

25.02.2019

From  
T. Pasupathi  
J. Niranjana Samuel  
R&D Section  
KCE

To  
The Principal  
KCE

Respected Madam,

Sub: Permission – Organizing workshop on Biomedical Interventions– reg.,

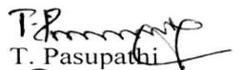
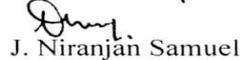
A workshop on “**Biomedical Interventions**” is organized on 27<sup>th</sup> & 28<sup>th</sup> February, 2019 by Dept of ECE and R&D Section.

In this regard, we request you to kindly grant us permission towards:

- a) Utilization of Pallava Hall.
- b) LCD projectors & PA system at Pallava Hall.
- c) Utilization of College vehicle for resource persons, if required.
- d) Accommodation for participants at Hostel.
- e) Genset during power interruption.
- f) Utilization of Lamp.
- g) Providing lunch and refreshments for the participants at our college canteen at subsidized rate.

Thank you,

Yours faithfully,

  
T. Pasupathi  
  
J. Niranjana Samuel

  
25/2/19

  
25/2/19

### Registration Form

Kings College of Engineering  
Punalkulam, Thanjavur - 613 303

Workshop on  
Biomedical Interventions

1. Name (in block letters) : .....
  2. Designation: .....
  3. Institution / Organization: .....
  4. Postal Address: .....
  5. E-mail: .....
  6. Phone No. / Mobile: .....
  7. D.D No. .... Date: .....
- Bank/Branch: .....

Signature of the applicant

#### Please send your registration form to:

The Coordinator,  
Dept. of Electronics & Communication Engg.,  
Kings College of Engg., Punalkulam- 613303.  
Phone : 04362 - 282474

#### Organizing Committee

**Chief Patrons:**  
**Dr. R. Rajendran**  
Secretary

**Mr.T.R.S.Muthukumar,**  
Chief Executive Officer

**Patron:**  
**Dr. J. Arputha Vijaya Selvi**  
Principal

**Co-Patron:**  
**Dr.S.Sivakumar**  
Vice Principal

**Convenor:**  
**Dr. D. Kumar**  
Professor/ECE

**Co-ordinators:**  
**Mr. T. Pasupathi**  
AP/ECE

**Mr. J. Niranjan Samuel**  
JRF/ECE-R&D

#### Registration fees:

Registration fee has to be paid in the form of demand draft drawn in favour of Kings College of Engineering - IEEE Student Branch payable at Thanjavur. Registration fee includes course material, lunch and refreshment.

UG/ PG Students : Rs. 600/-  
Faculty : Rs. 800/-

Last Date for Registration :18.02.2019  
Confirmation of Acceptance:22.02.2019

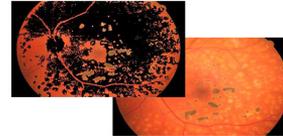
#### For further information contact:

Mr. T. Pasupathi - 98941 04645  
Mr. J. Niranjan Samuel - 99947 18168



## National WORKSHOP on Biomedical Interventions

27<sup>th</sup> & 28<sup>th</sup> February, 2019



Jointly organised by  
Department of Electronics & Communication Engg.,  
R&D Section  
Kings College of Engineering,  
Punalkulam, Thanjavur - 613303.

#### About our Institution:

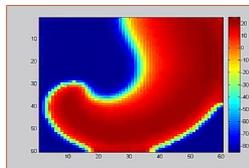
Kings College of Engineering (KCE), since its inception in the year 2001, provides quality education to the needy aspirants including under-privileged students of this region. KCE is approved by All India Council for Technical Education, New Delhi, affiliated to Anna University, Chennai and is a NAAC accredited institution. The institute offers five UG and four PG programmes. Situated on the Thanjavur – Pudukkottai Highway, the KCE campus spreads over 50 acres in a beautiful serene atmosphere, ideally suited for technical education with architecturally designed infrastructural facilities.

