St. JOSEPH'S DEGREE & PG COLLEGE

(Autonomous), Affiliated to Osmania University

Accredited by NAAC with A Grade with a CGPA of 3.49

King Koti Road, Hyderabad

Department of Physics & Electronics

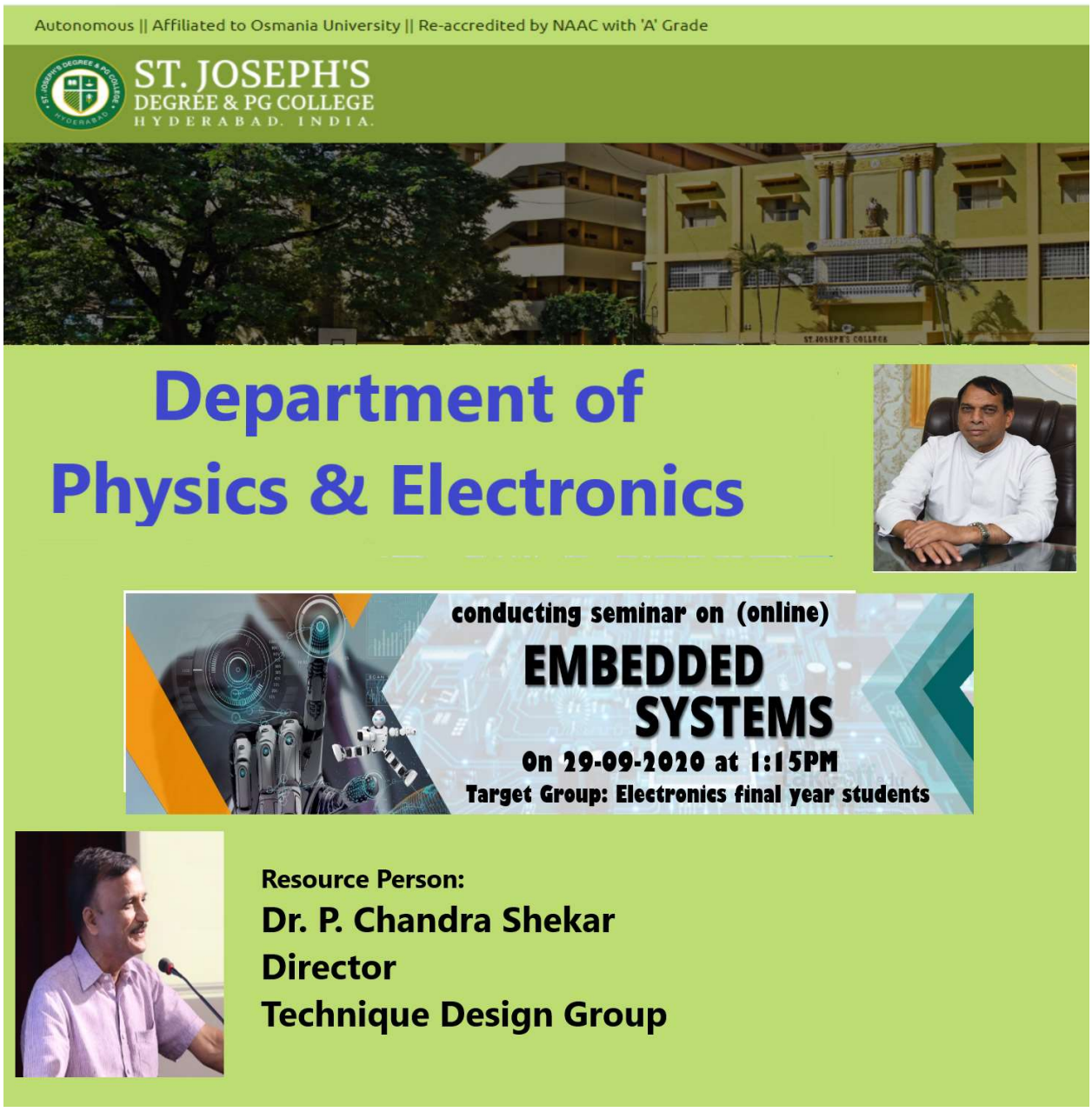
NOTICE

25-09-2020

This is to inform the students of B.Sc (MECs) III year students that the Department of Physics & Electronics is organizing a **Seminar** on "Embedded Systems & Career Opportunities" on 29th Sept 2020 at 1.15 pm through Google Meet (online). Students can login using their Google class room link at the specified time.

