



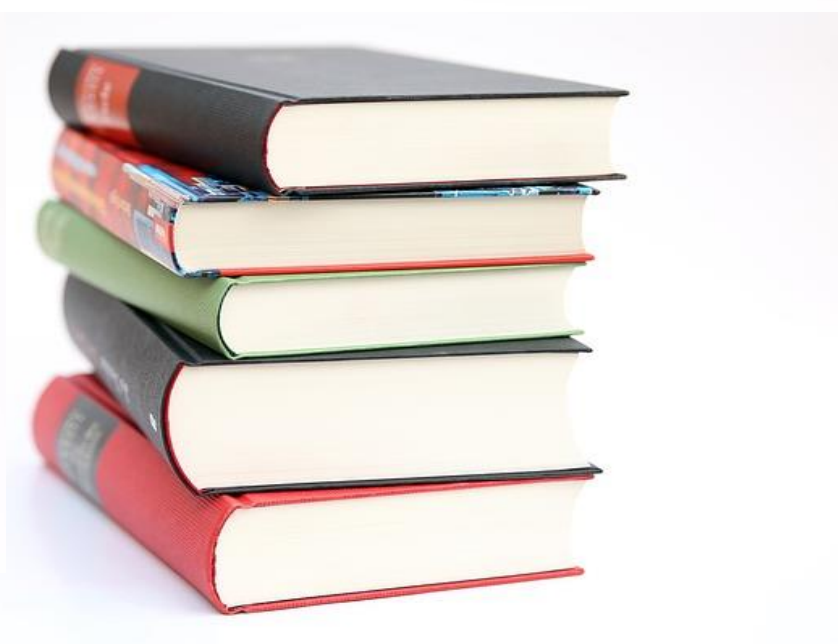
# **VEL TECH HIGH TECH Dr.RANGARAJAN Dr.SAKUNTHALA ENGINEERING COLLEGE**

(Approved by AICTE, Affiliated to Anna University - Chennai, ISO 9001:2008 Certified Institution,  
Accredited by NBA, New Delhi & Accredited by NAAC with 'A' Grade & CGPA of 3.27)

#60, Avadi-Vel Tech Road, Avadi, Chennai - 600062, Tamil Nadu, India.



# **Research and Development**



# **HANDBOOK**

[2018-19]

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## **Faculty Research domain**

### **Department of Bio Technology (BT)**

<b>Faculty Name</b>	<b>Research Domain</b>	<b>Research Domain Code</b>
Dr.D.Yuvaraj	Marine Engineering	RDBT1
Ms. A.Anli Dino		
Dr.Sai	Bio Chemistry	RDBT2
Mr. J.Iyyappan		
Ms. K.Ramya		
Dr.K.H.Smila	Plant Biotechnology	RDBT3
Ms. A.Uma Roobini		
Ms. M.J.T.Nithyananthi		
Mr. R.Gnanasekaran	Environmental Biotechnology	RDBT4

### **Department of Chemical Engineering (CH)**

<b>Faculty Members</b>	<b>Research Domain</b>	<b>Research Domain Code</b>
Dr.R.Rajamani	Process simulation, Applied thermodynamics	RDCH1
Ms.S.Kalaiarasi		
Dr.J.B.Veeramalini	Organic Chemical Technology	RDCH2
Mr.P.Vinosh Muthukumar		
Dr.B. Bharathiraja	Bio-Energy, Environmental Biotechnology	RDCH3
Mr.K.Kadambanathan		
Mr.A.Saravanaraj	Advanced Separation Process, Effluent Treatment	RDCH4
Mr. B. Vinoth Kumar		
Ms. M. Vaishnavi		
Ms. S. AnisFathima		

### Department of Civil Engineering (CE)

Faculty Members	Research Domain	Research Domain Code
Dr.S.Govindasami	Utility of Construction & Demolition Waste Materials, Urban Waste Management.	RDCE1
Mr.R.Thennarasu.		
Mr.J.Madhan Kumar		
Mr.B.Raghul Raj		
Dr.D.Sivakumar	Waste Water Treatment, Water Resources, Environmental Engineering, Flood Management	RDCE2
Mr.M.Manoj Kumar		
Mr.A.James Ruban		
Mr.N.Perumal Raja		
Dr.M.Tamil Selvi	Concrete Technology, Construction Techniques & Rehabilitation of Structures, Soil Mechanics, Earthquake Resistant Structures, Disaster Management	RDCE3
Ms.S.Gayathri		
Mr.N.R.Monish Raaj		
Mr.K.Ganesh Raja		
Dr. M.Tholkapiyan	Fiber Reinforced Concrete, Geo Polymer Concrete, Remote Sensing	RDCE4
Dr.P.B.Sakthivel		
Mr.R.Kalaiselvan		
Mr.S.Ashok Ram		

**Department of CSE, Department of IT & Department of MCA**

<b>Faculty Members</b>	<b>Research Domain</b>	<b>Research Domain</b>
Dr. E. Kamalanaban.	Network Security	RDCIM1
Mr. R. Karthikeyan		
Mrs. S. Durgadevi.		
Mrs. M. Gowthami		
Ms.P.Rekha		
Mr.Gopinath.M		
Dr. S. Veeramalai.	Big Data, Data mining, DBMS.	RDCIM2
Mr. T. Praveen.		
Mr.D. Dhayalan		
Mrs.R. Latha		
Ms.R.Anto Rose		
Mr. V. S. RajKumar.		
Mr. Ganesh.T		
Ms. Jayanthi.A		
Dr. V. Manjula.	Wireless sensor networks.	RDCIM3
Dr. S. Hemalatha		
Mr.M.Sakthivel		
Mr. P. Senthil		
Mr.Vinoth Kumar.P		
Mr. Vishnu Kumar.A	Grid and Cloud Computing	RDCIM4
Mr.Velmurugan.J		
Mr.S.K Manigandan		
Mrs. S. Sageengrana		
Mr. V. Sabapathi.		
Ms. D. Rejees Jenifa		
Dr. M. Malathy	Image and information security.	RDCIM5
Dr. P. Murali		
Mr. P. Karthikeyan.		
Mrs. Queen Mary Vidhya		
Mr.J.Senthil Murugan		
Mrs. K. Sheela Shantha Kumari	IOT	RDCIM6
Mrs. S. Shanmuga Priya		
Mrs. W. Ancy Breen		

Dr.Nirmal Kumar.A	Computer networks	RDCIM7
Mr.R. Danu		
Ms.P. J. Alinmercybha		
Ms. R. Rajasaranya kumari		
Ms. Daya Florance.D		

### Department of EEE and Department of ECE

Faculty Members	Research Domain	Research Domain Code
Mr.K.Sugavanam	Power electronics	RDEE1
Mr.R.Senthil Kumar		
Ms.R.Suguna		
Mr.A.Mohammed Oviaz	Power quality	RDEE2
Mr.S.Sri Krishna Kumar		
Mr.K.Prabaakaran		
Mr.Pradeep Katta	Embedded System Applications	RDEE3
Mrs.K.S.Rani		
Mr. S. Thiyagarajan		
Dr. G. Saravana kumar	Optical Communication, Signal Processing	RDEE4
Mrs. S. Krishna kumari		
Mr. S. Siva Saravana Babu		
Dr. J. Veerappan	Image Processing	RDEE5
Dr. Malleswari.M		
Mr. N. Prabhakaran		
Mrs. R. Lavanya		
Mr. S. Sudhakar		
Ms. D. Gowthami		
Mrs. K. Shanmugapriya		
Dr. V. P. Kolanchinathan	VLSI Integration	RDEE6
Mr. B. Madhusudhana Reddy		

Mr. M. Muni reddy		
Mrs. K. Sindhu priya		
Dr. V. Prithivirajan	RF and Microwave, Antennas, RF MEMS and EMI/EMC	RDEE7
Mrs. S. Jalaja		
Mr. E. Praveen kumar		
Ms. G. Sakana		
Dr. N. D. Bobby		
Mrs. N. Duraichi	Wireless Communication	RDEE8
Mrs. G. S. Sivapriya		
Mrs. J. Thameema begam		
Ms. R. Srividhya		
Mrs. P. Punitha		

### Department of Mechanical Engineering (ME)

<b>Faculty Members</b>	<b>Research Domain</b>	<b>Research Domain Code</b>
Dr.Arumugam.K	Thermal Power Engineering, Internal Combustion Engines, Energy Engineering	RDME1
Dr. Suresh.R		
Mr. Muralidharan.M		
Mr. Manjunathan. R		
Mr. Prakash.E		
Dr.P.Nagashankar	Engineering Design	RDME2
Mr. Palani. R		
Mr. Arun. A		
Mr. Satheeshkumar. S		
Dr. Anbazhagan.R	Computer Aided Design/ Computer Aided Modelling	RDME3
Dr. Sathiyamoorthy		
Mr. Babu T.V.B		
Mr. Aravindh. S		

Mr. Mariyappan. K		
Mr. Seenuvas.S		
Mr. Rajamanickam.S	Manufacturing Engineering & Technology, Production Engineering, Manufacturing System & Management, Computer Integrated Manufacturing	RDME4
Mrs. Gayathri.N		
Mr. Karthick.N		
Mr. Nagendran.N		
Mr.P.Balaji		
Mr. Prasanth. R		

### Department of Science and Humanities

Faculty Members	Research Domain	Research Domain Code
Dr. R. Muralidharan	Nano Composites	RDPY1
Dr. K. Tamilselvi		
Dr. R. Muralidharan	Crystal Growth ( NLO and Ferroelectric Single Crystals )	RDPY2
Mr. S. Raju		
Dr. R. Muralidharan	Magnetic Materials	RDPY3
Dr.K.Alamelumangai		
Dr.S.Thiruvengadam	Thin Films and Solar cells	RDPY4
Mrs. R. Sumalatha		
Dr. R. Muralidharan		
Dr.B.Vijayakumar	Green Chemistry, Organic Chemistry, Catalysis	RDCY1
Dr. Gomathi G	Organometallic Chemistry	RDCY2
Mrs. Anuradha R		
Mrs. Kaviyarasi M		
Mrs. Priya R		
Mrs. Kavitharani T		
Mrs. Dhanalekshmi		
Dr. Brundha B A	Polymer Chemistry And Polymer Composites	RDCY3
Dr.B.Vijayakumar		



**Department of Master of Business Administration (MBA)**

<b>Faculty Members</b>	<b>Research Domain</b>	<b>Research Domain Code</b>
Dr.H.Moideen Batcha	Finance, Marketing, Human Recourses, Operation Management and Entrepreneurship	RDMB1
Dr. Evangeline. E.T		
Dr. Saravana Mahesan.S		
Mrs.Lumina Jule R		

## **R & D Review Schedule (2018-2019)**

**Time:** 3.00 PM to 5.00 PM

**Venue:** R&D Cell/Activity Cell

<b>S. No.</b>	<b>Branch/ Department</b>	<b>R &amp; D Review Dates</b>
1	Department of Biotechnology & Department of Chemical Engineering	<b>28.07.2018</b> , 09.08.2018, <b>21.08.2018</b> , 08.09.2018, <b>24.09.2018</b> , 08.10.2018, <b>29.10.2018</b> , 10.11.2018, <b>24.11.2018</b> , 08.12.2018, <b>24.12.2018</b> ,
2	Department of Civil Engineering	<b>24.07.2018</b> , 04.08.2018, <b>14.08.2018</b> , 04.09.2018, <b>17.09.2018</b> , 03.10.2018, <b>24.10.2018</b> , 02.11.2018, <b>20.11.2018</b> , 04.12.2018, <b>19.12.2018</b>
3	Department of CSE & Department of IT	<b>26.07.2018</b> , 07.08.2018, <b>17.08.2018</b> , 06.09.2018, <b>19.09.2018</b> , 05.10.2018, <b>26.10.2018</b> , 08.11.2018, <b>22.11.2018</b> , 06.12.2018, <b>21.12.2018</b> ,
4	Department of ECE & Department of EEE	<b>25.07.2018</b> , 06.08.2018, <b>16.08.2018</b> , 05.09.2018, <b>18.09.2018</b> , 04.10.2018, <b>25.10.2018</b> , 03.11.2018, <b>21.11.2018</b> , 05.12.2018, <b>20.12.2018</b>
5	Department of Mechanical Engineering	<b>23.07.2018</b> , 03.08.2018, <b>13.08.2018</b> , 03.09.2018, <b>15.09.2018</b> , 01.10.2018, <b>23.10.2018</b> , 01.11.2018, <b>19.11.2018</b> , 03.12.2018, <b>18.12.2018</b>
6	Master of Business Administration & Master of Computer Application	<b>27.07.2018</b> , 08.08.2018, <b>20.08.2018</b> , 07.09.2018, <b>20.09.2018</b> , 06.10.2018, <b>27.10.2018</b> , 09.11.2018, <b>23.11.2018</b> , 07.12.2018, <b>22.12.2018</b>
7	Physics & Chemistry	<b>30.07.2018</b> , 10.08.2018, <b>23.08.2018</b> , 10.09.2018, <b>25.09.2018</b> , 09.10.2018, <b>30.10.2018</b> , 12.11.2018, <b>26.11.2018</b> , 10.12.2018, <b>26.12.2018</b>
8	English & Mathematics	<b>31.07.2018</b> , 11.08.2018, <b>24.08.2018</b> , 11.09.2018, <b>26.09.2018</b> , 10.10.2018, <b>31.10.2018</b> , 13.11.2018, <b>27.11.2018</b> , 11.12.2018, <b>27.12.2018</b>

**R & D Action Plan - Faculty (Research/Project Proposals/Publications/Patents)**

Faculty Name:	Department:	Research Group(Domain)
ID No.:	Designation:	
Years of Experience:	Research Experience:	

**Ongoing Research**

Area of Interest				
As Supervisor(S)/ Joint Supervisor(JS)		Student(s)/Batch	Research/Project Title	Domain
S	Ph.D. Level	1.		
		2.		
		3.		
JS		1.		
		2.		
S	PG Level	1.		
		2.		
		3.		
		4.		
JS		1.		
		2.		
		3.		
		4.		
S	UG Level	1.		
		2.		
		3.		
		4.		
		5.		
JS		1.		
		2.		
		3.		
		4.		
		5.		

**Proposals - Planned to Submit**

Funding Agencies (UGC,AICTE,CSIR, DRDO, DAE, DBT, DOC, DOD, DST,DSIR, ICMR, IMD, ISRO, MOCIT, MOEF, MFPI, MNES, CPRI, MOWR, STARD, STAWS, INSA)	Name of the Scheme	Title of the Research	Target Duration
Others funding Agencies(Specify)			

**Patents - Planned to file**

S.No.	Title of Patent	Name of the Faculty	Remarks
1			
2			

Signature of Faculty

Dean- Research

PRINCIPAL

## **Funded Research**

<b>S. N o.</b>	<b>Principal Investigator &amp; Co-Principal Investigator</b>	<b>Title of Project</b>	<b>Fund Sanctioned (Rs.)</b>	<b>Funding Agency</b>	<b>Status</b>
	Dr.B.Bharathiraja, Associate Professor, Dept. of Chemical Engineering	Microbial production of high value malic acid from low cost crude glycerol	24 Lakhs	DST-SERB	<b>Ongoing (2018-2021)</b>
	Dr.M.Thiruvengadam & Dr.D.Sivakumar Professor, Dept. of Civil Engineering	A study of flow through porous media in converging boundary	15.65 Lakhs	AICTE	Completed (2013-2016)
	Dr.Vijayakumar Associate Professor, Dept. of Chemistry (S&H)	Development of eco-friendly synthetic methods for organic compounds of commercial importance	25 Lakhs	DST-SERB	Completed (2013-2016)

## **Proposals Submitted to AICTE 2017-2018**

<b>S.No</b>	<b>Principal Investigator &amp; Co-Principal Investigator</b>	<b>Title of Project</b>	<b>Budget (Rs.)</b>	<b>Scheme</b>
<b>1.</b>	Dr.H.Moideen Batcha, Professor, Dept.of MBA	A Study on Awareness and Impact of Digital Learning among colleges offering Management Programme in South India	25 Lakhs	Research Promotion Scheme
<b>2.</b>	Dr.M.Malleswari, Professor, Dept.of IT	IOT and Python	5 Lakhs	Short Term Training Program
<b>3.</b>	Dr.M.Tholkapiyan, Professor, Dept.of Civil	Modernization of structural engineering laboratory	20 Lakhs	Modernization & Removal of Obsolescence
<b>4.</b>	Mr.S.D.Dhayalan Asst.Professor, Dept.of MCA	Multi modal blind user interaction for ATM transaction	25 Lakhs	Research Promotion Scheme
<b>5.</b>	Dr. V.Manjula Professor, Dept.of CSE	Migration from RDBMS Technologies To Big Data Technology.	20 Lakhs	Modernization & Removal of Obsolescence
<b>6.</b>	Dr.S.Hemalatha, Asst.Professor, Dept.of CSE	Problem solving and Python Programming	7 Lakhs	Faculty Development Program
<b>7.</b>	Dr.B.Bharathiraja, Associate Professor, Dept. of Chemical Engineering	Eurasia Waste Management Symposium-2018	1.5 Lakhs	Travel Grant Scheme
<b>8.</b>	Dr.D.Yuvaraj, Professor, Dept. of Biotechnology	Up gradation of Bioprocess & Downstream Processing Laboratories	20 Lakhs	Modernization & Removal of Obsolescence
<b>9.</b>	Dr.M.Chandran, Associate Professor, Dept. of Biotechnology	Advanced Techniques on Analytical Instrumentation Methods in Bio-Chemical Engineering	5 Lakhs	Short Term Training Program

<b>10.</b>	Dr.D.Sivakumar, Professor, Dept.of Civil	Validation of Experimental Investigations With Model For The Flow Through Porous Media In Parallel And Vertical Boundaries	25 Lakhs	Research Promotion Scheme
<b>11.</b>	Dr.A.Saravanan Professor, Dept.of ECE	Sustainable wastewater treatment methodologies – An eco friendly approach	7 Lakhs	Faculty Development Program
<b>12.</b>	Dr.M.Tamilselvi, Professor, Dept.of Civil	Special Concrete and Nano Materials	5 Lakhs	Short Term Training Program
<b>13.</b>	Mr.B. Madhusudhana Reddy Assistant Professor, Dept.of ECE	The 9 <sup>th</sup> International Conference on Power Electronics, Machines and Drives – 2018	1.5 Lakhs	Travel Grant Scheme
<b>14.</b>	Dr.S.Govindasami, Professor, Dept.of Civil	Accident free road” through safe road infrastructure and appropriate enforcement.	5 Lakhs	Grant for Organizing Conference

## **Proposals Submitted to External Funding Agencies 2017-18**

<b>S.No</b>	<b>Title of Proposal</b>	<b>Project Value (In Rupees)</b>	<b>Funding Agency</b>	<b>Submitted on</b>	<b>Principal Investigator &amp; Co-Principal Investigator</b>	<b>Dept.</b>
<b>1.</b>	Brain computer interface based epilepsy seizure detection system	39,44,000/-	DST-DBT	31.05.2018	Dr G Saravanakumar Dr V Prithivirajan	ECE
<b>2.</b>	Development of efficient Processing Technology for cooking oil from edible algae	4,100,000	DST-CRG	25.05.2018	Dr B. Bharathiraja	Chemical
<b>3.</b>	Bioremedial approach for removal of cadmium from industrial effluents	22,05,000	DST-SYST-SEED	15.03.2018	Dr A Saravanan Dr D Yuvaraj	Biotech
<b>4.</b>	Development of low loss micro machined phase shifter for phased array antenna applications	23,10,000	DST-SYST-SEED	15.03.2018	Dr V Prithivirajan Dr G Saravanakumar	ECE
<b>5.</b>	Separation of acid soluble and pepsin soluble collagen ASC & PSC from marine fishes.	27,44,000	DST-BIG Scheme	15.02.2018	Dr D Yuvaraj Dr A Saravanan	Biotech
<b>6.</b>	Continuous water for irrigation at dry lands using fiber plastic bed land rainwater harvesting.	27,60,000	DST-BIG Scheme	15.02.2018	Dr J Veerappan	ECE
<b>7.</b>	Industrial waste water treatment using sludge based activated carbons	37,32,000	CSIR	27.11.2017	Dr S Govindasami Dr M Tholkapiyan	CE
<b>8.</b>	Removal toxic arsenic from ground water using low cost adsorbent and it's antimicrobial studies - An eco -friendly approach	24,41,000	DST-EMRF	31.07.2017	Dr A Saravanan Dr B Bharathiraja	Biotech & Chemical
<b>9.</b>	Enhancement and extraction of lovastatin, a cholesterol lowering drug, from selected potent mushrooms using sea	24,80,600	DST-EMRF	31.07.2017	Dr KH Smila Dr D Yuvaraj	Biotech

	weeds as a substrate					
10.	Evaluating the effect of snake venom on systemic lupus erythematosus through animal model	28,73,500	DST-EMRF	31.07.2017	Dr D Yuvaraj Dr A Saravanan	Biotech

## **Research Publications 2017-2018**

### **Department of Biotechnology**

S.No	Title of Paper	Author	Journal Name	Volume/Issue	Year	Indexed
1	Production and purification of pectinase by newly isolated Bacillus megaterium PBIL-2 using agro residue	Mr. J. Iyyappan	International Journal of Modern Science and Technology	2(8): pp. 297-303	2017	Scopus
2	Statistical optimization of L-asparaginase production by E. coli K-12 MTCC 1302	Mr. J. Iyyappan	International Journal of Industrial Engineering	1 (5): pp. 178-182	2017	Scopus
3	Fortification of Common salt with locally available Indian Herbs	Dr. D. Yuvaraj	International Journal of Modern Science and Technology	2 (9): pp. 304-310	2017	Scopus
4	Hybrid synthesis of novel material through acid modification followed ultrasonication to improve adsorption capacity for zinc removal	Dr A Saravanan	Journal of Cleaner Production	172: pp. 92 - 105	2018	Scopus



5	Malic acid production by chemically induced <i>Aspergillus niger</i> MTCC 281 mutant from crude glycerol	Mr. J. Iyyappan Ms Anna Shiny	Bioresource Technology	251: pp. 264-267	2018	Scopus
6	Carbon sphere: Synthesis, characterization and elimination of toxic Cr(VI) ions from aquatic system	Dr A Saravanan	Journal of Industrial and Engineering Chemistry	60: pp. 307 – 320	2018	Scopus
7	Nano-Zero Valent Iron Impregnated Cashew Nut Shell: A Solution to Heavy Metal Contaminated Water / Wastewater	Dr A Saravanan	IET Nanobiotechnology	Doi:10.1049/iet-nbt.2017.0264	2018	Scopus
8	Isolation, Characterization and Purification of Xylanase producing Bacteria from Sea Sediment	Dr A Saravanan	Biocatalysis and Agricultural Biotechnology	13: pp. 299-303	2018	Scopus
9	Significant contribution in biotechnology by the Indian Scientist Professor Ashok Pandey – An Scientometric analysis	Mr. J. Iyyappan	International journal of recent scientific research	9: pp. 23774-23780	2018	Scopus
10	Synthesis of Itaconic acid from agricultural waste using novel <i>Aspergillus niger</i>	Ramakrishnan Gnanasekaran, Balaji Dhandapani, Kannappan Panchamoorthy Gopinath and Jeyaraj	Preparative Biochemistry and Biotechnology	DOI: 10.1080/10826068.2018.1476884	2018	Scopus

		Iyyappan				
<b>Book Chapters</b>						
<b>1.</b>	Sustainability in wastewater treatment in textiles sector	Dr A Saravanan	Textile Science and Clothing Sustainability	DOI.org/10.1007/978-981-10-8491-1_3	March 2018	Scopus (Springer)
<b>2.</b>	Phytoremediation techniques for the removal of dye in wastewater	Mr. J. Iyyappan	Bioremediation : Applications for environmental production and management	DOI.org/10.1007/978-981-10-7485-1_12	March 2018	Scopus (Springer)

### Department of Chemical Engineering

S.No	Title of Paper	Author	Journal Name	Volume/Issue	Month/Year	Indexed
<b>1.</b>	Malic acid production by chemically induced Aspergillus niger MTCC 281 mutant from crude glycerol	J. Iyyappana, B. Bharathirajaa	Bioresource Technology	251 (2018) 264–267	2018	Scopus
<b>2.</b>	Biodiesel production from microbial oil derived from wood isolate Trichoderma reesei	B. Bharathiraja, D. Yuvaraj	Bioresource Technology	239 (2017) 538–541	2007	Scopus
<b>3.</b>	Simultaneous saccharification and fermentation of woody stem Prosopis juliflora by	B. Bharathiraja	Int. J. Materials and Product Technology	Vol. 55, Nos. 1/2/3, 2017	2017	Scopus

	Zymomonas mobilis for the production of cellulosic ethanol					
4.	Prosopis juliflora Bark - An Alternate Feedstock in the Production of Bioethanol using Thermo Tolerant Yeast Kluyveromyces marxianus	B. Bharathiraja	Biosciences Biotechnology Research Asia	Vol. 14(3), pp. 945-951	2018	Scopus

#### **Book Chapters – Dr. B. Bharathiraja**

##### **1. “Phytoremediation Techniques for the Removal of Dye in Wastewater”**

Springer Nature Singapore Pte Ltd. 2018, S. J. Varjani et al. (eds.), *Bioremediation: Applications for Environmental Protection and Management*, Energy, Environment, and Sustainability

##### **2. “Utilization of Crude Glycerol from Biodiesel Industry for the Production of Value-Added Bioproducts”**

Springer Nature Singapore Pte Ltd. 2018, R. R. Singhanian et al. (eds.), *Waste to Wealth*, Energy, Environment

##### **3. “Calcium Oxide Nanoparticles as An Effective Filtration Aid for Purification of Vehicle Gas Exhaust”**

Springer Nature Singapore Pte Ltd. 2018, D. K. Srivastava et al. (eds.), *Advances in Internal Combustion Engine Research*, Energy, Environment, and Sustainability

##### **4. “Synthesis of Value Added Biomimetic Material of Hydroxyapatite Using Aqueous Calcareous Fish Wastes”**

Springer Nature Singapore Pte Ltd. 2018, R. R. Singhanian et al. (eds.), *Waste to Wealth*, Energy, Environment

5. **Bioprocess Engineering for Green Environment**, Description: Boca Raton : Taylor & Francis, 2018. | Includes bibliographical references and index, Bioprocessing of biofuels for Green and Clean Environment pp-237-249.

#### Department of Civil Engineering

S.No.	Title of Paper	Author	Journal Name	Volume/Issue	Month/Year	Indexed
1.	Behavior and impact of concrete deck slab, shear connector and steel beam in composite bridge	A.Mohan and M.Tholkapiyan	International Journal of Pure and Applied Mathematics	Vol.115 No. 7, pp. 247-255	2017	Scopus
2.	Sustainable approach on reuse of waste materials in construction	A.Mohan and M.Tholkapiyan	International Journal of Pure and Applied Mathematics	Vol.115 No. 7 2017, pp. 337-342	2017	Scopus
3.	Assessment of energy absorption of steel, polypropylene and hybrid fibre reinforced concrete prisms using graph software	Dr Tamilselvi M	International Journal of Civil Engineering and Technology	Vol.8, Issue 10, pp. 1269-1276.	October 2017	Scopus
4.	Concrete arranged by means of fine particles from beach shells	Dr Tamilselvi M	International Journal of Civil Engineering and Technology	Vol.8, Issue 10, pp. 1259-1264.	October 2017	Scopus
5.	Replacement of steel slag as Coarse aggregates in concrete mixture Leads	A.Mohan M.Tholkappiyan	International Journal of Advanced Research Trends in Engineering	Vol.4, Special Issue.12	April 2018	Scopus

	to heavy density of concrete		and Technology			
6.	Behavior of shear wall in earth quake Resistant structures	M. Tholkapiyan, A. Mohan	International Journal of Advanced Research Trends in Engineering and Technology	Vol.5, Special Issue12,	April 2018	Scopus
7.	Experimental study on Geopolymer concrete with Glass fiber	M. Tholkapiyan, A. Mohan	International Journal of Advanced Research Trends in Engineering and Technology	Vol.5, Special Issue 12,	April 2018	Scopus
8.	Experimental Investigation on Utilization of Fly ash and Pond ash with self-compacting concrete	A. Mohan <sup>1</sup> , M. Tholkapiyan <sup>2</sup> , G. Rushitha sai <sup>3</sup> , G. Yogesh Parri <sup>4</sup>	International Journal of Advanced Research Trends in Engineering and Technology	Vol.5, Special Issue 12,	April 2018	Scopus

### Department of Computer science and Engineering

S.No.	Title of Paper	Author	Journal Name	Volume/Issue	Month/Year	Indexed
1	Design of optimal Elliptic Curve Cryptography by using partial parallel shifting multiplier with parallel complementary	S. Hemalatha	International journal of Computer Systems, Science and Engineering	Vol.32, Issue5, pp. 337-351	January 2018	Scopus

### Department of Information Technology

S.No	Title of Paper	Author	Journal Name	Volume/Issue	Month / Year	Indexed
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1.	Efficient performance upsurge in live migration with downturn in the migration time and downtime	A.Vishnu Kumar, Dr.A.Nirmal Kumar	Cluster Computing	P 1-11,	2018	Scopus
2.	A Systematic Survey on Multidimensional Spinning Cube of Potential Doom Resource Utilization in Network Visualization	Dr.A.Nirmal Kumar	Journal of Chemical and Pharmaceutical Sciences	Special Issue no. 6, pp. 183-187,2017	2017	Scopus
3.	An Efficient Medical Diagnosis System based on Artificial Neural Networks to Minimize Misdiagnosis	Dr.A.Nirmal Kumar	International Journal of Pure and Applied Mathematics	Vol. 117, no. 21, pp. 943-946,2018	2018	Scopus
4.	Suspicious Motion Detection And Tracking Based On Histogram	Nirmal kumar, A, Daya Florance, D Jayanthi A	Journal of Scientific and Industrial Research	Accepted	-	Scopus

### Department of Electronics & Communication Engineering

S.No.	Title of Paper	Author	Journal Name	Volume / Issue	Month / Year	Indexed
1.	Analysis of Various Cluster Algorithms Based On Flying Insect Wing Beat Sounds and Their Spatio-Temporal Features	S.Arif Abdul Rahuman, Dr.J.Veerappan	International Research Journal of Engineering And Technology (IRJET)	Vol: 04, Issue: 12, pp. 595-601.	Dec 2017.	-
2.	Comparative analysis of eye detection and tracking algorithm for surveillance	Madhusudhana Reddy.B, Praveen Kumar.E, Sakana G	International journal of pure and applied mathematics	Vol. 117 22, 71-75.	-	Scopus

3.	MIMO –WSN implementation in geriatric care unit through MASTS and successive convex approximation algorithm	Duraichi.N, Suganthi M	Biomedical research	S243-S247.	-	-
4.	Low-cost SPLL-based electrical faults identification for three – phase squirrel cage induction motor using handheld Doppler radar signal analysis	Madhusudhana Reddy, Umamaheswari Sethurajan, Meganathan Deivasigamani	The Institution of Engineering and Technology	Vol.11, Issue 7. Pp.1205-1216	-	Scopus
5.	Early Stage Diagnosis of Disease In All Parts of Body using Iris Image	Lavanya R, Sakana G , Praveen kumar E, Gowdhami D, Sivasaravanababu S	International Journal of Pure and Applied Mathematics	Vol. 119 No. 15 , 189-193	June 2018	Scopus
6.	Bronchogenic Carcinoma Identification With X-Ray Image Using Fuzzy C Means	Sivasaravanababu S, Madhusudhana Reddy Barusu, Siva Priya G.S, Punitha.P, Shanmuga Priya.K	International Journal of Pure and Applied Mathematics	Vol. 119 No. 15 , 727-730	June 2018	Scopus

## Department of Electrical & Electronics Engineering

S.No .	Title of Paper	Author	Journal Name	Volume / Issue	Month / Year	Indexed
1.	Rfid Based Hybrid Vehicle Smart Charging System With Solar Energy	Mr.R.Ezhilarasu	International Journal For Scientific Research & Development(IJSD)	Vol.5,Issue 4, pp.685-690	June 2017.	Google Scholar
2.	Design And Optimization Of A C-Type Harmonic Filter For Multi Dwelling Units	Mr.Pradeep Katta	Journal of Chemical And Pharmaceutical Sciences(JCHPS)	Special Issue 9.	June 2017.	Scopus
3.	Cardiac Arrest Aiding And Monitoring System	Mr.S.Sri Krishna Kumar	Journal of Chemical And Pharmaceutical Sciences(JCHPS)	Special Issue 9.	June 2017.	Scopus
4.	Automated Irrigation System Based On Renewable Energy	Mr.S.Sri Krishna Kumar	Journal Of Chemical And Pharmaceutical Sciences(JCHPS)	Special Issue 9,	June 2017.	Scopus
5.	Advanced Military Robot For Land Mine Detection And Surveillance	Mr.K R Sugavanam	Journal of Chemical And Pharmaceutical Sciences(JCHPS)	Special Issue 9,	June 2017.	Scopus
6.	Infant Monitoring System & Theft Alert	Mr.Prabaakaran K	International Journal For Scientific Research & Development(IJSD)	Vol. 5, Issue 05.	Jul 2017	Google Scholar
7.	Alleviating Torque Ripple	Mr.Mohammed Ovaiz.A	International Journal of Control	Vol.10,Number 36,	Aug 2017	Scopus



	And Speed Control Of Bldc Motor By Back Emf Detection Using Fuzzy Logic Controller		Theory And Applications(IJCT A)			
8.	Improvement Of Power Quality In A Distribution System Using Upfc With Simulated Annealing Algorithm	Mr.R Senthil Kumar, Mr.S.Harshavardhan Naidu, Mr.K R Sugavanam	International Journal of Pure and Applied Mathematics	Special Issue, Vol. 115 No.7, pp.275-279	Aug 2017	Scopus
9.	Gsm Based Real Time Disaster Rescue System	Mr.R Senthil Kumar, Mr.S.Harshavardhan Naidu, Mr.K R Sugavanam	International Journal of Pure and Applied Mathematics	Special Issue, Vol.115 No.7, pp.293-297	Aug 2017	Scopus
10.	Implementation Of Bacterial Foraging Algorithm And Gravitational Search Algorithm For Voltage Profile Enhancement With Loss Minimization	Mr.Prabaakaran K, Mr.S.Harshavardhan Naidu, Mr.K R Sugavanam, Mr.R Senthil Kumar,	International Journal of Pure and Applied Mathematics	Special Issue, Vol.115 No.7, pp.331-336	Aug 2017	Scopus
11.	Pv Fed By Negative Output Super-Lift Luo Converter Using Improved P&O Mppt	Mrs.Suguna.R Mr.Mutharasan A Mr.Rameshkumar T Mr.K R Sugavanam Mr.R Senthil Kumar	International Journal of Pure and Applied Mathematics	Special Issue, Vol.115 No.8, pp.79-84	Aug 2017	Scopus
12.	Implementation Of Modified	Mr.R Senthil Kumar	International Journal of Pure and	Special Issue, Vol.115	Aug	Scopus

	Sepic Converter Topology For Solar Powered Electrostatic Precipitator	Mr.Mohammed Ovaiz.A Mr.K R Sugavanam	Applied Mathematics	No.8, pp. 239-243	2017	
13	Modeling And Analysis of Three Phase Multiple Output Inverter	Mr.S.Sri Krishna Kumar Mr.R Senthil Kumar Mr.K R Sugavanam	International Journal of Pure and Applied Mathematics	Special Issue, Vol.115 No.8, pp.281-285	Aug 2017	Scopus
14	The Power Quality Analysis In Gearbox Using Vibration Sensor	Mr.Mutharasan A	International Journal of Pure and Applied Mathematics	Special Issue, Vol.117 No.16, pp. 695-704	Aug 2017	Scopus

### Department of Mechanical Engineering

S.No.	Title of Paper	Author	Journal Name	Volume, Issue and Page number	Month/Year	Indexed
1	Effects of nano particles on the microstructure of LM25 (A356) alloy manufactured by squeeze casting	N. Nagendran, N. Gayathri, V.K. Shanmuganathan, S. Praveen	Applied mechanics and materials	Vol. 867, pp 64-70.	July 2017	Scopus
2	Energy Saving Method For Operating CNC Machine Door	Gayathri N. Shanmuganathan V.K. Karthigayan K.G. and Manesh Kumar S.	Applied mechanics and materials	Vol. 867, pp. 272-279.	July 2017	Scopus

3	Wear analysis of LM25 (A356) alloy manufactured by squeeze casting	N. Nagendran , V.K.Shanmuganathan, N. Gayathri, G. Dinesh Ram	Applied mechanics and materials	Vol. 867, pp. 157-164.	July 2017	Scopus
4	Improving The Depth Of Number Marking On Engine Cylinder Block By Hydraulic Power System	V.Sathyamoorthy G. Thirumalaikumar S.Karthick R.Anbazhagan and R. Suresh	International Journal of Pure and Applied Mathematics	Vol.114, No. 9.	2017	Scopus
5	Performance And Emission Characteristics Of Ci Engine Fueled With 100% Palm Biodiesel: An Experimental Study	K. Arumugam , V. Sathiyamoorthy , R.Anbazhagan and R.Suresh	International Journal of Pure and Applied Mathematics	Vol.115 No. 8 pp. 265-273.	2017	Scopus
6	A Study on Automated Tool Wear Monitoring By Using IOT	Suresh. R, Gopinath s, Renga Guru. M, Santhosh. T	International Journal of Pure and Applied Mathematics	Vol.115 No. 6 pp. 343-349.	2017	Scopus
7	Metal removal from industrial waste water by using natural adsorbents	R. Anbazhagan, R. Divya, Anjana Vijayan, M. Anitha and P. Thulasi Devi	Eco. Env. & Cons.	-	2018	Scopus
8	Mechanical and Micro	R. Anbazhagan, G.Rekka, R.Kalidoss,	TAGA	Vol.14, pp.	2018	SCI

	structural analysis of Al7050-SiC Composite prepared by Stir Casting Method	M. Nantha kumar and M. Sanjeev	Journal	1282-1290.		
9	CFD Analysis of Aerodynamic Drag Force	Suresh.R, Arumugam.K, Anbazhagan.R and Sathiyamoorthy.V	TAGA Journal	Vol.14, pp. 1291-1303.	2018	SCI
10	A Critical Review on Diesel Engine Performance and Emissions Using Tyre Pyrolysis Oil [TPO] As Blend	Suresh.R, Arumugam.K, Anbazhagan.R, Sathiyamoorthy.V and Nagasankar.P	TAGA Journal	Vol.14, pp. 1593-1603.	2018	SCI
11	An Approach For Exhaust Gas Energy Recovery And Performance Improvement Of A Di-Diesel Engine With Heat Exchanger	Arumugam.K, Suresh.R, Anbazhagan.R, Sathiyamoorthy.V and Nagasankar.P	TAGA Journal	-	2018	SCI
12	Experimental Analysis On Single Slope Double Basin Solar Assisted Still Coupled With Heating	Arumugam.K, Anbazhagan.R, Suresh.R, Sathiyamoorthy.V and Nagasankar.P	TAGA Journal	Vol.14, pp. 2305-2311	2018	SCI

	Coil For Desalination Of Brackish Water					
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## Physics

S.No .	Title of Paper	Author	Journal Name	Volume/Issue	Month/Year	Indexed
1	Deposition and characterization of spray pyrolysed p-type $\text{Cu}_2\text{SnS}_3$ thin film for potential absorber layer of solar cell	S.Thiruvankadam et al.,	Physica B: Physics of Condensed Matter	Vol.538, 1, pp. 8-12	June 2018	Scopus
2	Growth and characterization of novel semi organic nonlinear optical urea lead acetate single crystal by solution growth technique	V.Chithambaram	Journal of Materials Science: Materials in Electronics ISSN 0957-4522	Vol.29 Number 6, pp. 5009-5013	2018	Scopus
3	Investigation of non - linear optical tyrosine cadmium chloride single crystals grown by solution growth technique	Kothandaraman, V. Chithambaram	Journal of Materials Science: Materials in Electronics ISSN 0957-4522	pp. 1-7		Scopus
4	Growth and characterization of novel nonlinear optical l-valine	V. Chithambaram	International Journal of Pure and Applied Mathematics	Vol.115 No. 7 pp. 281-285	2017	Scopus

	zinc Chloride single crystal grown by Slow evaporation technique					
5	Investigation of optical, mechanical and dielectric studies of urea ammonium Sulphate (UAS) crystal for non-linear optical (NLO) applications	V.Chithambaram	International Journal of Pure and Applied Mathematics	Vol.115 No. 7 287-291	2017	Scopus
6	Impedance and modulus spectroscopy studies of cobalt substituted strontium hexaferrite ceramics	K. Alamelu Mangai, K. Tamizh Selvi, M. Priya P. Sureshkumar, M. Rathnakumari	Journal of Materials Science Materials in Electronics	Vol.28, 7, pp. 1-10	2017	Scopus
7	Chemical Synthesis and characterization of thorium incorporated yttria ceria-stabilized zirconia nanoparticles for high temperature applications	Dr.B.Vijayakumar	Digest journal of nanomaterials and Biostructures	Vol.12, Issue 4, pp. 973-979	October-December 2017,	-

## English

S.No.	Title of Paper	Author	Journal Name	Volume/Issue	Month/Year	Indexed
1	The relevance of language laboratory to improve communicative English - A study	M.Rajendran, Mr. T .Rajeshkanna, Premkumar	International Research Journal of Education and Information management	Vol 6 (1),	January 2018	Scopus
2	Women in the novels and short stories of Raja Rao – A study	M.Rajendran, T.Rajeshkanna, Premkumar	Indian journal of education and information management	Vol 6 (1),	January 2018	Scopus

## Mathematics

S.No	Title of Paper	Author	Journal Name	Volume/Issue	Month/Year	Indexed
1	Probabilistic Analysis of Manpower Levels Affecting Business With the Introduction of Location phase together with an Inspection period before carrying out Recruitment	C.Mohan, et al	International Journal of Pure and Applied Mathematics	Vol.116, No.23 579-584.	2017	Scopus
2	The Analysis of Manpower Affecting Marketing with the introduction detection location phase for review and Recruitment	C.Mohan, et al	International Journal of Pure and Applied Mathematics	Vol.116, No.23 2017 93 - 97	2017	Scopus
3	The one Vertex Union and Disjoint Union of Paths are Prime Graph	P.Selvaraj , C.Mohan, et al	International Journal of Pure and Applied Mathematics	Vol.116, No.23 2017 9 -13.17	2017	Scopus
4	Crisis rate of	C.Mohan,	International	Vol.116,	2017	Scopus

	Analysis of Manufacturing concern subjected to Failure of Machines and Production	et al	Journal of Pure and Applied Mathematics	No.23 2017 87-92		
5	One Vertex Graceful Labelling : Disjoint Union of Cycles Actinias and Cycle with Path Graph	P.Selvaraj , C.Mohan, et al	International Journal of Pure and Applied Mathematics	Vol.116, No.23 2017 567 - 578.	2017	Scopus

### MBA

S.No.	Authors	Title	Name of Journal	Volume/ Issue	Month/ Year	Indexed
1	Dr. H.Moideen Batcha Dr.K.Ravishankar	Exploring the Impact of Organization Culture on Employee Work Performance using Structural Equation Modeling (SEM) Approach	International Journal of Applied Business and Economic Research	Vol.15 Is,No 16, pp. 483-493	Jun 2017	Scopus & UGC Listed Journal
2	Dr.K.Ravishankar Dr. H.Moideen Batcha	An Empirical study on Millennials Perception towards Usage and Ban of Global Soft Drinks in Tamilnadu after Jallikkattu Protest	Shanlax International Journal of Commerce	Vol.5 Is.No ,pp 132-1411,	Aug 2017	UGC Listed Journal
3	Dr.K.RavishankarDr . H.Moideen Batcha	A Study on Potential market of Free Launcher Distribution Channel with Special reference to MTS Chennai	International Journal for Science and Advance Research in Technology	Vol.3 Is.No 8, pp 150-157	Aug 2017,	UGC Listed Journal



4	Dr.K.Ravishankar Dr. H.Moideen Batcha	A Study on Identification and analysis of sick units and development of Coir Cluster with reference to MSME – DI Chennai	International Journal for Science and Advance Research in Technology	Vol.3 Is.No 8, PP 144-149	Aug 2017,	UGC Listed Journal
5	Dr.K.Ravishankar Dr. H.Moideen Batcha	Comparative Organizational Climate of Permanent and Temporary Workers in Construction Industry	International Journal of Civil Engineering and Technology	Vol.8 Is.No 9, ,PP 43-52	Sep 2017	Scopus
6	Dr.H.Moideen Batcha	A Multidimensional study of Consumer Shopping Behaviour in Malls	Shanlax International Journal of Management	Vol.5 Is.No 4, pp 178-182	Mar 2018,	UGC Listed Journal
7	Mrs.T.Sirisha	The role of virtual reality and augmented reality in contemporary business	Shanlax International Journal of Management	Vol.5 Is.No 4, pp 190-193	Mar 2018,	UGC Listed Journal
8	Mrs.T.Sirisha	Impact of Demonetization on Micro, Small and Medium Scale(MSME) Women Entrepreneurs-Kanchipuram District	Shanlax International Journal of Management	Vol.5 Is.No 4, pp. 232-235	Mar 2018,	UGC Listed Journal
9	Dr.Saravana Mahesan	Green Marketing for sustainable development	Shanlax International Journal of Management	Vol.5 Is.No 4, pp 183-189.	Mar 2018,	UGC Listed Journal

10	Dr.Evangeline.E.T	Factors Affecting Purchase Decision of Men's Shirts in Showrooms – A Study	Shanlax International Journal of Management	Vol.5 Is.No 4, , PP 17-21.	Mar 2018	UGC Listed Journal
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## MCA

S.No	Title of Paper	Author	Journal Name	Volume/Issue	Month/Year	Indexed
1	Hybrid Scheduling Queue Model for Efficient Resource Allocation in Cloud Data Centers	S. K. Manigandan and S. Manjula	Journal of Computational and Theoretical Nanoscience	Vol.15, Number 3, pp. 1038-1043(6)	March 2018	Scopus, Anna University Annexure-I
2	Trust based profile matching secure social network	D.Dhayalan, B.Balaji & A.Francina	Advances in Computational Sciences and Technology	Vol.10, Number 6 pp. 1885-1892	2017	Google Scholar
3	Resilient identity for blind users	D.Dhayalan, Gunaseelan S, & Muzhumathi	International Journal of Computer Trends and Technology (IJCTT)	Vol. 48, Number 1 June 2017, pp-27-31	2017	Scopus, Thomson Reuters

## **List of articles accepted for publication in journals (Scopus Indexed)**

### **Department of Biotechnology (BT)**

<b>S.No.</b>	<b>Title of Paper</b>	<b>Author(s)</b>
1	Itaconic Acid Production By Novel Aspergillus Niveus In Solid State Fermentation Using Agrowastes	R. Gnanasekaran, P. Saranya, S. Yuvashree, D. Yuvaraj, A. Saravanan , K.H. Smila & A. Anli Dino
2	Design and Implementation of Needleless Glucose Level Monitoring and Data sharing using NIR Spectroscopy Technique and GSM Module	M.J.T. Nithyananthi, M.K. Akash Prabhu, R. Kishore Kumar, A. Uma Roobini, R. Gnanasekaran & D. Yuvaraj
3	Sustained Release of Nanoformulation of Diethyl Carbamazine (Dec) For filariasis - A Review	D. Yuvaraj, P. Jai Preethi , A. Saravanan & K.H. Smila

### **Department of Chemical Engineering (CH)**

<b>S.No.</b>	<b>Title of Paper</b>	<b>Author(s)</b>
1	Activated Carbon Production from Waste Biomass	Rajamani. R, Vinoth kumar.B, Sujith .A & Karthick. E
2	Comparative biosorption capacity of Copper and Chromium by Bacillus Cereus	Saravana Raj A, Vinosh Muthukumar P, Bharathiraja B & Priya M

### **Department of Civil Engineering (CE)**

<b>S.No.</b>	<b>Title of Paper</b>	<b>Author(s)</b>
1.	A Study on adsorption capacity of activated carbons through Analysis of variance (ANOVA)	S. Govindasami , D. Sivakumar & P B Sakthivel
2.	Ground Water Quality Assessment in Ambattur Industrial Estate	D. Sivakumar, S. Govindasami, D. Arun & T. Durai Arasu
3.	Stabilization of Bitumen Using Crumb Rubber and Glass Powder	S.Gayathri, R.Kalaiselvan, J.Robin, U. Ravikumar & A.Prince
4.	Experimental Study on Partial Replacement of Clayey Soil with Rice Husk on Side Skew Bricks	A.Mohan & M.Tholkapiyan
5.	Experimental Study on Partial Replacement of Fly Ash with GGBF and Glass Powder in Fly Ash Brick	N.R.Monish Raaj
6.	An Experimental Investigation on Influence of Replacement Level of Recycled Aggregate on the Properties of No – Fines Concrete	A.Mohan & M.Tholkapiyyan
7.	An Experimental Study on Fibre Reinforced	J Asanammal Saral , S Gayathri, M

	Geopolymer Concrete Composites- Glass Fibre, Copper Slag	Tamilselvi & B Raghul Raj
8.	Experimental Study of PVC Modified Bitumen	R.Thennarasu, A.Mohan & M.Tholkapiyyan
9.	Corrosion Prevention on Coated Rebars and Fiber in R.C Slabs	Dr.Tamil Selvi.M. Hathari Evangelin.J & Gayathri.S
10.	Strengthening of Reinforced Concrete Beam Elements by wrapping with GFRP	Dr. Tamil Selvi, Dr. P.B. Sakthivel & R. PoornimaGandhi
11.	Strength Assessment of Polypropylene Fibre Reinforced Concrete (PPFRC)	S. Govindasami, Sakthivel, P.B & R. Harish
12.	Experimental study of using bentonite concrete with and without Crumbed steel fiber in conventional concrete.	R.Kalaiselvan, J.Madhan kumar & Raghul raj.
13.	Experimental Study on Strength of Concrete Partially Replacing chiton shell As Fine Aggregate	J. Madhan Kumar, R.Kalaiselvan vRaghul raj
14.	Ground water Quality Assessment for Irrigation in Madhavaram	D. Sivakumar, S. Govindasami, B. Raghul Raj, C. Gowdham & V.M. Ragothaman

### Department of Computer Science and Engineering (CSE)

S.No.	Title of Paper	Author(s)
1.	An IOT Based Human Deduction System In Queueing Sector	Mrs. S. Shanmuga Priya , Mrs.W.Ancy Breen , P.Janani & Rami Reddy Likitha
2.	IOT Based Smart Irrigation and Anti - Flooding System Using Raspberry Pi	W.Ancy Breen,S. Shanmuga Priya, Divya Priya.R & Prudvi Saidurgamadhavipriya
3.	Predicting the Stock Market by Using the Clustering Algorithm In Big Data	Veeramalai Sankaradass, T.Praveen, S.Padmavathy & R.Bharathi
4.	Train Ticket Inspection and Validation Using Biometrics	Ms.M.Gowthami Mr. P.Karthikeyan, P. Kishore & R. Arun Aravinth
5.	Girls Fight Back: User Behavior Pattern Analysis for Girls Protective Mechanism with Emergency Communication & Unlocking System	M.Queen Mary Vidya , V. Charles Prabu ,J. Yuvaraj & G.Deepakkumar

<b>6.</b>	Secured Voting Using Finger Print Authentication	R.Danu,R .Karthik & M.Gokul
<b>7.</b>	Reduction of Irrelevant Document Retrieval	Dr. S. Veeramalai, T.Praveen,S. Aishwarya & M.Rameela
<b>8.</b>	Providing Secure Data Transmission in Public Infrastructure Cloud	Mrs.P.K.Sheela Shantha Kumari, Mrs.W.Ancy Breen, M.Gayathri & E.Anushya
<b>9.</b>	Home Assistance Robotics	Mrs.Sheela Shantha Kumari.P.K, Dr.Manjula.V, Nithin Vishnu.S & Vinayak Kumar.D
<b>10.</b>	Prevention and Detection of Cloak and Dagger Attack	Mrs.Durga Devi S, Ms. Gowthami M , Jyothsana LP & Tejaswini G
<b>11.</b>	Advanced Orchestrating Bulk Data Transfer Across Geo-Distributed Data centres	Mrs. Sageengrana, Dr. Malathy, Gowtham.S & Aravind Raja.L
<b>12.</b>	Reducing the Effectiveness of Gray-Hole Attack in Manet	W.Ancy Breen , S.Durga Devi, E.Sushmitha & V.Suveetha
<b>13.</b>	Image Source Detection Based On Social Network Provenance	Ms.Alin Mercybha.P.J , Prabhakaran.R & Harish Kumar.N
<b>14.</b>	Survey on Effective Quarantine System for Virus Scanning	P.Karthikeyan, K. MohanRaj & M.Kamesh
<b>15.</b>	Memory Control in Virtual Machines	Ms.D.Rejees Jenifa, Mrs. S.Sageengrana, A. Revathy & B.Priyadharshini
<b>16.</b>	Temporal Token based Authentication for IP Trace back	P. J. Alin Mercy Bha, D. Jai Shree & R. Chandni
<b>17.</b>	Mobile App Authentication to Improve Security in Android Devices	Dr.V.Manjula, Mrs.P.K.SheelaShantha Kumari, K.Gokul & R.Naveenkumar
<b>18.</b>	Detection and Avoidance of Greedy Behavior Nodes in Vehicular Environments	Mr.P.Senthil, Dr. S.Selvakumar, Ms.S.R.Preethi & Ms.G.Hemalatha
<b>19.</b>	Inter-Contact Routing for using Mobile phone	Dr.M.Malathy, P.J.Alin Mercybha

	system	J.JebastyKiruba & M.Benisha
20.	Mobile Navigation in Emergency Environment Using Wireless Sensor Networks	Ms.R.Rajasaranyakumari, Mr.R.Karthikeyan, M.Bakyalakshmi, R.Geethanjali & K.Priyadharshini
21.	Cost Effective Mapping between user And Seller Based On Multistage Bargaining	M.Queen Mary Vidya, P.Karthikeyan, K.Srilekha & J.Rekha
22.	Enhancement in Firewall Design and Verification	R.Danu, S.Jackson & C.Haribalakrishnan
23.	An Id-Based Aggregate Signature Scheme Using Repudiation Model for Wireless Sensor Networks	Dr.E. Kamalanaban, S. Durga Devi, A. Kateeja Begam & S. Yogamathi
24.	Two Way Authentication Process using M-Transaction	D. Ramachandran & U.Manikandan
25.	Automated Employee Effort Tracking System Using Data Mining	Mrs.S.Sageengrana, Ms.Rajees Jenifa, K.Praveen, T.Praveen Kumar & S.Thivagar
26.	Effective Accident Avoidance with Multi Zone Secured Implementation	Dr.E.Kamalanaban, V.Sabapathi, S.Vincent Helmen & A.Mukundan
27.	A Study of Recent Trends and Technologies on Open stack Cloud Computing	V.Sabapathi, E.Kamalanaban, R.Vishwath & K.N.Lokesh
28.	Analyzing Real Time Health Care Data for Disease Prediction Systems	Mr.R.Karthikeyan, Dr.E.Kamalanaban, R.Pragatheeswaran & P.Praveen Kumar
29.	Implementation of Effective crop Selection by using the Random Forest Algorithm	R.Karthikeyan, M.Gowthami, A.Abhishek & P.Karthikeyan
30.	A Secured Frame work for Content-Based Retrieval in Cloud Image repositories	Dr.E.Kamalanaban, Mr.R.Karthikeyan, A.Sridhar & S.Santhosh kumar
31.	Image Retrieval Designed For Network Big Data	Mr.V.S.Raj Kumar & S. Lavanya
32.	Medicine Box: Doctor's prescription recognition using deep machine learning	Dr.E.Kamalanaban, M.Gopinath & S.Premkumar

### Department of Electronics and Communication Engineering (ECE)

S.No.	Title of Paper	Author(s)
1.	Detection of Brain Stages Using BCI with EEG In Arduino	G.Sakana, E.Praveen Kumar, R.Lavanya, D. Gowdhami
2.	CPW based band pass filter using DGS for ISBM band applications	Mrs. S. Jalaja, Dr. V. Prithivirajan, K. Gajalakshimi, S. Chitra, R. Nithya
3.	Mammogram Breast Cancer Detection Using Segmentation Based Fractal Texture Analysis and Hybrid Methods	Dr G Saravana Kumar, Ms DGowdhami, Mr S Thiagarajan
4.	Hedonic Regression Model for Heterogeneous Wireless Networks	K.Shanmuga Priya, R.Srividhya, K.Sindhu Priya , G.S Siva priya.S
5.	Implementation of optical Character Recognition Using Raspberry Pi for visually challenged Person	S.Thiyagarajan, Dr.G.Saravana Kumar, E.Praveen Kumar, G.Sakana
6.	Performance and Energy Improvement in Data Fusion Centre Using MIMO in WSN	Mrs.N.Duraichi, Mrs.K.Sindhu Priya, Sumathi.B, Aishwariya.S
7.	River Extraction from High Resolution Sar Images Using Deep Learning Algorithm	Punitha P, Sivapriya G S, Sindhu Priya K, Gowthami D, Shanmuga Priya J
8.	Underwater Wireless Communication Links In The Presence of Different Air Bubbles	E. Praveen Kumar, G.Sakana, D.Gowdhami, R. Lavanya
9.	Wireless Power Transfer For Medical Systems using IOT	K.Sindhu priya, J.Thameema Begum, K.Shanmuga priya
10.	DGS based micro- strip filter for ISM band Applications	Dr. V. Prithivirajan, Mrs. S. Jalaja, K. Divya, N. Juhitha, T.V.L.S. Sudhasahithi
11.	Analysing Driving Pattern for Automatic Driver License Issuing System	Dr N.D.Bobby, N.Prabhakaran, P.Punitha, M.MuniReddy
12.	Automatic detection of surface defects in industrial materials based on image Processing	R.Srividhya, K.Shanmugapriya, K.SindhuPriya

<b>13.</b>	Smart Reconnaissance and Apprise System Enhanced With SOC Bcm87 (Raspberry Pi) and IEEE 80. Module	Mrs.D. Gowdhami , Mrs.Lavanya, G. Sakana , E.Praveen kumar
<b>14.</b>	Irrigation, Fertilizing and Weed Cutting in the Row Crops with IOT controlled Robot	Madhusudhana Reddy Barusu, Muni Reddy, Siva Priya
<b>15.</b>	Development Of Electro Cardio Gram Based Automatic Syringe Infusion Pump	Dr.G.Saravana Kumar, S.Sivasaravana Babu, Dr Prithvirajan, E Praveen Kumar, S Thiagarajan

### Department of Information Technology (IT)

<b>S.No.</b>	<b>Title of Paper</b>	<b>Author(s)</b>
1.	Comparative Analysis of Machine Learning Techniques to Identify Churn for Telecom Data	M.Malleswari, Maniraj.R , Praveen Kumar, Murugan
2.	All in One Card Rfid for Smart Tracking Expiration	J.Velmurugan, A.Vishnukumar S.Kalyani, P.Umamageswari, V.Suganya.
3.	A Driver Sleep Detection System	D.Daya Florance, P.Rekha, R.Manikkavethan, K.Ravi
4.	Improving Result Accuracy with Multikeyword Search over Encrypted Cloud Data	J.Velmurugan, A.Nirmal Kumar,S.JeyaKohila, M.Preethi.
5.	Coal Mine Workers Safety Helmet in Li-Fi Data Stored In Cloud	A.Vishnukumar , Dr.A.Nirmal Kumar,J.Velmurugan P.Pavithra, K.Poornima, S.Sabareesh
6.	Design of CMOS High Linear Low Noise Amplifier for Small Satellite Ground Station	M.Malleswari and S.Manjula
7.	Smart Ambulance with Traffic Control	Nirmal Kumar A, Gowtham V, Vasanth.S
8.	Dermatological Disease Detection Using Deep Learning and Ensemble	Nirmal Kumar A , Nirmala S , Uvashree K



	Feature	V
9.	Big Data Integration of Disease Detection with Drug Recommendation Using Machine Learning	A. Jayanthi, M.Gopinath , R. Ganeshkumar, K. Prasanna,
10.	Secure Relay Selection and Attack Prevention Technique for Energy Harvesting Networks	Malleswari.M, Maniraj.R, Deepa Lakshmi.S, MalarSelvi.J.
11.	Smart Bus Ticketing System using QR Code in Android App	Mr.J. Vel Murugan, Dr.A. Nirmal Kumar, A.Thiru moorthi, G.Naresh Kumar
12.	Women Welfare Safety and Prevention System	D. Daya Florance, M.Malleswari, V.Ragunapriya, R. Renuka Devi
13.	DOS Attack over Packet Dropping Network	Vishnukumar.A, Rekha.P, Dr.Nirmalkumar,Rajamani. k

### Department of Mechanical Engineering (ME)

S.No	Title of Paper	Author(s)
1	A Review of Mobile oil Skimmer	Sathiyamoorthy V , Arumugam K Arun Pragathish M , Barath B.N, Baskar M , Balamurugan S
2	Analysis and Conversion Of Air Suspension System To Parabolic Leaf Spring Suspension System	P.Balaji, A Arun, R.Chandan Singh, K.Boobalan
3	Analysis of Energy Loss through Conventional Refractory Lining In Refinery Heater And Its Conservation Measures	R. Prasanth , M. Muralidharan, A. Arun S Ravi Shankar ,S Vinoth Y Vinod Kumar
4	Comparative Analysis of MRR on Abrasive water jet machining parameters over aerospace alloys: Inconel 8 & Ti – Al- V	S Rajamanickam, R Anbazhagan, R Suresh,R Manjunathan , S Aravindh K Mariyappan
5	Comparative study on edm of Ti- Al-V using circular & convex shaped electrode	S Rajamanickam, R Palani ,V sathiyamoorthy, Muppala Jagadeesh Varma,Shaik Mahammad Althaf, and Antony Michel Thilak
6	Design and analysis of battery box lifter	Karthick N , Aravindh S, Gayathri N, Nagendran N, Siddaarthan K R, Thenamuthan

		A
7	Design and fabrication of garbage collector on beach using solar power	Arun. A, Dr.Nagasankar.P, Balaji. P, Barath kumar. E, Janarthanan. G , Magesh. AS
8	Design and fabrication of lifting beam for air pre heater Centre section parts	Manjunathan R, Gayathri N, Prasanth R,Barathan A, Delhibabu R , Ilaiyarasu T
9	Design and Fabrication of Pick and Place Robot Controlled By Android Application	Sathiyamoorthy V , Arumugam K, Jeneeshwar T , Manojkumar K, Mohanraj A, Balamurugan S
10	Design and Manufacturing of Fixture for Edge Preparation of Elbows	P.Nagasankar, P.Tamilselvi, T.V.B. Babu, S.Jasim Salahudin, S.Aravindhan, J.Deepak
11	Design and Simulation of Automated Swaging Machine	R.Anbazhagan, G.Rekka, K.Arumugam, C.Dinesh, M.Ilayaraja, V. Sriranga ramanujaa
12	Design and Structural analysis of an airfoil by using Al700 reinforced with AR-glass fiber laminates	M. Muralidharan , R. Prasanth, M. Nantha Kumar , M. Sanjeev, N. Azeez ahmed
13	Design of Fixture for Rotor Post	R.Anbazhagan, R.Kalidoss, R.Suresh, C.Dinesh, M.Ilayaraja, V. Sriranga Ramanujaa
14	Development of Test Rig for Centrifugal Air Strainer	Karthick N , Gayathri N, Babu T V B, Nandhakumar S, Mugunthan S, Yuvaraj B
15	Experimental analysis of circularity and taperness during Abrasive Water Jet Machining (AWJM) of Ti-Al-V	S Rajamanickam, R Palani, R Anbazhagan R Suresh, Aravindh and R Manjunathan
16	Experimental analysis of electric discharge machining over Inconel-8 using coated and noncoated copper electrode	S Rajamanickam, R Manjunathan, R Palani J Peer Mohamed, D Monesh and A Aakash
17	Fabrication of hydro-pneumatic crane for automobiles	Nagasankar P, Tamilselvi P, Satheesh Kumar S, Someshwar D, Sanjay Murugan G, Theyagarajan K
18	Heat treatment and analysis of Al- 700 alloys reinforced with SiC metal composite	Arun.A, Dr.V.Sathiyamoorthy, Amirthalingam.P, Manikandan A, Manikandan K, Narendran R
19	Investigations on Mechanical Behavior of AlO-TiO-SiC Produced By Stir Casting	Nagendran N, Shanmuganathan V K, Gayathri N, Suresh K, Aravindh S , Prakash E
20	Mini Steam Power Plant Using Natural	K Arumugam , V Sathiyamoorthy, R Suresh,

	Blender	P Pankaj Ghosh, G Nareshkumar, Paluru Sai Gireesh
21	Comparative design and analysis of helical and wave spring	M. Muralidharan , R.Aravinth , J.Gaffer Khan, R.Gandhi
22	Performance And Emission Analysis In Engine Using Diffuser	R Suresh , A Arun, Dr. R Anbazhagan, A Palaniyappan , G Thilippan V Viji
23	Productivity Improvement and Cost Reduction in hydraulics cylinders	Gayathri N, Karthick N, Shanmuganathan V K, Adhithyan T R, Madhan Kumar T, Gopalakrishnan J
24	Quality Improvement through Mechanization of Tail Gate Weather Strip Assembly Process	R Suresh , R Palani , S Rajamanickam, K Arumugam, V Sathiyamoorthy , D Logeshwaran
25	Reactive braking system	Nagendran N, Rani K S, Punitha P, Vaishnav V P, Balaji V, Ragul S
26	Recent Trends in Composite Materials	Dr.S.Balamurugan, M.Govindaraj, S.Rameshkumar, V.Sathiyamoorthy
27	Rejection Rate Analysis on Rail Wheels	Gayathri N, Prakash E, Manikandan P, Karthick N, Aravindh S, Rohini M
28	Studies on Wear Behaviour of Aluminium Alloy Reinforced with BC & Mica Particulates Hybrid Metal Matrix Composite	Dr. K. Arumugam, V.Sathiyamoorthy, J. Jerome Kingston, K.Janakiraman, M.Senthilkumar V, R. Suresh
29	Two Wheeler Aero Braking System	T V B Babu, R Ram Kumar, G Saravanan, V Vishnu Annamalai, L Giridharan
30	Design and production of portable bar bender	Mariyappan.K, Praveen K, Suresh Kumar.S, Kadambanathan.K , Rajamanickam. S , Vignesh.R

## **Best Projects for Patent**

<b>S.No.</b>	<b>Patent Title</b>
<b>Department of Biotechnology</b>	
1.	Isolation, identification and characterization of highly chromium tolerant fungi for heavy metal removal: <i>aspergillus japonicus</i> mg183814.
2.	Hydrolysis of plastic (pet) into tpa and ethylene glycol using enzyme.
3.	Production of bandages with anti-microbial activity and chitosan property in haemolymph from molluscs.
4.	Alkaline hydrolysis of algal biomass into synthesis of ammonia.
<b>Department of Chemical Engineering</b>	
5.	Synthesis of graphene oxide from graphite powder by modified hummers method.
6.	Hybrid solar cells – a venture for the future.
<b>Department of Civil Engineering</b>	
7.	Cost effective hybrid rice husk-bagasse ash concrete.
8.	A viable substitute of river sand with copper slag in basal5t fiber reinforced concrete.
9.	Process of preparing self-curing concrete using polyethylene glycol (peg).
10.	Poly styrene insulated concrete block for high thermal resistance building.
11.	Ground granulated blast furnace slag for reactive powder concrete in blast structures.
12.	Column reactor for Cr(VI) removal - a novel adsorbent chitosan.
13.	Copper removal by <i>saccharomyces cerevisiae</i> .
14.	Lignite adsorbent for industry wastewater treatment.
15.	Improving load carrying capacity of rigid pavements using construction demolition waste.
16.	Cock-tail rice husk ash and marble powder bricks.
<b>Department of Computer Science Engineering</b>	
17.	A healthy diagnosis decision system based on machine learning & big data.
18.	Smart energy management system (SEMS) using IOT.
19.	Image retrieval & prediction / recovery system using binarization technique.
20.	Dangerous selfie- multizone secured implementation with movie privacy prevention.
21.	Intelligent traffic controlling and monitoring character of ambulance during emergency situation.
<b>Department of Electronics and Communication Engineering</b>	
22.	Wearable ECG electrode for detection of heart rate and arrhythmia classification.
23.	Performance evaluation of underwater wireless optical communication.
24.	Monitoring and analysis of the swallowing from mems acoustic signal for diabetics suing deep learning.
25.	Surveillance of marine enhance border security using raspberry Pi.
26.	Smart reconnaissance and apprise system enhanced with raspberry pi (SOC BCM 2837).
27.	Remote non-invasive museum monitoring by visible light communication module.
28.	A novel authentication system based on finger vein identification.
29.	Development of brake shoe wear indicator with auto brake shoe adjustment
30.	Patient health monitoring using raspberry-pi and IOT.
31.	Home automation using GSM technology based on IOT.
<b>Department of Electrical and Electronics Engineering</b>	

32.	Wireless safety system in crackers factory using IOT modem.
33.	Performance analysis of electrical furnace.
34.	Sliding mode controller based converter less grid coupled inverter using residential PV.
35.	Intelligent voltage regulator for power quality improvement in low voltage distribution grid.
36.	Monitoring and rescue system for fisherman boat.
	<b>Department of Information Technology</b>
37.	Smart ambulance with traffic control.
38.	Tracking expiration by RFID.
39.	Annotation of EEG signals for d2d vehicular system.
40.	A sleep detection with driver assistance security for accident avoidance based system.
41.	Smart safety helmet for coal miners using li-fi.
	<b>Department of Mechanical Engineering</b>
42.	Design and fabrication hybrid electric solar vehicle.
43.	Design and fabrication of box type solar cooker.
44.	Design and fabrication of automated feeding mechanism for bench shear cutter.
45.	Design and fabrication of electrical bike.
46.	Design and fabrication of scissor lift.
47.	Sand blast cleaning of buffer case for crack detection.
48.	Two wheeler aero braking system.
49.	Design and structural analysis of an airfoil by al7050-ar fiber.
50.	Latent clutch mechanism.
51.	Conversion of natural oil in to bio fuel usage in automobile engine.

### **Summary of R & D Activity 2017-18**

<b>R &amp; D Activity</b>	<b>Count</b>
No. of funded research projects	1 Ongoing 2 Completed
No. of proposals Submitted to AICTE in 2017-2018	14
No. of research proposals submitted to external funding agencies in 2017-18	10
No. of research papers published in 2017-18	86
No. of book chapters published in 2017-18	7
No. of articles accepted for publication in journals (Scopus Indexed)	111
No. of patents to be filed	51