#### About R & D Section:

The Department of Electronics & Communication, Electrical & Electronics Engineering and Mechanical Engineering are recognized as research centres for collaborative research by Anna University, Chennai. A significant number of projects funded by various government and non government funding sectors namely DRDO, MCT, AICTE, New Delhi, TNSCST, Chennai, Analog Devices, USA & Texas Instruments, USA are successfully carried out.

#### About the workshop:

The workshop will address the clinical management of Coronary Artery Diseases with newer tools, various ways and means by which information and communication technology applications in health care sector focusing on selective diagnosis, emergency & long-term clinical care to people and the regulatory requirements of medical devices. Machine Intelligence (MI) aims at mining relevant information directly from the derivative physiological data, leads to better performance in comparison to human that is suffered by status of mind and mental variability. Evolutions of new machine learning algorithms are helping the even disrupted pattern of raw physiological data in terms of better classification. MI has been playing many different roles in scientific research and the literature has shown that Artificial Intelligence (AI) is promising in solving complex problems in many applications, particularly in areas with huge amounts of data but very little theory. Thus, it can be supportive to develop new decision support system including the devices. Also this workshop will explore the possibility of reducing the cost & complexity involved in healthcare practices thereby benefiting healthcare professionals and ultimately aims to provide quality healthcare to people at a lesser cost.



**Dr. G. Shanthi,**  
Scientist, Manager,  
Preclinical, Microtherapeutics Research Labs,  
Chennai  
She attained her Doctorate degree from Madras University with specialization in Molecular Genetics and began her career as Scientist-Toxicology. She has more than one decade of experience, well trained in GLP principles and expertise in preclinical study designing and execution (executed more than 400 both in-vivo and in-vitro) for various regulatory submissions.



**Dr. S. Shanthi,**  
Prof/Dept. of Electronics & Commn. Engg.,  
Adithya Institute of Technology,  
Coimbatore  
Highly motivated Professor, Positive approach, consistently strive to create a challenging and engaging learning environment in which the students become life long scholars and learners, interested in continuing research in Bio medical engineering combined with artificial intelligence.



**Prof. R. Malathy,**  
Prof/Dept. of Electronics & Instrumentation,  
Annamalai University,  
Chidambaram  
Prof. R. Malathy, thrust areas are Computational Bioengineering, modeling of various physiological systems which includes, cancer cells, cardiac cell, ganglion cells. Her research area has pioneered with effects of sodium channels on Arrhythmia -A mathematical model of human cardiac ventricular cells. Her thesis won the best thesis award at IIT Madras



**Dr. K. Damodaran**  
Sr. Consultant & Interventional Cardiologist  
Apollo Hospitals,  
Chennai  
DM in Cardiology from Madras Medical College and Research Institute and over 17 years of a highly proficient experience in interventional cardiology Postdoctoral Fellowship in National Board (FNB) from Escorts Heart Institute, Delhi. He is also a Fellow of FESC and the Fellow of FSCAI (USA). He has performed more than 15000 cardiac catheterisation procedures till date.

Dr. J. Arputha Vijaya Selvi, M.E., Ph.D.,  
**PRINCIPAL**

Ref: KCE / PRL /invite/18-19

13.02.2019

To

**Dr. K. Damodaran,**  
Senior Consultant Interventional Cardiologist  
Apollo Hospitals,

Dear Sir,

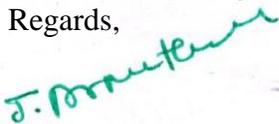
Greetings to you from Kings College of Engineering

Kings College of Engineering (KCE) is an institution which was formed with the single aim of providing quality education to the needy, underprivileged and socially & economically weaker sections of students. KCE is accredited by NAAC, recognized by 2(f) and 12(B) act of UGC, approved by All India Council of Technical Education, New Delhi (AICTE) and is affiliated to Anna University, Chennai. The institution was established in the year 2001 on a sprawling campus of around 48 acres on the Thanjavur-Pudukkottai Highway and run by Raj Educational Trust (RET), Chennai. The institution offers five U.G and four P.G programmes and certified with ISO 9001:2008. The state of the art teaching methodologies are used to impart high quality education to the students including e-learning.

