

**St. PETER'S INSTITUTE OF HIGHER EDUCATION AND RESEARCH**  
**(Declared Under Section 3 of the UGC Act 1956)**  
**Avadi, Chennai 600 054**



**Annual Quality Assurance Report (AQAR)**  
**of the IQAC for 2017-2018**



# The Annual Quality Assurance Report (AQAR) of the IQAC

Part – A

**AQAR for the year 2017-2018**

## 1. Details of the Institution

1.1 Name of the Institution **St.Peter's Institute of Higher Education and Research**

1.2 Address Line 1 **Tonakela Camp Road, Avadi**

City/Town **Chennai**

State **Tamil Nadu**

Pin Code **600054**

Institution e-mail address [spiher@stpetersuniversity.org](mailto:spiher@stpetersuniversity.org)

Contact Nos. **04426558080-85**

Name of the Head of the Institution **Dr. Francis C Peter, Vice Chancellor**

Tel. No. with STD Code: **04426558080-85**

Mobile: **8281712211**

Name of the IQAC **Dr.S.Stella Mary**

Co-ordinator:  
Mobile: **8610867183**

IQAC e-mail address: **iqac@stpetersuniversity.org**

1.3 NAAC Track ID (For ex. MHCOGN 18879) **TNUNGN11443**

**OR**

1.4 NAAC Executive Committee No. & Date: **EC(SC-10)/DO/2015 dated 16-11-2015**

*(For Example EC/32/A&A/143 dated 3-5-2004.*

*This EC no. is available in the right corner- bottom of your institution's Accreditation Certificate)*

1.5 Website address: **www.spiher.ac.in**

Web-link of the AQAR: **www.spiher.ac.in/AQAR2017-18**

### 1.6 Accreditation Details

Sl. No.	Cycle	Grade	CGPA	Year of Accreditation	Validity Period
1	1 <sup>st</sup> Cycle	B	2.52	Nov 16,2015	Nov 15, 2020
2	2 <sup>nd</sup> Cycle	-	-	-	-
3	3 <sup>rd</sup> Cycle	-	-	-	-
4	4 <sup>th</sup> Cycle	-	-	-	-

1.7 Date of Establishment of IQAC : DD/MM/YYYY : **27-09-2013**

1.8 Details of the previous year's AQAR submitted to NAAC after the latest Assessment and Accreditation by NAAC (*for example AQAR 2010-11 submitted to NAAC on 12-10-2011*)

i. AQAR 22.12.2016

ii. AQAR 06.09.2017

### 1.9 Institutional Status

University State Central Deemed ☒ Private

Affiliated College **No**

Constituent College **No**

Autonomous college of UGC **No**

Regulatory Agency approved Institution Yes ☒ No ☐  
(eg. AICTE, BCI, MCI, PCI, NCI)

Type of Institution Co-education ☒ Men Women

Urban ☒ Rural ---- Tribal ---

Financial Status Grant-in-aid ---- UGC 2(f) ☒ UGC 12B ---

Grant-in-aid + Self Financing --- Totally Self-financing ☒

### 1.10 Type of Faculty/Programme

Arts ☒ Science ☒ Commerce ☒ Law ☐ PEI (Phys Edu) ☐

TEI (Edu) ☐ Engineering ☒ Health Science ☐ Management ☒

Others (Specify) : **ARCHITECTURE**

1.11 Name of the Affiliating University (*for the Colleges*) Not Applicable.

1.12 Special status conferred by Central/ State Government-- UGC/CSIR/DST/DBT/ICMR etc

Autonomy by State/Central Govt. / University -----

University with Potential for Excellence ----- UGC-CPE -----

DST Star Scheme : - UGC-CE : --- UGC-Special Assistance Programme --

DST-FIST : -- UGC-Innovative PG programmes Any other (*Specify*) ----

UGC-COP Programmes : ---

## 2. IQAC Composition and Activities

2.1 No. of Teachers : 13

2.2 No. of Administrative/Technical staff : 1

2.3 No. of students : 2

2.4 No. of Management representatives : 1

2.5 No. of Alumni : 1

2.6 No. of any other stakeholder and

community representatives : 1

2.7 No. of Employers/ Industrialists : 1

2.8 No. of other External Experts : 1

2.9 Total No. of members : 21

2.10 No. of IQAC meetings held : 4

2.11 No. of meetings with various stakeholders: 7

Faculty : 3 Non-Teaching Staff 2 Students --- Alumni 1

Others **✓** (Industry interaction meet)

2.12 Has IQAC received any funding from UGC during the year? : **No**

If yes, mention the amount ----

2.13 Seminars and Conferences (only quality related)

(i) No. of Seminars/Conferences/ Workshops/Symposia organized by the IQAC

Total Nos. 7 International Nil National Nil State Nil Institution 6

(ii) Themes- Discussion about AICTE Model curriculum,

Digital Initiatives for Higher education, CBCS, Awareness of Journal Metrics,

Individual Author Metrics and Institution Metrics

## 2.14 Significant Activities and contributions made by IQAC

Plan of Action	Achievements
Continuation of the Deemed to be University status	The UGC committee visited the campus during 17 <sup>th</sup> -19 <sup>th</sup> December 2017
Applied for Approval to AICTE for Engineering and Technology programmes	AICTE visited the campus on 3 <sup>rd</sup> March 2018; 7 UG and 7 PG programmes have been accredited by the AICTE.
Efforts towards improving the Teaching learning process	The concerned board of studies in Engineering and Technology and Arts and Humanities had recommended the curriculum for I and II semesters of B.E/B.Tech. programme on the basis of AICTE model curriculum for implementation from the academic year 2018-19 under Regulation 2018 and approved by the Academic council held on 23.03.2018.
Digital learning	In tune with the MHRD initiative for digital learning, students were encouraged to choose SWAYAM courses and NPTEL video lectures.
Recertification of ISO from ISO9001:2008 standard to ISO9001:2015 standard	The certification body visited the campus during May 2018 and certification was recommended.
To motivate the students to equip themselves as sensible citizens with human values	Soft skills such as communication skills, leadership skills, personality development, Value education etc. have been included in the curriculum itself to make the students competent.

## 2.15 Plan of Action by IQAC/Outcome

The plan of action chalked out by the IQAC in the beginning of the year towards quality enhancement and the outcome achieved by the end of the year \*

Plan of Action	Achievements
Academic calendar has been attached as Annexure I	

2.16 Whether the AQAR was placed in statutory body : **YES**

Management **✓** Syndicate --- Any other body ---

Provide the details of the action taken

**The AQAR is approved.**

## Part – B

### Criterion – I

#### 1. Curricular Aspects

##### 1.1 Details about Academic Programmes

Level of the Programme	Number of existing Programmes	Number of programmes added during the year	Number of self-financing programmes	Number of value added / Career Oriented programmes
PhD	12	-	12	-
PG	14	-	14	-
UG	17	-	17	-
PG Diploma	-	-	-	-
Advanced Diploma	-	-	-	-
Diploma	-	-	-	-
Certificate	-	-	-	2
Others (M.Phil.)	7	-	7	-
<b>Total</b>	<b>50</b>	-	<b>50</b>	2

1.2 (i) Flexibility of the Curriculum: CBCS/Core/Elective option / Open options

(ii) Pattern of programmes:

Pattern	Number of programmes
Semester	All Programmes
Trimester	-
Annual	-

1.3 Feedback from stakeholders\* Alumni **✓** Parents **✓** Employers **✓** Students **✓**  
(On all aspects)

Mode of feedback : Online --- Manual **✓** Co-operating schools (for PEI): ---

*Analysis of the feedback have been attached in Annexure B*

**1.4 Whether there is any revision/update of regulation or syllabi, if yes, mention their salient aspects.**

Complete revision of UG/PG (Regulation 2018) curriculum for Engg & Tech featuring AICTE model curriculum. Introduction of multidisciplinary / inter disciplinary courses. Thrust on major design projects at UG level. Introduction of Induction programme for the UG students which is included in the curriculum, Mandatory publication requirement for M.phil.

