



Bharath Institute of Higher Education and Research

[Declared Under Section 3 of UGC Act, 1956]

Chennai - 600 073

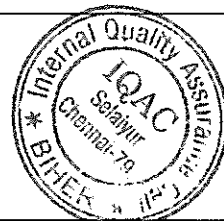
INTERNAL QUALITY ASSURANCE CELL (IQAC)

DOCUMENTS SUBMISSION FORM

Date of Submission	25.08.2017
Type of Documents	Seminar
Description	Technical Seminar on "Nano biosensors on Biomarkers On-site"
Enclosures	a) CIRCULAR
	b) PERMISSION LETTER
	c) INVITATION
	d) LIST OF PARTICIPANTS
	e) FEEDBACK FROM THE PARTICIPANTS
	f) SNAP SHOTS
	g) CERTIFICATE
No. of Pages	19
Submitted By	Name : Dr. R. VASUKI
	Designation : PROFESSOR & HOD / BME
	Department : Biomedical Engineering
	Signature :

For Office Use Only

Verified By:	K. SAKTHIVEL	Sign:	Date: 25/8/17
Uploaded By:	K. S. Senthil Kumar	Sign:	Date: 26/8/17
File Name:	SBE - BME - SEMI - 2017 - 2018 - 002		



Director
IQAC - BIHER



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SCHOOL OF BIO ENGINEERING

DEPARTMENT OF BIOMEDICAL ENGINEERING

Ref: BIHER/BIST/BME//Spl/2017

Date: 11/08/2017

CIRCULAR

The Technical seminar on “Nano biosensors on Biomarkers On-site” is planned by the School of Bio Engineering on 18.08.2017.

This Guest Lecture Programme is offered by Department of Biomedical Engineering, Bharath Institute of Higher Education & Research, with the duration of 1 hour (One hour and commences on 18.08.2017. In this regard, students are instructed to give their willingness and confirm their participation to their respective class in charge/Seminar Coordinator before 17.08.2017.

HOD/BME

Contact:

Mr.S.Prasath

Assistant Professor/ School of Bio Engineering., Seminar Coordinator

Bharath Institute of Higher Education & Research.

Mobile No: 996499223

Email id: prasaths.bme@bharathuniv.ac.in

Copy to Department of Biomedical Engineering

Notice Board/ Department of BME



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SCHOOL OF BIO ENGINEERING
No.173,Agharam Road,Selayur,Chennai, T.N -600 073
DEPARTMENT OF BIOMEDICAL ENGINEERING

Ref: BIHER/BIST/BME//Spl/2017

Date: 11/08/2017

PERMISSION LETTER

From
Mr.S.Prasath
Assistant Professor
Department of Biomedical Engineering
BIHER

To
The HOD
Department of Biomedical Engineering
BIHER

Respected Sir,


Sub – BME – Proposed to conduct Technical seminar on “Nanobiosensors on Biomarkers On-site” on 18.08.2017–Permission Requested -Reg

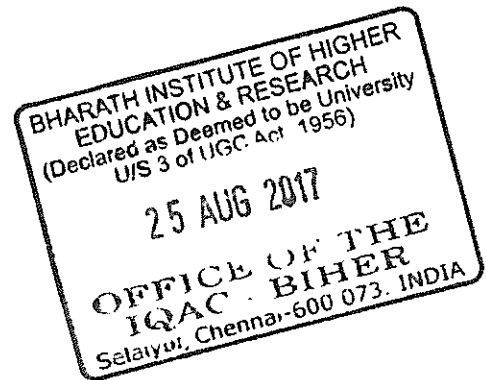
I wish to inform you that, it is proposed to conduct the technical seminar with the Resource Person, Dr.V.Sapthagirivasan, who is currently working as a RND Manager, Capgemini, Bangalore, in the topic “Nanobiosensors on Biomarkers On-site” on 18.08.2017.

This Seminar will improve the students Knowledge in Nanobiosensors. The Students of UG from School of Bio Engineering can participate in this seminar.