To expose our students to various industrial and technical skills, we organize seminars each semester. In this regard, we request you to make it convenient to be present and deliver lecture on **“Newer Modalities in the Management of Coronary Artery Disease”** in the National workshop on **“Biomedical Interventions”** on **27<sup>th</sup> February, 2019 (Forenoon session)**.

Thanking you and expecting your co-operation in this regard.

Regards,



Dr. J. Arputha Vijaya Selvi,  
Principal

**PRINCIPAL**  
Kings College of Engineering  
Punalkulam- 613 303.

Dr. J. Arputha Vijaya Selvi, M.E., Ph.D.,  
**PRINCIPAL**

Ref: KCE / PRL /invite/18-19

13.02.2019

To

**Dr. S. Shanthi,**

Professor & Head

Dept. of Electronics & Communication Engineering,

Adithya Institute of Technology, Coimbatore

Dear Madam,

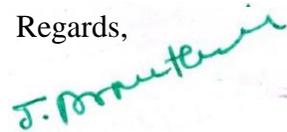
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To expose our students to various industrial and technical skills, we organize seminars each semester. In this regard, we request you to make it convenient to be present and deliver lecture on **“Machine Learning in Biomedical Engineering”** in the National workshop on **“Biomedical Interventions”** on **28<sup>th</sup> February, 2019 (Afternoon session)**.

Thanking you and expecting your co-operation in this regard.

Regards,



Dr. J. Arputha Vijaya Selvi,  
Principal

**PRINCIPAL**  
Kings College of Engineering  
Punalkulam- 613 303.

## **Brief Profile**

Dr.G.Shanthi, working as Quality Assurance Manager, at Micro Therapeutics Research Labs Pvt. Ltd. Chennai.(MTR). She attained her Doctorate degree from Madras University with specialization in Molecular Genetics and began her career as scientist-Toxicology She has more than one decade of experience, well trained in GLP principles and expertise in preclinical study designing and execution (executed more than 400) both *in vivo* and *in vitro*) for various regulatory submissions.

She designed a study model to identify the Blood clotting effect of drug which is accepted in the USFDA regulatory. She established the Preclinical Research Unit Facility at MTR as per the GLP Quality System and got GLP certification from National GLP Compliance Monitory Authority (NGCMA) DST, New Delhi for the Laboratory. She participated in many National and International level workshops, symposium and published many research articles. Her strength is commitment towards the task with adherence to Quality and Ethics.



**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**

**Workshop on “BIOMEDICAL INTERVENTIONS”**

**LIST OF PARTICIPANTS**

S.No	Name of the Participant	Branch	College
1.	S.Rutharesh	B.Tech Bio Medical Engineering	Rajiv Gandhi College of Engineering and Technology
2.	S.Sakthidharan		
3.	P.Sasvath		
4.	K.Suresh		
5.	Thivakar.B		
6.	S.Santhiya	B.Tech Bio Technology	Periyar Maniammai Institute of Science & Technology, Vallam, Thanjavur
7.	Anushya.P		
8.	C.Bathira		
9.	J.Kokila		
10.	K.Dinesh pandi		
11.	M.Nidesh		
12.	J.Pradeep		
13.	B.Tamizhini		
14.	M.Thasaleema parven		
15.	M.Vivek		
16.	ABARNA. R	ECE	Kings College of Engineering, Punalkulam
17.	ABINAYAKARTHIKA.T		
18.	AGALYA. S		
19.	ARCHANA.T		
20.	ARIYAVARSHINI.J		
21.	DHANAHARSHINI. S		
22.	DHANASEKARAN.S		
23.	DHIVYA DHARSHINI. R		
24.	DHURKA. K		
25.	DIVAKAR.S		
26.	ELAKIYA KOWSHIKA. A		
27.	HARINI. M		
28.	ILANKHATIR.E		
29.	INDHUJA. J		
30.	JENIFER.X		
31.	KOWSALYA. M		
32.	MEERA.K		
33.	MEGALA.M		
34.	RASIKA. M		
35.	SANTHAKUMARI. J		
36.	SANTHIYA.R		
37.	SEDHUPATHI.M		
38.	SOWMIYA.R		
39.	SUTHA.M		