**1.5 Any new Department/Centre introduced during the year. If yes, give details**

**Criterion – II**

**2. Teaching, Learning and Evaluation**

**2.1 Total No. of permanent faculty**

Total	Asst. Professors	Associate Professors	Professors	Others
155	96	24	32	3

**2.2 No. of permanent faculty with Ph.D. 43**

**2.3 No. of Faculty Positions Recruited (R) and Vacant (V) during the year**

Asst. Professors		Associate Professors		Professors		Others		Total	
R	V	R	V	R	V	R	V	R	V
55	-	6	-	8	-	4	-	10	-

**2.4 No. of Guest, Visiting faculty and Temporary faculty: 19**

**2.5 Faculty participation in conferences and symposia:**

No. of Faculty	International level	National level	State level
Attended	7	29	-
Presented	9	28	-
Resource Persons	5	8	-

**2.6 Innovative processes adopted by the institution in Teaching and Learning:**

Digitalization has been adopted by many of the faculty members. They use internet, power point and animation in their teaching methodology. Slip Test conducted at the end of each hour based on the class handled at the hour to improve the concentration and memory power of students. Special attention is given to slow learners. NPTEL Video lectures are being used in addition to class room coaching. Accesses to e-resources are available in the digital library.

**2.7 Total No. of actual teaching days during this academic year 180**

**2.8 Examination/ Evaluation Reforms initiated by the Institution  
(for example: Open Book Examination, Bar Coding, Double Valuation, Photocopy, Online Multiple Choice Questions)**

Student's academic performances is based on both Continuous Assessment (internal) and the End Semester Examinations (external) with weightage of 25 and 75 marks out of 100 marks for each respectively with a minimum pass of 50 for Engineering & Technology, 40 for the UG Arts and Science courses and 50 for the PG Arts Science courses. Different methods of assessing the student – Slip test, Unit Test, Model Exams & Assignments. OMR sheets with bar coding and answer scripts are followed. Revaluation without any fees is done at the request of student. The valuation followed is single valuation system for both undergraduate and postgraduate students.

**2.9 No. of faculty members involved in curriculum restructuring/revision/syllabus development as member of Board of Study/Faculty/Curriculum Development workshop : 23**

**2.10 Average percentage of attendance of students: 76 %**

**2.11 Course/Programme wise distribution of pass percentage:**

Title of the Programme	Year	Sem	Total no. of students appeared	Division		
				I (no of students)	II (no of students)	% of pass
B.E. (Bio medical Engineering)	I	I	6	5	-	83
		II	7	5	-	71
	II	III	5	4	1	100
		IV	6	5	1	100
	III	V	6	6	-	100
		VI	5	5	-	100
	IV	VII	6	5	-	83.3
		VIII	6	4	2	100
M.E. (Bio medical Engineering)	II	III	3	3	-	100
		IV	3	3	-	100
B.E. CSE	I	I	8	2	-	25
		II	9	4	-	44
	II	III	18	15	-	83
		IV	18	10	-	55
	III	V	4	3	-	75
		VI	4	1	-	25
	IV	VII	13	12	-	92
		VIII	13	12	-	92
M.E CSE	I	I	5	5	-	100
		II	5	5	-	100
	II	III	1	1	-	100
		IV	1	1	-	100
B.E. ECE	I	I	4	3	-	75
		II	3	1	-	33
	II	III	02	02	0	100
		IV	03	01	01	67
	III	V	15	06	01	47
		VI	15	06	05	73
	IV	VII	17	05	06	65
		VIII	15	04	10	93
M.E Applied Electronics	I	I	02	01	-	50
		II	02	01	-	50
	II	III	01	01	-	100
		IV	01	01	-	100
B.E. EEE	I	I	3	-	-	0
		II	3	1	-	33
	II	III	11	10	1	90
		IV	12	5	7	58.33
	III	V	10	9	3	66.6



		VI	8	7	1	87.5
	IV	VII	12	10	2	83.33
		VIII	12	10	2	83.33
M.E (Power Electronics Engineering)	I	I	5	4	1	80
		II	5	5	-	100
	II	III	1	1	-	100
		IV	1	1	-	100
B.E (Civil Engineering)	I	I	12	4	-	33
		II	9	4	3	78
	II	III	12	8	4	93
		IV	12	3	9	19
	III	V	9	8	1	99
		VI	8	2	6	38
	IV	VII	32	29	3	99
		VIII	28	26	2	96
M.E (Structural Engineering)	I	I	11	9	2	82
		II	11	8	3	100
	II	III	5	5	0	100
		IV	5	5	0	100
B.E (Mechanical Engineering)	I	I	16	2	-	12.5
		II	16	2	-	12.5
	II	III	36	14	08	61.11
		IV	36	32	4	80.55
	III	V	30	13	82.69	30
		VI	47	42	5	78.7
	IV	VII	39	10	05	38.46
M.E Advanced Manufacturing Technology		VIII	37	32	5	67.56
	I	I	07	03	01	57.14
		II	06	04	02	100
	II	III	01	01	-	100
B.Tech (Information Technology)		IV	01	01	-	100
	I	I	5	2	-	40
		II	5	2	-	40
	II	III	8	8	-	100
		IV	8	8	-	100
	III	V	4	3	-	75
		VI	4	3	-	75
	IV	VII	9	9	-	100
M.Tech (Information Technology)		VIII	9	8	-	89
	I	I	1	1	-	100
		II	1	1	-	100

## Arts & Sciences

Title of the Programme	Year	Sem	Total no. of students appeared	Division		
				I (no of students)	II (no of students)	% of pass
B.Com	I	I	349	148	85	67
		II	313	133	92	87
	II	III	23	9	6	60
		IV	21	14	4	85.71
B.Com (CS)	I	I	22	13	3	72.72
		II	22	11	5	72.72
B.A English	I	I	6	4	1	83
		II	6	4	1	100
M.A English	I	I	2	2	-	100
		II	2	2	-	100
	II	III	1	1	-	100
		IV	1	1	-	100
B.B.A	I	I	23	8	3	47.82
		II	18	7	3	55.56
MBA	I	I	20	12	2	70
		II	17	12	3	88.23
	II	III	13	13	-	100
		IV	12	12	-	100
B.C.A	I	I	114	35	7	36.8
		II	86	30	24	62.8
	II	III	12	9	1	83.33
		IV	12	7	2	80
MCA	II	III	8	5	NIL	62.5
		IV	6	6	NIL	100
	III	V	8	8	NIL	100
		VI	8	8	NIL	100
B.Sc (Physics)	I	I	12	11	-	91.7
		II	12	12	-	100
M.Sc Physics	I	I	15	14	NIL	88.8
		II	13	12	NIL	88
	II	III	11	2	NIL	18.18
		IV	11	11	NIL	100
B.Sc (Chemistry)	I	I	16	13	1	88
		II	16	15	1	100
	II	III	3	2	-	67
		IV	2	2	-	100
M.Sc (Chemistry)	I	I	22	22	-	100
		II	23	22	-	95.65
	II	III	9	8	1	100
		IV	9	9	-	100
B.Sc (CS)	I	I	57	26	4	52.63
		II	53	27	14	36

**2.12 How  
does  
IQAC  
Contribute/  
Monitor/  
Evaluate  
the  
Teaching**

	II	III	7	7	NIL	87.5
		IV	7	4	1	71.43
M.Sc (CS)	I	I	3	1	NIL	33.33
		II	3	2	NIL	66.67
B.Sc (Mat)	I	I	3	3	3	100
		II	3	3	3	100
	II	III	5	5	2	100
		IV	5	5	5	100
M.Sc Maths	I	I	9	8	NIL	88.8
		II	5	5	NIL	100
	II	III	2	2	NIL	100
		IV	2	2	NIL	100

**& Learning processes:**

IQAC organises meetings, reviews the implementation of resolutions of earlier meetings and proposes quality enhancement measures for the forthcoming academic year. The cell plays an advisory role in Faculty development, Academics, Research and Development, Training and Placements. The cell identifies the societal needs and suggests to the departments to conduct various certificate courses and value-added programmes. The feedback of such programmes are collected and analyzed by the cell and suitable recommendations are made for future improvements so that the needs of the Employer, parents and students can be met. Recommendations and Suggestions collected from the feed backs on the programme, courses, curriculum and Teaching Learning can be implemented and this has always resulted in qualitative improvement of Teaching- Learning process.

