating and customising websites, covering essential aspects such as layout customization and multimedia integration. Participants expressed appreciation for the practical insights gained and left the workshop with enhanced skills. The IEEE chapter aims to continue offering such focused sessions to empower its members with valuable technical expertise.



Higher education in India is a vital system encompassing a network of universities and colleges offering diverse programs. Regulated by bodies like the University Grants Commission and All India Council for Technical Education, the sector faces challenges of access and quality maintenance. Renowned institutions like the Indian Institutes of Technology and Management lead in engineering, technology, and management studies. Ongoing efforts focus on inclusivity, research, internationalization. The sector aims to align education with the job market, integrate technology for online learning, and implement policy reforms for enhanced quality and global competitiveness, reflecting a commitment to meeting evolving global demands.



CODEKSHETRA

The event consisted of three rounds. In the first round a quiz was conducted on the basics of C language which consisted of 20 questions.

In the second round the participants were divided into teams of two and three problem statements with the respective codes along with logical and compilation errors were given to each team. Later, they must debug the code and display the expected results within an hour. In the last round, the Karel IDE website was used as a platform to display a given pattern by writing a code with pre-defined functions. Evaluation scheme was based on the smaller number of errors, warnings, and completion time.





Workshop On Design & Finance

The design and finance workshop was exclusively for BEC IEEE volunteers, and was a hands-on session that focused on utilizing Photoshop and Canva for creative design solutions. The workshop started with an overview of design principles and the importance of effective financial communication. Participants were guided through practical exercises using Photoshop for advanced design techniques and Canva for its user-friendly approach. Attendees left the workshop equipped with skills to enhance their design and financial communication abilities.



BASAVESHWAR ENGINEERING COLLEGE, BAGALKOTE
IEEE STUDENT BRANCH (35261)

Presents

WORKSHOP

Exclusive For BEC-IEEE volunteers
ON DESIGN AND FINANCE

Student Resource Persons



Satvik Patil
2nd year CSE



Rahul Hugar
2nd year CSE



Preetam G
2nd year CSE



Arslan D
2nd year CSE



“TECH-AATA” was a technical event conducted on 21st and 22nd of July from 5:30PM-6:30PM. The event was conducted for all the BEC-IEEE Volunteers and the event was focused on testing the technical, designing and logical skills of the participants.

The event was composed of 3 rounds, namely–

- 1. Apti Test-This round consisted of quiz questions, which was focused on testing the aptitude and reasoning skills , and the basic knowledge of all the engineering branches of participants.**
- 2. Wiki-Web: Motto of this round was to create an interactive and visually appealing website using Google Sites, taking the content from the Wikipedia page of the chosen topic.**
- 3. CodeHunt: In this round, participants will be given a set of riddles and they need to find the answer of those riddles, which are the file name of multiple code snippets and these files will be stored in different folders. Combining all the code snippets, participants need to complete the program and debug the errors.**

The event concluded with the announcement of winners of the overall event and the participants got exposure to multidisciplinary problems and Google sites.



ELEVATE

“ELEVATE” was an event conducted by BEC-IEEE. It’s an annual event that offers a unique platform for 11th and 12th PUC (Pre-University Course) students to showcase their talents in various domains. This event, designed to foster creativity, critical thinking, and intellectual growth, comprises a series of competitive rounds, including essay writing, drawing, aptitude tests, quizzes, and debates. ELEVATE aims to provide a holistic learning experience, encouraging students to excel beyond their academic curriculum. Around 500 students participated in this event.



Visit to BEC STEP

The visit to Basaveshwar Engineering College's Science and Technology Entrepreneurs Program (STEP) in Bagalkot was an insightful experience for BEC IEEE volunteers. The visit offered a close look at innovative projects and technologies, showcasing the intersection of science, technology, and entrepreneurship. BEC IEEE volunteers gained practical insights into how engineering principles are applied in entrepreneurial ventures. The visit not only expanded their knowledge but also inspired a greater appreciation for the role of technology in entrepreneurship.



