



**THE INSTITUTION OF ELECTRONICS AND
TELECOMMUNICATION ENGINEERS**

Hyderabad Centre

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Cordially invites you to

Shri M. MADAN MOHAN 15th MEMORIAL LECTURE

on

**“QUALITY of SERVICE in
DATA COMMUNICATION NETWORKS”**

by

Dr. D. SRINIVASA RAO

Prof. & Head, ECE Dept., JNTUH College of Engg., Hyderabad

Dr. K. JAYA SANKAR

*Chairman, IETE Hyderabad Centre
will preside*

**Monday, 15th September, , 2014 at 6.30 PM
IETE, OU Campus, Hyderabad**

Er. NULI NAMASSIVAYA
Honorary Secretary

Dr. G. LAXMINARAYANA
Honorary Treasurer

Shri K. SEETHA RAM BABU
Chairman, Technical Programmes Sub-Committee

PROGRAMME

***6.30 PM - Tea**

- 6.45 PM - Welcome Address : Er. Nuli Namassivaya
Honorary Secretary, IETE Hyderabad Centre
- 7.00 PM - Lighting of Lamp and Garlanding : Speaker and Executive Committee Members
the Photograph of
Late Shri M. Madan Mohan
- 7.10 PM - Opening Remarks : Dr. K. Jaya Sankar
Chairman, IETE Hyderabad Centre
- 7.20 PM - Brief on Memorial Lecture : Er. Nuli Namassivaya
Honorary Secretary, IETE Hyderabad Centre
- 7.25 PM - Introduction of the Speaker : Shri K. Seetha Ram Babu, Chairman, Technical
Programmes Committee, IETE Hyd Centre
- 7.30 PM - Address by the Speaker : Dr. D. Srinivasa Rao,
Prof. & Head, ECE Dept., JNTUH
College of Engg., Hyderabad
- 8.20 PM - Vote of Thanks : Dr. G. Laxminarayana
Honorary Treasurer, IETE Hyderabad Centre
- 8.30 PM - Dinner

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BIO-DATA OF Dr. D. SRINIVASA RAO

Dr.D.Sreenivasa rao did his B.tech from Nagarjuna University , Mtech from Osmania University and PhD from University of Hyderabad His research interests are in the area of communications and computer networks. He guided 03 research scholar and he is presently guiding 08 research scholars. He has 80 publications in various National, International conferences and Journals. He has 25 years of teaching experience. He worked at CBIT as lecturer in ECE department for 6 years during 1988 -1994. He worked at ECE department of JNTU, Anantapur in various capacities for 11 years during 1994-2005. Presently he is working as professor and Head in ECE Dept. of JNTUHCE, Hyderabad. He has organized many workshops, conferences and refresher courses. He has participated in more than 10 short term courses, summer schools, and workshops conducted by various organizations. He has chaired sessions for various National conferences. He is advisory committee member for GNIT, Hyderabad. He is also governing body member for 5 JNTU affiliated colleges. He is a Member of IETE and ISTE, JNTU forum for science & society and he is the coordinator for campus networking at JNTUHCEH, Hyderabad. He is the coordinator for Instrumentation maintenance facility at JNTUH Hyderabad. He has delivered a number of invited lecturers at various academic institutions.

ABSTRACAT

QUALITY of SERVICE in DATA COMMUNICATION NETWORKS

Quality of Service is the performance level of a service offered by the network to the user. The goal of QoS provisioning is to achieve a more deterministic network behavior, so that information carried by the network can be better delivered and network resources can be better utilized. A network or a service provider can offer different kinds of services to the users. Here a service can be characterized by a set of measurable pre-specified service requirements such as minimum bandwidth, maximum delay, maximum delay variance (jitter) and maximum packet loss rate. After accepting a service request from the user, the network has to ensure that the service requirements of the user's flow are met, as per the agreement, throughout the duration of the flow (a packet stream from the source to the destination).