40.	TAMILAZHAGI. T	ECE	Kings College of Engineering, Punalkulam
41.	VIDHYA. K		
42.	VINITHA. K		
43.	VITHYASRI. U.K		
44.	PONNI R		
45.	THANDAYUTHAPANI R		
46.	MANGAIYARKARASI N		
47.	GEETHABAI P		
48.	JEYASEELAN T		
49.	SATHYARAJ R		
50.	CHANDRASEKAR S		
51.	SRIVIDHYA N		
52.	FRANKLIN VIJAY S		
53.	PRIYADHARSHINI. G		
54.	RANJITHA.C		
55.	SOFIYA JENNIFER J		
56.	T. SHANTHI		
57.	R. PONNI		
58.	P. GEETHABAI		
59.	K. SUDARSANAN		
60.	S. RAMARAJAN		
61.	R. SATHYARAJ		
62.	T. JEYASEELAN		
63.	P.RAJAPIRIYAN		



A NAAC Accredited Institution  
**KINGS**  
COLLEGE OF ENGINEERING



Recognized by UGC 2(f) & 12B  
Approved By AICTE, New Delhi & Affiliated to Anna University, Chennai

Department of Electronics & Communication Engineering  
&  
R&D Section

Cordially invite you to the two days

*National Workshop*  
*on*  
*Biomedical Interventions*

27<sup>th</sup> & 28<sup>th</sup> February, 2019

**Dr. K. Damodaran**  
Sr. Consultant & Interventional Cardiologist  
Apollo Hospitals,  
Chennai

has consented to deliver the Inaugural Address

Staff Members  
Department of ECE  
KCE

Venue: Pallava Hall

Time: 10.00 a.m.



## Workshop on Biomedical Interventions

Date: 27.02.2019 & 28.02.2019

Venue: Pallava Hall

10.00 a.m.	Invocation Song	
10.02 a.m. – 10.05 a.m.	Welcome Address	<b>Prof. N. Mangaiyarkarasi</b> HOD(i/c)/ECE, KCE
10.06 a.m. – 10.10 a.m.	Introducing Guest	<b>Dr. D. Kumar</b> Professor/ECE, KCE
10.11 a.m. – 10.15 a.m.	Honouring the Guest	<b>Dr. J. Arputha Vijaya Selvi</b> Principal, KCE <b>Dr. S. Sivakumar</b> Vice Principal, KCE
10.16 a.m. – 10.20 a.m.	Presidential Address	<b>Dr. J. Arputha Vijaya Selvi</b> Principal, KCE
10.21 a.m. – 10.25 a.m.	Felicitation	<b>Dr. S. Sivakumar</b> Vice Principal, KCE
10.26 a.m. – 10.45 a.m.	Inaugural Address	<b>Dr. K. Damodaran</b> Sr. Consultant & Interventional Cardiologist Apollo Hospitals, Chennai
10.45 a.m. – 11.00 a.m.	Tea Break	
11.01 a.m. – 12.55 p.m.	Session – I	<b>Dr. K. Damodaran</b> Sr. Consultant & Interventional Cardiologist Apollo Hospitals, Chennai
12.55 p.m. – 01.00 p.m.	Vote of Thanks	<b>Mr. T. Pasupathi</b> AP/ECE, KCE
01.00 p.m. – 02.00 p.m.	Lunch Break	
02.01 p.m. – 02.05 p.m.	Honoring & Introducing the Guests	<b>Mr. R. Balakrishnan</b> AP/ECE, KCE
02.06 p.m. – 03.10 p.m.	Session – II	<b>Dr. Baskaran</b> Biomedical Engineer Gentech Marketing Pvt. Ltd., New Delhi
03.16 p.m. – 03.30	Tea Break	
03.36 – 04.30	Session – II Continues	<b>Dr. Kiran George</b> Assoc. Professor /EIE Annamalai University, Chidambaram
04.31 p.m – 04.35 p.m.	Vote of Thanks	<b>Mr. P. Raja Pirian</b> AP/ECE, KCE