Orientation Session of IEEE

The orientation session, focused on familiarising participants with IEEE (Institute of Electrical and Electronics Engineers), achieved its objective by providing a thorough overview of the organisation. The agenda encompassed a warm welcome, an introduction to IEEE's history and role in advancing technology, and an explanation of membership categories, including distinctions between student, professional, and senior memberships. The session highlighted the diverse benefits of IEEE membership, ranging from access to cutting-edge research papers to networking opportunities and career development resources.

Participants left the session with a comprehensive understanding of IEEE, its significance in the technology field, and the tangible advantages associated with membership. The Q&A session allowed for the clarification of doubts and concerns, contributing to a positive atmosphere. Feedback from participants was encouraging, with many expressing interest in further exploring IEEE membership, and some noting that the session dispelled misconceptions and provided valuable information for informed decision-making.





Podcast on Recent Trends in Artificial Intelligence

BEC IEEE conducted a compelling podcast on recent AI trends, featuring Dr. K G Srinivas from IIIT Naya Raipur. Dr. Srinivas, a prominent expert in the field, shared valuable perspectives on the latest advancements and applications in artificial intelligence. The podcast served as an accessible and informative platform for students and enthusiasts to grasp the evolving landscape of AI, contributing to their understanding of this rapidly developing technology. This engaging session facilitated by BEC IEEE not only provided a snapshot of the current state of AI but also offered insights into the potential future directions of the field. Dr. Srinivas' expertise and the simplicity of the podcast format made complex AI trends comprehensible, catering to a diverse audience interested in staying abreast of technological developments.



Podcast on Opportunities in Space Sector and ISRO

BEC IEEE organised an enlightening podcast featuring Sri Sanjeev C Gour from ISRO, discussing opportunities in the space sector and insights into ISRO. Mr. Gour, with his expertise, provided valuable perspectives on career prospects and advancements within the space industry. The podcast offered listeners a concise yet comprehensive overview, serving as an informative resource for those interested in exploring opportunities in the ever-evolving field of space exploration.



F.A.I.L

First Attempt in Innovative Learning

BEC-IEEE SB hosted an instructive professional development event for fresher students, covering key skills for engineering careers. Sessions on Canva presentations, effective email writing, LinkedIn profile optimization, and resume crafting were conducted by volunteers. Practical examples and interactive exercises facilitated hands-on learning. The workshop emphasized clear communication, visual appeal, and online presence. Participants honed their skills with personalized guidance, ensuring they are well-prepared for the professional world. Additionally, insights on valuable Instagram handles and YouTube channels were shared for ongoing career development.



Rural Education promotion and Awareness Program on Renewable & Sustainable Energy

The BEC IEEE PES Student Branch Chapter organized an awareness program, "Significance of Renewable Energy Resources & Sustainable Development," targeting students of class 4th to 6th at Shri Sushil Ratna English Medium School. Aimed at fostering awareness of renewable energy's importance, the event, led by Basaveshwar Engineering College's IEEE PES student members, emphasized the limitations of non-renewable resources and the need for sustainable development. The session included a quiz to enhance understanding, with top scorers receiving awards. Adding a touch of fun, students showcased talents in singing, dancing, and mimicking, making the learning experience enjoyable and enlightening.



Farmers visit to the EEE-Department Energy Park

The IEEE Power and Energy Society Student Branch Chapter organized an event to engage with farmers. The event took place in offline mode at the Renewable Energy Park of Basaveshwar Engineering College, Bagalkote, on October 19, 2023.

Upon arriving at the Energy Park, the farmers were addressed by Dr. B. F. Ronad, Assistant Professor of Electrical and Electronics Engineering at BEC, Bagalkote. He introduced the EEE Department, discussed the BEC Energy Park, and demonstrated various projects conducted at the park.

The IEEE-PES and REACH volunteers guided the farmers and presented demonstrations of different technical projects installed in the park. These included:

- Solar Still
- Solar Dryer
- Conical Solar Water Heater
- Pentagonal Solar Water Heater
- Solar-powered Mobile Canteen
- SPV Irrigation Pump
- Generation of Power Gym Bicycle
- Automatic SPV Lighting System
- Wind Power Plant

In conclusion, Dr. R. L. Naik, Head of the EEE Department, addressed the farmers, followed by Dr. D. S. Jangamshetti, Principal of BEC Bagalkote. Afterward, high tea was arranged for the farmers, and the event concluded with a group photo.