PRINCIPAL

Poster of the Seminar:



Invitation Letter :

ST. JOSEPH'S
DEGREE & PG COLLEGE

Autonomous, Affiliated to Osmania University
Re-Accredited by NAAC with 'A' Grade
A Catholic Christian Minority Institution (Co-Education)

Date: 26-09-2020

To
Dr. P. Chandra Shekar
Director
Technique Design Group
Secunderabad

Dear Sir,

Warm greetings on behalf of St. Joseph's Degree & PG College. I am very pleased to have the honour of inviting you to deliver a seminar on "Embedded Systems & Career Opportunities".

We have arranged the seminar for September 29, 2020 at 1:15 PM on Google Meet. This seminar is for B.Sc (Electronics) Final Year Students, for them Embedded Systems(8051 Microcontroller) is one of the Subjects.

You have already established your work with several years of embedded systems development experience. Your guidance, your approach in embedded development would be definitely enlightening to the participants.

We will mail you the Google Meet link.

Thank you

regards

MLNRAO
Assistant Professor,
Department of Physics & Electronics,
St. Joseph's Degree & PG College,
King Koti Road,
Hyderabad – TS – 500 029
Mobile: 9393005522

Resource Person Profile:

Dr. P.Chander Sekar **Technical Director –Management Consultant of Technique Design Group completed his Masters in Electronics in 1978, MS (**Product development, Industrial Engineering (Robotics), & Market Research**) from** MS Southampton Solent University – UK in 1994, MBA (Information Technology and Marketing) from IGNOU in 1998 he has completed 16 Diplomas to his credit in various fields.

Dr. Chandra Sekar Associated **with Research work for more than 40 years in various Industries.** He owns R & D CENTRE for more than 40 years, also Associated with computer industry from 1978 –Univac Mainframe, Associate Director at Ms Color Kinetics (Project handled – London Eye), Associate Director at Ms Color Kinetics (Project handled – Madame Tussauds Wax Museum), Development of control Systems for Wilmed Global – USA (dialysis – Renetraon), Textile and Jewellary Design and manufacturing Automation

In the field of development: He Developed India's – first

- Robotic hand for BARC-1979
- Earth quake Monitoring System –1985 Roorkeee University
- Control System for Space simulation chamber –ISRO
- Control System for High vacuum high temperature furnace – DMRL
- Motorized wheel chair, Foldable stretcher and Robotic platforms –Defense Applications
- Artificial Arm for amputee hand personal, Corner shot GUN for Defense Applications
- Video Guided Automatic Brush (Dental Systems_ Australia)
- Solar Powered cooling system and Micro Film (NANO Technology) Speaker

Winner of

- **25 gold medals**
- **17 silver medals**
- **3 time Prime Minister Award (Science & Technology) (1. Robotic Hand, 2. Space Simulation Chamber, 3. Earth Quake Monitoring System) (Smt. Indira Gandhi, Sri Rajeev Gandhi and Sri P.V. Narasimha Rao)**
- Singapore Science Centre Associate Award 1999
- Philips Holland - Life time contribution for lighting Industry Award by LDA 2007

- Radio VERITAS Asia, Philippines – Optimum performance of Radio Transmitting Station 2009

Presented 90 papers on Automation and conducted 500 Seminars on Robotic Applications at Various colleges, Institutions and Events.

- **Vice President (International Robotic society) - 2011-2013, 2016-2017**
- **Currently working on: World largest clock, waterfall and artificial aquarium.**
- **Member of Indian Society of Lighting Engineers (ISLE)**
- **Member of International Lighting Designers**
- **Member of International Market Research Association**

About the Seminar:

Introduction: An embedded system is any device controlled by instructions stored on a chip. These devices are usually controlled by a micro controller that executes the instructions stored on a read only memory (ROM) chip.

The software for the embedded system is called firmware. The firmware will be written in assembly language for time or resource critical operations or using higher level languages like C or embedded C. The software will be simulated using micro code simulators for the target processor. Since they are supposed to perform only specific tasks, these programs are stored in read only memories(ROMs). Moreover they may need no or minimal inputs from the user, hence the user interface like monitor, mouse and large keyboard etc, may be absent.

