

**AICTE**  
sponsored  
**Two weeks Faculty Development  
Programme**  
*on*  
**Challenges and Opportunities in  
Biomaterials Research**

**26<sup>th</sup> November - 9<sup>th</sup> December, 2019**

**REGISTRATION FORM**

Name :  
Designation :  
Department :  
Institution :  
Address :  
Mobile No. :  
E-mail ID :

Signature of the Participant

Mr./Mrs./Dr./\_\_\_\_\_

is an employee of our institution and sponsored for  
the above programme.

Signature of the Principal with seal

Place:  
Date:

**Organizing Committee**

**Chief Patrons**

Tmt. Vijaya Muthuvannan, Chairperson,  
Rtn. S.R. Ramanathan, Secretary & Correspondent,  
Thiru. N. Muthuvannan, Director.

**Patron**

PMJF. Ln. M. Saravanan, M.E.,  
Chief Executive Officer.

**Chairman**

Dr. N. Anbazhagan, M.E., Ph.D.,  
Principal

**Organizing Secretary**

Dr. G. Perumal, M.E., Ph.D.,  
HOD/Mechanical

**Co-ordinator**

Prof. J.K. Jothi Kalpana, M.Tech, (Ph.D.)  
R&D Committee / Department of CSE

**Eligibility**

Faculty working from AICTE recognized Institutions,  
University Departments, R&D Organisations and  
Professionals from Industries.

**Registration Fee**

There is no registration fee for faculty working from  
AICTE recognized Engineering and polytechnic  
colleges.

**Selection Norms**

Number of seats are limited. Selection of the participants  
will be based on first come first serve basis.

**Important Dates**

Submission of application : 21.11.2019  
Intimation of selection : 24.11.2019



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*organized  
by*

**Department of Mechanical  
Engineering  
&  
Research and Development  
Committee**



**College of Engineering & Technology**

Arasur - 607 107, Villupuram District

(Reaccredited by NAAC and  
an ISO 9001:2008 Recertified Institution)

Phone : 04149- 298053

Email : vrsctet@yahoo.com Website : www.vrsctet.in

## About the Institution

V.R.S College of Engineering and Technology was established in the year 1994 under the aegis of S.P.S Educational Trust. The college excels with the approval of All India Council for Technical Education, New Delhi, affiliation of Anna University, Chennai, Reaccreditation by NAAC, Bengaluru and recertification by ISO 9001: 2008. It is managed by the Board of Governors with Mrs.Vijaya Muthuvannan as its Chairperson, Mr.S.R.Ramanathan as the Secretary & Correspondent and Mr.N.Muthuvannan as the Director. Er.M.Saravanan looks after the entire administration of the college.

Rapid dissemination of scientific principles and its vast exploitation through innovative inventions have triggered tremendous impact on the socio-economic development of our Country. However, the needs of more resources and their meticulous contributions have become vital to face the confronting socio-economic behavior of our country. By inculcating the educational and professional experience to the resources through innovative applied research, a well-developed economic structure can be established in our country. Keeping this as a mission, VRSCET has been established in a rural area and provides intellectual and career oriented professional education through various disciplines. Known for its excellent infrastructure and facilities for learning, the college has consistently registered impressive academic performance. A gateway to success, the college has set a long-range planning to enlarge and enrich its programs and activities to empower the youth, who aspire to become successful engineers, scientists and managers. The college offers five UG and one PG programme.

Our college is institutional member of ISTE and established ISTE chapter and ISTE student chapter in 2000. Since then, we are promoting various ISTE activities in our college. The institution has achieved milestones such as “Best ISTE Chapter Award” in the year 2012 & 2014, “Best ISTE Staff Advisor Award” in the year 2011 & 2015, “Best ISTE Student Award” in the year 2012, 2013, 2014, 2015, 2016 & 2017 and ‘Best ISTE Secretary Award’ in the year 2013 for Engineering Colleges in Tamil Nadu & Pondicherry Section. The