IEEE Day Celebration

The IEEE Day Celebration held on October 7, 2023, at Basaveshwar Engineering College, Bagalkot, was a resounding success. The event was organized by the IEEE student branch at the college and was filled with engaging activities and insightful discussions.

IEEE Day Celebrations:

The highlight of the event was the cake-cutting ceremony by the dignitaries, symbolizing the IEEE Day celebrations and reinforcing the spirit of innovation and collaboration.

Future Plans and Vote of Thanks by Mr. Shrivatsa V Gudi:

Mr. Shrivatsa V Gudi, the Chairman of BEC-IEEE, who is pursuing his 7th semester in AIML, shared the student branch's future plans and extended his gratitude to all participants and organizers.

The IEEE Day Celebration at Basaveshwar Engineering College was a testament to the commitment and enthusiasm of the students, teachers, and IEEE members in promoting technological advancements and knowledge sharing. It provided an excellent platform for networking, learning, and celebrating the contributions of IEEE to the world of technology.





BEC-IEEE's "Walk for Awareness" event on October 15, 2023, brought together 45 participants for a symbolic walk towards "zero point." This endeavor symbolized a collective commitment to heightening social consciousness and unity in action. Participants, spanning various ages and backgrounds, walked together, highlighting the potency of joint effort in instigating positive change.

Following the walk, the event transitioned into engaging group activities designed to foster teamwork and understanding among participants with diverse perspectives. These exercises served as a catalyst for open dialogue, enabling individuals to break down barriers and forge connections within the community. The event's core was the group discussions, which delved into pressing societal topics like politics and education. These conversations provided a platform for participants to express their views, exchange invaluable insights, and gain a deeper understanding of these vital subjects. This aspect of the event equipped participants with a broader perspective and a heightened sense of social awareness, leaving a lasting impact on all involved.



</> IEEE XTREME 17.0

BEC IEEE Student Branch hosted the IEEE Xtreme 17.0 coding competition at our campus. The 24-hour event attracted coding enthusiasts who tackled a series of challenging problems, showcasing their coding skills and problem-solving abilities. The competition not only emphasized technical excellence but also fostered a collaborative and competitive spirit among participants. The successful event highlighted BEC IEEE's commitment to promoting coding culture and providing students with a platform to enhance their coding prowess.





Interdisciplinary Engineers Summit

This was a 2 day event conducted in online mode on 7th and 9th of November. The event began at 7:30pm and ended at 8:30 pm on day one and started at 6:30 pm and ended at 8:30 pm on day two.

This event was based on bringing together different branches of engineering to collectively bring out a solution to the given problem statement which was "Discuss advancements in agricultural technology and how interdisciplinary engineering can enhance food production, reduce waste, and promote sustainable farming practices and also the strategies for disaster preparedness and response, with a focus on interdisciplinary approaches to mitigate the impact of natural disasters affecting agriculture." The participants were divided into 9 teams and there were 2 sessions in the event.

The first session was held on 7-9-23 where there was idea presentation by the teams where they proposed their way of approaching the solution. After this session there was a collaboration phase where the like minded teams collaborated into 4 groups containing two teams each. The second session was on 9-9-23 which was a presentation come debate session where the collaborated teams presented their ideas and debated on their solutions. Based on the scores of the teams and involvement of individual participants on both the days total of 5 prizes were announced. With this the two days online event was wrapped up.





RAS WORKSHOP - 1

It was basically a workshop conducted on 26th and 27th of June from 5:00PM-6:00PM in the IDEA LAB of our college.

The workshop was basically conducted with a moto “Empowering Future Innovators” and was focused on giving a hands-on experience on –

- 1.Awareness of Drones.
- 2.Working with Robots.
- 3.Additive Manufacturing using 3D-Printers.
- 4.IOT Application development.