Kindly Permit to conduct the above seminar on 18.08.2017.

Thanking You,


Mr.S.Prasath
Assistant Professor

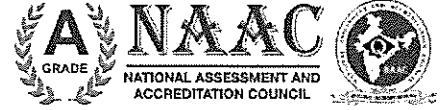




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DEPARTMENT OF BIOMEDICAL ENGINEERING



Ref: BIHER/BIST/BME//Spl/2017

Date: 11/08/2017

PERMISSION LETTER

From
The HOD
Department of Biomedical Engineering,
BIHER

To
Dr. V. Sapthagirivasan
RND Manager,
Capgemini,
Bangalore

Respected Sir,

Sub – BIHER–BME–Proposed to conduct technical seminar on “Nanobiosensors on Biomarkers On-sit” –Permission Requested to organize technical seminar on 18.08.2017–Reg

In continuation of Telephonic conversation had on 2.08.2017, it is requested to organize the technical seminar on “Nanobiosensors on Biomarkers On-sit” on 18.08.2017.

Kindly accept our request and do the needful.

Thanking you.

HOD/BME



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ACADEMIC YEAR 2017-18

Seminar – August 2017



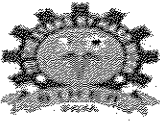
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SCHOOL OF BIO ENGINEERING

DEPARTMENT OF BIOMEDICAL ENGINEERING

INVITATION




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The Management, Staff and Students of Biomedical Engineering
Department Solicit your esteemed presence for the

Technical Seminar
On
Nanobiosensors on Biomarkers on-site
By



Dr. V. Sathagurunathan
RND Manager, Cappemini
Bangalore

<p>Time: 11.00 a.m.</p>	<p>Date: 15th August, 2017</p>
<p><u>Mr. S. Prasath</u> Co-ordinator</p>	<p><u>Dr. R. Vasuki</u> Convener</p>

ALL ARE WELCOME!



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OBJECTIVE

Nanotechnology is having a profound impact on the development of a new class of biosensors known as nanobiosensors. Nanobiosensors commonly comprise a biological recognition molecule immobilized onto the surface of a signal transducer. The reaction between the biorecognition molecule and the analyte is a heterogeneous reaction and therefore the design of the biosensing interface is important in determining the performance of the nanobiosensor. Nanobiosensors are being widely used for molecular detection of biomarkers associated with diagnosis of disease. The application of new nanomaterials in biosensing has influenced biosensing research. The use of high surface area nanomaterials has been important in producing nanobiosensors with greater sensitivity and shorter response times. This review summarizes the advances in disease diagnostics, primarily through the detection of molecular biomarkers, such as proteins and nucleic acids mediated by use of nanobiosensors.

A nanobiosensor is a means of detecting biological agents such as antibodies, nucleic acids, pathogens, and metabolites. The working principle consists of binding bioanalytes of interest onto bioreceptors, which in turn modulate the physicochemical signal associated with the binding. Later, a transducer captures and converts the physicochemical signal into an electrical signal. The variation in signal such as electric potential, current, conductance, impedance, intensity and phase of electromagnetic radiation, mass, temperature, and viscosity is monitored. Analysis of the variation in one or more of these parameters quantifies the presence or absence of bioagents. The nanostructures in nanobiosensors act as an intermediate layer between biological agents and physicochemical detector components or biological agents, and the transducer is combined with nanomaterials to construct a biosensor.

The role of nanobiosensors is to continuously monitor biomarker concentration levels for active tracking and effective treatment of disease. It also needs to be a point-of-care device which in turn means simplistic human involvement towards detection. The best possible solution would be to be able to just drop the sample onto a sensing device and continuously monitor the concentration of biomarkers present in the sample.



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TIME SCHEDULE FOR SEMINAR

S.No	Date	Time	Title	Resource Person
1	18.08.2017	11.00am – 12.00 pm	Technical Seminar on “Nanobiosensors on Biomarkers on-site”	Dr. V. Sapthagirivasan RND Manager, Capgemini, Bangalore.