**2.13 Initiatives undertaken towards faculty development**

<i>Faculty / Staff Development Programmes</i>	<i>Number of faculty benefitted</i>
Refresher courses	8
UGC – Faculty Improvement Programme	10
HRD programmes	-
Orientation programmes	3
Faculty exchange programme	-
Staff training conducted by the university	77
Staff training conducted by other institutions	8
Summer / Winter schools, Workshops, etc.	22
Others	
National Conference	50
Certificate Course	20

**2.14 Details of Administrative and Technical staff**

Category	Number of Permanent Employees	Number of Vacant Positions	Number of permanent positions filled during the Year	Number of positions filled temporarily
Administrative Staff	75	-	15	-
Technical Staff	25	-	5	-

### Criterion – III

### 3. Research, Consultancy and Extension

#### 3.1 Initiatives of the IQAC in Sensitizing/Promoting Research Climate in the institution

- Plan to constitute a Research Forum with Dean R&D as the Chairman and Director R&D as the Ex officio member with two Heads of the Departments as the members. This forum is created with the following objectives.
- A Centre for Innovation was created with the objective to impart and encourage creativity and innovation among students and faculty, conduct motivational programmes and skill development programmes on innovation, encourage innovation by introducing awards at various levels and create awareness about IPR and provide guidance. In 2017-18, the following activities were conducted.
  - Students Project Exhibition (for B.E., B.Tech. and M.Sc. students) and Best Project Awards, April 5, 2018.
  - One-Day Workshop on Nanoscience and Technology, February 22, 2018.
  - Special lecture on Science, Technology & Innovation, April 10, 2018. Speaker: Dr.V.Ponraj - Former Scientist-G, ADA, Min of Defence, Govt of India. Former Director (TI) at the President's Secretariat of Dr APJ Abdul Kalam, Scientific Advisor to Late Dr. APJ Abdul Kalam; Worked with Dr APJ Abdul Kalam for 20 years. His Last Ph.D Student.
  - Presentation of students/faculty projects in the International Exhibition on Machine Tools organised by AIEMA in Chennai Trade Centre, June 21-25, 2018. A stall was given freely by AIEMA to display projects of students/faculty. Seven projects of biomedical, ECE and Mechanical Engineering were presented. The project on Gluco L was awarded the Best Project Prize.
- To provide guidelines for utilization of Resources for Research.
- Unveiling the significance of identifying the original research problems to file patent and to provide guidelines for organization of Conference/Seminar/Workshops/Symposia.
- Encourages faculty and students for Paper Presentation, Paper Publication in refereed journals and journals with high impact factor.
- Motivates the Faculty to apply for Major and Minor Research Projects from various National and International funding agencies
- Sessions and Projects are devised to improve and enhance research potential and initiate quality assessment standards
- Encourages teachers and students to participate in International, National and State level seminars and Conferences

- Motivates the faculty to pursue research and also to avail the benefits of FDP
- Invites eminent resource persons to conduct lectures/ workshops/ seminars on relevant topics.
- Education Consultancy has been carried out by the faculty.

### 3.2 Details regarding major projects

	Completed	Ongoing	Sanctioned	Submitted
Number	3	-	1	2+1
Outlay in Rs. Lakhs	9.35	-	30 lakhs	83.405 +5.33

### 3.3 Details regarding minor projects

	Completed	Ongoing	Sanctioned	Submitted
Number	9		7	7
Outlay in Rs. Lakhs	11,30,000		10,90,000	6,10,000

### 3.4 Details on research publications

	International	National	Others
Peer Review Journals	48	2	8
Non-Peer Review Journals		1	
e-Journals	4	2	
Conference proceedings	13	113	

### 3.5 Details on Impact factor of publications:

Range : **0.042-2.3** Average : 1.5 h-index: **1-30** Nos. in SCOPUS : 10

### 3.6 Research funds sanctioned and received from various funding agencies, industry and other organisations

Nature of the Project	Duration Year	Name of the funding Agency	Total grant sanctioned	Received
Major projects	3	DST –Seed Division	30 lakhs	Nil
Minor Projects				
Interdisciplinary Projects				
Industry sponsored	2017-2018	Meditech Info Systems	50,000	50,000
	2017-2018	IIPM	10,000	10,000
Projects sponsored by the University/ College	2017-2018	SPIHER	60,000	60,000
	2017-2018	SPIHER	2,000	
Students research projects (other than compulsory by the University)				
Any other(Specify)				
<b>Total</b>			1,22,000	1,20,000

**3.7** **No.**

**of books published** i) With ISBN No. **7** Chapters in Edited Books **28**

ii) Without ISBN No. **5** iii) with ISSN No. **4**

**3.8 No. of University Departments receiving funds from: NIL**

UGC-SAP --- CAS --- DST-FIST --- DPE ---- DBT Scheme/funds ----

**3.9 For colleges** Autonomy CPE DBT Star Scheme  
INSPIRE CE Any Other (specify)

**3.10 Revenue generated through consultancy: 1.5 L**

**3.11 No. of conferences organized by the Institution**

Level	International	National	State	University	College
Number	1	7			
Sponsoring agencies	SPIHER	IIPM & SPIHER			

**3.12 No. of faculty served as experts, chairpersons or resource persons : 24**

**3.13 No. of collaborations:** International 1 National 4 Any other 1

**3.14 No. of linkages created during this year:** 7

**3.15 Total budget for research for current year in lakhs:**

From funding agency: **16.650 L** From Management of University/College : **57.50 L**

Total: **74.15 L**

**3.16 No. of patents received this year:**

Type of Patent		Number
National	Applied	8
	Granted	-
International	Applied	1
	Granted	-
Commercialised	Applied	-
	Granted	-

**3.17 No. of research awards/ recognitions received by faculty and research fellows of the institute in the year**

Total	International	National	State	University	Dist	College
11	1	10	-	-	-	-

**3.18 No. of faculty from the Institution who are Ph.D. Guides : 25**  
**and students registered under them : 23**

**3.19 No. of Ph.D. awarded by faculty from the Institution: 66**

**3.20 No. of Research scholars receiving the Fellowships (Newly enrolled + existing ones)**

JRF : 1 SRF : -- Project Fellows: 23 Any other : --

**3.21 No. of students Participated in NSS events:**

University level 67 State level -- National level -- International level --

**3.22 No. of students participated in NCC events: Not applicable.**

University level State level National level International level

**3.23 No. of Awards won in NSS: Nil.**

University level State level National level International level

**3.24 No. of Awards won in NCC: Not applicable.**

University level State level National level International level

**3.25 No. of Extension activities organized**

University forum: 8 College forum -- NCC -- NSS : 3 Any other -

### 3.26 Major Activities during the year in the sphere of extension activities and Institutional Social Responsibility

1. Conducted basic Computer Training Course for the Recruit Police Constables on 12.12.2017
2. Faculty of the department of Computer Science involved in educating underprivileged children on 08.10.2017
3. Basic computer training course for Unemployed Women conducted by the Department of Computer Science
4. TEDP on Sustainable building materials – August 21 to September 29, 2017.
5. Entrepreneur Awareness Camp sponsored by EDII, Ahmedabad from 26.09.17 to 28.09.17.
6. Faculty Development Programme from 13<sup>th</sup> to 25<sup>th</sup> Nov.2017, 11<sup>th</sup> to 23<sup>rd</sup> Dec.2017 and 19<sup>th</sup> to 31<sup>st</sup> March 2018
7. TEDP on Servicing of Refrigeration and Air conditioning from 14.02.2018 to 28.03.2018.
8. Cleaning and Tree Plantation by NSS volunteers On 20<sup>th</sup> July 2017
9. Awareness Programme on Concept Development for Human Excellence on 10.02.18.
10. NSS camp in Karunakaracheri Village from 17<sup>th</sup> to 23<sup>rd</sup> February 2018.
11. Awareness Programme on Organ Donation on 25<sup>th</sup> May 2018
12. World Environmental Day celebration on Beat Plastic Pollution on 5<sup>th</sup> June 2018

### Criterion – IV

#### 4. Infrastructure and Learning Resources

##### 4.4 Technology up gradation (overall)

	Total Computers	Computer Labs	Internet	Browsing Centres	Computer Centres	Office	Departments	Others
Existing	955	646	All	All	183	11	15	100
Added	-	-	-	-	-	-	-	-
Total	955	646	All	All	183	11	15	100

##### 4.2 Computerization of administration and library

###### Administration:

###### Pay and Accounts Office

- Annual accounts, financial statements, salaries to the teaching and non teaching, Provident fund, Income Tax have been computerized through administration office.

###### Examination Office

Tasks executed through intranet:

- List of students appearing for examinations are transferred through intranet from the Academic Deans office to the Examination office.
- Exam Panel, Examiner selection and Hall Tickets are computerized.
- CA marks computed and included to the End – Semester mark sheets.
- Declaration of results is executed online.
- Mark Sheets are computerized.
- Course registrations and convocation registration are done online.
- Entry of hourly attendance is done online
- The certificates of all the students have been uploaded in NAD (National Academic Depository)



## Library

- Automated using the Library Management software “eBLIS “. eBLIS is a User-friendly software designed to take care of all the administrative and management functions of the Library. It organizes and manages the information of Books, Articles, Journals and Circulation in economical and effective manner.
- Research Alert, Online Question Bank, Link with Institutional Libraries
- The OPAC (Online Public Access Catalog) can be accessed from all the library computer systems which can also be used for browsing and surfing the internet to supplement the Library sources.
- The barcode printer in the library is used for printing the accession numbers of the books which would be scanned during books transaction and the barcode scanners are used in the library to scan the barcode of the books during issue and return of the books.
- ID card scanners record the entry of users into the library
- Availability of NPTEL Materials
- Digital Library

### 4.3 Library services:

	Existing		Newly added		Total	
	No.	Value	No.	Value	No.	Value
Text Books	60003	1,26,19,450	188	80676	60191	1,27,00,126
Reference Books	706	10,99,658			706	10,99,658
e-Books	350	Open sources database	168	Open sources database	548	Open sources database
Journals	77	1,39,279			72	1,36,085
e-Journals Delnet	487	10,36,611	205	Open sources database 28,673	692	10,65,284
Digital Database	50	Open sources database	10	Open sources database	60	Open sources database
CD & Video	2553	Books CDs				60,000
S&H Books	7150	12,26,739	98	14618	7248	12,41,357

### 4.4 Technology up gradation (overall)

	Total Computers	Computer Labs	Internet	Browsing Centres	Computer Centres	Office	Depart -ments	Others
Existing	955	646	All	All	183	11	15	100
Added	-	-	-	-	-	-	-	-
Total	955	646	All	All	183	11	15	100

#### 4.5 Computer, Internet access, training to teachers and students and any other programme for technology upgradation (Networking, e-Governance etc.)

Adequate computer access to faculty/staff/students
Training to faculty/staff/students on ICT
Wi-Fi enabled campus
Moving towards paperless office
e-varsity
e- management

- Adequate computer access to faculty/staff/students and Intranet connectivity between the departments
- Wi-Fi enabled campus for students and staff
- Wi-Fi for both Girls and Boys Hostels
- Moving towards paperless office
- e-varsity
- e- management
- Centralized data centre
- Biometric attendance for faculty both teaching and non teaching
- Special lecture on digital learning.

#### 4.6 Amount spent on maintenance in lakhs :

- i) ICT : Rs.8.625 L
- ii) Campus Infrastructure and facilities : Rs 36.70 L
- iii) Equipments : Rs 17.80 L
- iv) Others : Rs 66.65 L

**Total : Rs 129.775 L**

#### Criterion – V

### 5. Student Support and Progression

#### 5.1 Contribution of IQAC in enhancing awareness about Student Support Services

Feedback mechanism put in place
Accreditation of programs by AICTE
Orientation programmes organized for freshers
Bridge course conducted based on the AICTE model curriculum
Students are encouraged to participate in various events conducted by other Institutes and Universities

#### 5.2 Efforts made by the institution for tracking the progression

- Class Advisers keep track of the performance of the students and monitor the progress.
- Slow learners are identified in the class with the help of their respective class advisers and Remedial Coaching has been arranged.
- The academic performance of the students is analyzed every semester in the class committee meetings and in the Department Staff Meeting.
- Academic & Green Audit Conducted
- Feedback collected from various stakeholders and analysed.

- IQAC meetings held Quarterly
- Feedback from students, Faculty & Alumni
- Self-appraisal is done by Faculty
- Student counseling is done and recorded and follow up action taken
- Suggestion box is kept at various locations of the University

### 5.3 (a) Total Number of students

UG	PG	Ph. D.	Others (M.Phil.)
1635	225	23	63

(b) No. of students outside the state : 475

(c) No. of international students : ---

No	%	Men	No	%	Women
1389	72.23		534	27.7	

Last Year						This Year					
General	SC	ST	OBC	Physically Challenged	Total	General	SC	ST	OBC	Physically Challenged	Total
206	161	8	759	-	1134	250	335	16	1322	-	1923

Demand ratio – The number of seats are more than the students      Dropout - 5%

### 5.4 Details of student support mechanism for coaching for competitive examinations (If any)

- Soft skills and value added courses were included in the curriculum
- Training on Aptitude and Reasoning Skills is rendered.

No. of students beneficiaries- 1860

### 5.5 No. of students qualified in these examinations

NET :                      SET/SLET : 1                      GATE: ---                      CAT  
IAS/IPS etc : --                      State PSC: --                      UPSC                      Others

### 5.6 Details of student counselling and career guidance

<ul style="list-style-type: none"> <li>• A faculty counsellor is appointed for every 20 students</li> <li>• A class advisor is appointed for each class to monitor the performance of the students</li> <li>• Placement coordinator for every department to carry out career counselling</li> <li>• Professional counselling by full time doctors</li> </ul>	No. of students benefitted
	1860

## 5.7 Details of campus placement

<i>On campus</i>		<i>Off Campus</i>	
Number of Organizations Visited	Number of Students Participated	Number of Students Placed	Number of Students Placed
9	60	33	2

## 5.8.Details of gender sensitization programmes

Anti sexual harassment Cell and Women Empowerment cell conducts meetings with all girl students. Contact number of the coordinator has been circulated and displayed in Notice Boards & website. Women empowering awareness programmes such as Gender Equality speech Titled **Kanavu Meipada Vendum** are being conducted to motivate the students to become an entrepreneur, to follow united approach in competition ,training and workshop programmes and to have equal involvement in extension activities like NSS & YRC etc. Students are encouraged to perform cultural activities related to women empowerment. International Women's Day is being celebrated every year in which eminent speakers are invited to deliver a talk on the problems and challenges faced by the Women in society and to celebrate gender diversity through meaningful celebration and targeted bold action. Awareness program on **Gynecological Health Benefits** promoting women empowerment for better health outcomes.

## 5.9 Students Activities

### 5.9.1 No. of students participated in Sports, Games and other events

State/ University level : **73**      National level :      International level :

No. of students participated in cultural events

State/ University level: 154      National level      International level

### 5.9.2 No. of medals /awards won by students in Sports, Games and other events

Sports : State/ University level : **1**      National level: **1**      International level: -

Cultural: State/ University level : **30**      National level: -      International level: -

## 5.10 Scholarships and Financial Support

	Number of students	Amount
Financial support from institution	8	5,20,000
Financial support from government	-	-
Financial support from other sources	-	-
Number of students who received International/ National recognitions	-	-

## 5.11 Student organised / initiatives

Fairs: State/ University level      2      National level -      International level -

Exhibition: State/ University level      2      National level -      International level -

## 5.12 No. of social initiatives undertaken by the students: 2

## 5.13 Major grievances of students (if any) redressed: NIL

## **Criterion – VI**

### **6. Governance, Leadership and Management**

#### **6.1 State the Vision and Mission of the institution**

**VISION :** To achieve Academic Excellence in Engineering & Technology and Science through Teaching, Research and Extension to Society.

**MISSION:** By Generating, Preserving and Disseminating Knowledge through Rigorous Academic Study, Inquisitiveness to Understand and Explore Nature and Entrepreneurship with Creativity and Innovation.

#### **6.2 Does the Institution has a management Information System**

Yes, SPIHER has Management Information System.

#### **6.3 Quality improvement strategies adopted by the institution for each of the following:**

##### **6.3.1 Curriculum Development**

- OBE for B.E./B.Tech.
- Student feedback system on Teaching, curriculum and course
- Implementation of AICTE Model Curriculum
- External experts from Industry and Institutes in Board of studies.
- Curriculum revision to meet the industry demands.
- Input from Industrialists and Alumni

##### **6.3.2 Teaching and Learning**

- Digital courseware.
- Mapping student outcomes / instructional objectives and program educational objectives.
- Uploading lesson plan / question paper keys.
- Active learning laboratories
- Use of Internet, ppt presentation during class room teaching.

##### **6.3.3 Examination and Evaluation**

- Internal assessment: End-semester exam = 25:75
- Slip tests/ Unit Tests/ Retests/ Model examination/ Assignments/ for internal assessment.
- Record of internal assessment fully computerised.
- Central valuation for end semester examinations.
- Results processing fully computerised
- Results uploaded on the University website to help the students and provision has been given to take print outs
- Online Publication of End Semester Examination results
- Mark sheets printed with six security features including the photograph of the students
- Provisional certificates are issued within one month of the declaration of the results
- Convocation conducted without any delay and degrees are given to the students.

##### **6.3.4 Research and Development**

- Ph.D programs in all disciplines.
- Funded projects by industries / government departments/ industries.
- Seed money given for projects by the university
- Plan to constitute A Research Forum with Dean R&D as the Chairman and Director R&D as the Ex officio member with two Heads of the Departments as the members. This forum is to be created with the following objectives
- Centre for Innovation

- To create awareness on concept development for Innovative research Problems.
- To provide ideas on ‘Research approach for Global reach’.
- To provide guidelines for utilization of Resources for Research.
- Unveiling the significance of identifying the original research problems to file patent and to provide guidelines for organization of Conference/Seminar/Workshops/Symposia
  - Publication in peer reviewed journals.
  - Sponsorship to present papers in / attend international /national conferences.
- SAIF centre has organized an Internship Programme for nearly 35 M.Sc students from in and around colleges like New College, DG Vaishnav College etc.,

### **6.3.5 Library, ICT and Physical Infrastructure / Instrumentation**

- Fully automated through the use of standard library software package called “AutoLib”,
- well stocked with number of volumes
  - Student records/ attendance/ internal marks/ fee payments/ fully computerised.
  - Entire correspondence through e-mails; moving towards paperless office.
  - Purchase / salary / leave records of faculty/ applying leave etc. fully computerised.
  - Wi-Fi enabled campus.
- Internet connectivity with a speed of **1Gbps** provided by MHRD under NMEICT Programme through National Knowledge Network (NKN) and BSNL.
  - Calibration of lab measuring equipment by university instrumentation centre
  - Fire extinguishers installed on campus and students and staff trained in handling the equipment
  - Biometric system introduced for staff.
  - Auditorium with the capacity of around 3000
  - Seminar Halls and Conference Halls with LCD projector
  - Notice boards installed in strategic locations to disseminate information relating to events, news, and other important information that every student needs to know
  - To ensure safety and security of the campus community, the University is under central surveillance with the installation of CCTVs at all floors in the main block and in hostels.
  - Buildings to house administrative offices, staff rooms, well equipped laboratories, Fine Arts studios, library, students’ common room, guest rooms, hostels for both boys and girls, Medical centre, games field, Xerox facility
  - Bank with ATM facility, canteen, coffee day, a juice centre, parking area and residential facilities for few staff

### **6.3.6 Human Resource Management**

- Dedicated Management
- Well laid policy for recruitment / upward mobility.
- Well laid policy for faculty Development.
- Organization of in-house faculty development programs. Faculty development Programme on Outcome Based Education (OBE) on April 2-4, 2018 by National Institute of Technical Teacher’s Training and Research, Ministry of Human Resources, Government of India.
- Organization of Awareness programme on IPR, Income tax etc.,

### **6.3.7 Faculty and Staff recruitment**

- Well laid out policy and process.
- Interview panel consisting of external / internal experts.
- Advertisement in leading national dailies.
- Online submission of resume.

### 6.3.8 Industry Interaction / Collaboration

- A dedicated Industry Interaction done at the department level headed by the respective Heads.
- Collaborative MoUs with industries in India.
- Factory and Field visits organized for students

### 6.3.9 Admission of Students

- Admission notification given in leading National dailies
- Through Entrance Examination followed by counselling for Engineering & Technology and PG both Engineering Technology and Arts and Sciences.
- Admission is monitored by the Admission committee constituted for this purpose
- For research programmes, both entrance examination and interview are conducted
- Participated in Educational Fairs in collaboration with the leading news paper 'Daily Thanthi' and 'The Hindu' in Trade centre during 7<sup>th</sup> and 8<sup>th</sup> of April and 14<sup>th</sup> and 15<sup>th</sup> of April 2018 in Chennai, Salem and Tirunelveli Districts.

### 6.4 Welfare schemes for

Teaching	Yes
Non teaching	Yes
Students	Yes

Teaching	a) Funding for organizing workshops/ conference/ seminars b) Funding for participation in national and international workshops/ conference/ seminars. c) Encouragement to attend refresher/ orientation programmes. d) Incentive driven consultancy rules e) Encouragement for submitting externally funded projects. An incentive driven project handling guidelines. f) Every faculty member was provided a desktop computer with accessories and an intercom connection g) Loan facility is provided by Indian Bank functioning inside the University campus. h) Besides PF, Free Transport are provided. i) Staff Quarters are also available j) Health Centre within campus available
Non teaching	PF, ESI are provided along with loan facility Health Centre within campus available
Students	Merit scholarships, Medical insurance, National scholarships Health Centre within campus available

### 6.5 Total corpus fund generated : Rs 5.39 Cr.

### 6.6 Whether annual financial audit has been done: Yes

### 6.7 Whether Academic and Administrative Audit (AAA) has been done?

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	Yes	Senior Faculty from other Institutes	Yes	Senior Faculty
Administrative	---		----	

### 6.8 Does the University/ Autonomous College declares results within 30 days?

For UG Programmes : **Yes**  
For PG Programmes : **Yes**

### **6.9 What efforts are made by the University/ Autonomous College for Examination Reforms?**

1. Semester and Grading System on a ten point scale are implemented. For each semester, grade point average is mentioned in the grade sheet. Cumulative grade point is also arrived at. The formula for arriving CGPA is given in the mark sheet.
2. Genuineness of the certificate can be verified online.
3. Semester grade sheets are given to all students.
4. Consolidated marks on successful completion of the programme will be provided on demand from the students
5. Degree (Diploma) certificates for all the eligible candidates will be made available on conferment of degrees at the Convocation.
6. Course completion certificate, Transfer Certificate, Migration Certificates are made available on request of the candidates without any fee.
7. Consolidated mark sheets and provisional certificates are given at the earliest.
8. The results are announced within 20 days after the last examination.
9. Provisional result for the final year students are declared in a week's time. This is highly helpful for students who want to pursue higher studies in India and abroad.
10. The grievances of the students if any are addressed to the Heads of the department, which are resolved within ten days.
11. The office of the Controller of Examinations provides immediate supportive mechanism for those students who have approached the university with grievances.
12. Practical examinations are completed before the theory examinations.
13. Question Papers are set by the outside experts. Board of studies prescribes the pattern of the question paper. The Head of the department informs the Controller of Examinations for suitable further actions in case of any discrepancy in the question papers.
14. Question papers are sent in sealed cover to the Chief Superintendent of the examinations on the respective day of examination.
15. The answer sheets with OMR sheets with provision for subject code, title of the paper, date of examination and bar code for scanning are provided by the University as a student friendly measure.
16. Central valuation system is adopted.
17. The examiners are given orientation before the commencement of evaluation process.
18. The examiners are provided with the scheme of evaluation to ensure objectivity in the valuation process.
19. Provisional certificates for M.Phil. and Ph.D. scholars are given within 14 days after viva voce examination.

### **6.10 What efforts are made by the University to promote autonomy in the affiliated/constituent colleges?**

Not Applicable

### **6.11 Activities and support from the Alumni Association**

- Alumni meet is organized every year during February and this year it was organized on 25<sup>th</sup> February 2018.
- Alumni are invited as resource persons.



- Alumni give valuable inputs for curriculum revision and updation. All Departments use the support of alumni in academic field by including them as Board member in their Board of Studies.
- Alumni guide in identifying internship opportunities for students.
- Alumni help in securing placements in reputed organizations
- Various Alumni Associations are active in this institution.
- Members support the college by providing the students with lectures, seminars and counseling classes.
- Yearly alumni meeting provide the students, a golden opportunity for interaction.

#### **6.12 Activities and support from the Parent – Teacher Association**

- University is not having PTA
- It is mandatory that parents of first year students attend an Orientation on all academic programmes and student support services offered on campus.
- Parent – Teacher Meet is organized by various departments where teachers will give the feedback about their wards in the areas of curricular, co-curricular and behavioural aspects
- Departments organize a one-on-one dialogue with parents whose children need further support and counselling services to enhance performance

#### **6.13 Development programmes for support staff**

- Motivational lectures by eminent speakers were organized by the Management

#### **6.14 Initiatives taken by the institution to make the campus eco-friendly**

- Segregation of garbage by placing bins
- Collection of solid waste
- Material recovery and recycling / upcycling
- Ban on usage of plastics in the Campus
- Swatch Bharat campaign conducted
- RO plant installed.
- Extensive efforts have been taken to plant trees and make campus green
- Creating Awareness on the importance of keeping the campus eco- friendly by placing boards inside the campus.
- Supervised by environment manager and sanitation manager
- Replacement of Bulbs with LED and energy efficient PL lamps and solar panels

## Criterion – VII

### 7. Innovations and Best Practices

**7.1 Innovations introduced during this academic year which have created a positive impact on the functioning of the institution. Give details.**

- Revision of curriculum and syllabus as per AICTE Model curriculum and six week induction programme.
- Periodic Introduction of new and innovative courses in curriculum
- A Facebook page for the institution has been created with the idea of hosting details of the activities of the Institute
- The Institute has been the pioneer in establishing SMS gateway used to send intimation to parents about their ward's performance and attendance detail regularly
- A group in Whatsapp is created for faculty as well as the students department wise to have instant communication regarding placement activities.
- University magazine is released annually containing student achievement, articles.
- Annual IQAC news letter is released
- Introduction of new courses by various departments to cater to the different needs of the students
- Summer Internships were encouraged for UG/ PG students to enhance research and industry-institute linkage
- Introduction of Electives to help the students to widen their knowledge
- Training in Soft Skills increases self confidence, builds leadership qualities and skills for holistic development.
- Celebration of National Science Day, Women's Day, Independence day etc.
- Motivational Lectures organized for the students to manage their stress and age related issues.
- NSS students made a positive impact with their contributions to the nearby village for camp and conducted awareness on banning usage of plastics

**7.2 Provide the Action Taken Report (ATR) based on the plan of action decided upon at the beginning of the year**

Plan of Action	Achievements
Continuation of the Deemed to be University status	The UGC committee visited the campus during 17 <sup>th</sup> -19 <sup>th</sup> December 2017
Applied for Approval to AICTE for Engineering and Technical Education	AICTE visited the campus on 3 <sup>rd</sup> March 2018 and 7 UG and 7 PG programmes have been approved by the AICTE.
To upgrade the staff with the concept of OBE and equip them with the new curriculum	Faculty development Programme on Outcome Based Education (OBE) on April 2-4, 2018 by National Institute of Technical Teacher's Training and Research, Ministry of Human Resources, Government of India.
Efforts towards improving the Admission and branding the Institute	Educational Fairs have been organized in collaboration with leading News papers like 'The Hindu' and Daily Thanthi on April 7 <sup>th</sup> & 8 <sup>th</sup> April 2018 and April 14 <sup>th</sup> & 15 <sup>th</sup> 2018 in Trade Centre, Nandambakam, Chennai.
Efforts towards improving the Teaching learning process	The concerned Board of studies in Engineering and Technology and Arts and Humanities had

	recommended the curriculum for I and II semesters of B.E/B.Tech on the basis of AICTE model curriculum for implementation from the academic year 2018-19 under Regulation 2018 and approved by the Academic council held on 23.03.2018.
Recertification of ISO from ISO9001:2008 standard to ISO9001:2015 standard	The certification body visited the campus during May 2018 and certification was recommended with few minor NCRs
To motivate the students to equip themselves as sensible citizens with human values	Soft skills such as communication skills, leadership skills, personality development, Value education etc. have been included in the curriculum itself to make the students competent.
To create Awareness among the public on societal problems	<ul style="list-style-type: none"> <li>• Cleaning and Tree Plantation by NSS volunteers On 20<sup>th</sup> July 2017</li> <li>• Awareness Programme on Concept Development for Human Excellence on 10<sup>th</sup> February 2018.</li> <li>• NSS camp in Karunakaracheri Village from 17<sup>th</sup> to 23<sup>rd</sup> February 2018.</li> <li>• Awareness Programme on Organ Donation on 25<sup>th</sup> May 2018</li> <li>• World Environmental Day celebration on Beat Plastic Pollution on 5<sup>th</sup> June 2018</li> </ul>
To create awareness about the research facilities (SAIF) available in the Institute	Induction programme organized for the students to create research opportunities and around 30 students took up the induction programme during May 2018 for nearly 15 days
To organize Workshops, Seminars, Conferences etc by the departments	One International Conference on Green Technology organized by the ECE department during April 2018 Around 7 National Conferences organized by various departments
To create awareness on concept development for Innovative research Problems and to provide ideas on 'Research approach for Global reach', guidelines for utilization of Resources for Research, Unveiling the significance of identifying the original research problems to file patent and to provide guidelines for organization of Conference/Seminar/Workshops/Symposia	A plan to create a Research with Dean R&D as the chairman and Director and 2 Heads as the members. Various seminars and Guest lectures were organized in topics like <b>"Research Metric Analysis and its impact on Global Research"</b> on 3 <sup>rd</sup> August 2018 and <b>IPR focused to Patents and Commercialization</b> strategies for Indian Research Scenario on 11 <sup>th</sup> August 2018.
To make the students manage their stress by conducting Orientation Programme	Orientation programme conducted for the students by a Psychiatric doctor Dr. Kannan Girish founder of 'Live Life' on 24 <sup>th</sup> July 2018.
Yoga Awareness programme	YOGA awareness programme conducted by Mr.Saravanan, Yoga Master on 1 <sup>st</sup> August 2018

### **7.3 Give two Best Practices of the institution** (please see the format in the NAAC Self-study Manuals)

#### **Best Practice (I)**

##### **1. Title of the practice :Formation of Research Forum**

Promotion of High Quality Research

##### **2. Objectives of the practice**

- Promotion of High Quality Research
- To create awareness on concept development for Innovative research Problems.
- To provide ideas on 'Research approach for Global reach'.
- To provide guidelines for utilization of Resources for Research.
- Unveiling the significance of identifying the original research problems to file patent and to provide guidelines for organization of Conference/Seminar/Workshops/Symposia
- Publication in peer reviewed journals.
- Sponsorship to present papers in / attend international /national conferences.

##### **3. The context**

- Research and Development is the fulcrum of any country's socio economic progress activities
- Educational institutes take lion's share of this arena in any country.
- To support this with proper perspective for innovation, Research Forum is established.
- Forum extends supports to all researchers to nurture their research in leading issues of society in Science, Arts, Engineering and Technology and Management.

##### **4. The practice**

- New facilities created for advanced research like Sophisticated Analytical Instrumentation facility.
- Faculty identified as mentors and encouraged to apply for funding.
- Provided advance funding for sanctioned projects
- Conducted workshops, research training programmes and research scholars seminars.
- MoUs signed with national research laboratories and industries.
- A fortnightly meeting scheduled for the members, in which the members are allotted slots to present their research interests for debate and then opportunity is given to members to discuss issues in the presentation and suggestions are solicited.

##### **5. Evidence of success**

- SAIF is being utilized by many research scholars of our universities and other academic institutions. This has helped in high quality publications and useful research outputs.
- Many Projects are being carried out by the students which are being patented.
- Innovative courses introduced and value added programmes conducted.
- The number and quality of publications improved over the years.

##### **6. Problems encountered and Resources required**

- Many project proposals sent to funding agencies are pending.
- Research grant for Ph.D. scholars. Many proposals pending

## **Best Practice (II)**

### **Title of the Practice : Teaching Learning Process”**

#### **1. Objective of the Practice**

- To make the teaching learning process effective.
- To introduce digital learning.
- To monitor the academic performance of the students by continuous evaluation, by conducting slip tests, unit tests, model exams and assignments.
- To maintain a teaching/lesson plan, which gives a clear schedule for the hour wise coverage of subject syllabus, assignments etc.
- To motivate students to achieve 95% attendance and conduct seminars, specific assignment writing, group discussion and quiz competition.

#### **2. The Context**

- To make the teaching learning process meaningful and efficient.
- To make the students understand the basics of the subjects and to make them strong in fundamentals.
- To motivate the students to give their best performance.
- To make them employable or take up higher education/research.

#### **3. The Practice**

- SWAYAM courses introduced.
- Maintain a logbook for each subject separately containing details of attendance, unit test and model examination marks and coverage of syllabus for each hour.
- Maintain the course file, which includes the syllabus, lesson plan, course material and question bank.
- Unit test cell has been created which conducts weekly tests during the first two hours on every Monday and Saturday. The cell also conducts model examinations at the end of the semester on the same pattern as university examinations.
- The performance of the students in the above tests are discussed with the students and periodically sent to the parents as progress reports.
- Faculty counselors for every 15 to 20 students are nominated to counsel the students on all matters including academics.
- Class committee meetings are conducted regularly to get the feedback of the faculty and the students on academic matters for all subjects.
- Parents are informed daily about the absence of their wards by sms.

- Parents are counseled to improve the academic performance of their ward
- Special efforts are taken for slow learners. Orientation classes for freshers are conducted at the beginning of the semester.
- The methodology of internal assessment is clearly informed to the students at the beginning of the semester.

#### **4. Evidence of Success**

- Academic performance has clearly improved by the above process.
- The counselling has helped in the overall improvement of the behavior of the students.
- A strong basic in subjects has helped the students in taking up useful projects to the industry and the society.
- Parents are very happy that regular monitoring of their wards is being done.
- Many students take the unit tests and model exams seriously which helps them in their performance during University examinations.

#### **5. Problems Encountered and Resources Required**

Many students are from rural areas and have studied in Tamil medium. Many students are first time graduates in their families. Hence, special efforts are required to bring them on par with others.

#### **7.4 Contribution to environmental awareness / protection**

- Environmental Studies included in the curriculum as a separate paper with credits to create awareness on the ways of protecting the environment
- Guest Lectures are arranged on environmental degradation and the measures to be taken for preventing the same and the role played by the students in such an action
- Awareness programs are conducted by the students in the nearby villages on the factors responsible for environmental degradation, need for protecting the environment and growing more trees held during 17<sup>th</sup> to 23<sup>rd</sup> February 2018
- The use of plastics and plastic covers is banned in the institution.
- Waste water is recycled and used for trees and plants.
- In order to create environmental awareness the students are instructed to dispose the waste in the dustbins that are placed in the classrooms and frequently visited places.
- Various awareness programs are organized in the Institute by the NSS forum to create awareness on Beat Plastic Pollution on the World Environment Day held on 5<sup>th</sup> June 2018
- Incinerators have been installed in the women's hostel
- All student and staff of the Institute are given awareness about switching off the fans and other devices when not in use.
- Around 1500 saplings have been planted in the last year
- A few solar street lights have been installed. Solar kit procured from IIT Bombay helps to demonstrate solar energy concepts and applications to students

**7.5 Whether environmental audit was conducted?      Yes**

## **7.6 Any other relevant information the institution wishes to add. (for example SWOT Analysis)**

### **Strengths:**

- Green and Beautiful Campus
- Great infrastructure facilities
- Excellent student support with hostels, library, scholarships, health care etc
- Transparent admission policy
- Clearly defined Vision and Mission
- Wide number of UG, PG, M.Phil, and Ph.D programs in Engineering, Arts, Sciences and Management
- Qualified and efficient faculty
- Updated curriculum and syllabi
- Effective Teaching-learning process with use of ICT
- Video lectures by SWAYAM Prabha 32 DTH Channel and NPTEL
- Semester scheme with continuous assessment
- Methodical and transparent evaluation process
- Strong research culture with significant research output
- Community oriented extension activities.
- Fair placement record
- Networking with industries/institutions
- Scholarships for studnets and research scholars
- Sports and cultural facilities
- Guidance and Counseling system Remedial coaching was arranged for slow learners
- Extension programmes through NSS.
- Technology Business Incubator supported by the Department of Science & Technology
- MSME Business Incubator supported by the Micro, Small and Medium Enterprises
- Entrepreneurship development supported by Entrepreneurship Development Institute of India, Ahmedabad.

### **Weakness:**

- Extension activities need to be improved
- Depleting strength of students.
- Funded research projects are not being sanctioned
- Communication skill of the students is poor since they are from rural and academically weaker background.
- Lower number of patents in the university is another weakness.

### **Opportunities:**

- Research and career oriented programs.
- Strategic alliances with national research and industrial centers.
- Collaboration at national and international levels for academics and research.
- More students are opting for Arts & Science Programme

### **Threats:**

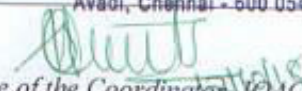
- Enrolment of students is not viable in many programmes
- Poised for tremendous growth with the implementation of steps taken and with the support of all stakeholders.
- A considerable number of students are not opting professional courses.



#### 8.0 Plans of institution for next year

- Collaborative learning and research through ICT with other Universities
- Strengthening of interdisciplinary research activities
- New Major and Minor research projects from external agencies
- MoU with industrial organizations
- Establishment of new research lab facilities in science departments.
- Introduction of new certificate courses.
- Inter-University and Interdepartmental competitions
- Exhibition, Seminars and Lecture series
- Starting up of Medical Courses in the coming Academic year

Name Dr. S. STELLA MARY, M.Sc., M.Phil., Ph.D.  
Professor & Head, (Research Supervisor)  
Department of Physics  
St. Peter's Institute of Higher Education and Research  
Avadi, Chennai - 600 054.

  
Signature of the Coordinator, IQAC

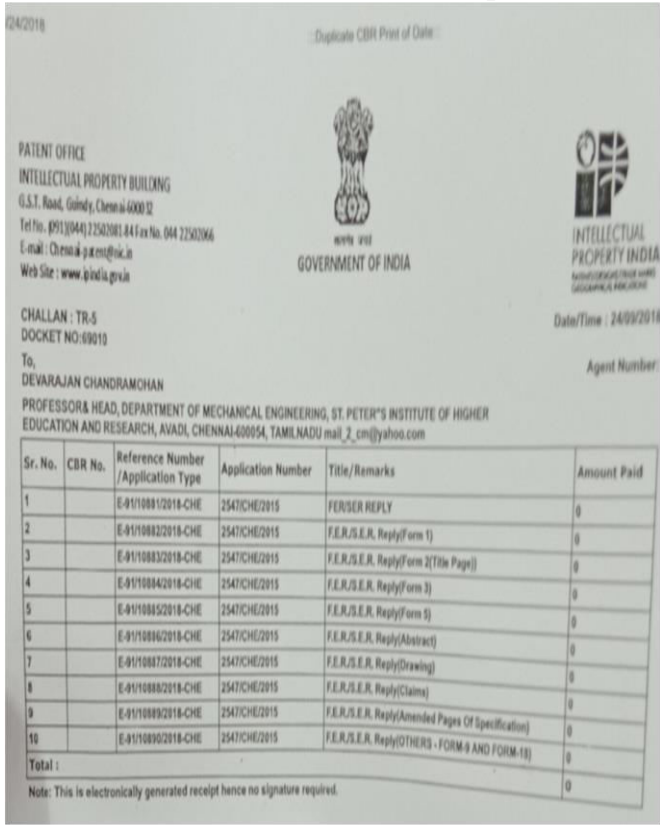
Name \_\_\_\_\_  
**Dr. FRANCIS C PETER, M. Tech., Ph.D.,**  
**VICE CHANCELLOR**  
St. PETER'S INSTITUTE OF HIGHER EDUCATION AND RESEARCH  
(Deemed to be University U/S 3 of the UGC Act, 1956)  
AVADI, CHENNAI-600 054.



  
Signature of the Chairperson, IQAC











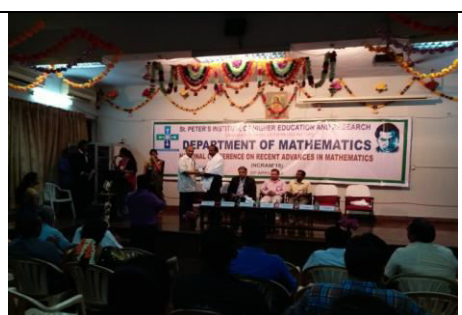
## Details of Some of the Events (2017 -2018)

Patent Applied			
Department	Name of the Faculty	Date	Title
Mechanical	Dr.D.Chandramohan	24/09/18	<p style="text-align: center;"><b>Natural Fiber Reinforced Composite</b></p> 
Bio-Medical	Dr.K.Kantharaj		Device for active assist rehabilitation of elbow and wrist joint Patent No - 201741030287
			Device for hand gesture to voice translation –A Dumb assist device Patent No - 201741030286
			Prototype Development of Gluco “L” Patent No - 201741030285
SAIF-SPIHER	Dr. S. Gunasekaran Dr. R. Pavithra Dr. E. Sailatha	2018	Cellulose Nanofibrils made Water Purifier to remove Uranium Pollutants from Groundwater Application No: 201841015230 (Ref.No:E-2/1249/2018-CHE)
	Dr. S. Gunasekaran Mrs. P. Janani	2018	Identification of Active Component Responsible for Anti-Thyroid from the Seeds of Commiphora Mukul Application No: 201841020164 (Ref.No: E-2/1696/2018-CHE)
	Dr. S. Gunasekaran Dr. S. Kamatchi Dr. E. Sailatha	2018	Efficacy of 1,1 Dimethylbigunaide Hydrochloride (Dmbh) Over Diabetes Using Human Single Hair Fibre Application No: 201841020755 (Ref.No: E-2/1726/2018-CHE)
Mechanical	Dr.P.Periyasamy	20/9/18	<b>Wheazes Problem Detecting Device</b>