faculty members work with commitment to maintain the Engineering education standards and adopt best practices. The students are proving their potential and succeeding with University ranks such as 14<sup>th</sup> rank in 1998, 4<sup>th</sup> rank in 1999, 1<sup>st</sup> rank in 2001, 12<sup>th</sup> rank in 2003 and 7<sup>th</sup> rank in 2004 of University of Madras examinations and 3<sup>rd</sup> & 6<sup>th</sup> ranks in 2008, 19<sup>th</sup> rank in 2013, 9<sup>th</sup>, 10<sup>th</sup>, 36<sup>th</sup> & 41<sup>st</sup> ranks in 2014, 1<sup>st</sup>, 15<sup>th</sup> & 25<sup>th</sup> ranks in 2015, 5<sup>th</sup> & 8<sup>th</sup> in 2016, 10<sup>th</sup> rank in 2017 and 42<sup>nd</sup> rank in 2018 under Anna University, Chennai examinations.

## About the Programme

Advent of biomaterials has transfigured health care by making tissue replacement therapy a certainty. History has documented the use of various materials such as 316L stainless steel, Co-Cr, and Titanium alloys as biomaterials to replace lost and diseased structures in the human body. Though these alloys have exceptional reputation with regard to biocompatibility and corrosion resistance, poor tribological properties are main issues that restrict their usage for load bearing applications. Still, there are several features of biomaterials, which require significant improvements, such as osteolysis, mechanical, tribological and corrosion characteristics, biocompatibility, toxicity and life span. So, a broad interdisciplinary research and development attempts are continuing to address these issues. The future becomes uncertain, unless the efforts are made to collaborate, understand and overcome these challenges by focusing towards improving quality of biomaterials through exact selection of technology and thereby avoiding failures during the functional life cycle.

## Scope and objectives

It is extremely multidisciplinary in nature, which includes various disciplines such as Mechanical Engineering, Material Science, Applied Science and Medicine. Nanotechnology, Tribology, Corrosion, Bioceramics, Bioglass, Biomechanics, Biocomposites, Plasma electrolytic oxidation Coatings, Plasma spray coatings, Thin film coatings, Amorphous alloy coatings, Solgel

coating, Electrophoretic deposition (EPD), 3D metal printing, Ceramic 3D printing and their characterization and applications of optimization technique are the some of the key areas that will be focused in this FDP.

This FDP is aimed to explore potential research areas and challenges and opportunities in the field of biomaterials. The main objective of the FDP is to enrich the knowledge of faculty members through interaction with eminent personalities from research labs and academics which will improve the teaching learning process among the faculty members and students and benefits to the society.

## Resource Persons

- Dr.A.Arockiarajan, IIT,Chennai.
- Dr.Geetha Manivasagam, VIT,Vellore.
- Dr.N. Ramesh Babu, NIT, Trichy.
- Dr.B.Subramanian, CECRI, Karaikudi.
- Dr.Deepak K Pattanayak, CECRI, Karaikudi.
- Dr.S.T.ArunaReddy, NAL, Bangalore,
- Dr.A.Siddharthan, Anna University, Chennai.
- Dr.K. Marimuthu, CIT, Coimbatore.
- Dr.N. Rajendran, Anna University, Chennai.
- Dr.S.Manisha Vidyavathy, Anna University Chennai.
- Dr.R.Selvakumar, PSG, Coimbatore.
- Dr.T.M.Sridhar, University of Madras, Chennai.
- Dr Rajesh Ranganathan, CIT, Coimbatore.
- Dr.D.Kalpana, CECRI, Karaikudi.
- Dr.A. Gnanamani,Central Leather Research Institute.
- Dr.D.Gopi, Periyar University, Salem.
- Dr.S.Shankar, Kongu Engineering College, Erode.
- Dr.M.A.Vijayalakshmi, VIT,Vellore.
- Dr.N. Senthilkumar,APEC, Melmaruvathur.
- Mr.Senthilnathan senguttuvan,  
QIAGEN India Pvt.Ltd, New Delhi.

## ADDRESS FOR CORRESPONDENCE

### The organizing secretary,

V.R.S. College of Engineering and Technology,  
Arasur- 607107, Villupuram District.

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