

DEPARTMENT OF BIOMEDICAL ENGINEERING



**BIOMEDICAL ENGINEERING SOCIETY OF INDIA - STUDENT CHAPTER
INAUGURATION FOR THE ACADEMIC YEAR 2020 - 2021**

The Department of Biomedical Engineering inaugurated the Student Chapter of the Professional Society – Biomedical Engineering Society of India, for the academic year 2020 – 2021 on 31st October 2020 (Saturday) from 10.00 AM to 12.00 PM via Google Meet.

All the faculty members and students of the department participated in the event.



DEPARTMENT OF BIOMEDICAL ENGINEERING
*cordially invites you to the
Inaugural function of*
**Biomedical Engineering Society of India
- Student Chapter for the year
2020 - 2021**

Organising Committee

Chief Patron
Dr. A.M.Natarajan
Chief Executive

Patron
Dr. M.Akila
Principal

Chairman
Dr. D.Ganeshkumar
HoD / BME

Organising Secretary
Ms. M.Swathy
Assistant Professor

Faculty Coordinator
Ms. S. Sree Sanjanaa Bose
Assistant Professor

Student Coordinators
Mohammed Afsal
IV BME

Priyadarshni.K
III BME

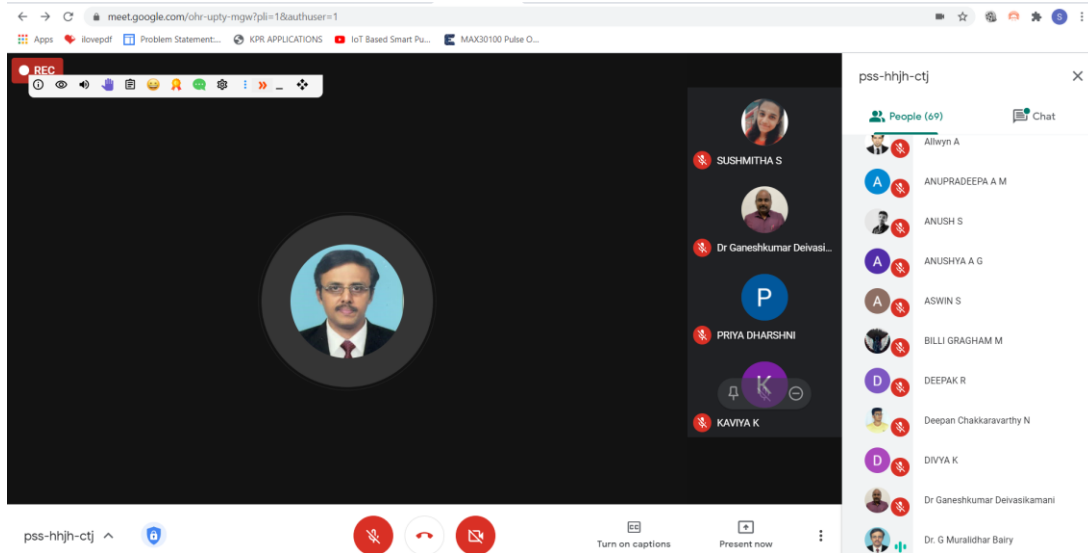
Chief Guest

Dr. G Muralidhar Bairy
Secretary - BMESI, Professor and Head,
Department of Biomedical Engineering,
MIT, Manipal Academy of Higher Education.

31st October 2020
10.00 a.m. - 12.00 p.m.

Google Meet
<https://meet.google.com/ps-hhj-h-ctj>

The event started with an Introduction about the institution and the professional body by the organizing Secretary Ms. M. Swathy, Assistant Professor in the Department of Biomedical Engineering, KPRIET. The Head of the Department of Biomedical Engineering, KPRIET- Dr. D. Ganeshkumar welcomed all the dignitaries, experts, professors, faculty members and students for the event. The Chief Guest was then introduced to the participants.

