TAURUS

News letter

Volume-XII, Issue-1
(January 2023 – March 2023)

LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

(Autonomous)

MYLAVARAM – 521230, N.T.R Dt., A.P, INDIA

CONTENTS

Vision

To empower the students to become technologically vibrant, innovative and emotionally matured; and to train them to face the challenges of the quality conscious globalized world economy.

Mission

IM1: To provide an environment most conducive to learning and to create a stimulating intellectual atmosphere on the campus.

IM2: To achieve Academic Excellence.

IM3: To ensure a Holistic Development of Personality.

IM4: To spread Education to Rural Areas.

IM5: To establish partnership between Institution & Industry

About LBRE

Lakireddy Bali Reddy College of Engineering (LBRCE) was founded through Lakireddy Bali Reddy Charitable Trust in 1998 by eminent philanthropist and NRI Entrepreneur Sri Lakireddy Bali Reddy, a Chemical Engineer by qualification. Since the inception, LBRCE aims at co-creating value-based technical excellence, which ultimately leads to the development of the rural area where the college is situated.

Lakireddy Bali Reddy College of Engineering (LBRCE), approved by AICTE and affiliated to JNTUK, Kakinada is an Autonomous Institution since 2010 and has been accredited by NAAC with 'A' Grade (3.20 / 4 in Cycle-2), NBA (CSE, IT, ECE, EEE& ME) under Tier-I and ISO 9001:2015 Certified. It has also been awarded 2(f) and 12(B) status and Recognized as a 'Colleges with Potential for Excellence' (CPE) by UGC. It ranks in 251-300 band (Under Engineering) in NIRF India Rankings - 2022 and ranked 201-250 band (Under Engineering) in NIRF India Rankings - 2020. At present, we offer 9 B.Tech programs in CSE, CSE (AI&ML), AI & DS, IT, ECE, EEE, CE, ASE, ME and 4 M.Tech programs in CSE, Thermal Engg., Power Electronics & Drives, VLSI and Embedded systems, apart from M.B.A. Operating from a 65-acre green landscaped campus in Mylavaram, major facilities include 7 advanced labs, Internet with 1800 Mbps bandwidth, Digital library, 500KWp solar PV system, Indoor and Outdoor stadium, Gym, Yoga centre, NSS unit, NCC Girls wing, Girls and Boys hostels. The teaching-learning process is handled by highly-qualified and experienced faculty. In R&D, we currently handle 12 projects sanctioned by DST, Govt. of India, UGC, and AICTE amounting to Rs 7 Crores, besides 29 patents and 1150+ research publications. Also 4 depts. function as research centres of JNTUK, Kakinada.

Principal's Message

Dear Students and Faculty Members,

Last three months have been phenomenal for us. We have seen exceptional success in placements. I feel happy to share that our Computer engineering student, Ms.Rallabandi Eswari Madhavi, got recruited in IBM package of 11LPA. In NIRF India Rankings - 2022, LBRCE is ranked 251-300 rank band under engineering category and Internalshala-2022 is ranked 47 in south Zone. Five of our UG programs CSE, IT, ECE, EEE & ME were re-accredited by NBA for a period of 3 years. A Harshitha, CSE student received state level Influential student award by Hon'ble Chief Minister of Andhra Pradesh Sri.Y.S.Jagan Mohan Reddy and Kum. K.Poojitha Gayathri, EEE Student got State Level Best NSS Volunteer Award for A.Y 2021-22 from NSS Cell, Government of Andhra Pradesh. AI&DS Department students got First prize in "Data Science Hackathon" organized by APSSDC & Indo-Euro synchronization, Germany held on 28th September 2022. A.Sai Yaswanth got selected for All India Inter University Volleyball tournament to be conducted at SRM university, Chennai. Usha got selected for All India Inter University Volleyball tournament to be conducted at MG University, Kottayam. **4**

I congratulate all stakeholders for their incessant efforts.

