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

S.No.	Date	Details
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,	Concept
		Dean (R&D)	development for
			inspiring
			innovation
2.	30.10.2013	Dr.D.S.Ramachandra Murthy,	Achieving
		Former Vice Chancellor, Director	academic
		(R & D) & Bursar	excellence and
			high quality
			research
3.	10.04.2014	Dr.D.S.Ramachandra Murthy,	Preparing project
		Former Vice Chancellor, Director	proposals
		(R & D) & Bursar	
4.	28.04.2014	Dr.S.Gunasekaran	New Facility for
		Dean R&D, SPU	materials
			characterization
			using
	10.06.2014	1 D D C D 1 1 M 1	Spectroscopy
5.	18.06.2014	1. Dr.D.S.Ramachandra Murthy	Academic and
		Former Vice Chancellor, Director	Research
		(R & D) & Bursar 2. Dr.L.Maheshkumar,	program for 2014-15
		Director (Academic)	2014-13
6.	20.06.2014	Dr.A.Thangaraja, Asso.Prof.,	Nanotechnology-
0.	20.00.2014	Bio-Tech Dept., SPU	Technology for
		Bio Teen Dept., ST C	the future
7.	10.11.2014	Dr.P.V.Senthil, Head –	Innovative
	1011112011	Department of Mechanical, SPU	Teaching
		•	Methodology
			0,
8.	01.12.2014	Prof.Dr.N.S.Venkataraman	How to Instill
		Former Dean & Director,	Quality in
		MIT, Anna University and	Technical
		Former Director, TIFAC, DST,	Education –
		Government of India	Practical
			Approach
9.	09.04.2015	Dr.D.S.Ramachandra Murthy	Assessment and
		Former Vice Chancellor, Director	Accreditation of
		(R & D) & Bursar	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.

Year	Total Budget of	Budget	% of the	% of the
	Plan and Non-	Amount for	budget spent	Total Budget
	plan of the	Research	on Research	amount for
	University	(Rs. In Lakh)		Research
	(Rs. In Lakhs)			
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

Table 3.3 University Budget for Research Schemes

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

S. No.	Name of the Department	Total No of Seminar/ Conference/ Workshop organized	National	International	Regional
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	-	-	-

St. Peter's Institute of Higher Education and Research

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	Aeronautical	2012
	MIT, Anna University	Engineering	
	Chennai		
2	Mr. P. Xavier Jagannathan	Aeronautical	2013
	Managing Director	Engineering	
	Goodwin Motors, Chennai.		
3	Dr. M. Chinnapandiyan	Aeronautical	2013
	SAE Faculty Advisor	Engineering	
	St. Peter's College of		
	Engineering and Technology		
4	Mr. Martine Fiddler	Aeronautical	2013
	Senior Lecturer	Engineering	
	Staffordshire University, UK		
5	Mr.K.Aravind		
	Regional Trainer- South India,	Automobile	2011
	BOSCH Ltd.	Engineering	
6	Dr.S.Gunasakeran, Chennai	Automobile	2014
		Engineering	
7	Dr.Prof.D.S.Ramachandra	Automobile	2015
	Murthy, Chennai	Engineering	
8	Mr. M. Vinoth	Biomedical	2013
	Wiztech Solutions	Engineering	
	102, W Block, 2 nd floor, 2 nd		
	Avenue, Anna Nagar		
	Roundanna,		
	Chennai – 600 040		
9	Dr. Indira Vincent, Associate	Bio-tech	2011
	Professor	Engineering	
	Department of Animal		
	Biotechnology,		
	Presidency College, Chepauk,		
	Chennai – 5		