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SPEAKER PROFILE



Name of Resource Person: Dr. V. Sapthagirivasan, RND Manager, Capgemini,

- Bangalore Educational Background
- B.E Instrumentation and Control Engineering, Madras University 1999-2003
- M.E Medical Electronics, Anna University 2005-2007
- PhD Biomedical Engineering, SRM University 2009-2015
- Post doctorate, Kyungpook National University, South Korea

Work Experience

- Currently working in Capgemini as Manager- RnD (Solutions and imaging COE, Medical devices)
2014-Present

Previous Employment

- Project Engineer, CERT Technologies 2007-2009

Skills

- Developed a computer aided diagnosis system (proof-of-concept) for Osteoporosis diagnosis from CT images.
- Good understanding and hands on experience of various fundamental image processing algorithms and machine learning techniques.
- Good understanding and hands on experience of medical imaging standards such as DICOM and workflow such as PACS, RIS and HIS.



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- Rich experience on algorithm design and development, and Proof-of-Concept with various modality images such as X-ray, CT, MR and Mammogram.
- Proficient programming skills using MATLAB with image processing and machine learning tool kits; additional skills on LabView programming; use of MIMICS software application for surgical planning; and statistical analysis using SPSS.
- Published many peer reviewed journals in medical imaging areas.
- Presented in various conferences related to digital and medical image processing
- Serving as editorial board member, reviewer, session chair and program committee member for various peer reviewed journals and conferences
- Delivered key-note address and guest lectures related to medical imaging in many conferences and universities



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LIST OF PARTICIPANTS

S.No	Full Name	Mobile Number	Name of The Institute	Your Designation
1.	Sanjanaah Shree	8012227777	BIHER	Student
2.	Lisweena. K	9390552214	BIHER	Student
3.	Ch.Praneetha	7550266348	BIHER	Student
4.	Surasani Sudharshan	9514460028	BIHER	Student
5.	Suresh	8695579984	BIHER	Student
6.	Thangjam	9940188390	BIHER	Student
7.	Vijayalakshmi	9789733297	BIHER	Student
8.	Vijay Varunaeswaran	9944991156	BIHER	Student
9.	Ambati Anitha	7358459989	BIHER	Student
10.	K.Swathi	9789066133	BIHER	Student
11.	Karthika	7397459550	BIHER	Student
12.	Mathrapu	9493209498	BIHER	Student
13.	S.John Petter	8823061103	BIHER	Student
14.	Aamir Hussain	7006166158	BIHER	Student
15.	Kanaga Priya	9791633561	BIHER	Student
16.	Debabrata Bandyopadhyay	7478396760	BIHER	Student
17.	Ajitha	9500135956	BIHER	Student
18.	Gajji Sai Mounik	8019390487	BIHER	Student
19.	Dhanavath	9441437815	BIHER	Student



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20.	Vamsi	9908408302	BIHER	Student
21.	Gattamaneni	9849295382	BIHER	Student
22.	Rambalaji	8939496932	BIHER	Student
23.	Aamir Hussain	7006166158	BIHER	Student
24.	Kanaga Priya	9791633561	BIHER	Student
25.	Vanga Rupesh Kumar	6593850459	BIHER	Student
26.	S.Meenakshi	9843722882	BIHER	Student
27.	G Nithishkumar	7358287314	BIHER	Student
28.	Kadali Chandana	7981560405	BIHER	Student
29.	Supratik Nandi	8617597798	BIHER	Student
30.	Abhijith	7907169871	BIHER	Student
31.	Abinaya	7868953254	BIHER	Student
32.	Ambati Sneha Sree	9010235132	BIHER	Student
33.	Anagha	9790915107	BIHER	Student
34.	Aneesa	9086788141	BIHER	Student
35.	Aravindhan	9345304262	BIHER	Student
36.	A.Raabiya Shareef	7358729645	BIHER	Student
37.	Besia	9447426561	BIHER	Student
38.	B. Sheeba Alexia	9962465772	BIHER	Student
39.	Sai Kumar K	8072174863	BIHER	Student
40.	Surasani Sudharshan	9514460028	BIHER	Student
41.	Anjana	8681846606	BIHER	Student
42.	Afreen Banu.A	9952088995	BIHER	Student
43.	Bysani Anjani Umesh	9989982243	BIHER	Student
44.	V. Varatharajan	8610445285	BIHER	Student
45.	Ajith Kumar	9443424086	BIHER	Student
46.	Monisha	9841424537	BIHER	Student
47.	Devasneha	9176990679	BIHER	Student
48.	S.R.Manju Sri	6380717136	BIHER	Student
49.	K.Arun	9865237425	BIHER	Student
50.	Gopalakrishnan	9994255890	BIHER	Student
51.	Abhijith	7907169871	BIHER	Student