Dr. J. Arputha Vijaya Selvi, M.E., Ph.D.,  
**PRINCIPAL**

Ref: KCE / PRL /Thanks /071/ 18-19

28.02.2019

To

**Dr. S. Shanthi,**

Professor & Head

Dept. of Electronics & Communication Engineering,

Adithya Institute of Technology, Coimbatore

Dear Madam,

On behalf of the Management, Staff and Students, I express my sincere thanks for your visit to our campus for delivering lecture in the workshop on **“Biomedical Interventions”** on 28-02-2019 inspite of your busy schedule. The lecture was very informative and all the participants got benefited. I sincerely thank you for the efforts you have taken to make this workshop fruitful.

Regards,

*J. Arputha Selvi*  
*28/2/19*

Dr. J. Arputha Vijaya Selvi

**PRINCIPAL**  
Kings College of Engineering  
Punalkulam- 613 303.



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Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai  
Punalkulam, Gandarvakottai Taluk, Pudukkottai Dist. - 613 303.

National Workshop on  
**"Biomedical Interventions"**

**CERTIFICATE OF PARTICIPATION**

This is to certify that Mr. / Ms. \_\_\_\_\_ of  
\_\_\_\_\_ has participated in  
the National Workshop on **"Biomedical Interventions"** on 27<sup>th</sup> & 28<sup>th</sup> February,  
2019, jointly organized by IEEE Student Branch (STB16621) and Research &  
Development Section, Kings College of Engineering, Punalkulam.

Dr. D. Kumar  
CONVENER

Dr. J. Arputha Vijaya Selvi  
PRINCIPAL



**DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING**

**Two days workshop on Biomedical Interventions**

**Expenditure Details of Workshop held on 02.01.19**

S.No	Name of Vendor	Details	Bill No. /Date	Total
1	Makemytrip	Flight Tickets – Trichy to Chennai	52462060/ 22.02.2019	4698.00
2	IRCTC	Train tickets	20.02.2019	606.00
3	Thanjavur Art & Bronze	Memento	26.02.2019	750.00
4	Maharaja Silk House	Shawl	GIS-76315/ 27.02.2019	240.00
5	Maharaja Silk House	Shawl	GIS-76154/ 27.02.2019	679.00
6	Poompuhar	Memento	3709/ 27.02.2019	336.00
7	Bombay Sweets	Sweets	22191/ 26.02.2019	126.00
8	Bombay Sweets	Sweets	115/ 27.02.2019	184.00
			<b>Total Expenditure</b>	<b>7619.00</b>
				<b>(Rupees Seven Thousand Six Hundred and Nineteen Only)</b>

COORDINATOR

HOD

PRINCIPAL

## THE HINDU 12.03.2019 PAGE 5



Kings College of Engineering at Punalkulam near Thanjavur organised a two-day national workshop on 'Biomedical Interventions' recently. Dr.K.Damodaran, Senior Consultant and Interventional Cardiologist, Apollo Hospital, Chennai, inaugurated the workshop. Dr.J.Arputha Vijaya Selvi, Principal, presided. Dr.S.Baskaran, Biomedical Engineer, Gentech Marketing Pvt.Ltd, New Delhi, Dr. Kiran George, Associate Professor, Electronics and Instrumentation Engineering, Annamalai University and Dr. G.Shanthi, Scientist, Manager Preclinical, Microtherapeutics Research Labs, Chennai, spoke.