The workshop had concluded with a great exposure to the projects present over the lab and the participants has got a good knowledge about the technologies that we are equipped with.





RAS WORKSHOP - 2

The workshop on robotics provided students with a comprehensive introduction to key concepts in robotics, Arduino programming, and embedded systems. Through hands-on activities and engaging demonstrations, participants gained fundamental knowledge of robotics, enabling them to comprehend the principles of automation and control. They were introduced to Arduino, a versatile microcontroller platform, and acquired basic programming skills for robotics applications. Additionally, the workshop fostered an understanding of embedded systems, laying a strong foundation for future exploration in the field. Overall, the event equipped students with essential skills and insights to embark on a rewarding journey in robotics and technology.

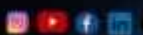


AESS Amazing Facts



Basaveshwar Engineering College ,Bagalkote
IEEE Student Branch(35261)

Did you know?
You can only see about 2,000 stars on a very dark night with the naked eye

 | @BEC-IEEE

- Team IEEE-AESS-BEC



Basaveshwar Engineering College ,Bagalkote
IEEE Student Branch(35261)

Did you know?
During a total solar eclipse, when the Moon completely covers the Sun and the corona of sun(outermost layer) is only visible , that is not a reason of any human sin just a natural phenomena .

 | @BEC-IEEE

- Team IEEE-AESS-BEC

One-week hands-on workshop on PLC , SCADA & IoT

The Electrical and Electronics Engineering Department, in collaboration with AICTE IDEA Lab, organized a week-long workshop focusing on PLC, SCADA, and IoT. Led by industry expert Mr. Subodh Mone, the event covered PLC fundamentals and programming intricacies in the initial days, followed by SCADA exploration, including tag generation and scripting. The workshop showcased effective PLC-SCADA communication. Inaugurated by Dr. Basanagouda Ronad, the event was a profound learning experience. Special thanks to Mr. Subodh Mone, Dr. Ronad, and Dr. Sangamesh Y. G. for their contributions. The workshop provided participants with hands-on knowledge, translating theoretical concepts into practical understanding.





VOLUNTEER TALK SERIES

Ms. Poorvi Goudar's presentation delved comprehensively into the myriad opportunities offered by the Institute of Electrical and Electronics Engineers (IEEE), emphasizing the tangible advantages associated with active membership. She eloquently highlighted how IEEE provides a robust professional network, invaluable resources, and platforms for knowledge exchange, fostering continuous growth and advancement in the field of electrical engineering and related disciplines. The presentation strategically outlined avenues for skill enhancement, collaborative projects, and access to state-of-the-art research, positioning IEEE as a key catalyst for professional development.

Ms. Poorvi Goudar's articulate delivery not only underscored the strategic importance of active engagement but also served as a source of inspiration for peers, encouraging them to consider the manifold benefits inherent in becoming active contributors to this globally recognized professional organization. In essence, her presentation functioned as an informative guide, showcasing the wealth of opportunities and professional advantages awaiting those who choose to align themselves with IEEE. The seminar concluded on a congratulatory note by BEC IEEE Chair, Mr. Shrivatsa V.Gudi.

STUDENT TALK-1



STUDENT TALK -2



Mr. Bharatesh B. Karbhari delved into the field of artificial intelligence, with a specific focus on the transformative potential of Gamma AI in content creation. The presentation explored various applications and implications of leveraging Gamma AI, shedding light on how this advanced technology can revolutionize the generation and interaction with digital content. Demonstrating a deep understanding of the subject matter, Mr. Karbhari engaged the audience by illustrating real-world examples and discussing the future possibilities that Gamma AI holds for the creative landscape. His talk served to inspire and inform attendees about the cutting-edge advancements in AI shaping the future of content creation.

The seminar concluded on a congratulatory note by BEC IEEE Chair, Mr. Shrivatsa V. Gudi.



VOLUNTEER TALK SERIES

STUDENT TALK-3

The BEC IEEE student branch organised a tech talk titled "Navigating the Digital Age: The Imperative Rise of Mental Health Awareness in the Modern Workplace" by Praveen Ullagaddi. This insightful session explored the critical importance of mental health awareness in the context of the modern workplace. Attendees gained valuable insights into the challenges posed by the digital age on mental well-being and learned strategies to foster awareness and well-being. Praveen Ullagaddi's seminar provided a thoughtful exploration of this crucial aspect of the contemporary professional landscape, concluding with appreciation for his valuable contribution to raising awareness within the BEC IEEE community.



Societies and Affinity Groups @BEC IEEE



IEEE WIE

IEEE Women in Engineering (WIE) is one of the largest international professional organizations dedicated to promoting women engineers and scientists, and inspiring girls around the world to follow their academic interests in a career in engineering. The mission of IEEE WIE is to facilitate the recruitment and retention of women in technical disciplines globally. IEEE WIE envisions a vibrant community of IEEE women and men collectively using their diverse talents to innovate for the benefit of humanity. Membership is free to Life Members, Student and Graduate Student Members.

IEEE WIE is one of the world's leaders in changing the face of engineering. Our global network connects over 40,000 members in over 125 countries to advance women in technology at all points in their lives and careers. IEEE WIE members make lifelong friendships, acquire influential mentors, and make a difference for the benefit of humanity.



IEEE PES

IEEE Power & Energy Society (PES) develops standards and empowers the development of technology, software, and best practices in all areas of electric power and energy including generation, transmission, distribution and utilization to provide a reliable, resilient, safe, cost-effective and sustainable AC and DC electricity supply system to the end-user. PES focuses on current power system infrastructures and technological advancements in energy resources, smart grid and smart cities for the betterment of society.

PES members also gain access to the IEEE PES Resource Center, a library with hundreds of technical reports, tutorials, conference videos, webinars, presentations and more. PES also offers networking opportunities, access to peer-reviewed technical journals and educational materials that help our members stay up-to-date on the latest advances including renewable energy system design and integration, smart-grid technologies, electric vehicles, wholesale market design and operation, and asset management.

Societies offer an electronic-only membership option at a reduced rate for individuals who reside in developing countries. You will receive electronic/digital versions of your publications. Reduced fees such as unemployed, retired or minimum income are not available for the Essential package, but may be applied to the Preferred package.



IEEE RAS

Robotics is here defined to include intelligent machines and systems; whereas automation includes the use of automated methods in various applications to improve performance and productivity. The Society sponsors a number of conferences, including the annual International Conference on Robotics and Automation.

IEEE Societies provide access to current information, opportunities to network with peers, and enhancement of the worldwide value of your profession. IEEE members receive special prices for Society memberships. If you are not an IEEE member, you may wish to join as an Affiliate at the non-IEEE member price noted at right.



IEEE AESS

The mission of the AESS is to provide a responsive and relevant professional society that attracts, engages, aids, and retains a diverse set of members (age, culture, community – theoretical, managerial and applications) worldwide in the areas of our fields of interest as defined in our constitution. AESS will accomplish this through technical, chapter and society activities in the areas of conferences, publications, education, technical operations, industry relations, and member services.

The vision of the AESS is to be essential to the worldwide technical community and be recognized for outstanding contributions in the fields of aerospace and electronic systems as demonstrated through the Society's products, service and offerings in the areas of conferences, publications, education, technical operations, industry relations, and member services.



IEEE CS Society

IEEE Computer Society, the world's leading organization of computing and information technology professionals.

What we offer:

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More than 9,000 conference publications

Standards Development

Online learning with more than 45 Professional Development Hours available

Learn, collaborate and network at 225 international conferences, 350+ worldwide chapters and 40 technical communities

Beginner and Advanced Software Developer Certifications

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As we conclude this souvenir, consider it a cherished keepsake that has not only informed but also sparked your enthusiasm for the dynamic world of technology. This chapter may be closing, but the narrative continues in the upcoming edition. Anticipate a fresh compilation of insights, compelling stories, and exciting updates. Stay engaged, reflect on this edition as a meaningful memento, and look forward with excitement to the discoveries awaiting you in the next chapter of our annual report. Thank you for being part of our journey.



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