An embedded system is a combination of computer hardware and software, and perhaps additional mechanical or other parts, designed to perform a specific function like Microwave oven, Automatic washing machine, Telegraph and Laser printer. Almost every household has one, and tens of millions of them are used every day, but very few people realize that a processor and software are involved in the preparation of their lunch or dinner.

Embedded systems are computer systems that monitor, respond to, or control an external environment. This environment is connected to the computer system through sensors, actuators, and other input-output interfaces. It may consist of physical or biological objects of any form and

structure. Often humans are part of the connected external world, but a wide range of other natural and artificial objects, as well as animals are also possible.

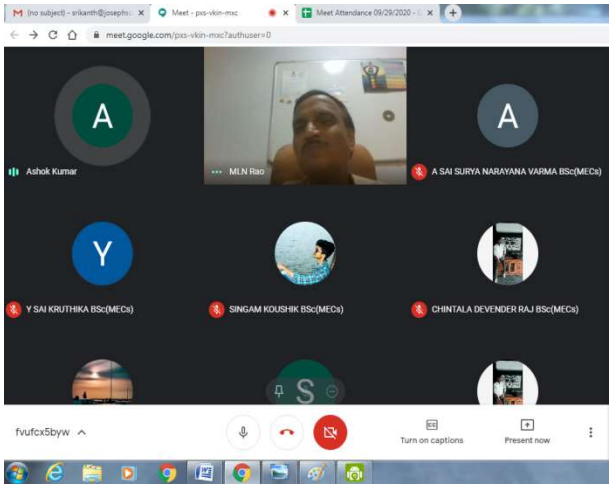
Embedded systems are also known as real time systems since they respond to an input or event and produce the result within a guaranteed time period. This time period can be few microseconds to days or months. Hence comes the name real time. A real time computer system may be a component of a larger system in which it is embedded, reasonably such a computer component is called an **embedded system**.

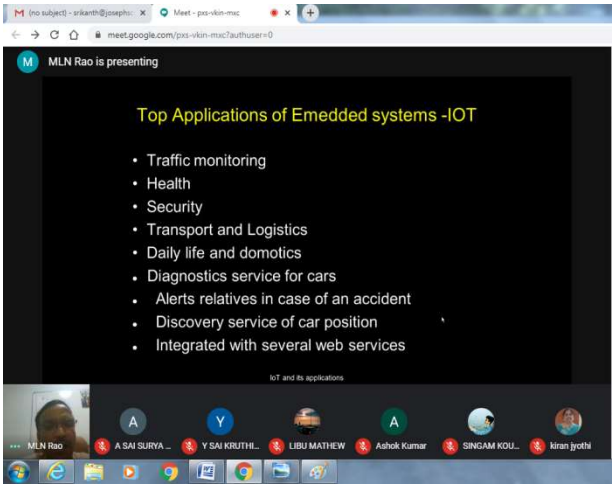
Seminar started with the introduction of the embedded systems by Mr. M. L. N. Rao senior faculty of the department. Mr. R. Ashok Kumar, Senior faculty in Electronics, read the profile of the resource person Dr. P. Chandra Sekar.

Dr. Chandra Sekar spoke about various embedded systems used and how they are implemented. He gave number of examples of embedded systems like in defense, consumer electronics, automobile industry, communication electronics. He explained how the various lighting systems are developed in embedded systems. He spoke about design strategies of Samsung Electronics and Ramdev Baba biscuit industry. He shared the information about the opportunities in embedded systems.

He interacted with the students and clarified their doubts.

Finally seminar was ended with the formal vote of thanks presented by M. L. N. Rao.





(no subject) - srikanth@josephsc | Meet - pxs-vkin-mxc | Meet Attendance 09/29/2020 -

meet.google.com/pxs-vkin-mxc?authuser=0

MLN Rao is presenting

Samsung Innovation Strategy

Everyone has heard about the company named Samsung and the reason why they have heard of it is because of its innovation strategies.

Innovation strategy at Samsung can be described as the way that made them a leading manufacturer in electronic industry as they keep the competitors at bay, .In the present business environment,.

Globalization and technological changes. It is not just innovative strategy that matters, but innovations that embed on themselves some strategies that are truly game changing.