Rankings and Recognitions

251-300
Band
Engineering
nirf
National Institutional Ranking Framework
NIRF-2022

Band
EXCELLENT
Colleges/Institutes (Private / Self Financed)
(Technical)
ARIIA
ATAL RANKING OF INSTITUTIONS
ON INNOVATION ACHIEVEMENTS
ARIIA-2021

47 Zonal Rank
122 All India Rank
INTERNSHALA
INTERNSHALA-2022

GRADE
AA
NPTEL
NPTEL-2022

Ranked
AAA+
CAREERS 360
A Career is a Life
Indian's Best Engineering Colleges - 2023

Ranked
8
THE**WEEK**
JOURNALISM WITH A HUMAN TOUCH
BEST COLLEGES-2022
Among all Private Colleges in AP

Ranked
77
DATAQUEST
Top 100 T Schools – 2023
Private Colleges in India

Ranked
87
DATAQUEST
Top 100 T Schools – 2023
Overall: Govt. and Private Sector in India

MUST-WATCH
ENGINEERING COLLEGES
IN INDIA – 2022
LAKIREDDY BALI REDDY
COLLEGE OF ENGINEERING
Higher Education

MoE's
INNOVATION CELL
(GOVERNMENT OF INDIA)
INSTITUTION'S INNOVATION COUNCIL
(Ministry of HRD Initiative)
★★★★☆
A.Y:2021-22

Major Events

AI&DS department celebrated **Spirit of AI Club Day** on 13.04.2023 by conducting various events both curricular and co-curricular activities for students of I, II and III Year Students. The coordinators of the Spirit of AI Club organized this event and made it successful.

LBRCE SC/ST cell organized workshop on **"IoT "** A Joint initiative of IEEE Bangalore Section and CDAC Bangalore for SC/ST Students from 28-02-2023 to 03-03-2023.

AI&DS department organized **5 day workshop with Hackathon** on Data Science using Python, from 12.02.2023 to 17.02.2023 by Brain O'VIsion to enable students to get in depth knowledge of Data Science in Python. End of the workshop made students win the 2nd prize of Hackathon.

AI&DS department organized Workshop on Cyber Security and Ethical Hacking - 03/01/2023 and 04/01/2023 in association with Indian Servers, Vijayawada. Resource Person Mr.D.Sai Satish, CEO, Indian Servers started workshop and explained Cyber security Basics and Ethical Hacking tools like as Malware Analysis Tools, OWASP top 10, Pen testing Tools along with Hands-on sessions
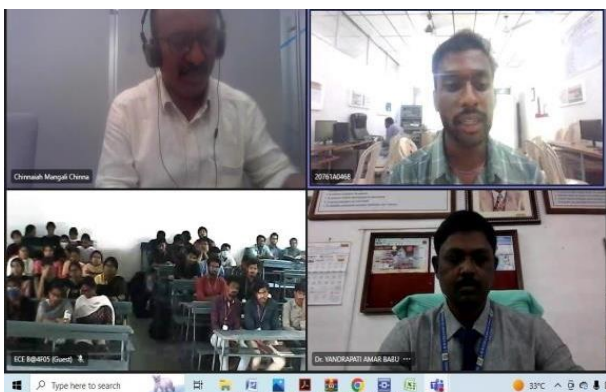
The department of Computer Science & Engineering has organized two days' workshops on "Cyber Security Ethical Hacking" from 03-01-2023 to 04-01-2023. Mr. T.V.N.S. Praveen acted as Coordinator for the Program.
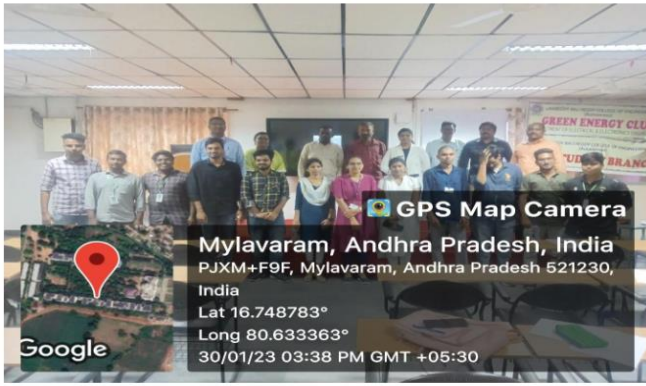

