SCIENCE ACADEMIES VIRTUAL LECTURE WORKSHOP ON

"Modern Computational Techniques"
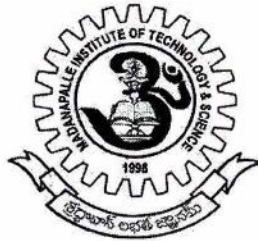
November 25 - 26, 2020

Submitted to

The Co-ordinator
Joint Science Education Panel
Indian Academy of Sciences
CV Raman Avenue Library Avenue Bangalore - 560 080

Submitted By

Dr. SaketSarubh - Convener

Dr. S.Padma- Coordinator

Department of Computer Science and Technology
Madanapalle Institute of Technology & Science
Madanapalle – 517325, Chittoor District
Andhra Pradesh

PROPOSAL FOR SCIENCE ACADEMIES VIRTUAL LECTURE WORKSHOP ON

"Modern Computational Techniques"

1.	Name of the Organization	Madanapalle Institute of Technology & Science Madanapalle - 517325, Chittoor District, Andhra Pradesh Ph : +91 – 8571 – 280255, 280706 www.mits.ac.in
2.	Name of the Convener	Dr. SaketSarubh, FNASc., The Institute of Mathematical Sciences CIT Campus, Taramani Chennai, Tamil Nadu
3.	Name of the Coordinator	Dr.S.Padma Asst Prof, Department of Computer Science &Technology Madanapalle Institute of Technology & Science Madanapalle – 517325, Chittoor District, Andhra Pradesh Ph : 9952198855 Email : padmaselvaraj255@gmail.com

About the Organizing Institution

Madanapalle Institute of Technology & Science is established in 1998 in the picturesque and pleasant environs of Madanapalle and is ideally located on a sprawling 26.17 acre campus on Madanapalle - Anantapur Highway (NH-205) near Angallu, about 10km away from Madanapalle.

MITS, originated under the auspices of RatakondaRanga Reddy Educational Academy under the proactive leadership of Sri.N.Krishna Kumar M.S.(U.S.A), President and Dr.N.VijayaBhaskarChoudary, Ph.D., Secretary & Correspondent of the Academy.

MITS is governed by a progressive management that never rests on laurels and has been striving conscientiously to develop it as one of the best centers of Academic Excellence in India. The Institution's profile is firmly based on strategies and action plans that match changing demands of the nation and the student fraternity. MITS enjoys constant support and patronage of NRI's with distinguished academic traditions and vast experience in Engineering & Technology.

The Institution focuses on this vision,to become a globally recognized research and academic institution and thereby contribute to technological and socio-economic development of the nation. The Institution is an autonomous Institution executing five major courses including twenty one branches. The Institution was recognized by various Apex bodies globally. The Institution is strengthened by nearly 450 highly qualified faculty members and nearly 8000 students. Research and Development is much focused by the Institution to promote the STEM education which leads to innovation.

About the Organizing Department

The Department of Computer Science & Technology (CST) was established in the year 2018 and plays a vital role in producing value-based professionals to cater to the ever challenging needs of technical excellence in the emerging areas of CST. The department offers one UG program with an intake of 60 students and the intake was enhanced to 180 seats in the year 2019. Department has adequate infrastructural facilities required for imparting high quality education and the department is fully structured to meet the contemporary needs of the industry. Imparting high quality education is supported by well qualified and experienced faculty members with rich academic and industry exposure, who have pursued Masters/Ph.D degree from prestigious institutions like NITs, IITs, and Central Universities within India and abroad. Seminars, Workshops, and Technical Symposia are conducted in the department to keep faculty and students updated with latest developments in various technologies. The student strength of the department is around 500.

Objectives of the Workshop

- To promote Science, Technology, Engineering, Medicine (STEM) education among the students
- To exposé the need of computation especially in the field of science
- To gain knowledge of the essential terms in computation techniques used for the analysis of various algorithms
- To point out some of the emerging new research areas
- To create awareness to start research

No. of Students to be invited for the Lecture Workshop : 150

Dates and Duration of Workshop : November 25 - 26, 2020, 2 Days

Tentative schedule of the lecture workshop programme : ANNEXURE – I

Broad Distribution of Total Budget : ANNEXURE – II

Bank Detail for Transfer of Funds as Follows

a) Name of the account holder : MITS(Research and Development)
b) Bank Name : INDIAN BANK
c) Branch Name & Code : KURABALAKOTTA Branch, 00K059
d) IFSC Code : IDIB000K059
e) Account Number : **6178349863**
f) MICR Code : 517019018
g) Bank Contact Number : 08571280632

TENTATIVE SCHEDULE OF THE LECTURE WORKSHOP PROGRAM

DAY -1

Date and Time	Name and Address of the Speaker	Program
Date : 25.11.2020 **10.00 – 10.30 – Inauguration**		
10.30 – 11.45	Dr. SaketSarubhFNASc Institute of Mathematical Sciences Chennai	**Technical Session I** Streaming Algorithms: A paradigm for Dealing with Big-Data - I
11.45 – 12.00 Break		
12.00 – 13.15	Dr. P. Kandaswamy, FNASc Professor and Head (Retd.) Department of Mathematics Bharathiar University Coimbatore 641 046	**Technical Session II** Computational Techniques - I
13.15 – 14.00 Break		
14.00 – 15.15	Dr.S.Padma Asst Prof, Department of Computer Science &Technology Madanapalle Institute of Technology & Science, Madanapalle,AP	**Technical Session III** Machine Learning – How and Why of feature weights?
15.15 – 16.30	DrDebasisaMohantyFNASc National Institute of Immunology New Delhi	**Technical Session IV** Introduction to Structural Bioinformatics & it's applications in discovery of drugs and vaccines using Machine Learning

DAY - 2

Date and Time	Name and Address of the Speaker	Program
Date : 26.11.2020		
9.30 – 10.30	**Dr K KSoundraPandian** Ph.D(IIT Patna), PostDoc(NYU) Scientist,& Public Grievance Officer Government of India Ministry of Electronics and Information Technology (MeitY), NewDelhi-110003	**Technical Session V** Impact of Emerging Technologies and Challenges in Cyber Security / Physical System and its Threats / Attack - I
10.30 – 11.30	**Dr K KSoundraPandian** Ph.D(IIT Patna), PostDoc(NYU) Scientist, & Public Grievance Officer Government of India Ministry of Electronics and Information Technology (MeitY), NewDelhi-110003	**Technical Session VI** Impact of Emerging Technologies and Challenges in Cyber Security / Physical System and its Threats / Attack -II
11.30 – 11.45 Break		
11.45 – 13.00	**Dr. SaketSarubhFNASc** Institute of Mathematical Sciences Chennai	**Technical Session VII** Streaming Algorithms: A paradigm for Dealing with Big-Data - II
13.00 – 14.00 Break		
14.00 – 15.30	**Dr.K.Dinesh** Asst Prof, Department of Computer Science &Technology Madanapalle Institute of Technology & Science, Madanapalle, AP	**Technical Session VIII** Optimization Techniques
15.30 Onwards Feedback and Valedictory		

ANNEXURE – II

Item.No.	Expenditure Details	Amount (Rs.)
1.	**Honorarium** a) Resource Person (8 Lecture * 2000) b) Work Shop Convener c) Workshop Coordinator d) Supporting Staff (4 * 500)	16,000.00 2,500.00 2,000.00 2,000.00
2.	**Rental Charges for Web Platform**	0
3.	**Incidental Expenses (Designing brochures, Stationery etc.)**	2,000.00
	Total Expenditure	24,500.00