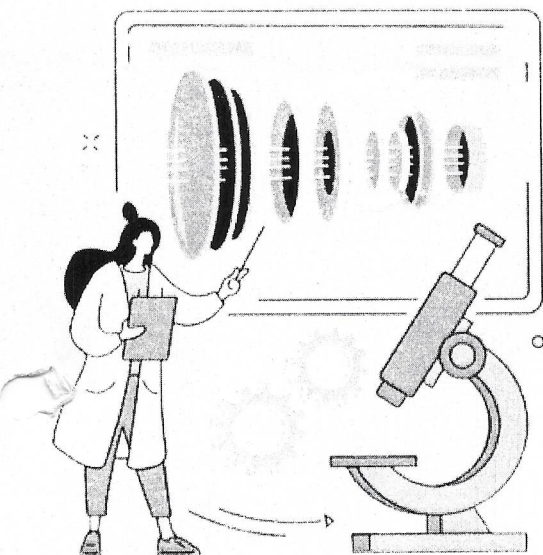DEPARTMENT OF MEDICAL ELECTRONICS ENGINEERING, BMSCE IN COLLABORATION WITH IEEE PHOTONICS SOCIETY, BANGALORE SECTION AND ASSOCIATION OF MEDICAL ELECTRONICS
PRESENTS

1·H ☐1

A HANDS-ON WORKSHOP ON

PHOTONIC CHIP DESIGN FOR BIOSENSOR

Photonics is the latest, upcoming science and application of light generation, detection, and manipulation through emission, transmission, modulation, signal processing, switching, amplification, and sensing.

In the hands-on session, Photonic Integrated circuit and Photonic biosensors combine the sensitivity and speed of photonic sensing with bio recognition elements to enable label-free rapid testing in a compact chip. Since, the underlying photonic technology can be functionalized with a wide range of bio recognition agents, photonic biosensors can detect an unrivalled range of biological agents ranging from DNA, proteins and cells to environmental pollutants and food contaminants. The workshop is focused on biosensors used for medical diagnostic instruments and biomedical research.

SPEAKERS

Dr. Preeta Sharan

Suchandana Mishra

MAY 15, 2022 | 10:30 AM - 5 PM
IEEE MEMBERS: ₹350 | NON IEEE MEMBERS: ₹500
Payments to be made at shreyapattankude98@oksbi (+91 8431789280)

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STUDENT COORDINATORS
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Report of Biosensors workshop:

It was photonics based biosensor workshop. We learnt to use the Rsoft tool and how it could be effectively used for research. Workshop was arranged by Dr Kalpana, who was also the faculty coordinator. Aakanksha Vetekar and Shreya Pattankude were the student coordinators. Dr Preeta Sharan and her PhD scholar Suchandana Mishra were the key speakers. There were around 27participants. There was active participation by the PG first year students during the workshop.
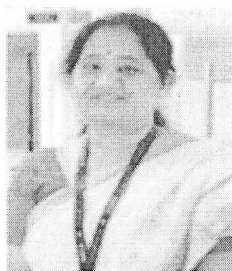
About workshop:

Photonics is the latest, upcoming science and application of light generation, detection, and manipulation through emission, transmission,modulation, signal processing, switching, amplification, and sensing. In the hands-on session, Photonic Integrated circuit and Photonic biosensors combine the sensitivity and speed of photonic sensing with bio recognition elements to enable label-free rapid testing in a compact chip. In this workshop, expected outcome was obtained by the participants which is to learn and get insight into photonics and have hands on experience with Rsoft tool. We learnt about implementation of temperature and pressure sensor and its use in biomedical applications for research purposes.

Date and time of workshop:

This workshop was conducted on 15th May from 10am to 5pm

Our Speakers:

Dr Kalpana R   Dr Preetha Sharan   Suchandana Mishra
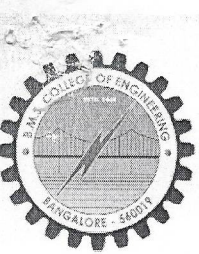
(Faculty -Coordinator)

Screenshot taken on the day of workshop:

Outcome:

With the help of photonics we can diagnose various Medical Applications. Since, the underlying photonic technology can be functionalized with a wide range of bio recognition agents, photonic biosensors can detect an unrivalled range of biological agents ranging from DNA, proteins and cells to environmental pollutants and food contaminants..