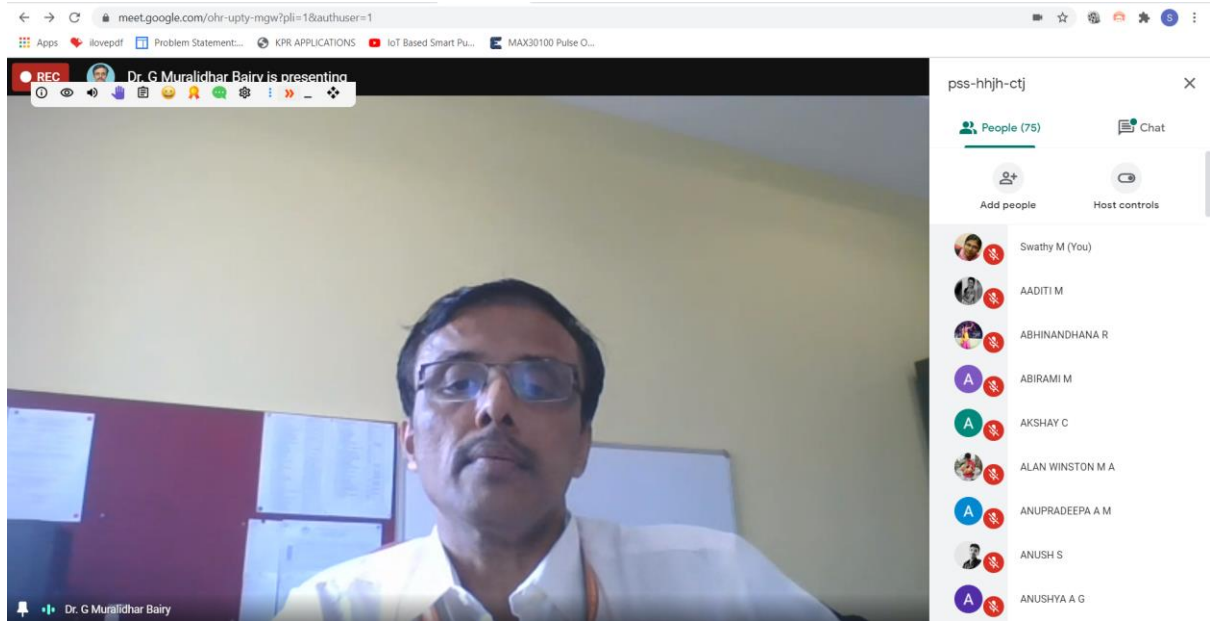


The chief guest for the session was Dr. G. Muralidhar Bairy, Secretary of BMESI, Professor and Head, Department of Biomedical Engineering, Manipal Institute of Technology, Manipal. Followed by this, the student chapter board members were introduced to the guest.