Techniq Design Group

MLN Rao | A SAI SURYA ... | Y SAI KRUTHI... | LIBU MATHEW | Ashok Kumar | SINGAM KOU... | SOMNATH DO...

(no subject) - srikanth@josephsc | Meet - pxs-vkin-mxc | Meet Attendance 09/29/2020 -

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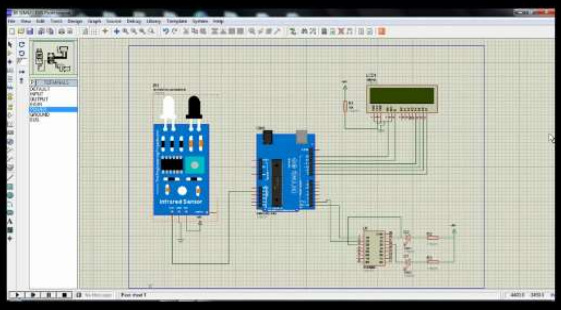
MLN Rao is presenting

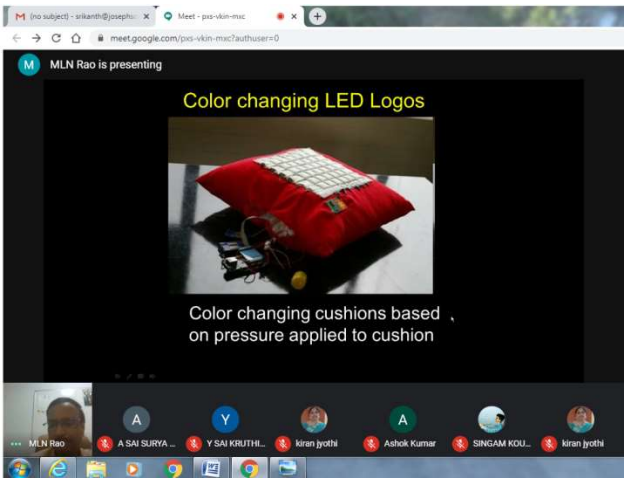
PROTUES SIMULATOR

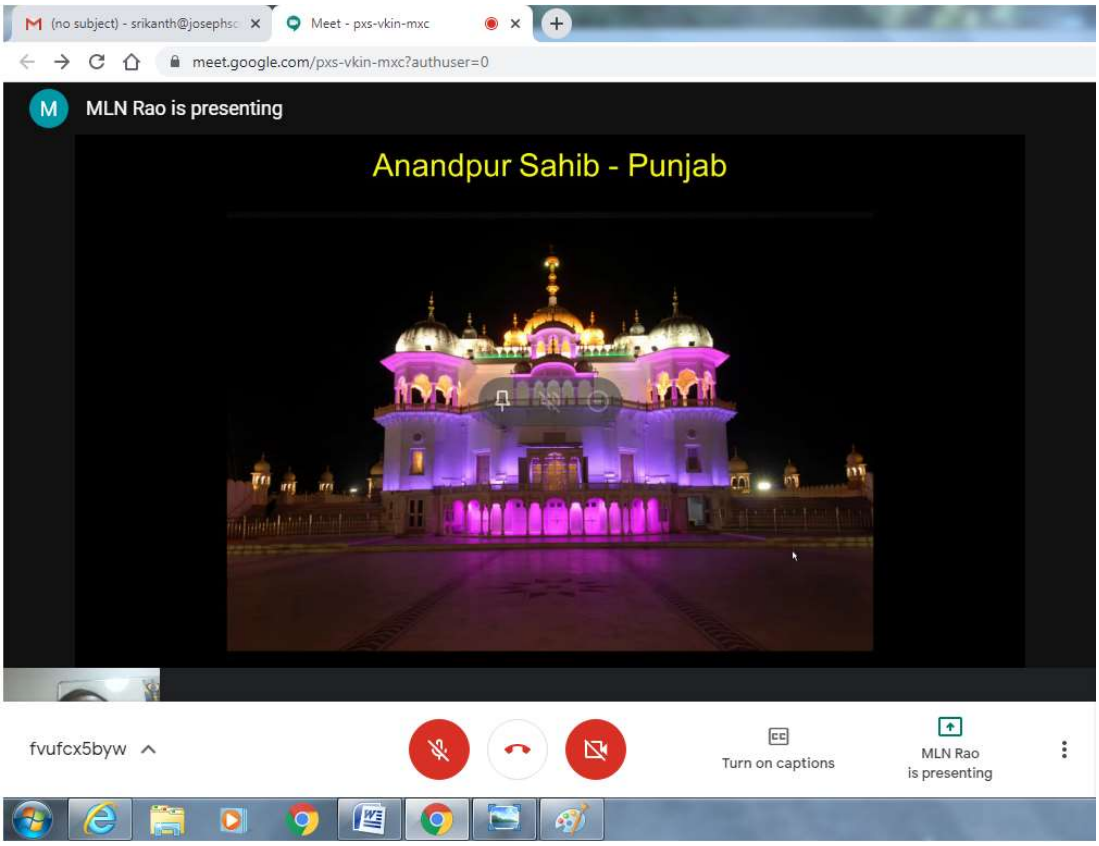
The total hardware can be simulated and checked for functionality