## Report

### National Workshop on “Biomedical Interventions”

Kings College of Engineering, Punalkulam near Thanjavur organized a two day National Workshop on **Biomedical Interventions** on 27<sup>th</sup> & 28<sup>th</sup> February, 2019. Dr. K. Damodaran, Senior Consultant & Interventional Cardiologist, Apollo Hospital, Chennai, inaugurated the workshop. **Dr. J. Arputha Vijaya Selvi**, Principal, presided over the function and delivered presidential address. **Dr. K. Damodaran**, in his lecture, stated coronary artery disease develops when the major blood vessels that supply the heart with blood, oxygen and nutrients (coronary arteries) become damaged or diseased. Cholesterol-containing deposits (plaque) in the arteries and inflammation are usually the cause for coronary artery disease. The damage may be caused by various factors, including: Smoking, High blood pressure, High cholesterol, Diabetes or insulin resistance and sedentary lifestyle. To improve the heart healthcare, one should quit smoking, control conditions such as high blood pressure, high cholesterol and diabetes. He also explained about surgical procedure involved in robot assisted cardiac surgery. While concluding his lecture, he said to stay physically active, consume low-fat and less-salt diet, and consume fruits, vegetables and whole grains and advised to maintain a healthy weight and manage stress.

**Dr. S. Baskaran**, Biomedical Engineer, Gentech Marketing Pvt. Ltd., New Delhi started his lecture with the major instruments used in acquiring bio-signals from human beings. Also he demonstrated the real-time Electro Cardio Gram (ECG) acquisition from one of the participant with four channel data acquisition development device and necessary electrodes. His lecture includes analysis of the acquired data and report preparation for the end user. **Dr. Kiran George**, Assoc. Professor, Electronics and Instrumentation Engineering, Annamalai University, Chidambaram, delivered lecture. In his lecture he briefed about multiscale physiological model of organ system which provides an opportunity for the researcher and clinician in the field of mathematical oncology. While concluding his lecture, he suggested how these new directions could contribute in addressing the current challenges in the field of Biomedical Engineering.

**Dr. G. Shanthi**, Scientist, Manager Preclinical, Microtherapeutics Research Labs, Chennai, delivered a lecture on synthetic biomaterials and its applications, Biocompatibility Regulatory Testing and its biological effects. She concluded her lecture with a case study on biomaterial implantation in animals. **Dr. S. Shanthi**, Professor & Head/ECE, Adithya Institute of Technology, Coimbatore delivered a lecture. In her lecture, she briefed that MI plays various roles in scientific research. Artificial Intelligence (AI) provides promising solutions in solving complex problems in many applications, particularly in areas with huge amounts of data but very little theory. It helps to develop new decision support system including the devices.

A total of 63 participants from various institutions situated at U.T of Pondicherry, Karnataka and Andhra Pradesh, Tamil Nadu participated in the programme and got benefitted.



Dignitaries on the Dias



Ceremonial Lighting of the Lamp



Mrs. N. Mangairyarkarasi, HOD(i/c)/ECE  
welcoming the gathering



Dr. D. Kumar, Professor/ECE introducing  
Dr. K. Damodaran, Chief Guest



Dr. J. Arputha Vijaya Selvi, Principal  
honouring Dr. K. Damodaran,  
Interventional Cardiologist



Dr. J. Arputha Vijaya Selvi delivering  
presidential address



Dr. K. Damodaran, Interventional  
Cardiologist, Apollo Hospital, Chennai  
delivering Inaugural Address



Dr. K. Damodaran, during invited lecture  
session



Dr. Kiran George during invited lecture  
session



Dr. S. Baskar during demonstration  
session



Dr. G. Shanthi during invited lecture session



Dr. S. Shanthi during invited lecture session



Students during the activity session



Participant during feedback session



Participants receiving certificates from dignitaries



Mr. T. Pasupathi during workshop summary and vote of thanks