The department of Electronics and Communication Engineering has organized one week FDP on "Design and Implementation of advanced VLSI Architectures" from 13-03-2023 to 17- 03-2023.

The department of Electronics and Communication Engineering has organized a three-day student training program on" PCB Circuit Design from 27-03-2023 to 29-03-2023.

The department of Electronics and Communication Engineering has conducted Guest Lecture on "Computing methods and Techniques for Computer Technology " on 27-02-2023.

Dept. of ME organized ACREX-2023 Quiz Competition under ISHRAE Student Chapter on 30.01.2023

Dept. of ME conducted Unacademy Interactive Session on 25.01.2023

Dept. of ME Organized a "Five Day Workshop on IoT for SC/ST Students by IEEE, CDAC Bangalore" from 27.02.2023 to 03.03.2023

SAHELI-The Girls club organizes Awareness program on"Birth Anniversay Celebratins of Savitribai Phule@2K23" on 03-01-2023

SAHELI-The Girls club Awareness Program on "TO COUNTER HUMAN TRAFFICKING" Y.Chandraya, Coordinator, Prajwala voluntary organization, HYD Interacting with the students in awareness Program on "TO COUNTER HUMAN TRAFFICKING"

Industry Institute Interactions

The Department of ECE has organized a one day Industrial Visit for III year students to "Efftronics" on 06-01-2023.

Dept. of ME organized Industrial Visit to APSRTC ZONAL WORKSHOP, Vijayawada for VI Sem students on 03.02.2023

Research & Consultancy

Publications

- K Sudhakar, "The Dashboard Infrastructure of Electric Vehicles with IoT and Wireless Power Transfer System: April 2023, 10.1109/IITCEE57236.2023.10091082
- V Sowjnayna, Selected 2 papers in 6th Edition of International Conference on Communications and Cyber-Physical Engineering (ICCCE-2023) which is held on 28TH & 29TH April 2023, organized by CMR College of engineering Hyderabad. (Springer)
- V, Sowjanya, "A survey on Disease Analysis and Prediction of an individual based on GAIT using Deep Learning Techniques" in a conference organized by Loyola College of Engineering" on Feb 2023.
- Dr. Y. Vijaya Bhaskar Reddy, Optimized CNN-based Brain Tumor Segmentation and Classification using Artificial Bee Colony and Thresholding, International Journal of Computers Communications & Control, Feb-2023, 1841-9844.
- Venkata Subbaiah Desanamukula, A mass correlation based deep learning approach using deep Convolutional neural network to classify the brain tumor. Biomedical Signal Processing and Control, Mar-2023, 1746-8094
- Chopparapu Srinivasa rao, Gradient weighted CNN model for diagnosing COVID-19 using radiography X-ray images, Measurement: Sensors, Mar-2023, 2665-9174
- Narisetty SrinivasaRao, An Effective Machine Learning Techniques to Detect Parkinson's Disease, 2023 Third International Conference on Artificial Intelligence and Smart Energy (ICAIS), Mar-2023, 6654-6216.
- Amar Babu.Y, Performance Analysis of on Chip Interconnects for ASIC DesignInternational Journal of Scientific Research in Engineering and Management (IJSREM),2023, 2582-3930
- Ravi Kumar Kandagatla, V, IOT framework for monitoring the condition of roads, Journal of Engineering Science and Technology, 2023, 1823-4690
- K. Ravi Kumar, Object Detection Mechanism using Deep CNN model, 5 th International Conference on Smart Systems and Inventive Technology (ICSSIT 2003), 23-25, January 2023
- M.K. Lingamurthy, Implementation and Analysis of Image, International Interdisciplinar y Humanitarian,2023.
- **Murahari Kolli**, Satyanarayana Kosaraju , Devaraju Aruri, & Medikondu Nageswararao, Influence of Rotary Assisted Electrical Discharge Machining of 17-4PH Stainless Steel Using Taguchi Technique, Indian Journal of Engineering & Materials Sciences, Vol. 29, pp. 799-806, January 2023, ISSN: 1955-2513 DOI: 10.56042/ijems.v29i6.70267
- P. Karthikeyan, K. Kalaiselvi, M. Pachamuthu, **Kanulla Karthik,** A. Johnson Santhosh, An Optimisation Method of Construction for Warping Copper Plates and Engines Using Complete Block Designs with Some Special Types of Graphs, Advances in Materials Science and Engineering, Jan 2023, ISSN: 1687-8434, Special Issue : Article ID 9002743, Doi.org/10.1155/2023/9002743.