	St. 1 etcl 5 litstitut	, ,	
10	Dr. P.K. Kaleena, Associate	Bio-tech	2012
	Professor	Engineering	
	Department of Animal		
	Biotechnology,		
	Presidency College, Chepauk,		
	Chennai - 5		
11	Dr. Gayathri, Associate	Bio-tech	2013
11	Professor		2013
		Engineering	
	Department of Biomedical		
	Engineering,		
	St. Peter's University, Avadi,		
	Chennai – 54		
12	Dr. V. Ganesan, Head, Centre	Bio-tech	2013
	for Research and PG Studies in	Engineering	
	Botany, ANJA College,		
	Sivakasi.		
13	Dr. L. Veerakumari	Bio-tech	2014
	Head and Associate Professor,	Engineering	
	Department of Zoology,		
	Pachaiyappa's College, Chennai		
14	Dr. K. Srinivasan, Scientist	Bio-tech	
14	Central Leather Research	Engineering	2014
		Engineering	2014
	Institute,		
1.7	Adyar, Chennai	D' 1	2015
15	Dr. P.K. Kaleena, Reader	Bio-tech	2015
	Department of Advanced	Engineering	
	Zoology and Biotechnology,		
	Presidency College,		
	Chepauk, Chennai - 5		
16	Dr. Indira Vincent, Associate	Bio-tech	2015
	Professor	Engineering	
	Department of Advanced		
	Zoology and Biotechnology,		
	Presidency College,		
	Chepauk, Chennai - 5		
17	V. Duraisamy Anand	Civil Engineering	2011
1 '	M.D., Bostnic Software, USA	Civil Englicering	2011
10			
18	S.Charulatha	C: 1E : :	2012
	Head/Training, KKM soft,	Civil Engineering	2012
	Chennai		
19	Mr. K . Balasubramanian	Civil Engineering	2012
	MD- Hightech Concrete		
	Solutions		
20	S.Veeramani	Civil Engineering	2012
	Chief Engineering Manager,		
	L & T ECC Division		
L	_ = = = = = = = = = = = = = = = = = = =	1	

	St. 1 etc. 3 Institut	te of Higher Education and	a Research
21	Anith Rajan	Civil Engineering	2013
	Senior Planning Engineer, Sri		
	Visthara infrastructure		
22	Dr.D.S.Ramachandra Murthy	Civil Engineering	2013
	Vice-Chancellor, SPU		
23	Dr.P.Asha,	Civil Engineering	2013
	Professor, Civil, SPU		
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	<i>G</i>	
	Blue Chip Technologies	Computer Science	2009
	Chennai	Engineering	2007
29	Mr. S. Selvadurai	Computer Science	
	SS Technologies	Engineering	2009
	Chennai		2007
30	Mr. S. Gopal	Computer Science	2009
	NACE Solution	Engineering	2007
	Chennai		
31	Ms. Shyamala	Computer Science	2009
	Image College of Arts, Science	Engineering	
	and Animation		
	Chennai		
32	Mr. Pravjot Singh	Computer Science	2009
	Embwiz Embedded	Engineering	
	Technologies		
	Chennai		
33	Mr. Sahabudeen	Computer Science	2009
	Data logic	Engineering	
	Chennai		
34	Mr. R. Venkatesh	Computer Science	2009
	Epsilon Technologies	Engineering	
	Chennai		
35	Mr. G. Arun Kumar	Computer Science	2009
	Jiffy Solutions	Engineering	
	Chennai		
36	Mr. Balamurugan	Computer Science	2009
	A Square Animation Academy	Engineering	
	Pvt. Ltd, Chennai		
37	Mr. R. Pradeep	Computer Science	2010
	Career Launcher	Engineering	
	Chennai		
	**		