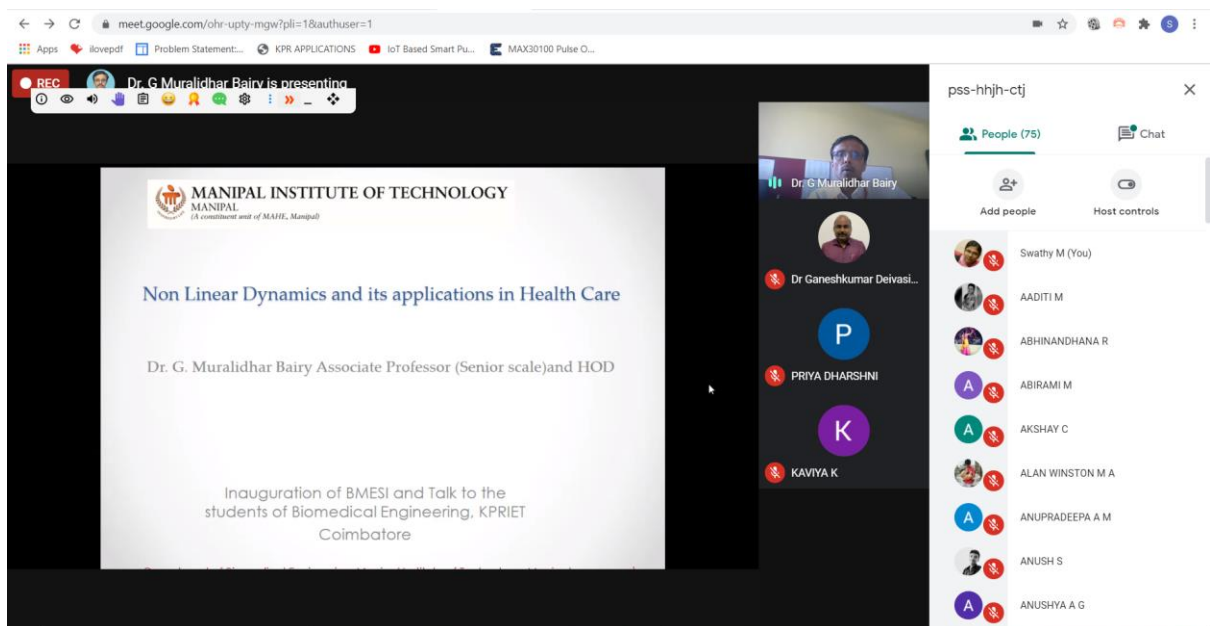
BOARD MEMBERS OF THE STUDENT CHAPTER

S.No.	Designation	Class	Name of the student
1	Secretary	IV BME	Mohammed Afsal
2	Joint Secretary	III BME	Priyadharshini K
3	Additional Secretary	IV BME	Anupradeepa A M
4	Treasurer	III BME	Aswin S
5	Executive member	IV BME	Jane Roshini S
6	Executive member	IV BME	Nandeeshwaran. U
7	Executive member	III BME	Harish Raghavender
8	Executive member	III BME	Jayaprabha S
9	Executive member	II BME	Deepan Chakravarthi
10	Executive member	II BME	Susmitha

The chief guest gave an overview on the formation of this professional body and deliberated the functions and opportunities that are provided by the body. He also explained the importance of the student's active involvement in professional society activities which will help them in improving their career in future.



The chief guest continued the session with his lecture on 'Non-Linear Dynamics and its Applications in Healthcare'. He explained the EEG signal processing using specific techniques for better feature extraction purposes. He explained the methods of analysing the signal in Time, Frequency and Spatial domains. He also discussed and guided the faculty members and students in improving the bio-signal analysis done in the laboratories. The students found the session more informative and shared their valuable feedbacks.



meet.google.com/ohr-upty-mgw?pli=1&authuser=1

REC Dr. G Muralidhar Baiyy is presenting

PARTHASARAT... and 67 more

10:52 AM

EEG

- EEG signals are characterized by the following rhythms
- Delta waves: less than 3 Hz (infants)
- Theta waves: 4 to 8 Hz (infants, children and adults)
- Alpha waves: 8 to 13 Hz (normal relaxed adults)
- Beta waves: 13 to 30 Hz (anxious subjects)

- Brain signals are highly complex and random in nature.
- Characteristics strongly depend on the individual, age and mental state.
- Occurrence of symptoms is also at random in time scale

Dr. G Muralidhar Baiyy

ABIRAMI M

PRIYA DHARSHNI

SUSHMITHA S

REC Dr. G Muralidhar Baiyy is presenting

DHANUSH D and 67 more

10:55 AM

Time Domain

- **Linear Prediction** – predicting the output of a linear system based on its input and previous outputs
 - Used for signal generation, storage and transmission of EEG
 - Presentation of spectral array data which provides better visualization of background EEG activity.
- **Independent Component Analysis** - linearly decompose a multidimensional data vector into statistically independent components
 - Effective method for removing artifacts and separating individual sources of brain signals from EEG recordings

Dr. G Muralidhar Baiyy

ABIRAMI M

PRIYA DHARSHNI

SUSHMITHA S

Finally, Ms. S. Sree Sanjanaa Bose, Assistant Professor in the Department of Biomedical Engineering, KPRIET delivered vote of thanks and the event was successfully completed.