- Kode Srividya, **Seelam Pichi Reddy,** Kurra Hari Prasad, Naga Sai Rama Krishna Thati, Kilari Snehita, Unnam Sai Pranay, Naga Venkata Sairam Yellapragada, Optimization of Process Parameters for Preparation of Lanthanum Hexa-Aluminate Powders Using Combinatorial Approach of Taguchi-GRA and ACO Methods, Annales de Chimie - Science des Matériaux, Vol. 47, No. 1, February, 2023, pp. 43-50. ISSN: 0151-9107**.**
- Srinivasa Reddy Kunduru1,Hanumantha Rao Yarrapathruni Venkata, **Dhanaraju Vallapudi**, Narmatha Deenadayalan, Arul Raj Kumaravel, prediction of recital characteristics of a ci diesel engine operated by bio-fuel extracts from cotton seed oil, linseed oil and mahua seed oil using ann method, Journal of Thermal Engineering, Vol. 9, No. 2, 1-15, March, 2023, ISSN: 2148-7847**.**
- Ravi Prakash Babu Kocharla, **Murahari Kolli,** Muralimohan Cheepu, Real-Time Detection of Faults in Rotating Blades Using Frequency Response Function Analysis, Applied Mechanics, March 2023, Vol 4 (1), 356-370, ISSN: 2673-3161.
- P. Venkataramana, P. Vijaya Kumar, B. Bala Krishna, Thermal and flow performance in a CLPHP with Al2O3/copper nanofluids: Application in microelectronics and power generation, Materials Today Processsindings, https://doi.org/10.1016/j.matpr.2023.03.110, March 2023, ISSN: 2214-7853
- **Seelam Pichi Reddy**, PV Chandrasekhara Rao, A Nageswar Rao published a book chapter of "Effect of ball milling on compacting characteristics of Al-10% Al2O3-fly ash composites" published by Walter de Gruyter GmbH & Co KG, Germany in March 2023 with DOI https://doi.org/10. 1515/9783110766523-007.
- **Murahari Kolli**, Krishna Kishore Mugada, Adepu Kumar, Sunkara Gopi Rakesh published a book chapter of "Next-generation waste residue composite materials" published by Walter de Gruyter GmbH & Co KG, Germany in March 2023 with DOI https://doi.org/10. 1515/9783110766523-001.
- Sai Naresh Dasari, **Murahari Kolli** published a book chapter of "Performance of economical aluminum MMC reinforced with welding slag particles produced using solid-state liquid metallurgical stir casting" published by Walter de Gruyter GmbH & Co KG, Germany in March 2023 with DOI https://doi.org/10. 1515/9783110766523-006.
- **Murahari Kolli**, Krishna Kishore Mugada, N Jaya Prakash published a book chapter of "Applications of green waste composite" published by Walter de Gruyter GmbH & Co KG, Germany in March 2023 with DOI https://doi.org/10. 1515/9783110766523-012. **V.Dhana Raju.**, Harish Venu., Jayashri N Nair., M.B.S.Sreekar Reddy and J Subba Reddy published a book chapter of "CNTs based nano-fuels: Performance, combustion and emission characteristics, Nanotechnology for Advanced Biofuels: Fundamentals and Applications" published by Elsevier Science in March 2023 with DOI https://doi.org/10.1016/B978-0-323-91759-9.00007-1.