Dr. JOSHI MANISHA S
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B.M.S COLLEGE OF ENGINEERING
DEPARTMENT OF MEDICAL ELECTRONICS

SOLUTION

brings 2 DAYS WORKSHOP PROGRAM ON

"GRAPHICAL SYSTEM DESIGN FOR BIOMEDICAL APPLICATIONS"

SPEAKER

Nagarajan G

Sr. Application Engineer
VI Solutions, Bangalore

(5 JUNE & 6 JUNE for 8th Sem)
(12 JUNE & 13 June for 4th, 6th Sem & PG)

For more
details a
schedule

Kindly g
through
BROCHU

Registration Fees : **Rs. 400**
Last Date to Register : **02 June, 2021**
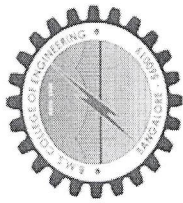Link to Register : **http://bit.ly/LabviewforBiomedical**

Coordinator

Dr. Kalpana R
Associate Professor
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rk.ml@bmsce.ac.in

For Queries Contac

Dr. R. Kalpana - 9886201
Bhavani S – 8550047369
Swarna Kedia - 75748179

SOLUTIONS

Graphical System Design for Biomedical Applications

Venue: BMSCE, Bangalore

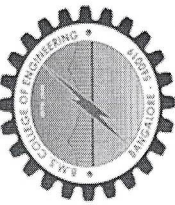| Date	Session-01	15 min	Session-02	45 min	Session-03	15 min	Session-04
Day-1	Engineering solutions using Graphical Systems Design WHY? WHAT? HOW? & LabVIEW for Bio-Medical Engineers	Tea	Hands on LabVIEW Programming concepts – Programming Loops & structures	Lunch	Introduction to Biomedical signal Processing	Tea	Hands on Programming on Bio-Medical Signal Processing (File Signals)- ECG Feature Extraction
Day-2	Hands on Programming on Bio-Medical Signal Processing – Blood Pressure Analyzer		Introduction to NI LabVIEW Image processing for Bio-Medical		Hands on Programming on Bio- Medical Image Processing (File Images)		Hands on demo- NI Biomedical Vernier Sensors

Technical Requirements for online courses

- Computer and Internet Connection
- Operating System: Windows 7 SP1 or Later
- LabVIEW should be installed in system along with the required toolkits and drivers for hardware interface
- Web Browser: Firefox, Chrome, Internet Explorer 11, or Microsoft Edge

Duration

- Instructor-led Virtual: Four Hour Sessions per day (Total 2 days)

NATIONAL INSTRUMENTS
AUTHORIZED ACADEMIC RESELLER

SOLUTIONS

Audience
- New Users and users preparing to develop applications using LabVIEW

Instructor
- Professional & NI Certified Instructor from VI Solutions.

Training Fee
- Rs 200/- per day per student (Minimum Participants: 30)
- Total Rs. 400 for 2 days - Registered participants can Gpay on 9886201137

Organized by
Dept of Medical electronics,
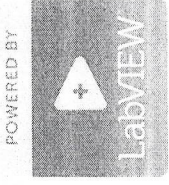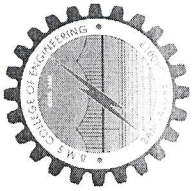B. M. S College of Engineering, Bengaluru

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Sr. Application Engineer
VI Solutions, Bangalore
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POWERED BY

LabVIEW

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CERTIFICATE OF PARTICIPATION

This is to certify that

ANSHU ANDANI

has participated in two days workshop on "Graphical System Design for Biomedical Applications - Hands On Training" organised by Department of Medical Electronics, BMS College Of Engineering on 5 - 6th June, 2021

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HOD, Dept. Of Medical Electronics
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WORKSHOP CO-ORDINATOR
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