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38	Mr. Ragav Shankar	Computer Science	2010
	Career Launcher	Engineering	
	Chennai		
39	Mr. S. Jagan	Computer Science	2010
	TIME Pvt. Ltd	Engineering	
	Chennai		
40	Mr. Marknorth	Computer Science	2010
10	TIME Pvt. Ltd	Engineering	2010
	Chennai	Eligilicering	
41	Ms. Geetha	Computer Science	2010
41	FABMAX	_	2010
		Engineering	
10	Chennai		2010
42	Ms. N. Uma Maheswari	Computer Science	2010
	FABMAX	Engineering	
	Chennai		
43	Mr. Debi Prasad Prayak	Computer Science	2010
	Accel IT Resources Ltd	Engineering	
	Chennai		
44	Dr. Prabhu Raj	Computer Science	2010
	IMS Learning Resources	Engineering	
	Chennai		
45	Mr. Nageswaran	Computer Science	2011
	Career Launcher India Ltd	Engineering	
	Chennai		
46	Mr. D. Loganathan	Computer Science	2011
	Global Techno	Engineering	2011
	Solutions	Zinginicorinig	
	Chennai		
47	Mr. L. Anandh kumar	Computer Science	2011
47	Future Tech	Engineering	2011
		Eligilicering	
48	Chennai Mr. S.L. Denis	Commutan Caianas	2011
48		Computer Science	2011
	Integrity Solution	Engineering	
40	Chennai		2011
49	Mr.L.R. Gokulnath	Computer Science	2011
	CMTES Informatics	Engineering	
	Chennai		
50	Ms. D. Geetha	Computer Science	2011
	FABMAX	Engineering	
	Chennai		
51	Mr. J. Raji	Computer Science	2011
	NIIT Ambattur	Engineering	
	Chennai		
52	Mr. T. Karthikeyan	Computer Science	2011
	Changepond Tech	Engineering	
	Chennai	-0	
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53	Mr. Lakshmi Narayanan	Computer Science	2011
	Kaashiv Infotech	Engineering	
	Chennai		
54	Mr. Venkatesan Prabhu	Computer Science	2011
	Kaashiv Infotech	Engineering	
	Chennai		
55	Mr. Baskar	Computer Science	2012
	Chennai	Engineering	
56	Mr. S. Thamarai Selvan	Computer Science	2012
	Manager, Software Development	Engineering	
	Engineering, CISCO Systems		
	Pvt. Ltd., Bangalore		
57	Mr. P. Essakimuthu	Computer Science	2012
	CMTES, Chennai	Engineering	
58	Mr. P. Suresh	Computer Science	2012
	MAXX Networking	Engineering	
	Technologies	2.18.11.01.11.18	
59	Ms. Cheryl	Computer Science	2012
	Chennai	Engineering	
60	Mr. Ankit Fadia,	Computer Science	2013
	Ankit Fadia Foundation	Engineering	2013
61	Mr. Sai Satish	Computer Science	2013
01	Founder & CEO	Engineering	2013
	Indian Servers, Hyderabad	Lingineering	
62	Uma Maheswari.K	Computer Science	2014
	Quality Assurance-ETS	Engineering	
	HCL, Chennai		
63	Mr. Yathin	Computer Science	2014
	Mazenet Solutions, Chennai	Engineering	
64	Mr. K. Adhivarahan	Computer Science	2014
	Former Chairman,	Engineering	
	CSI Chennai Chapter	8 3 8	
65	Dr. Arun Sundararaman	Computer Science	2014
	Vice President-Healthcare	Engineering	,
	Analytics, Accenture	8 3 8	
	Chennai		
66	Mr. Karthik Karunakaran	Computer Science	2014
	MD & CEO	Engineering	
	Mobius Knowledge Services,	8 3 8	
	Chennai		
67	Ms. Prema.S	Computer Science	2014
]	Engineer	Engineering	,
	CDAC, Chennai	-6	
68	Ms. Vigneswari.S	Computer Science	2014
	Senior Engineer	Engineering	2011
	CDAC, Chennai		
	CD.1C, Chemiui	<u> </u>	

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

St. Prof.Dr.S.Gunasekaran, Founder President, Indian Spectro Physics Association Former Professor and Head Department of Physics, Pachaiyappa's College Former Registrar, Periyar University		St. I etci S Instituto	e of Higher Education and	Research
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89 Mr. Choi Joon Hyuk Electronics and Communication Engineering 90 Dr. John Anna Selvan Electronics and Founder and CEO Communication				2013
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90 Dr. John Anna Selvan Electronics and Communication 2014		· ·		
Founder and CEO Communication				
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Nano PV Technologies Engineering				
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		e of fitgher Education and	
91	Dr. J. Arun Kumar	Electronics and	2014
	Auckland University of	Communication	
	Technology	Engineering	
	Newzealand		
92	Dr. M. R. Nayak	Electronics and	2014
	Scientist NAL	Communication	
	Chennai	Engineering	
93	Dr. V. N. Mani	Electronics and	2014
	Scientist E, C-MET	Communication	
	Chennai	Engineering	
94	Mr. R. Ram Kumar	Electronics and	2014
	Chairman, Gemini	Communication	
	Communications Ltd.	Engineering	
	Chennai		
95	Dr. S. Gomathinayagam	Electronics and	2015
	Director General, National	Communication	
	Institute of Wind Energy	Engineering	
	Chennai		
96	Dr. Chockalingam Aravind		2015
	Vaithilingam	Electronics and	
	Research Lead, CIARC	Communication	
	School of Engineering, Taylor's	Engineering	
	University, Malaysia		
97	Dr. Selwyn Piramuthu	Electronics and	2015
	Professor of Information System	Communication	
	University of Florida,	Engineering	
	Gainesville Florida, USA		
98	Dr. Nirmal Kumar	Electronics and	
	Associate Professor	Communication	2015
	Anna University, Chennai	Engineering	
99	Dr. Nagarajan Velmurugan	Electronics and	2015
	Professor, Adi Parasakthi	Communication	
	Engineering College	Engineering	
	Tamil Nadu		
100	Dr. P. Ananda Kumar	Electronics and	2015
	Professor & Head	Communication	
	MIT, Anna University, Chennai	Engineering	
101	Dr. M. Manikandan	Electronics and	2015
	Associate Professor	Communication	
	MIT, Anna University, Chennai	Engineering	
102	Dr.N.Senthil Kumar,	Electrical and	2013
	Prof, Panimalar Engineering	Electronics	
	college,	Engineering	
	Chennai.		
103	Prof.A.Jagadhesh	Electrical and	2013
	Chennai	Electronics	
		Engineering	<u> </u>

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104	Dr.P.Kothari	Electrical and	2013
	Former Vice Chancellor, VIT,	Electronics	
	Vellore, Tamil Nadu	Engineering	
105	Dr.K.Balagurunathan,	Electrical and	2013
	Advisor,	Electronics	
	St Peter's University,	Engineering	
	Chennai.		
106	Dr.S.Iniyan,	Electrical and	2013
	Director,IES,	Electronics	
	Anna University, Chennai.	Engineering	
107	Dr.N.Senthil Kumar, Prof,	Electrical and	2014
	Panimalar Engineering College,	Electronics	
	Chennai.	Engineering	
108	Dr. S. Iniyavan, Director, IES,	Electrical and	2014
	Anna University, Chennai.	Electronics	
		Engineering	
109	Mrs.P.Loganayagee,	Electrical and	2014
107	BE,MBA,	Electronics	201.
	Assistant Engineer, TNEB	Engineering	
110	Mr.G.Kanagaraj,	Electrical and	2014
110	Design Engineer,	Electronics	2014
	First Logic Automation Pvt Ltd,	Engineering	
	Adambakkam,	Engineering	
	Chennai.		
111	Mr.A.Karthikeyan,	Electrical and	2014
	Technocrat Automation,	Electronics	
	Manager- Outstation& Campus	Engineering	
	Training,		
	Nelson Manickam Road,		
	Chennai.		
112	Mr.R.Arun Prasad,	Electrical and	2014
	Engineer-Control System Division,	Electronics	
	Technocrat Automation,	Engineering	
	Nungambakkam,		
112	Chennai. Dr.S.R.KrishnaMurthy BE., M.S.,	Electrical and	2015
113	Ph.D	Electrical and Electronics	2015
	Former Member, Generation		
	Tamilnadu Electricity Board	Engineering	
	And		
	Visiting Professor, Anna University		
	Chennai.		
114	Dr. S. Srinivasan	Electronics and	2013
	Professor, Department of	Instrumentation	
	Electrical Engineering	Engineering	
	IIT Madras	<i>Gg</i>	
115	Dr. N. Siva Kumaran	Electronics and	2013
	Assistant Professor, Department	Instrumentation	2015
	of Instrumentation and Control	msuumentation	
	or monumentation and Control	<u> </u>	

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	Engineering, National Institute of Technology, Trichy	Engineering	
116	Dr. K. Vijayarekha	Electronics and	2013
110	Professor, School of Electrical	Instrumentation	2015
	and Electronics Engineering,		
	Sastra University,	Engineering	
	Tirumalaisamudrum		
117	Dr. S. Hosimin Thilagar	Electronics and	2012
	Associate Professor, Department	Instrumentation	
	of EEE	Engineering	
	Anna University, Chennai		
118	Dr. T. M. Sridhar	Electronics and	2012
	HOD/ BIOMED, SMK FOMRA	Instrumentation	
	Chennai	Engineering	
119	Mr. J. Visweswaran	Electronics and	2012
	National Instruments	Instrumentation	
	Bangalore	Engineering	
120	Dr. V. Tulasi Bai	Electronics and	2011
	Dean/ECE, Sri Ram Engineering	Instrumentation	
	College	Engineering	
121	Mr. Anandhan	Information	
	Project Executive, Software	Technology	2013
	Patterns, Chennai		
122	Mr. Muthu	Information	2014
	SSI Ltd, Chennai	Technology	
123	Mr. Rajkumar , CEO	Information	2014
	Verbit E- learning soln Pvt. Ltd.,	Technology	
101	Chennai	7.0	2014
124	Mr. Lokesh	Information	2014
105	WITY Solutions Ltd., Chennai	Technology	2014
125	Mr. Sathish	Information	2014
127	NIIT, Ambattur, Chennai	Technology	2014
126	Ms. Padma Priya, Project	Information	2014
	Manager	Technology	
	Info Sams Technology Ltd., Chennai		
127	Brinda Karlo, Gynacologist	Information	2015
12/	Chennai	Technology	2013
128	Mr. S. Kandan		
123	Executive, TIME Institute,	Information	2015
	Chennai	Technology	
129	K . Senthikumar	Mechanical	2013
	CEO, Dukes enterprises	Engineering	
	Gunidy, Chennai		
130	K.Lokesh, Wity solutions	Mechanical	2014

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	Chennai	Engineering	
131	Dr.G.Ram Kumar/ Assistant		2014
	Manager Lucas TVS, Chennai	Mechanical	
		Engineering	
132	S.Fernos Raj Chief Executive,	8 11 8	
102	Ashok Leyland, Chennai	Mechanical	2014
	Tishon Zeyland, Chemia	Engineering	201.
133	D.Rajesh,	Mechanical	2014
133	General Manager/	Engineering	2014
	Auto Leck Pvt. Ltd.	Linginicoring	
134	Daniel K. Brown	School of	2015
134	Reader in Design Studio, School	Architecture	2013
	of Architecture, Victoria	Architecture	
	University of Wellington, New		
	Zealand		
135	Ar. Ganesh Kumar	School of	2015
155		Architecture	2013
126	Practicing Architect		2011
136	Dr. S.Gunasekaran	Chemistry	2011
	Prof. of Physics		
	Founder President of ISPA		
107	Pachaiyappa's College, Chennai		2011
137	Dr. Shahil Krupavathy	Chemistry	2011
	Prof. of Physics		
	Velammal Engineering College,		
	Chennai		
138	Dr. M.N. Ponnusamy	Chemistry	2013
	Emeritus Prof.		
	Department of Bio-Physics of		
	crystallography		
	University of Madras		
139	Dr. V. Balasubramanian		2014
	Dean (R&D), AMET University,	Chemistry	
	Chennai		
140	Dr. A. SubbiahPandi, Professor	Chemistry	2014
	and Head, Department of		
	Physics, Presidency College,		
	Chennai		
141	Dr. D. Velmurugan	Chemistry	2014
	Professor & Head		
	Department of Centre of		
	Advanced Study in		
	Crystallography and Biophysics,		
	University of Madras, Chennai		
142	Dr. B. Krishnan	Chemistry	2014
	Vice President		
	Indian Spectrophysics		
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	Association		
	Chennai		
143	Dr. T.S. Natarajan, Professor,		2015
	Department of Physics, IIT,	Chemistry	
	Madras.	-	
144	Prof.Asai Thambi,		2013
	Department of English,	English	
	Presidency College.		
145	Dr.Kannan Girish,		2014
	Psychatrist & counsellor	English	
146	Ms. Sharmila Rani,		2015
	Trainer and Research Editor In	English	
	New Indian Express	8 "	
147	Dr. S. Mohan	Mathematics	2014
	Dean (R&D)		
	Vel Tech University		
148	Dr. Ananthi Sheshasaayee	Computer Science	2013
	Head,Department of Computer	and Applications	
	Science		
	Quaid-e-Millath Govt college for		
	women (A), Chennai-02.		
149	Dr.L.Josephine Mary	Computer Science	2013
	Prof & Head	and Applications	
	Dept of Computer Applications	Tr ·····	
	Sri Ram College of Engg.		
150	Dr.Viji Vinod	Computer Science	2012
	Head, Department of Computer	and Applications	
	Applications		
	Dr.MGR University,		
	Chennai.		
151	Dr.D.Pugazhenthi,	Computer Science	2012
	Asst.Professor,	and Applications	
	Department of Computer		
	Science,		
	Quaid-E-Millath Govt.College		
	for women(Autonomous)		
	Chennai-02.		
152	Mr.Saranya Chandrasekaran	Computer Science	2011
	HR, Infosys Technologies Ltd.,	and Applications	
	Chennai.		
153	Mr.Raj	Computer Science	2011
	HR, C-CAT,	and Applications	
	Chennai	11	
154	Dr.L.Josephine Mary	Computer Science	2011
	Head of the Department	and Applications	
	Department of MCA,		
	SriRam College of Engg,		
<u> </u>		1	1

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

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:

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

Chlorine dioxide: Calcium Chlorite".			
"Double - rotor Flux Assisted Permanent Magnet Machine"	 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

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

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
	Total	51.552

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

3.3.1What 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 Fourier Transform as Spectrophotometer with attenuated total reflectance technique, Ultraviolet visible spectrophotometer with DRS/ DTS technique and Luminescence spectrophotometer and other 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 Geopolymer 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	International	Dr. R. Gayathri	-
	Studies	Journal of	Head Department	
		Management	of Management	
		Research	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

5t. I etci 5 Institute 0/ Ilignet Luacution and Research					
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

S. No	Name of the Department	No. of Ph.D. Awarded	No. of Ph.D. thesis Submitted	No. of Ph.D. Ongoing	M.Phil. Awarded
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
	Total	40	27	152	837

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

S. No	Date	Name of the Instruments	Amount in Rs.
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

1		N 11 A1 1 C1 : 16	
		Moulds, Alandur. Chennai-16	
8	29.08.2012	CNC Milling Machine, Everest	25,000
0	29.08.2012	Moulds, Alandur. Chennai-16	25,000
9	20.09.2012	CNC Milling Machine, Everest	20.625
9	20.09.2012	Moulds, Alandur. Chennai-16	30,625
10	15 10 2012	CNC Milling Machine, Everest	6.500
10	15.10.2012	Moulds, Alandur. Chennai-16	6,500
1.1	29 11 2012	CNC Milling Machine, Everest	2.275
11	28.11.2012	Moulds, Alandur. Chennai-16	2,375
		CNC Milling Machine,	
12	30.11.2012	K.S.Engineering Tools, Ambattur	3,600
		Estate, Chennai	
12	14 12 2012	CNC Milling Machine, Everest	1 000
13	14.12.2012	Moulds, Alandur. Chennai-16	1,800
1.4	17 10 2012	CNC Milling Machine, Everest	0.002
14	17.12.2012	Moulds, Alandur. Chennai-16	8,803
		CNC Milling Machine,	
15	04.01.2013	K.S.Engineering Tools, Ambattur	23,960
		Estate, Chennai	,
		CNC Milling Machine,	
16	09.02.2013	K.S.Engineering Tools, Ambattur	20,025
		Estate, Chennai	,
17	01 02 2012	CNC Milling Machine, Everest	4.050
17	01.03.2013	Moulds, Alandur. Chennai-16	4,950
1.0	10.00.0010	CNC Milling Machine, Everest	2.750
18	12.03.2013	Moulds, Alandur. Chennai-16	2,750
		CNC Milling Machine, Everest	
19	09.05.2013	Moulds, Alandur. Chennai-16	6,725
		Rapid Proto Typing, 3D Scan	
20	31.05.2013	Solutions, Defence Officers Colony,	4,185
20		Chennai-32	1,105
		Rapid Proto Typing, 3D Scan	
21	15.07.2013	Solutions, Defence Officers Colony,	2,500
21	13.07.2013	Chennai-32	2,500
		Rapid Proto Typing, 3D Scan	
22	17.10.2013	Solutions, Defence Officers Colony,	2,750
	17.10.2013	Chennai-32	2,750
		Rapid Proto Typing, 3D Scan	
23	28.10.2013	Solutions, Defence Officers Colony,	2,000
23	20.10.2013	Chennai-32	2,000
		Rapid Proto Typing, 3D Scan	
24	11.11.2013	Solutions, Defence Officers Colony,	500
	11.11.2013	Chennai-32	300
		Rapid Proto Typing, 3D Scan	
25	18.11.2013	Solutions, Defence Officers Colony,	500
23	10.11.2013	Chennai-32	500
<u> </u>		Chemar-32	

27.01.2014	Rapid Proto Typing, 3D Scan Solutions, Defence Officers Colony, Chennai-32	9,600
27.01.2014	Rapid prototyping, iRam Technologies, Kundalahalligate, Bangalore-560037	3,000
10.02.2014	Rapid Proto Typing, 3D Scan Solutions, Defence Officers Colony, Chennai-32	9,600
06.05.2014	CMM Machine, HAVISS 3D Metrology Solutions, Manali New Town, Chennai-600103	1,500
20.05.2014	Rapid Proto Typing, 3D Scan Solutions, Defence Officers Colony, Chennai-32	2,250
08.07.2014	CMM Machine, HAVISS 3D Metrology Solutions, Manali New Town, Chennai-600103	3,150
05.11.2014	Rapid Proto Typing, Aura LED (3D Printing)	3,600
27.11.2014	Rapid Proto Typing, Growtech Innovations India Private Ltd, Bangalore-560043	4,200
04.12.2014	CMM Machine, HAVISS 3D Metrology Solutions, Manali New Town, Chennai-600103	3,300
13.01.2015	CNC Milling Machine, Sixth Sense Robotics, Chennai-53	10,000
23.01.2015	Rapid Proto Typing, 3D Scan Solutions, Defence Officers Colony, Chennai-32	600
31.01.2015	CNC Milling Machine, Sixth Sense Robotics, Chennai-53	4,850
04.02.2015	Rapid Proto Typing, 3D Scan Solutions, Defence Officers Colony, Chennai-32	15,000
06.02.2015	Rapid Proto Typing, Personal Quality Systems, Bangalore	3,000
06.02.2015	Rapid Proto Typing, 3D Scan Solutions, Defence Officers Colony, Chennai-32	15,000
11.02.2015	CNC Milling Machine, Sixth Sense Robotics, Chennai-53	2,000
18.02.2015	CNC Milling Machine, Sixth Sense Robotics, Chennai-53	2,000
	27.01.2014 10.02.2014 06.05.2014 20.05.2014 08.07.2014 05.11.2014 27.11.2014 13.01.2015 23.01.2015 31.01.2015 04.02.2015 06.02.2015 11.02.2015	27.01.2014 Solutions, Defence Officers Colony, Chennai-32 Rapid prototyping, iRam Technologies, Kundalahalligate, Bangalore-560037 Rapid Proto Typing, 3D Scan Solutions, Defence Officers Colony, Chennai-32 CMM Machine, HAVISS 3D Metrology Solutions, Manali New Town, Chennai-600103 Rapid Proto Typing, 3D Scan Solutions, Defence Officers Colony, Chennai-32 CMM Machine, HAVISS 3D Metrology Solutions, Manali New Town, Chennai-600103 Rapid Proto Typing, Aura LED (3D Printing) Rapid Proto Typing, Growtech Innovations India Private Ltd, Bangalore-560043 CMM Machine, HAVISS 3D Metrology Solutions, Manali New Town, Chennai-600103 CMM Machine, HAVISS 3D Metrology Solutions, Manali New Town, Chennai-600103 CMM Machine, HAVISS 3D Metrology Solutions, Manali New Town, Chennai-600103 CNC Milling Machine, Sixth Sense Robotics, Chennai-53 Rapid Proto Typing, 3D Scan Solutions, Defence Officers Colony, Chennai-32 CNC Milling Machine, Sixth Sense Robotics, Chennai-53 Rapid Proto Typing, 3D Scan Solutions, Defence Officers Colony, Chennai-32 O6.02.2015 Rapid Proto Typing, Personal Quality Systems, Bangalore Rapid Proto Typing, 3D Scan Solutions, Defence Officers Colony, Chennai-32 CNC Milling Machine, Sixth Sense Robotics, Chennai-53 CNC Milling Machine, Sixth Sense Robotics, Chennai-52 CNC Milling Machine, Sixth Sense Robotics, Chennai-53 CNC Milling Machine, Sixth Sense Robotics, Chennai-53 CNC Milling Machine, Sixth Sense Robotics, Chennai-53

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
		Total	4,64,848

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.
- Shreram 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.
- CADDCAMM 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.