Books/Book Chapters:
- Dr O Rama Devi, Published Edited Book Titled "Research Algorithms in Real World Applications" ISBN: 978-93-5779-832-7 on Apr 2023.
- V.Sowjanya, Published Edited Book Titled "Research Algorithms in Real world Applications" ISBN: 978-93-5779-832-7 on Apr 2023.
- K Venkatesh, Book published by Amazon "Artificial Intelligence: Principles and concepts" in March 2023
- Murahari Kolli, J Paulo Davim published a book of "Waste Residue Composites" published by Walter de Gruyter GmbH & Co KG, Germany on in March 2023 with ISBN 978-3-11-076640-0.

Patents:
- K Sudhakar, Solar Powered Camera Based Kit for Lead Ions Detection in Water Employing H2S Gas Application Patent ID: 202321025271, Country: Indian Patent (IPR), Filed in April 2023.
- K Sudhakar, IoT&Cloud Computing based Hull Mounted Mercury Detector in Sea Water for Fishing Boats Application ID: 20233100812, Country: Indian Patent(IPR).Filed in March 2023.
- Mrs K Vinayasree Bai, Canadian Patent on "MODELING AND ANALYSIS OF DATA TRADING IN FINANCIAL ORGANIZATION BASED ON BLOCKCHAIN MARKET IN IOT NETWORKS"
- Dr. D. Venkata Subbaiah, An IoT based Autonomous Robot Monitoring System
- Dr.P.Rakesh Kumar, Dr.E.V.Krishna Rao, A rectangular A-Shaped Microstrip Patch Antenna with defected Ground Structure for Wireless communications (202341002404A)
- Dr. B. Poornaiah, Dr. T.Satyanarayana, Dr. B. Rambabu, Dr.E.V.Krishna Rao,An Artificially intelligent Smart Medical system using soft computing (20234100 2403)
- Dr.G.L.N. Murthy,Mr.M.K.Lingamurth y,Mr.M.Samba Siva Reddy, A fully automated vehicle control system using on chip technology (202341002405)
- Dr.Poornaiah Billa, Light Emitting Module (377320-001)
- Dr.Poornaiah Billa, An Electric Vehicle Safety Evaluation Device (377316-001)

Students' Achievements

Won "T10 Cricket Tournament" organized by The Hindu Future Indian Club on 23-02-2023.

Runners in "JNTUK - Central Zone Basketball (Women) Inter Collegiate Tournament " organized by Rise Krishna Sai Prakasam Group of Institutions, Ongole on 23-02-2023.

Mr B Naveen Kumar Reddy, S Nagababu and Mr Vivek of AI&DS for winning Hackathon at #PVPSIT

II B.Tech Students P Kuladeep Sai (437), SK John Saidulu (451) successfully completed the Microsoft Certification in Azure Fundamentals in the Month of March 2023.

Community Engagement

Dr. K. Appa Rao, Principal along with MPUP School H.M & NSS ProgramOfficer Addressed during Inaugural function at school.

Tree plantation at Kanimerla Thanda MPUP school

Rally on Awareness program on Plastic usage along with NSS Volunteers at Kanimerla Thanda Village

Medical camp at MPUP High School Children (General Diseases).