Different applications have different requirements, similarly the services required and the associated QoS parameters differ from application to application. In case of applications pertaining to multimedia, bandwidth, delay jitter and delay are the key QoS parameters whereas military applications demand stringent security requirements. For applications such as emergency search-and-rescue operations, availability of the network is the key QoS parameter. Applications such as group communication in a conference hall require that the transmissions among nodes consume as little energy as possible. Real time applications require mechanisms that guarantee bounded delay and delay jitter. By implementing Congestion control , call admission control, resource reservation, traffic shaping, Queue management and scheduling mechanisms required Quality of service can be provided in the network.



BIO-DATA OF Late Shri M. MADAN MOHAN

Sri M. Madan Mohan, born in 1914, studied in Nizam's College, Hyderabad and took B.Sc. degree from Madras University. He studied BE (ECE), IISc., Bangalore and PG in RCA Institute and Brooklyn Polytechnic, New York on Nizam's Govt. and GoI Scholarships. Started his career in Nizam's State wireless services and participated in the installation of two transmitters and studios by Marconi Engineers. In 1943-46 with his passion for indigenous technology he built Broadcast equipment for both transmitting and receiving also audio terminal equipment. Organized coverage of events outside the studios which included the proceedings of inauguration of Tungabhadra Dam near Hospet. He also demonstrated successfully by building wireless equipment so that the meager telegraphy and telephone facilities in the Nizam's State. He could rapidly expand with minimum cost and gestation period. The outcome of this was the sanction of Nizam's Government to extend wireless telephony between Hyderabad and all Dist. HQrs of Nizam State. 18 transmitting and receiving and terminal equipments were built with components from army disposals after World War II. In 1950 his services were transferred to All India Radio where he held several responsible positions. He has to his credit the installation of more than 24 AIR Centres all over India under 5 years plan. He was the Founder President of AIR Engineers Association and succeeded in the reorganization of Engineering services and betterment of Professional Status. Taking premature retirement in 1968 he returned to Hyderabad to set up his own electronic Industry. He was Member of High level Committee set up by Govt. of AP for development of Electronic Industries in the State and arduously worked for the establishment of AP Electronic Development Corporation and was the Member of the Board of Directors since its inception in 1981.

He is the founder President of ELIAP and encouraged establishment of more than 200 Industries in the State. He was instrumental in the establishment of these at Hyderabad, the Central Institute of Tool Design (UNDP Project), ATI (Electronics) (ILO Project) etc. In recognition of his services he has been honoured 'BHISHMA PITHAMAHA". He has also been honoured by several Professional Bodies, Associations and Societies for his services to the society in several fields. He is a multifaceted dignified and respected personality and is actively associated with a score of All India and State Associations and held important positions in education, industry, sports, cultural and social organizations and professional bodies. He was the President of Osmania Graduates Association and a moving figure in the All India Industrial Exhibition with whose beneficence 14 colleges and technical institutions both for girls and boys are run. He served on the Board of Studies of OU, JNTU. Member of Academic Senate and Executive Council of OU, Governing Council of Autonomous Engg. College of OU. He served on several Central and State Government Committees, like Ministry of Industries, Ministry of Information and Broadcasting, State Committee on Science and Technology of Govt. of AP.

The Hyderabad Centre of IETE established in 1973 is his dream child. He was Secretary and Treasurer in the initial stages and became Chairman in 1975-76 and 1976-77. His abiding interest in having a permanent home for the IETE Hyderabad Centre led to the acquisition of a site and construction of the most prestigious buildings that IETE has in the Country. By holding annual Endowment Lecture under the auspices of IETE Hyderabad Centre, Mr. Madan Mohan was honoured as a pioneering Electronics Engineer, Industrialist and Educationist and patriarch of IETE Hyderabad Centre. He was elected as the Distinguished Fellow of IETE in 1994.

Shri M. Madan Mohan passed away on 27th November, 2005. The Hyderabad Centre of the IETE lost a great visionary and an elderly guide..