MLN Rao | A SAI SURYA ... | Y SAI KRUTHI... | LIBU MATHEW | Ashok Kumar | SINGAM KOU... | SOMNATH DO...

MLN Rao is presenting
Transport and Logistics
IoT and its applications
MLN Rao
A SAI SURYA ...
Y SAI KRUTHI...
LIBU MATHEW
Ashok Kumar
SINGAM KOU...
kiran jyothi


MLN Rao is presenting
Color changing LED Logos
Color changing cushions based on pressure applied to cushion
MLN Rao
A SAI SURYA ...
Y SAI KRUTHI...
kiran jyothi
Ashok Kumar
SINGAM KOU...
kiran jyothi


(no subject) - srikanth@josephsc
Meet - pxs-vkin-mxc
meet.google.com/pxs-vkin-mxc?authuser=0
MLN Rao is presenting
Anandpur Sahib - Punjab
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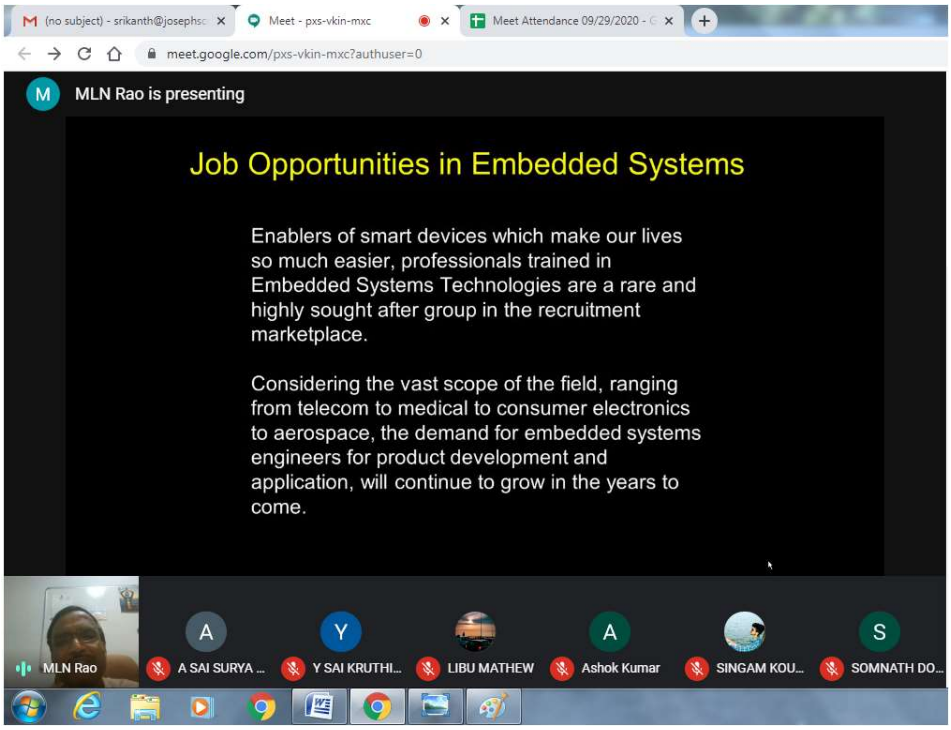
MLN Rao is presenting



Sample Certificate: