

**CRITERION III**  
**RESEARCH,**  
**CONSULTANCY &**  
**EXTENSION**

### **CRITERION III: RESEARCH, CONSULTANCY AND EXTENSION**

Research is the gateway to link an institution with the society. The outcome of research is applied for the welfare of the living system. It is an intellectual capital to the institution for its sustainability. The responsibility of University is to tap the talents of the professors, facilitators, scholars and students. The University encourages implementing research culture to harvest the quality research. The output of the research replicated in class room teaching, discloses the insight of learning and helps students to face the existing real life problems with panoramic positive attitude.

#### **3.1 Promotion of Research**

**3.1.1 Does the University have a Research Committee to monitor and address issues related to Research? If yes, what is its composition? Mention a few recommendations, which have been implemented, and their impact.**

Yes. The Board of Research is a statutory body to regulate the programmes for research degrees like M.Phil., Ph.D. and D.Sc as per the UGC regulations. The Board of Research studies is headed by the Vice Chancellor with various Heads of departments, senior professors and experts from other universities and the industries as its members. The university also has a research committee to facilitate research culture in the university.

The performance of Board of Research is based on all the duties and functions related to research as specified by the provisions of the UGC.

Framing of the regulations for research programmes, admission norms, monitoring the minimum standards and imparting the quality and standards in the research programmes are the prime responsibilities of the BOR.

Some of the recommendations of the BOR are

- Minimum standards and regulations for M.Phil / Ph. D. guideship
- Registration of candidates for M.Phil / Ph.D. programmes
- Speedy evaluation of M.Phil / Ph.D. theses

All of them have been implemented.

The BOR recently insisted that a minimum of two papers should be published in reputed journals prior to submitting the Ph.D. synopsis. This has brought out good response from research scholars. The BOR also has made (i) Pre-Ph.D. presentation, (ii) Submission of six month progress reports, (iii) Review meetings and (iv) three Doctoral Committee meetings, mandatory for the submission of synopsis.

The impact of these recommendations can be seen in the quality of the research output. Publications in international journals with impact factor and scopus indexed have increased. Evaluation process has also been strengthened.

### **3.1.2 What is the policy of the university to promote research in its affiliated / constituent colleges?**

It is not applicable since the University is a Deemed to be University with unitary system.

### **3.1.3 What are the proactive mechanisms adopted by the university to facilitate the smooth implementation of research schemes/projects?**

- **Advance funding for sanctioned project**
- **Providing seed money**
- **Simplification of the procedures related to sanction/purchases to be made by the investigators**
- **Autonomy to the principal investigators/coordinators for utilizing overhead charges**
- **Timely release of grants**
- **Timely auditing**
- **Submission of utilization certificate to the funding authorities**

The University assists the faculty members and research scholars in the smooth implementation of projects. The university provides seed funding and partial funding for innovative student projects. The finance section helps in timely release of funds. A purchase committee is formed for the purchase of equipments in the projects sanctioned. The committee finalizes the purchase related to the project as well as the general purchases made by the University. The finance office facilitates the faculty in submitting the utilization certificate to the funding agencies within the stipulated time.

### **3.1.4 How is interdisciplinary research promoted?**

- **Between/among different departments /schools of the university and**
- **Collaboration with national / international institutes / industries.**

(i) Joint proposals by the departments are encouraged.

(ii) Science and Humanities Departments, Circuit branches and non circuit branches of Engineering departments join to carry out interdisciplinary/collaborate research on related subjects.

(iii) MoUs with National/ International Institutes facilitate the faculty of the departments concerned to carry out joint research programmes using the advanced facilities in the host labs/centres to improve the quality of their research and publications.

**3.1.5 Give details of workshops/ training programmes/ sensitization programmes conducted by the University to promote a research culture on campus.**

The University departments and Centre for Staff Development have conducted several programmes to stimulate research culture on the campus as listed in Table 3.1 and Table 3.2.

**Table 3.1 Technical programs organized to promote research culture**

<b>S.No.</b>	<b>Date</b>	<b>Details</b>
1	13.3.2009	Workshop on Popularization of Research Methodologies and Techniques
2	07.04.2010	Workshop on Popularization of Research Methodologies and Techniques
3	18.11.2011	Workshop on Popularization of Research Methodologies and Techniques
4	19.10.2012	Workshop on Popularization of Research Methodologies and Techniques
5	25.10.2013	Workshop on Popularization of Research Methodologies and Techniques
6	09.03.2014	PG and M.Phil. Students Technical Seminar on Applied Sciences and Engineering
7	16.10.2014 & 17.10.2014	Workshop on Popularization of Research Methodologies and Techniques

**Table 3.2 Staff Development Programmes to promote research culture**

S.No.	Date	Name of the Speaker	Topic
1.	01.10.2013	Dr.S.Gunasekaran, Dean (R&D)	Concept development for inspiring innovation
2.	30.10.2013	Dr.D.S.Ramachandra Murthy, Former Vice Chancellor, Director (R & D) & Bursar	Achieving academic excellence and high quality research
3.	10.04.2014	Dr.D.S.Ramachandra Murthy, Former Vice Chancellor, Director (R & D) & Bursar	Preparing project proposals
4.	28.04.2014	Dr.S.Gunasekaran Dean R&D, SPU	New Facility for materials characterization using Spectroscopy
5.	18.06.2014	1. Dr.D.S.Ramachandra Murthy Former Vice Chancellor, Director (R & D) & Bursar 2. Dr.L.Maheshkumar, Director (Academic)	Academic and Research program for 2014-15
6.	20.06.2014	Dr.A.Thangaraja, Asso.Prof., Bio-Tech Dept., SPU	Nanotechnology-Technology for the future
7.	10.11.2014	Dr.P.V.Senthil, Head – Department of Mechanical, SPU	Innovative Teaching Methodology
8.	01.12.2014	Prof.Dr.N.S.Venkataraman Former Dean & Director, MIT, Anna University and Former Director, TIFAC, DST, Government of India	How to Instill Quality in Technical Education – Practical Approach
9.	09.04.2015	Dr.D.S.Ramachandra Murthy Former Vice Chancellor, Director (R & D) & Bursar	Assessment and Accreditation of Universities – By NAAC

**3.1.6 How does the University facilitate researchers of eminence to visit the campus as adjunct professors? What is the impact of such efforts on the research activities of the University?**

The visit of eminent scientists/ professors of various disciplines to the university and their interactions with faculty, research scholars and students have been helpful in creating awareness on thrust areas of research and advanced research techniques. It also helps the students and Ph.D. scholars to get exposed to international standards. These activities have helped the research scholars publish articles in standard journals in collaboration with faculty.

**3.1.7 What percentage of the total budget is earmarked for research? Give details of heads of expenditure, financial allocation and actual utilization.**

**Table 3.3 University Budget for Research Schemes**

Year	Total Budget of Plan and Non-plan of the University (Rs. In Lakhs)	Budget Amount for Research (Rs. In Lakh)	% of the budget spent on Research	% of the Total Budget amount for Research
2010-2011	1661	15	78	1.00
2011-2012	2319	23	68	0.99
2012-2013	2114	18	75	0.85
2013-2014	1654	27	79	1.63
2014-2015	1730	65	90	3.76

**3.1.8 In its budget, does the University earmark funds for promoting research in its affiliated colleges? If yes, provide details.**

It is not applicable since the University is a Deemed to be University with unitary system.

**3.1.9 Does the University encourage research by awarding post Doctoral Fellowships/ Research Associateships? If yes, provide details like number of students registered, funding by the university and other sources.**

Yes, the University encourages the scholars to register for Post Doctoral Fellowships and Research Associateships.

However, there are no scholars as on date.

**3.1.10 What percentage of faculty have utilized the sabbatical leave for pursuit of higher research in premier institutions within the country and abroad? How does the University monitor the output of these scholars?**

No request from the faculty for sabbatical leave has been received to pursue higher research.

**3.1.11 Provide details of national and international conferences organized by the university highlighting the names of eminent scientists/scholars who participated in these events.**

All the university departments conduct seminars, conferences and workshops at various levels (regional, national, international).The university advances seed money to the departments for initial organizational expenses. For the last four years the university departments have organized **116** seminars/conferences as shown in Table 3.4. List of few Eminent Scientists / Scholars who participated in events is shown in Table 3.4

**Table 3.4 Conferences / Seminars / Workshops organized during the last 4 years**

<b>S. No.</b>	<b>Name of the Department</b>	<b>Total No of Seminar/ Conference/ Workshop organized</b>	<b>National</b>	<b>International</b>	<b>Regional</b>
1	Computer Science and Engineering	16	15	1	-
2	Civil Engineering	9	7	2	-
3	Electronics and Communication Engg.	30	5	2	23
4	Electrical and Electronics Engineering	5	3	2	-
5	Information Technology	10	3	1	6
6	Mechanical Engineering	7	7	-	-
7	School of Architecture	1	-	-	-

8	Chemistry	2	-	-	2
9	Mathematics	1	-	-	1
10	Physics	1	-	-	1
11	Computer Science and Applications	15	15	-	-
12	Management Studies	10	2	1	7

**Table 3.5 List of Eminent Scientists / Scholars who participated in the events 2009-15**

S. No.	Name & Address	Department	Year
1	Dr. K. Thanigaiyarasu MIT, Anna University Chennai	Aeronautical Engineering	2012
2	Mr. P. Xavier Jagannathan Managing Director Goodwin Motors, Chennai.	Aeronautical Engineering	2013
3	Dr. M. Chinnapandiyan SAE Faculty Advisor St. Peter's College of Engineering and Technology	Aeronautical Engineering	2013
4	Mr. Martine Fiddler Senior Lecturer Staffordshire University, UK	Aeronautical Engineering	2013
5	Mr.K.Aravind Regional Trainer- South India, BOSCH Ltd.	Automobile Engineering	2011
6	Dr.S.Gunasakeran, Chennai	Automobile Engineering	2014
7	Dr.Prof.D.S.Ramachandra Murthy, Chennai	Automobile Engineering	2015
8	Mr. M. Vinoth Wiztech Solutions 102, W Block, 2 <sup>nd</sup> floor, 2 <sup>nd</sup> Avenue, Anna Nagar Roundanna, Chennai – 600 040	Biomedical Engineering	2013
9	Dr. Indira Vincent, Associate Professor Department of Animal Biotechnology, Presidency College, Chepauk, Chennai – 5	Bio-tech Engineering	2011

10	Dr. P.K. Kaleena, Associate Professor Department of Animal Biotechnology, Presidency College, Chepauk, Chennai - 5	Bio-tech Engineering	2012
11	Dr. Gayathri, Associate Professor Department of Biomedical Engineering, St. Peter's University, Avadi, Chennai – 54	Bio-tech Engineering	2013
12	Dr. V. Ganesan, Head, Centre for Research and PG Studies in Botany, ANJA College, Sivakasi.	Bio-tech Engineering	2013
13	Dr. L. Veerakumari Head and Associate Professor, Department of Zoology, Pachaiyappa's College, Chennai	Bio-tech Engineering	2014
14	Dr. K. Srinivasan, Scientist Central Leather Research Institute, Adyar, Chennai	Bio-tech Engineering	2014
15	Dr. P.K. Kaleena, Reader Department of Advanced Zoology and Biotechnology, Presidency College, Chepauk, Chennai - 5	Bio-tech Engineering	2015
16	Dr. Indira Vincent, Associate Professor Department of Advanced Zoology and Biotechnology, Presidency College, Chepauk, Chennai - 5	Bio-tech Engineering	2015
17	V. Duraisamy Anand M.D., Bostnic Software, USA	Civil Engineering	2011
18	S.Charulatha Head/Training, KKM soft, Chennai	Civil Engineering	2012
19	Mr. K . Balasubramanian MD- Hightech Concrete Solutions	Civil Engineering	2012
20	S.Veeramani Chief Engineering Manager, L & T ECC Division	Civil Engineering	2012

21	Anith Rajan Senior Planning Engineer, Sri Visthara infrastructure	Civil Engineering	2013
22	Dr.D.S.Ramachandra Murthy Vice-Chancellor, SPU	Civil Engineering	2013
23	Dr.P.Asha, Professor, Civil, SPU	Civil Engineering	2013
24	Mr. R. Sudhakar MD, CADD CAM Solutions	Civil Engineering	2014
25	Mr. Kannan L&T ECC Division	Civil Engineering	2014
26	Dr.D.S.Ramachandra Murthy Vice-Chancellor, SPU	Civil Engineering	2014
27	Dr. N.Gopalakrishnan Chief Scientist, SERC	Civil Engineering	2015
28	Mr. J. Rajkumar Blue Chip Technologies Chennai	Computer Science Engineering	2009
29	Mr. S. Selvadurai SS Technologies Chennai	Computer Science Engineering	2009
30	Mr. S. Gopal NACE Solution Chennai	Computer Science Engineering	2009
31	Ms. Shyamala Image College of Arts, Science and Animation Chennai	Computer Science Engineering	2009
32	Mr. Pravjot Singh Embwiz Embedded Technologies Chennai	Computer Science Engineering	2009
33	Mr. Sahabudeen Data logic Chennai	Computer Science Engineering	2009
34	Mr. R. Venkatesh Epsilon Technologies Chennai	Computer Science Engineering	2009
35	Mr. G. Arun Kumar Jiffy Solutions Chennai	Computer Science Engineering	2009
36	Mr. Balamurugan A Square Animation Academy Pvt. Ltd, Chennai	Computer Science Engineering	2009
37	Mr. R. Pradeep Career Launcher Chennai	Computer Science Engineering	2010

38	Mr. Ragav Shankar Career Launcher Chennai	Computer Science Engineering	2010
39	Mr. S. Jagan TIME Pvt. Ltd Chennai	Computer Science Engineering	2010
40	Mr. Marknorth TIME Pvt. Ltd Chennai	Computer Science Engineering	2010
41	Ms. Geetha FABMAX Chennai	Computer Science Engineering	2010
42	Ms. N. Uma Maheswari FABMAX Chennai	Computer Science Engineering	2010
43	Mr. Debi Prasad Prayak Accel IT Resources Ltd Chennai	Computer Science Engineering	2010
44	Dr. Prabhu Raj IMS Learning Resources Chennai	Computer Science Engineering	2010
45	Mr. Nageswaran Career Launcher India Ltd Chennai	Computer Science Engineering	2011
46	Mr. D. Loganathan Global Techno Solutions Chennai	Computer Science Engineering	2011
47	Mr. L. Anandh kumar Future Tech Chennai	Computer Science Engineering	2011
48	Mr. S.L. Denis Integrity Solution Chennai	Computer Science Engineering	2011
49	Mr.L.R. Gokulnath CMTES Informatics Chennai	Computer Science Engineering	2011
50	Ms. D. Geetha FABMAX Chennai	Computer Science Engineering	2011
51	Mr. J. Raji NIIT Ambattur Chennai	Computer Science Engineering	2011
52	Mr. T. Karthikeyan Changepond Tech Chennai	Computer Science Engineering	2011

53	Mr. Lakshmi Narayanan Kaashiv Infotech Chennai	Computer Science Engineering	2011
54	Mr. Venkatesan Prabhu Kaashiv Infotech Chennai	Computer Science Engineering	2011
55	Mr. Baskar Chennai	Computer Science Engineering	2012
56	Mr. S. Thamarai Selvan Manager, Software Development Engineering, CISCO Systems Pvt. Ltd., Bangalore	Computer Science Engineering	2012
57	Mr. P. Essakimuthu CMTES, Chennai	Computer Science Engineering	2012
58	Mr. P. Suresh MAXX Networking Technologies	Computer Science Engineering	2012
59	Ms. Cheryl Chennai	Computer Science Engineering	2012
60	Mr. Ankit Fadia, Ankit Fadia Foundation	Computer Science Engineering	2013
61	Mr. Sai Satish Founder & CEO Indian Servers, Hyderabad	Computer Science Engineering	2013
62	Uma Maheswari.K Quality Assurance-ETS HCL, Chennai	Computer Science Engineering	2014
63	Mr. Yathin Mazenet Solutions, Chennai	Computer Science Engineering	2014
64	Mr. K. Adhivarahan Former Chairman, CSI Chennai Chapter	Computer Science Engineering	2014
65	Dr. Arun Sundararaman Vice President-Healthcare Analytics, Accenture Chennai	Computer Science Engineering	2014
66	Mr. Karthik Karunakaran MD & CEO Mobius Knowledge Services, Chennai	Computer Science Engineering	2014
67	Ms. Prema.S Engineer CDAC, Chennai	Computer Science Engineering	2014
68	Ms. Vigneswari.S Senior Engineer CDAC, Chennai	Computer Science Engineering	2014

69	Prof.Madhusudhana Rao Sriramagiri Senior Project Consultant Dept of CSE, IIT	Computer Science Engineering	2014
70	Mr. Rajan.T.Joseph Director(Education) CSI, Chennai	Computer Science Engineering	2014
71	Ms. Bhuvana Business Manager Livewire Technologies	Computer Science Engineering	2014
72	Brinda Karlo Gynecologist	Computer Science Engineering	2015
73	Abdul Navas.H T.I.M.E Asst Manager Chennai	Computer Science Engineering	2015
74	Mr. Venkatesan Prabhu Kaashiv Infotech Chennai	Computer Science Engineering	2015
75	Mr. Vignesh Senior Engineer Cloud Research Lab CDAC, Chennai	Computer Science Engineering	2015
76	Mr.S.Kailash Senior Engineer Cloud Research Lab CDAC, Chennai	Computer Science Engineering	2015
77	Dr.Susan Elias Professor Department of CSE Sri Venkateswara College of Engineering, Chennai	Computer Science Engineering	2015
78	Prof. Dong Jin Song Professor National University of Singapore Singapore	Computer Science Engineering	2015
79	Dr. A. K. Kumar Principal C.Abdul Hakeem College of Engg. And Tech, Melvisharam-632509 Vellore District	Chemical Engineering	2010
80	Prof.Dr.Parthiban, Dean Academic, St.Peter's College of Engineering and Technology, Avadi, Chennai-54.	Chemical Engineering	2012

81	Prof.Dr.S.Gunasekaran, Founder President, Indian Spectro Physics Association Former Professor and Head Department of Physics, Pachaiyappa's College Former Registrar, Periyar University	Chemical Engineering	2013
82	Prof.Dr.Chinnapandian, Head, Department of Aeronautical Engineering, St.Peter's College of Engineering and Technology, Avadi, Chennai-54.	Chemical Engineering	2013
83	Prof.Dr.S.Gunasekaran, Dean (R&D) St. Peter's University Chennai.	Chemical Engineering	2014
84	K.Senthil Kumar, Chief Executive, Technical and Business Developments DUKES Enterprises, Chennai.	Chemical Engineering	2014
85	Dr. D. S. Ramachandra Murthy Former Vice Chancellor, Director (R & D) & Bursar, St. Peter's University Avadi, Chennai.	Chemical Engineering	2015
86	Mr. K. Sridhar Head, Communication System Group Department of Electronics and Information Technology, SAMEER, Chennai	Electronics and Communication Engineering	2013
87	Dr. Seetharaman Project Manager Robotics Division CVRDE, Chennai	Electronics and Communication Engineering	2013
88	Dr. L. Sujatha Professor Dr. MGR University, Chennai	Electronics and Communication Engineering	2013
89	Mr. Choi Joon Hyuk Director, IYF Chennai	Electronics and Communication Engineering	2014
90	Dr. John Anna Selvan Founder and CEO Nano PV Technologies	Electronics and Communication Engineering	2014

91	Dr. J. Arun Kumar Auckland University of Technology Newzealand	Electronics and Communication Engineering	2014
92	Dr. M. R. Nayak Scientist NAL Chennai	Electronics and Communication Engineering	2014
93	Dr. V. N. Mani Scientist E, C-MET Chennai	Electronics and Communication Engineering	2014
94	Mr. R. Ram Kumar Chairman, Gemini Communications Ltd. Chennai	Electronics and Communication Engineering	2014
95	Dr. S. Gomathinayagam Director General, National Institute of Wind Energy Chennai	Electronics and Communication Engineering	2015
96	Dr. Chockalingam Aravind Vaithilingam Research Lead, CIARC School of Engineering, Taylor's University, Malaysia	Electronics and Communication Engineering	2015
97	Dr. Selwyn Piramuthu Professor of Information System University of Florida, Gainesville Florida, USA	Electronics and Communication Engineering	2015
98	Dr. Nirmal Kumar Associate Professor Anna University, Chennai	Electronics and Communication Engineering	2015
99	Dr. Nagarajan Velmurugan Professor, Adi Parasakthi Engineering College Tamil Nadu	Electronics and Communication Engineering	2015
100	Dr. P. Ananda Kumar Professor & Head MIT, Anna University, Chennai	Electronics and Communication Engineering	2015
101	Dr. M. Manikandan Associate Professor MIT, Anna University, Chennai	Electronics and Communication Engineering	2015
102	Dr.N.Senthil Kumar, Prof, Panimalar Engineering college, Chennai.	Electrical and Electronics Engineering	2013
103	Prof.A.Jagadhesh Chennai	Electrical and Electronics Engineering	2013

104	Dr.P.Kothari Former Vice Chancellor, VIT, Vellore, Tamil Nadu	Electrical and Electronics Engineering	2013
105	Dr.K.Balagurunathan, Advisor, St Peter's University, Chennai.	Electrical and Electronics Engineering	2013
106	Dr.S.Iniyan, Director,IES, Anna University, Chennai.	Electrical and Electronics Engineering	2013
107	Dr.N.Senthil Kumar, Prof, Panimalar Engineering College, Chennai.	Electrical and Electronics Engineering	2014
108	Dr. S. Iniyavan, Director,IES, Anna University, Chennai.	Electrical and Electronics Engineering	2014
109	Mrs.P.Loganayagee, BE,MBA, Assistant Engineer,TNEB	Electrical and Electronics Engineering	2014
110	Mr.G.Kanagaraj, Design Engineer, First Logic Automation Pvt Ltd, Adambakkam, Chennai.	Electrical and Electronics Engineering	2014
111	Mr.A.Karthikeyan, Technocrat Automation, Manager- Outstation& Campus Training, Nelson Manickam Road, Chennai.	Electrical and Electronics Engineering	2014
112	Mr.R.Arun Prasad, Engineer-Control System Division, Technocrat Automation, Nungambakkam, Chennai.	Electrical and Electronics Engineering	2014
113	Dr.S.R.KrishnaMurthy BE., M.S., Ph.D Former Member, Generation Tamilnadu Electricity Board And Visiting Professor, Anna University Chennai.	Electrical and Electronics Engineering	2015
114	Dr. S. Srinivasan Professor, Department of Electrical Engineering IIT Madras	Electronics and Instrumentation Engineering	2013
115	Dr. N. Siva Kumaran Assistant Professor, Department of Instrumentation and Control	Electronics and Instrumentation	2013

	Engineering, National Institute of Technology, Trichy	Engineering	
116	Dr. K. Vijayarekha Professor, School of Electrical and Electronics Engineering, Sastra University, Tirumalaisamudrum	Electronics and Instrumentation Engineering	2013
117	Dr. S. Hosimin Thilagar Associate Professor, Department of EEE Anna University, Chennai	Electronics and Instrumentation Engineering	2012
118	Dr. T. M. Sridhar HOD/ BIOMED, SMK FOMRA Chennai	Electronics and Instrumentation Engineering	2012
119	Mr. J. Visweswaran National Instruments Bangalore	Electronics and Instrumentation Engineering	2012
120	Dr. V. Tulasi Bai Dean/ECE, Sri Ram Engineering College	Electronics and Instrumentation Engineering	2011
121	Mr. Anandhan Project Executive, Software Patterns, Chennai	Information Technology	2013
122	Mr. Muthu SSI Ltd, Chennai	Information Technology	2014
123	Mr. Rajkumar , CEO Verbit E- learning soln Pvt. Ltd., Chennai	Information Technology	2014
124	Mr. Lokesh WITY Solutions Ltd., Chennai	Information Technology	2014
125	Mr. Sathish NIIT, Ambattur, Chennai	Information Technology	2014
126	Ms. Padma Priya, Project Manager Info Sams Technology Ltd., Chennai	Information Technology	2014
127	Brinda Karlo, Gynecologist Chennai	Information Technology	2015
128	Mr. S. Kandan Executive, TIME Institute, Chennai	Information Technology	2015
129	K . Senthikumar CEO, Dukes enterprises Gunidy, Chennai	Mechanical Engineering	2013
130	K.Lokesh, Wity solutions	Mechanical	2014

	Chennai	Engineering	
131	Dr.G.Ram Kumar/ Assistant Manager Lucas TVS , Chennai	Mechanical Engineering	2014
132	S.Fernos Raj Chief Executive, Ashok Leyland, Chennai	Mechanical Engineering	2014
133	D.Rajesh, General Manager/ Auto Leck Pvt. Ltd.	Mechanical Engineering	2014
134	Daniel K. Brown Reader in Design Studio, School of Architecture, Victoria University of Wellington, New Zealand	School of Architecture	2015
135	Ar. Ganesh Kumar Practicing Architect	School of Architecture	2015
136	Dr. S.Gunasekaran Prof. of Physics Founder President of ISPA Pachaiyappa's College, Chennai	Chemistry	2011
137	Dr. Shahil Krupavathy Prof. of Physics Velammal Engineering College, Chennai	Chemistry	2011
138	Dr. M.N. Ponnusamy Emeritus Prof. Department of Bio-Physics of crystallography University of Madras	Chemistry	2013
139	Dr. V. Balasubramanian Dean (R&D), AMET University, Chennai	Chemistry	2014
140	Dr. A. SubbiahPandi, Professor and Head, Department of Physics, Presidency College, Chennai	Chemistry	2014
141	Dr. D. Velmurugan Professor & Head Department of Centre of Advanced Study in Crystallography and Biophysics, University of Madras, Chennai	Chemistry	2014
142	Dr. B. Krishnan Vice President Indian Spectrophysics	Chemistry	2014

	Association Chennai		
143	Dr. T.S. Natarajan, Professor, Department of Physics, IIT, Madras.	Chemistry	2015
144	Prof.Asai Thambi, Department of English, Presidency College.	English	2013
145	Dr.Kannan Girish, Psychatrist & counsellor	English	2014
146	Ms. Sharmila Rani, Trainer and Research Editor In New Indian Express	English	2015
147	Dr. S. Mohan Dean (R&D) Vel Tech University	Mathematics	2014
148	Dr.Ananthi Shesasaayee Head,Department of Computer Science Quaid-e-Millath Govt college for women (A), Chennai-02.	Computer Science and Applications	2013
149	Dr.L.Josephine Mary Prof & Head Dept of Computer Applications Sri Ram College of Engg.	Computer Science and Applications	2013
150	Dr.Viji Vinod Head, Department of Computer Applications Dr.MGR University, Chennai.	Computer Science and Applications	2012
151	Dr.D.Pugazhenth, Asst.Professor, Department of Computer Science, Quaid-E-Millath Govt.College for women(Autonomous) Chennai-02.	Computer Science and Applications	2012
152	Mr.Saranya Chandrasekaran HR, Infosys Technologies Ltd., Chennai.	Computer Science and Applications	2011
153	Mr.Raj HR, C-CAT, Chennai	Computer Science and Applications	2011
154	Dr.L.Josephine Mary Head of the Department Department of MCA, SriRam College of Engg,	Computer Science and Applications	2011

	Chennai.		
155	Mr.Chendan Amudhan & Mr.Kishore Bafna, J.C.K.Subburanga Bharathi,, Junior Chamber of Internationals, Chennai	Computer Science and Applications	2008
156	Mr.A.Saravanan, Project Manager, TCS, Chennai	Computer Science and Applications	2009
157	Mr.R.Nallathambi, Senior S/w Engineer, Protex Software Ltd.,	Computer Science and Applications	2009

### 3.2 Resource Mobilization for Research

#### 3.2.1 What are the financial provisions made in the University budget for supporting student's research projects?

From the funds of the University, core labs and computer labs have been established in various departments for the use of the Ph.D. scholars. These labs have internet connectivity. INFLIBNET which promotes sharing of Ph.D. thesis can be accessed by the students, through this connectivity. Field trips are arranged for students to visit Institutions of Higher Learning, Industries and National Laboratories.

The university supports students project funding through grants from funding agencies. Funds are also made available from TBI and MSME incubator schemes. The University has also funded student projects for various competitions.

#### 3.2.2 Has the University taken any special efforts to encourage its faculty to file for patents? If so, how many have been registered and accepted?

Yes. The university encourages the faculty to file for patents as shown in Table 3.6.

**Table 3.6 Details of Patents filed:**

<b>Title</b>	<b>Applicant Name</b>	<b>Patent No/File No</b>	<b>National/ International</b>	<b>Status</b>
<b>“A process for the manufacture of an Alternative precursor for</b>	<b>S.Jenish</b>	3948/CHE/2012	National	Filed

<b>Chlorine dioxide: Calcium Chlorite”.</b>				
<b>“Double - rotor Flux Assisted Permanent Magnet Machine”</b>	Aravind CV, Lam Pin Wen, <b>Ramesh GP</b>	PI 2014003065, 30 Oct.2014	International	Filed

**3.2.3 Provide the following details of ongoing research projects of faculty**

- Total number of ongoing projects is shown in Table 3.7
- Total number of ongoing research projects: 4
- Total amount: Rupees 2,20,50,000/-

**Table 3.7 Details of ongoing research projects of faculty**

<b>S.No</b>	<b>Name of the Department</b>	<b>Total No. of Projects</b>	<b>Name of the funding agency</b>	<b>Total amount Rs. in lakhs</b>
1	Technology Business Incubator		DST	200
2	Bio-Medical Engineering	3	MSME	2
3	Civil Engineering	1	MSME	6
4	Electrical and Electronics Engineering	3	MSME	12.5
5	Mechanical Engineering	2	MSME	11
6	Electronics & Communication Engineering	1	MSME	6.15

**3.2.4 Does the university have any projects sponsored by the industry / corporate houses? If yes, give details such as the name of the project, funding agency and grants received.**

The university has been approved by MSME ministry as Technology Business Incubator. 10 projects have been sanctioned under this scheme for technology and entrepreneurship. The details are given in the table 3.8.

**Table 3.8 Details of the projects sanctioned under MSME**

S.No.	Title of the Project	Amount Sanctioned (Lakhs)
1	Solar powered PV module to micro grids	6.25
2	Integrated starter generator for automobile using induction machine	6.15
3	Solar-powered vehicle for in-campus transportation	6.00
4	Concrete blocks using 100% fly ash and no cement	6.25
5	Fuel Activator	5.00
6	Low cost LED night lamp with variation in brightness control applicable for room dimension and consumer's choice	3.00
7	Novel and affordable emergency notification system for elderly protection: S-Waisteband	6.15
8	Prototype development of Gluco L	4.70
9	Device for hand gesture to voice translation dumb assist device	2.35
10	Device for active assist Rehabilitation of elbow and wrist joint	2.30
	Infrastructure fund for the above	3.402
	<b>Total</b>	<b>51.552</b>

**3.2.5 How many Departments of the University have been recognized for their research activities by national / international agencies (UGC-SAP, CAS; Department with Potential for Excellence; DST-FIST; DBT, ICSSR, ICHR, ICPR, etc.) and what is the quantum of assistance received? Mention any two significant outcomes or breakthroughs achieved by this recognition.**

Research project proposals have been submitted by various departments for funding. Some are in the progress. The university has been recognized as a Technology Business Incubator by the DST and MSME ministry.

### 3.2.6 List details of

#### a. Research projects completed and grants received during the last four years (funded by National/International agencies).

Total number of completed/ongoing research projects is shown in Table 3.8.

**Table 3.8 Total number of completed/ongoing research projects**

S. No	Name of the Department	Total no. of projects	Funding	Completed	Ongoing
1	Bio-Medical Engineering	3	MSME	-	3
2	Bio-Technology	3	UGC, AICTE, TNSCST	3	-
3	Civil Engineering	6	TNSCST, IE	6	-
4	EEE	2	MSME	-	2
5	Mechanical	1	MSME	-	1

#### b. Inter-institutional collaborative projects and grants received

- i) All India collaboration
- ii) International

The university is yet to have inter institutional collaborative projects.

### 3.3 Research Facilities

#### 3.3.1 What efforts have been made by the University to improve its infrastructure requirements to facilitate research? What strategies have been evolved to meet the needs of researches in emerging disciplines?

The University encourages the faculty to tap funds through National/International agencies for infrastructure facilities. The University also mobilizes funds and allocates funds for each department under non recurring head for the purchase of equipment, furniture and

other aspects needed for the strengthening the infrastructure of research laboratories.

Applications for establishing Centre of Excellence have been submitted to MHRD for a grant of Rs. 4 crores (for each centre) in the following areas.

- Disaster Management
- Solar Energy
- Biomedical Engineering
- Super capacitors

The above centres, if approved, will provide great impetus for research in the above thrust/emerging areas. Seed money for research scholars have been provided in the above proposals.

An amount of Rs.100 lakhs was sanctioned from University funds for establishing Sophisticated Analytical Instrumentation Facility (SAIF) with highly sophisticated spectrophotometers for material characterization. This facility helps research of SPU and other academic institutions.

Through Technology Business Incubator, machines have been purchased from grants sanctioned through DST for Rs 150 lakhs in the area of advanced manufacturing technology including CATIA software.

Infrastructures in many laboratories have been strengthened with new equipments from university funds to meet the requirements of UG/PG/Research scholars.

Thus the University, within a short period of existence, took efforts to improve the infrastructure for research.

**3.3.2 Does the University have an Information Resource center to cater to the needs of researchers? If yes, provide details of the facility.**

Yes. The University has an information resource centre in the University UG and PG Library, which helps in guiding the students for getting the resources. The following are the information source facilities available in our library.

- INFLIBNET Consortium Link
- DELNET
- Online Public Access Catalog
- Open source On line database
- Current awareness services

- Research Alert
- NPTEL course materials
- Facility to access other libraries in Chennai

**3.3.3 Does the University have a University Science Instrumentation Center (USIC)? If yes, have the facilities been made available to research scholars? What is the funding allotted to the USIC?**

Yes. The university has established a Sophisticated Analytical Instrumentation Facility (SAIF) housed with highly sophisticated spectrophotometers such as Fourier Transform Infrared Spectrophotometer with attenuated total reflectance technique, Ultraviolet visible spectrophotometer with DRS/ DTS technique and Photo Luminescence spectrophotometer and other scientific instruments. SAIF provides a dynamic thrust to current research and developmental activities of the university. This facility is also extended to other research institutions and nearby industries. The SAIF-SPU is undertaking consultancy services required for faculty's research, and project related works. The SAIF-SPU has proposed to conduct workshops at different levels. The beneficiaries include teachers, Research scholars, PG students and technicians of our university and other institutions.

Fund allotted for SAIF SPU is **Rupees 100 Lakhs.**

**3.3.4 Does the University provide residential facilities (with computer and internet facilities) for research scholars, post-doctoral fellows, research associates? Summer fellows of various academies and visiting scientists (national/ international)?**

Yes, the University provides residential facilities with internet facilities in the boys' and girls' hostels and the guest house for research scholars.

**3.3.5 Does the University have a specialized research center/work station on – campus and off-campus to address the special challenges of research programmes?**

Yes, the University has the following specialized research centers on campus.

- (i) Center for Disaster Management
- (ii) Center for Advanced Materials
- (iii) Center for Nanoscience and Nanotechnology.

**3.3.6 Does the University have center of national and international recognition/repute? Give a brief description of how these facilities are made use of by researchers from other laboratories.**

The university has started three Centres which motivate students, faculty and research scholars to undertake innovative research in thrust areas. They also enable to identify funding agencies. Technical programmes have been arranged by these centres for exchange of latest knowledge and interaction with experts.

**(i) Center for Disaster Management**

Centre for Disaster Management was started to disseminate knowledge on various aspects of disaster management among the students, faculty and practicing engineers, to organize special lectures, staff development programs and seminars to facilitate exchange of knowledge and latest developments. The centre helps to identify and introduce courses at undergraduate and post graduate levels in the specialized areas. The centre also helps to identify the research requirement and encourages the students to take up Ph.D. and research projects. An International Conference on Disaster Management ICDM 14 and pre conference workshop on Disaster Management were conducted during 21 to 24th January 2014. A workshop on Fire safety was organized on 15.10.2014. The centre for disaster management publishes newsletter periodically disseminating knowledge on disaster management and the activities. Elective subject on disaster management has been introduced in Regulation 2012 for B.E. Civil Engineering during the 6th semester. Syllabus has been prepared for conducting diploma course on Fire safety.

**(ii) Center for Advanced Materials**

Centre for Advanced Materials was started to bring out the latest advancement in the field of materials. Many materials are evolving day-by-day in every field like composite materials, nanomaterials, smart materials etc. A guest lecture was organized on the topic "Smart Materials" given by Dr. N. Gopalakrishnan, Chief Scientist, Structural Engineering Research Centre, Chennai. In future, it is planned to conduct seminars/workshops to disseminate further the developments in area of Advanced Materials. The centre facilitates taking up projects on new materials by students such as Geopolymer concrete and pre cast concrete. 1 Ph.D. has been completed in Geo polymer concrete and one is pursuing Ph.D.

**(iii) Center for Nanotechnology**

Centre for Nanotechnology has been started to cater to the need of scientific projects taken by students and faculties of the University. It fulfills the requirements and acts as helpline in the Research projects of BE/ B.Tech, M.E/M.Tech., M.Sc, M.Phil. and Ph.D. programmes.

Centre for Nanotechnology has taken steps to synthesize nano materials and research papers related to these topics have been published in journals. Centre for Nanotechnology has been discharging valuable services in the acquisition of knowledge in Green Chemistry which is a emerging trend in the environmental protection.

Recently, two Guest Lectures on Nanotechnology-Technology for the future and Nanomachines and a Technical seminar on Recent Trends in Nanotechnology were organized. This helped young budding scientists to motivate themselves towards this new era of technology.

In future it is planned to conduct interdisciplinary research programmes and also to expand research activities in diversified field of nanotechnology.

**3.4 Research Publications and Awards**

**3.4.1 Does the University publish any research journal(s)? If yes, indicate the composition of the editorial board, editorial policies and state whether it/they is/ are listed in any international database.**

Yes. The Department of Management Studies publishes national level journal as detailed below in Table 3.9

**Table 3.9 Journal published by the University Department**

S.No	Department	Journal Name	Editor	Associate Editors
1	Management Studies	International Journal of Management Research	Dr. R. Gayathri Head Department of Management Studies	-

A newsletter is published by Centre for Disaster Management. Mr. H.Prasad Raju, Assistant Professor, Civil Engineering and Dr.P.Periyasamy, Professor, Mechanical Engineering are the editors.

### 3.4.2 Give details of publications by the faculty

- Number of papers published in peer reviewed journals ( national/international)
- Monographs
- Chapters in Books
- Books edited
- Books with ISBN with details of publishers
- Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, EBSCO host, etc.)
- Citation Index – range/ average
  
- SNIP
- SJR
- Impact Factor – range/ average
- H-index

The university has taken a lot of effort to improve the research output. The publication in the university by the faculty, students and the research scholars in International Journals as of April 2015 is 524, of which 175 are Scopus indexed. Further, the publications in conferences are 1322. The details of publications of the faculty are shown in Table 3.10.

**Table 3.10: Publications by the Faculty (2008-15)**

S.No.	Name of the Department	Total No. of Research papers published in National / International	Total No. of books edited/ published	Impact Factor Range	h-index
1	Biotech Engineering	41	2	0.5-5.5	5
2	Computer Science Engineering	182	6	0.1 – 6.94	-
3	Civil Engineering	40	7	0.042 – 2.359	-
4	Chemical Engineering	19	-	0.266 - 3.601	5

5	Electronics and Communication Engineering	149	4	0.32-3.642	
6	Electrical and Electronics Engineering	57	-	0.13-3.419	-
7	Electronics and Instrumentation Engineering	16	-	0.715-3.2416	-
8	Information Technology Engineering	10	6	1.012 - 3.2	-
9	Mechanical Engineering	55	-	0.1-3.5	-
10	Chemistry	6	5	-	-
11	English	4	1	-	-
12	Mathematics	1	1	-	1
13	Physics	62	17	0.66-3.358	2-20
14	Computer Science and Applications	44	10	0.366-6.06	1
15	Management Studies	46	4	0.348-4.16	-
16	Aeronautical Engg.	2	-	-	-

### 3.4.3 Give details of

- **Faculty serving on the editorial boards of national and international journals**
- **Faculty serving as members of steering committees of international conferences recognized by reputed organizations/ societies**

The details of faculty serving on the editorial boards are given in Table 3.11.

**Table 3.11 Faculty Served in the Editorial Boards**

S.No	Name of the Department	No. of Faculty in Editorial Board	No. of Faculty Reviewer in Journals	No. of Faculty in Steering Committee of international conferences
1	Biotech Engineering	1	-	1
2	Computer Science Engineering	4	-	4
3	Civil Engineering	7	2	3
4	Electronics and Communication Engineering	7	1	6
5	Electrical and Electronic Engineering	-	1	-
6	Information Technology Engineering	3	-	3
7	Mechanical Engineering	3	-	-
8	English	1	-	-
9	Physics	2	1	1
10	Computer Science and Applications	3	-	1
11	Management Studies	1	-	-

#### 3.4.4 Provide details of

- **Research awards received by faculty and students**
- **National and International recognition received by the faculty from reputed professional bodies and agencies**

Prof. Dr.S.Gunasekaran Dean (R&D) has been selected for the prestigious TANSA 2013 Award by the Government of Tamil Nadu. The details of awards received by faculty and students are given in Table 3.12

**Table 3.12 Research Awards/ Professional Recognition**

S.No.	Name of the Department	Total No. of Awards	Faculty	Students
1	Biomedical Engineering	1	1	-
2	Biotechnology	1	1	-
3	Computer Science Engineering	19	1	18
4	Civil Engineering	5	3	2
5	Electronics and Communication Engineering	6	1	5
6	Electrical and Electronics Engineering	1	1	-
7	Information Technology Engineering	2	1	1
8	Mechanical Engineering	5	2	3
9	School of Architecture	3	-	3
10	Chemical Engineering	1	-	1
11	English	1	1	-
12	Mathematics	1	-	1
13	Physics	1	-	1
14	Computer Science and Applications	1	1	-
15	Management Studies	1	1	-

**3.4.5 Indicate the average number of successful M.Phil. and Ph.D. scholars guided per faculty during the last four years. Does the University participate in *shodhganga* by depositing the Ph.D. theses with INFLIBNET for electronic dissemination through open access?**

Yes. The University participates in Shodhganga by depositing the Ph.D. theses with INFLIBNET. The details of research degrees awarded and number of scholars passing Ph.D. and M.Phil. are given in Table 3.13

**Table 3.13 Research Scholars guided by Faculty since inception**

<b>S. No</b>	<b>Name of the Department</b>	<b>No. of Ph.D. Awarded</b>	<b>No. of Ph.D. thesis Submitted</b>	<b>No. of Ph.D. Ongoing</b>	<b>M.Phil. Awarded</b>
1	Biotech Engineering	2	2	10	-
2	Computer Science Engineering	14	3	16	-
3	Civil Engineering	2	-	11	-
4	Electronics and Communication Engineering	11	5	19	-
5	Electrical and Electronic Engineering	3	5	16	-
6	Information Technology Engineering	-	1	8	-
7	Mechanical Engineering	4	-	28	-
8	Chemical Engineering	-	-	1	-
9	English	-	-	6	46
10	Mathematics	-	-	-	225
11	Physics	-	-	9	54
12	Chemistry	-	-	1	47
13	Computer Science and Applications	1	7	11	345
14	Management Studies	2	4	16	120
<b>Total</b>		<b>40</b>	<b>27</b>	<b>152</b>	<b>837</b>

**3.4.6 What is the official policy of the University to check malpractices and plagiarism in research? Mention the number of plagiarism cases reported and action taken.**

The university follows the UGC guidelines to check malpractices and plagiarism in research. Code of ethics for research is strictly followed. Both M.Phil. and Ph.D. scholars are instructed to submit a certificate in their dissertation/thesis to state that their thesis work is original and not taken from any other sources that can be construed as plagiarism. The UGC plagiarism checker is available through the UGC INFLIBNET services. Malpractices and plagiarism

issues are usually referred to the Supervisor and appropriate action which includes rejection of the thesis by the Board of Management is taken. There have been no cases of plagiarism reported in the university.

**3.4.7 Does the University promote interdisciplinary research? If yes, how many interdepartmental/ interdisciplinary research projects have been undertaken and mention the number of departments involved in such endeavors?**

Yes. The University promotes interdisciplinary research at Ph.D. level.

**3.4.8 Has the University instituted any research awards? If yes, list the awards.**

Yes, The University has instituted Sir C.V.Raman Scientist Award to be given every year from 2015 onwards. The award aims to promote innovative scientific research in reputed academic institutions / Universities / Research institutions within India by encouraging and rewarding innovations which have positive impact on our Society. St. Peter's University proposes to award scientists / academicians for their excellence in original innovative work in Science and Technology. The award carries a cash prize and a citation.

**3.4.9 What are the incentives given to the faculty for receiving state, National and International recognition for research contributions?**

The Board of Management of the University places on record their contributions in the form of appreciation and certificate. The faculty members who are hardworking are given due representation in various committees.

**3.5 Consultancy**

**3.5.1 What is the official policy of the University for Structured Consultancy? List a few important consultancies undertaken by the University during the last four years.**

The University has a very liberal policy for taking up consultancy for industry and others. Departments and individual faculty can take up consulting service on the approval of the university. Presently testing services and small consultancies are taken and as the University matures this will be strengthened.

**3.5.2 Does the University have a university-industry cell? If yes, what is its scope and range of activities?**

Yes. Students go for Industrial visits. Students are encouraged to apply for internship in industries for inplant training. Certificate programmes are conducted with industry participation for the benefit of the students in new areas. Senior Engineers and scientists from the industry visit the University to deliver special lectures and share their knowledge. Experts from industry are also members in the Board of Studies. MoUs with various industries have been signed by the university to promote industry institute interaction.

**3.5.3 What is the mode of publicizing the expertise of the University for Consultancy Services? Which are the department from whom consultancy has been sought?**

The following are the Non-profit consultancy services offered by the Technology Business Incubator (TBI) and Sophisticated Analytical Instrumentation Facility (SAIF SPU).

- (i) Technology Business Incubator was started in 2009 with the support of the Department of Science & Technology to promote Technopreneurship among science and technology professionals. Technology Business Incubator is involved in new venture creation, technology commercialization, interfacing and networking, research and development for industry.
- (ii) SAIF-SPU has a tie up with Tamil Nadu Minerals (TAMIN), Government of Tamil Nadu for the characterization of vermiculite and its composites, being frequently used for weathering proof materials for industries, roof tiles and fertilizers.
- (iii) SAIF-SPU also has association with Tamil Nadu Newsprint Limited, a government paper industry of Tamil Nadu state to check the quality of paper and coatings on paper. SAIF-SPU also suggested the paper industry to employ nano cellulose in lieu of cellulose.
- (iv) SAIF-SPU has rendered its assistance to the leading hospitals in Chennai, in the spectroscopic analysis of body fluids, skin and hair to discriminate diseased from healthy persons. SAIF-

SPU has also offered interdepartmental help to the research scholars for analysis of samples.

The services offered are publicized through website and circular letters.

**3.5.4 How does the University utilize the expertise of its facility with regard to consultancy services?**

Sharing knowledge and expertise and helping the community to benefit directly from the knowledge resources available within the university.

**3.5.5 List the broad areas of consultancy services provided by the university and the revenue generated during the last years.**

The broad areas of consultancy services are in Spectroscopic analysis, Testing/ Consultancy in Advanced Manufacturing techniques, testing/ consultancy services for construction materials and website creation. Consultancy services are offered by SAIF-SPU and TBI in terms of data collection to the samples, analysis of the data and graphical solutions to the research scholars and scientists/engineers. Income generated from consultancy services is given in Table 3.14.

**Table 3.14 Revenue Generated**

<b>S. No</b>	<b>Date</b>	<b>Name of the Instruments</b>	<b>Amount in Rs.</b>
1		FT-IR-ATR/Spectrometer	52,500
2		UV-Visible Spectrometer	33,600
3		Luminescence Spectrometer	3,150
4	12.06.2012	CNC Milling Machine, Everest Moulds, Alandur. Chennai-16	4,000
5	21.06.2012	CNC Milling Machine, Everest Moulds, Alandur. Chennai-16	2,750
6	25.06.2012	CNC Milling Machine, Everest Moulds, Alandur. Chennai-16	1,000
7	27.06.2012	CNC Milling Machine, Everest	1,250

		Moulds, Alandur. Chennai-16	
8	29.08.2012	CNC Milling Machine, Everest Moulds, Alandur. Chennai-16	25,000
9	20.09.2012	CNC Milling Machine, Everest Moulds, Alandur. Chennai-16	30,625
10	15.10.2012	CNC Milling Machine, Everest Moulds, Alandur. Chennai-16	6,500
11	28.11.2012	CNC Milling Machine, Everest Moulds, Alandur. Chennai-16	2,375
12	30.11.2012	CNC Milling Machine, K.S.Engineering Tools, Ambattur Estate, Chennai	3,600
13	14.12.2012	CNC Milling Machine, Everest Moulds, Alandur. Chennai-16	1,800
14	17.12.2012	CNC Milling Machine, Everest Moulds, Alandur. Chennai-16	8,803
15	04.01.2013	CNC Milling Machine, K.S.Engineering Tools, Ambattur Estate, Chennai	23,960
16	09.02.2013	CNC Milling Machine, K.S.Engineering Tools, Ambattur Estate, Chennai	20,025
17	01.03.2013	CNC Milling Machine, Everest Moulds, Alandur. Chennai-16	4,950
18	12.03.2013	CNC Milling Machine, Everest Moulds, Alandur. Chennai-16	2,750
19	09.05.2013	CNC Milling Machine, Everest Moulds, Alandur. Chennai-16	6,725
20	31.05.2013	Rapid Proto Typing, 3D Scan Solutions, Defence Officers Colony, Chennai-32	4,185
21	15.07.2013	Rapid Proto Typing, 3D Scan Solutions, Defence Officers Colony, Chennai-32	2,500
22	17.10.2013	Rapid Proto Typing, 3D Scan Solutions, Defence Officers Colony, Chennai-32	2,750
23	28.10.2013	Rapid Proto Typing, 3D Scan Solutions, Defence Officers Colony, Chennai-32	2,000
24	11.11.2013	Rapid Proto Typing, 3D Scan Solutions, Defence Officers Colony, Chennai-32	500
25	18.11.2013	Rapid Proto Typing, 3D Scan Solutions, Defence Officers Colony, Chennai-32	500

26	27.01.2014	Rapid Proto Typing, 3D Scan Solutions, Defence Officers Colony, Chennai-32	9,600
27	27.01.2014	Rapid prototyping, iRam Technologies, Kundalahalligate, Bangalore-560037	3,000
28	10.02.2014	Rapid Proto Typing, 3D Scan Solutions, Defence Officers Colony, Chennai-32	9,600
29	06.05.2014	CMM Machine, HAVISS 3D Metrology Solutions, Manali New Town, Chennai-600103	1,500
30	20.05.2014	Rapid Proto Typing, 3D Scan Solutions, Defence Officers Colony, Chennai-32	2,250
31	08.07.2014	CMM Machine, HAVISS 3D Metrology Solutions, Manali New Town, Chennai-600103	3,150
32	05.11.2014	Rapid Proto Typing, Aura LED (3D Printing)	3,600
33	27.11.2014	Rapid Proto Typing, Growtech Innovations India Private Ltd, Bangalore-560043	4,200
34	04.12.2014	CMM Machine, HAVISS 3D Metrology Solutions, Manali New Town, Chennai-600103	3,300
35	13.01.2015	CNC Milling Machine, Sixth Sense Robotics, Chennai-53	10,000
36	23.01.2015	Rapid Proto Typing, 3D Scan Solutions, Defence Officers Colony, Chennai-32	600
37	31.01.2015	CNC Milling Machine, Sixth Sense Robotics, Chennai-53	4,850
38	04.02.2015	Rapid Proto Typing, 3D Scan Solutions, Defence Officers Colony, Chennai-32	15,000
39	06.02.2015	Rapid Proto Typing, Personal Quality Systems, Bangalore	3,000
40	06.02.2015	Rapid Proto Typing, 3D Scan Solutions, Defence Officers Colony, Chennai-32	15,000
41	11.02.2015	CNC Milling Machine, Sixth Sense Robotics, Chennai-53	2,000
42	18.02.2015	CNC Milling Machine, Sixth Sense Robotics, Chennai-53	2,000

43	10.03.2015	Rapid Proto Typing, Personal Quality Systems, Bangalore	3,000
44	10.03.2015	CNC Milling Machine, Sixth Sense Robotics, Chennai-53	5,000
45	11.03.2015	CNC Milling Machine, Sixth Sense Robotics, Chennai-53	14,500
46	18.03.2015	Rapid Proto Typing, Personal Quality Systems, Bangalore	4,000
47	2010-2011	Web Designing	55,300
48	2010-2011	Maintenance of Website	21,300
49	2011-2012	Maintenance of Website	21,300
<b>Total</b>			<b>4,64,848</b>

### **3.6 Extension Activities and Institutional social Responsibility (ISR)**

#### **3.6.1 How does the University sensitize its faculty and students on its Institutional Social Responsibilities? List the social outreach programmes which have created an impact on students' campus experience during the last four years.**

Faculty and students are advised to take up socially relevant projects as part of academic programmes. Circulars/ invitations for project proposals by various agencies are circulated to departments. VC and senior officials interact with students and faculty periodically to create interest and awareness about national and social priorities.

The NSS unit functioning in St. Peter's University under the NSS programme officer is sensitized on the need of local community in the University jurisdiction. The volunteers have conducted many programmes in rural areas on general sensitization, health and hygiene, social opportunities available to the down trodden. The university helps **Konambedu village** to benefit the community.

#### **3.6.2 How does the University promote university-neighborhood network and student engagement, contributing to the holistic development of students and sustained community development?**

The University promotes university-neighborhood network and student engagement mainly Through NSS, YRC and other programmes. The university also conducts awareness programmes.

**3.6.3. How does the University promote the participation of the students and faculty in extension activities including participation in NSS, NCC, YRC and other National/International programmes?**

The University constantly encourages and promotes the participation of students and faculty to be a part of all extension activities. Students and faculty are encouraged to participate in the activities such as tree plantation, Swacch Bharat campaign in the campus, attending training / workshops on disaster management, fire safety.

**3.6.4. Give details of social surveys, research or extension work, if any, undertaken by the University to ensure social justice and empower the underprivileged and the most vulnerable sections of society?**

The university organizes various developmental activities such as cleanliness in the campus, plantation of trees in the premises, awareness programmes on drug-abuse, AIDS, women health related programmes. NSS volunteers go for a camp for community services in the nearby Konambedu village. During the camp, special lectures are arranged for the benefit of school students, teachers and villagers. Research proposal has been sent for establishing Women's Technology Park to DST. The application is under review.

**3.6.5 Does the University have a mechanism to track the students' involvement in various social movements/activities which promote citizenship of society?**

The University promotes students involvement in various social activities such as Swacch Bharat, National Science Day, AIDS Awareness Programme. The NSS volunteers are encouraged to involve in various activities which help them to become socially aware and responsible citizens in the society.

**3.6.6 Bearing in mind the objectives and expected outcomes of the extension activities organized by the University, how did they complement students' academic learning experience? Specify the values inculcated and skills learnt.**

The University has the NSS, RRC and YRC to help the students and make them socially aware. The students are encouraged to work with others in the village when they go for a camp in the rural area. This helps them to understand the hygienic conditions existing in the villages. NSS volunteers also take classes and make the villagers and

children computer literate during the camps. This gives the students a sense of fulfillment and motivates them in their academic pursuits. These camps also help in developing the leadership skills of the students when they stay in unknown places and learn to live life by themselves.

**3.6.7. How does the University ensure the involvement of the community in its outreach activities and contribute to community development? Give details of the initiatives of the University which have encouraged community participation in its activities.**

The University NSS unit conducts students camp in the neighboring Konambedu village with the involvement of the community. During these camps, lectures in the field of medicine, rainwater harvesting, environmental aspects, motivating students are given to the students and the youth in the village.

**3.6.8. Give details of awards received by the institution for extension activities and/contributions to social/community development during the last four years.**

Appreciation by the local panchayat of the village.

### **3.7 Collaboration**

**3.7.1 How has the University's collaboration with other agencies impacted the visibility, identity and diversity of activities on campus? To what extent has the university benefitted academically and financially because of collaborations?**

The university has MoUs with various industries and agencies. These help in improving the research culture of the university. The university offers consultancy to various organizations and a revenue of Rs 4,64,848/- has been generated as a part of this consultancy activity. Members of the industry are also members in the Board of studies and Research. These collaborations have increased the quality of the faculty working in the university. Research publications and placement opportunities have also increased due to these collaborations.

**3.7.2 Mention specific examples of how these linkages promote.**

- **Curriculum development**
- **Exposure of students to industrial environment**
- **Internship and practical training**

- **On-the-job training**
- **Faculty exchange and development**
- **Research**
- **Publication**
- **Consultancy**
- **Extension**
- **Student placement**

The interaction of our faculty with industry / laboratories helps in curriculum development. Many people working in the industry are on the Board of studies. These linkages have also helped students to undergo inplant training and industrial visits. Consultancy services have also improved because of these linkages.

**3.7.3 Has the University signed any MoUs with institutions of national / international importance / other universities / industries/ corporate houses etc.? If yes, how have they enhanced the research and development activities of the university?**

The university has signed MoUs with various organizations and agencies have been mutually beneficial and help in sharing information and knowledge through various activities. The MoUs have also enhanced research and development activities. The MoU with industry helps in practical training and in taking up industry relevant projects.

**MoUs & RESEARCH LINKAGES**

- Ministry of Micro, Small and Medium Enterprises, Govt. of India.
- CSIR-Structural Engineering Research Centre.
- CSIR-Central Leather Research Institute, Chennai.
- Indian Medical Association, Tamil Nadu.
- King Institute
- M/s HITECH Concrete Solutions Chennai Pvt. Ltd., Chennai.
- Flash Bricks, Chennai.
- Shriram Instruments, Chennai .
- Premier Carbon Industries, Chennai.
- GVA Technocraft Pvt. Ltd., Chennai.
- Tanu Safety and Health Research Institute
- Ms.P.Anusha, B.E., Biomedical Engineering.
- Mr.M.Vinoth, B.E., Biomedical Engineering.
- Mr.K.Prithiv, Biomedical Engineering.
- University Canada West, British Columbia, Canada.
- CMC Academy Pvt. Ltd, Chennai.
- myeasydocs.com, Chennai.
- FACADE TECHNOLOGIES, Chennai.

- INFLIBNET Centre, Gujarat.
- CADD CAMM SOLUTIONS, Chennai.
- PLUSKB Innovations Pvt. Ltd., Chennai.
- Indian SpectroPhysics Association (ISPA), Chennai.
- YBG Technology and Development Services, Chennai.
- NACE Solutions Pvt. Ltd.
- I VENTURES Pvt Ltd.
- NIIT Ambattur.
- Asian Analytical Laboratories Pvt. Ltd., Chennai.
- Technocrat Automation Private Limited, Chennai.
- Taneja Aerospace & Aviation Ltd., Tamil Nadu
- Hofinsoft Technologies Pvt. Ltd., Chennai.
- SRM Learning Tree Pvt. Ltd. (SRM Infotech), Chennai.
- INFOSYS Technologies Ltd., Bangalore.
- SPIRO Solutions Pvt. Ltd., Chennai.
- Jagadeeshwari Industries, Bargur.

**3.7.4 Have the University-industry interactions resulted in the establishment/ creation of highly specialized laboratories / facilities?**

Yes, the interactions with specialized laboratories have helped the Science and Engineering Departments to establish research laboratories and for the commissioning of sophisticated and precise analytical instruments and facilities like SAIF and TBI.