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FEED BACK FROM THE PARTICIPANTS

S.no	Name of the participant	Contact no of the participants	How useful was The presentation?	Overall how you rate the webinar
1.	Mathrapu	9493209498	Good	4
2.	S.John Petter	8823061103	Excellent	5
3.	Aamir Hussain	7006166158	Excellent	5
4.	Kanaga Priya	9791633561	Excellent	5
5.	Debabrata Bandyopadhyay	7478396760	Excellent	5
6.	Ajitha	9500135956	Excellent	5
7.	Gajji Sai Mounik	8019390487	Excellent	5
8.	Dhanavath	9441437815	Excellent	5
9.	Vamsi	9908408302	Excellent	5
10.	Gattamaneni	9849295382	Excellent	5
11.	Rahul K	8056810956	Excellent	5
12.	Anjana	8681846606	Excellent	5
13.	Afreen Banu.A	9952088995	Good	3
14.	Bysani Anjani Umesh	9989982243	Excellent	5
15.	V. Varatharajan	8610445285	Excellent	5
16.	Ajith Kumar	9443424086	Excellent	5
17.	Monisha	9841424537	Excellent	5
18.	Devasneha	9176990679	Good	4
19.	S.R.Manju Sri	6380717136	Excellent	5
20.	K.Arun	9865237425	Good	5
21.	Gopalakrishnan	9994255890	Good	4
22.	Rambalaji	8939496932	Excellent	5



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23.	Aamir Hussain	7006166158	Excellent	5
24.	Kanaga Priya	9791633561	Good	4
25.	Vanga Rupesh Kumar	6593850459	Good	5
26.	S.Meenakshi	9843722882	Excellent	5
27.	G Nithishkumar	7358287314	Excellent	5
28.	Kadali Chandana	7981560405	Good	4
29.	Supratik Nandi	8617597798	Excellent	5
30.	Sanjanaah Shree	8012227777	Excellent	5
31.	Lisweena. K	9390552214	Good	5
32.	Ch.Praneetha	7550266348	Excellent	5
33.	Surasani Sudharshan	9514460028	Excellent	5
34.	Suresh	8695579984	Excellent	5
35.	Thangjam	9940188390	Good	4
36.	Vijayalakshmi	9789733297	Excellent	5
37.	Vijay Varunaeswaran	9944991156	Excellent	5
38.	Ambati Anitha	7358459989	Excellent	5
39.	K.Swathi	9789066133	Good	2
40.	Karthika	7397459550	Excellent	5
41.	Abhijith	7907169871	Excellent	5
42.	Abinaya	7868953254	Good	5
43.	Ambati Sneha Sree	9010235132	Good	4
44.	Anagha	9790915107	Excellent	5
45.	Aneesa	9086788141	Excellent	4
46.	Aravindhnan	9345304262	Good	4
47.	A.Raabiya Shareef	7358729645	Good	4
48.	Besia	9447426561	Good	4



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49.	B. Sheeba Alexia	9962465772	Excellent	5
50.	Sai Kumar K	8072174863	Excellent	5
51.	Surasani Sudharshan	9514460028	Excellent	5



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SNAP SHOTS





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CERTIFICATE