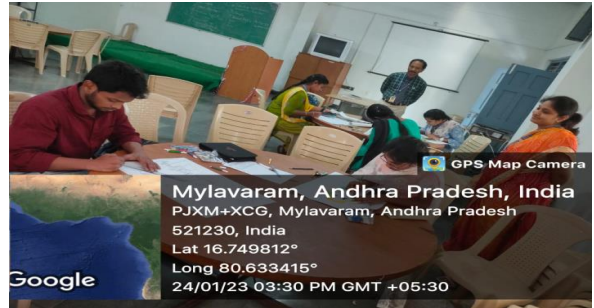Swachh Barath at MPUP School by NSS Volunteers LBRCE

House Hold Survey at Kanimerla Tanda

LBRCE NSS Unit organizes SPECIAL CAMP on "HEALTHY YOUTH FOR BETTER INDIA" at adopted village Kanimerla Tanda- Yedurubedu Panchyat, N.T.R District, A.P. from 25.03.2023 to 31.03.2023

Extra Curricular & Cultural Activities

Spoothi – The Literary Club conducted a short fil on the occasion of **"National Youth Day"** and the prizes were given to the students by the Mentors of Spoothi – The Literary Club.

Spoothi – The Literary Club conducted drawing and Elocution competition on the occasion of **"74 Republic Day"** Celebrations.

Rangoli competitions were held by Prakruthi Club in association with Saheli Club of LBRCE sponsored by AICTE SPICES on the occasion of National Youth Day 2023. This rangoli making competition motivated the students to perform and outshine in their creative skills and most important, work as team to bring laurels to their house. This event helped in revelation of beauty and the acquisition of auspiciousness.
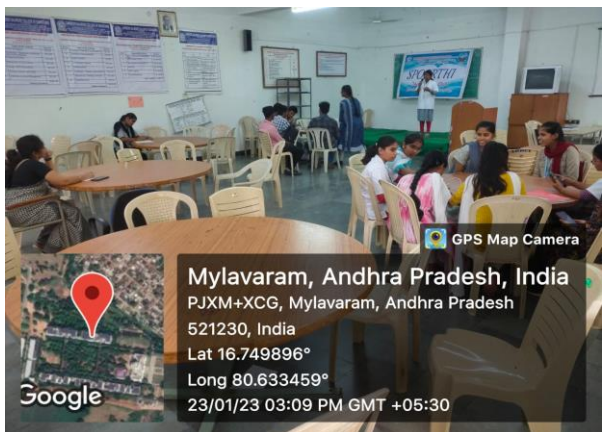

B.Tech EEE students that EEE Department in association with Prakruthi Club sponsored by AICTE SPICES as a part of BOARD OF COMMUNITY DEVELOPMENT through EDUCATION, Govt. of Andhra Pradesh program on "Energy Conservation Awareness" organised PPT presentation and Poster Presentation competitions. This event was organized to inculcate the awareness on energy conservation.

Prakruthi club organize a poster presentation & Elocution competition for the students with the themes like "Wetland conservation, Importance of Wetlands and Role of the individuals on conservation of Wetlands". While exhibiting their posters, the participants explained the importance of wetlands and the various human activities that are causing damage to our natural wetlands. This event was conceived with an aim to spread awareness about importance of wetland and catastrophic consequences caused due to degradation of wetlands by the human activities. Healthy wetlands are essential as they are habitat to plants and animals.

Spoothi – The Literary Club conducted Elocution competition on the occasion of 74 Republic Day Celebrations.

Programs Offered

UG-B.Tech
- Aerospace Engineering
- Artificial Intelligence and Data Science
- Civil Engineering
- Computer Science and Engineering
- Computer Science and Engineering (AI&ML)
- Electronics and Communication Engineering
- Electrical and Electronics Engineering
- Information Technology
- Mechanical Engineering

PG-M.Tech
- Computer Science and Engineering
- Power Electronics and Drives
- Thermal Engineering
- VLSI & Embedded Systems

PG-Master of Business Administration

Dreams to Destiny @ LBRCE

25 Years of ACADEMIC EXCELLENCE (1998-2022)

Committed to Academic Excellence in Engineering Education