ORGANIZING COMMITTEE:

CHIEF PATRON:

Prof. Dr. Ing. P. S. Rao, President, Gayatri Vidya Parishad

PATRONS:

Sri D. Dakshina Murthy, Vice-President, Gayatri Vidya Parishad

Prof. K. P. R. Sastry, Vice-President, Gayatri Vidya Parishad

Prof. Dr. P. Somaraju, Secretary, Gayatri Vidya Parishad

Prof. P. V. Sarma, Member, Secretary, GVPCDPGC(A)

Dr. A. SyamSundar, Vice – Principal, Gayatri Vidya Parishad College of Engineering (A) **ADVISORY COMMITTEE:**

Dr. Sastry V. Vedula, Sr. Professor, Gayatri Vidya Parishad College of Engineering (A)

Dr. C.V.K. Bhanu, Professor & Dean, IQAC Gayatri Vidya Parishad College of Engineering (A)

Dr. J. Vasundhara Devi, Professor & Associate Director, GVP-LIAS Gayatri Vidya Parishad College of Engineering (A)

CHAIRMAN:

Prof. Dr. A. B. KoteswaraRao, Principal, Gayatri Vidya Parishad College of Engineering(A)

CONVENORS:

Dr. G.V.E.Satish Kumar,

Professor & Head, Dept. of EEE, Gayatri Vidya Parishad College of Engineering(A)

Dr. S.K.Tripathy,

Associate Professor & Head, Dept. of Physics, Gayatri Vidya Parishad College of Engineering(A)

TOPICS:

- Basics of AI & ML.
- Machine Learning Technique/Problems-Engineering Design.
- AI & ML Applications for EV.
- Fatigue Life Prediction of Aerospace Materials using machine learning and deep learning models.
- Batteries Basics & Latest Trends.
- AI & ML tools for defect analysis in Materials.
- Intelligent Power Management Scheme for Micro Grid Applications.
- Battery SOC Estimation using Deep learning.
- Accelerating Materials Discovery using computations and Machine Learning.

RESOURCE PERSONS:

- Prof. S. Sundar, Prof. IIT Madras & Director, NIT Mizoram
- Dr. R. Jayaganthan, IIT Madras
- Dr. Sagar Mitra, IIT Bombay
- Dr. Rohit Batra , IIT Madras
- Dr. P.V. Sundaranand, Rayalaseema University
- Mr. Utkarsh Bhardwaj, Scientific Officer–E BARC Visakhapatnam.
- Dr. Aeidapu Mahesh, NIT Surat
- Dr. Arnab Ghosh, NIT Rourkela
- Dr. D. Raveendra, NIT Allahabad
- Dr. G.V. E. Satish Kumar, GVPCE(A)
- Dr. Y. Anuradha, GVPCE(A)

"Marking GVP-LIAS Centenary Year of Celebrations" One Week Online Workshop On

AI & ML Tools for Material Science & Electrical Engineering Applications

Jan 29th -03rd Feb, 2024

Organized by Department of Electrical & Electronics Engineering & Department of Physics

In Association with Gayatri Vidya Parishad Prof .V.Lakshmikantham Institute for Advanced Studies (GVP-LIAS)



Gayatri Vidya Parishad College of Engineering (Autonomous)

Approved by AICTE & Affiliated to Andhra University, Visakhapatnam from 2022-23 Accredited twice by NAAC with 'A' Grade with a CGPA of 3.47/4.00 Madhurawada, Visakhapatnam – 530 048

Tel No: 91-891-2739507 | Fax: 91-891-2739605

Visit us at: (www.gvpce.ac.in)



ABOUT GAYATRI VIDYA PARISHAD COLLEGE OF ENGINEERING:

The Gayatri Vidya Parishad College of Engineering has a 5000 strong contingent of students pursuing quality and skill oriented education. The college is established by 'Gayatri Vidya Parishad' (GVP), a non-profitable organization comprising of noted educationists and eminent philanthropists who have a missionary zeal to provide quality technical education. The college is one of the mostpreferred self-financing engineering colleges in Andhra Pradesh and at present offers 10 B.Tech. Programs, 5 M.Tech. and one MCA Program approved by AICTE. The college has brought in many initiatives for the benefit of students with autonomous status granted by UGC in 2009 and extended up to 2025. The institute has been reaccredited second time by NAAC with 'A' grade with CGPA of 3.47/4.0. All the eligible seven B.Tech. programs are accredited by NBA at least twice. The institute received funds to the tune of Rs. 5 Crores under Technical Education Quality Improvement Program (TEQIP), S.C-1.2. The college received Rs. 12 Crores from funding organizations AICTE / DST / NBHM / ARB etc. towards 45 R&D projects.

ABOUT THE DEPARTMENT OF E.E.E:

The Department of Electrical & Electronics Engineering (EEE) was established in the year 1996. The department offers a B.Tech and an M.Tech Programme. Highly qualified and experienced faculty with 9 doctorates and 10 pursuing Ph.D. from reputed institutes are the strength of the department. The Department has 10 state of the art laboratories with a total investment of more than Rs. 3.5 Crores. The department undertakes consultancy projects for industries and actively involved in various research projects worth Rs. 2.63 Crore funded by MNRE, AICTE, HBL Hyderabad and other organizations.

SCOPE & OBJECTIVE OF THE WORKSHOP:

Power electronics is interdisciplinary in nature and is used in a wide variety of area of Electric Drives, Power Quality in Power Systems, Renewable Energy systems and Electric vehicles etc. Materials are the central core to the futuristic developments in these areas. The objective of the workshop is to impart knowledge of AI and ML techniques to Faculty/Ph.D. scholars/PG Students for specific challenges and characteristics of Materials Design and Power Electronics systems in the area of design, control and maintenance.

This workshop provides a platform to learn practical implementation of AI and ML algorithms on defect analysis in materials, battery SoC estimation for enhancing Electric vehicle Performance. In addition the workshop provides comprehensive sessions on the fundamental concepts of AI and ML algorithms and application of AI and ML techniques to Microgrid System, power system optimization problems, EV battery charging issues etc. will be presented.

ABOUT THE DEPARTMENT OF PHYSICS:

Department of Physics at GVP College of Engineering was established in the year 1996. Presently there are 7 faculty in Physics department, out of which 6 faculty are doctorates. In association with the centre for Nanoscience and Technology, founded in 2010 in the Physics department, the faculty members are engaged in diverse research areas and are currently supervising research scholars, some B.Tech. and M.Tech. Projects

ABOUT GVP-LIAS:

Gayatri Vidya Parishad Professor V. Lakshmikantam Institute for Advanced Studies (GVP-LIAS) organize seminars/ workshop / conference every year. GVP-LIAS in association with the departments of GVP-College of Engineering organized four international conferences titled, "Recent Advances in Mathematical Sciences and Applications (RAMSA)"in 2009, 2013, 2017 and 2021. GVP-LIAS boasts of hosting a good number of distinguished Mathematicians, Scientists and Researchers from various parts of the country and from abroad.

ONLINE REGISTRATION FORM:

https://forms.gle/k4RcQkFFycbJuQsf8

DATES TO REMEMBER:

Registration Deadline: 28th January 2024

Online Workshop Date: 29th January to 3rd February 2024

REGISTRATION FEE:

Students / Research Scholars	: NIL
Faculty Members	: 300 INR
Delegates from Industries	: 500 INR

BANK DETAILS FOR PAYMENT:

Name: HOD EEE DEPT GVPCE A A/c No. 191912010000244 IFS Code: UBIN0819191 Bank Name: Union Bank

CO-CONVENORS:

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