			 <p><b>Allinnov Research and Development Private Limited</b>  No. 25 B, Bairappa Colony, Newpet, Krishnagiri - 635001, Tamil Nadu, India  Ph: 04543-233388 Mobile: 9788096823, 9790336194  CIN:U74140TZ2015PTC021895MSME:2015/03/03/10396/SADK</p> <p><b>LETTER OF RECOGNITION</b></p> <p>From  ANBARASU M  HEAD - SUPPORT &amp; HANDLING  ALLINNOV RESEARCH AND DEVELOPMENT PVT LTD,INDIA.</p> <p>To  Dr. P. PERIYASAMY  NO.2,MALLIGAI STREET,  JP ESTATE,SARASWATHI NAGAR,  AVADI,CHENNAI-54</p> <p><b>Respected Sir / Madam</b></p> <p><b>Sub:</b> Approval grant of Hand's on Innovation Program - Reg.</p> <p><b>Ref:</b> Congratulations on enrolling with us as a Researcher in innovating our upcoming product / process under our research.</p> <p>With reference to your enrollment application placed to carry out research and IP training over the invention of a product / process in the area of <b>WHEAZES PROBLEM DETECTING DEVICE</b> and Concept No.: <b>ALP201843</b> which is a prospective patent at Allinnov Research and Development, we are pleased to inform you that your application is shortlisted for the same. During this period you will be designated as our Researcher and your enrollment number/Customer ID shall be <b>ALISSO</b>.</p> <p>Upon successful completion of the Research and Training, you will be awarded with our prestigious certificate of Research and Inventorship, which by virtue makes you an inventor of the following patent application over the research. Please note that you will have to submit a detailed report summarizing your observations and suggestions at the end of the program to have successfully completed this training. Since during the training you will have access to confidential facts and information about the company and product, you will be required to sign a legal agreement before the commencement of the training to pledge your adherence to the code of conduct for non-sharing of information.</p> <p><b>Sincerely</b></p>  <p>HEAD - SUPPORT &amp; HANDLING</p> <p>Training and Development - Consultants  <a href="http://www.allinnov.org">www.allinnov.org</a></p>	
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Memorandum of Understanding (MoU)				
Department	Company Name	Event Date	External Experts	
Mechanica 1	SP institute of CNC Training Center	23/08/20 17	<p>Mr.S.Pandiyarajan</p> 	This Memorandum of Understanding is to conduct a Unique, Step – By – Step, Systematic, and Employable Skills Development Program towards achieving the objective of maximizing the employable opportunities for students of the St. Peter's Institute of Higher Education and Research.
Mechanica 1	CAD/CAM Solutions	10/08/20 18	<p>Mr.R.Sudhakar</p> 	To provide employable skills and Make the student aware of the latest tools and techniques in order to keep them industry ready at the end of their course. Increase the employability of the student and maximize on the placement opportunities available. To build / improve the confidence level of the student to face the challenge of real time.






## National Conference Organised

S. No	Dept.	Event Name	Convenor /Coordinator	Sponsor	Photo
1.	Mech	NCRAMST-2K17 23.03.2017	Dr.P.Periyasamy	SPIHER	
2.	CIVIL	National Conference on Latest Innovations in Civil Engineering on 20.03.2018	Dr.V.B.M.Sayana Dr. P. Asha	SPIHER	
3.	ECE	4 <sup>th</sup> National Conference on Green Technologies for Power Generation, Communication & Instrumentation (ICGPC-2017) on 3 <sup>rd</sup> of Apr 2018	Dr.V.B.M.Sayana Dr. P. Asha Mr.P.Sampath	SPIHER	
4.	CS & A	10 <sup>th</sup> National Conference on Recent Trends & Technologies in Soft Computing NCRTSC'18 on 06.04.2018	Dr. R. Latha Mrs. S. Brindha	SPIHER	
5.	Mathematics	National Conference on Recent Advances in Mathematics on 25 <sup>th</sup> April 2018	Dr. N. Srinivasan	SPIHER	





6.	MBA	International Conference on Frontiers of Management Practices for Economic Sustainability on 13.12.17	Dr.R.Gayatri	SPIHER	
7.	Physics	National conference on Future Dimension in Physics NCFDP-2018-11 <sup>th</sup> may 2018	Dr.S.StellaMary	SPIHER	

### Workshop Organised

S.No	Dept	Title of the program and period	Resource persons	Funding Agency	Photo
1.	Civil	TEDP on Sustainable Building Materials from 21.08.2017 to 29.09.2017	Dr.D.S.Ramachandra Murthy Dr. P. Asha	Entrepreneurs Development Institute of India	
2.	Mech	Workshop On "Industrial Automation" August 29-31 ,2017	Mr. Arunkumar.S Application Engineer from Technocrat Automation Solutions Pvt.Ltd	SPIHER	
3.	ECE	National Work Shop On "Antenna Design" September 21-22 ,2017	Ms.M.Sasikala and Mr.Pachiyappan from Tekiknow technologies	SPIHER	
4.	CS&A	Workshop on Research Methodology and Techniques 06.10.2017 & 07.10.2017	Dr.R.K.Natarajan, Dean(Humanities & Science), Dhanalakshmi College of Engineering, Chennai	SPIHER	
5.	CSE	Hands-on Training Workshop on Python Programming organized on 12-10-2017	Mr.I.Mohan Ms.R.Meena, Praythusaha Engg College	SPIHER	


6.	CSE	Computer Training programme for Recruit police constables on 12-12-2017	Dr.S.Puspha Mr.K.SureshBabu SPIHER	SPIHER	
7.	CSE	Workshop on Data Analytics and R-Programming organized on 20-03-2018	Dr.Dharani Senthil Kumar, VaniAnalytic	SPIHER	
8.	CSE	Seminar on IT awareness organized on 28-03-2018	Mr.K.S.Vignesh iGrow Global Solutions Pvt.Ltd.,	SPIHER	
9.	MBA	workshop on Financial Market  22 <sup>st</sup> and 23 <sup>rd</sup> August 2017	Mr.Rohan Deep Deputy Manager-Technical, Mr.Srinivas Bobba, Deputy Manager-Research, Karv Stock broking Ltd., Hyderabad	SPIHER	
10.	MBA	One day seminar on Entrepreneurship through Business Education. 4.1.18	Dr.B.Nimalathasan, Prof.Account.&Head, Dr.S.Sivanesan, SL, University of Jaffna, Srilanka	SPIHER	

### Certificate Courses Conducted

S.No	Title of the program and period	Convener/Coordinator	Funding Agency	Photo
1.	Certificate Course On “The Philosophy Of Sriramanuja” July to September 2017	Dr. Dr.R.Latha	SPIHER	
2.	Certificate Course on “Surveying, Plumbing and Electrical Works”, 21.05.2018 to 26.05.2018	Dr.V.B.M.Sayana Dr. P. Asha Mr.P.Sampath	SPIHER	





## Faculty Development Programme

S.No	Title of the program and period	Convener/Coordinator	Funding Agency	Photo
1.	FDP on Outcome Based Education, 2-4 <sup>th</sup> April 2018 by National Institute of Technical Teacher's Training and Research, Ministry of Human Resources, Government of India	Dr.D.S.Ramachandra Murthy Director (R&D)	SPIHER	

## Convocation 2017-2018






## GUEST LECTURES

S.No	Department	Name and Designation of the Chief Guest	Title of the lecture	Date /Duration	Photo
1.	ECE	Dr.Shankar, Chase Technologies	Lecture on ANDROID OS	6 <sup>th</sup> July 2017	
2.	ECE	Mr. Malayappan, Pantech Solutions	Lecture On IOT	8 <sup>th</sup> July 2017	
3.	Civil	Dr.K.Balasubramanian, M.D., Hitech Concrete Solutions Chennai Ltd.	Behavior of Concrete Structures	21.08.2017	

4.	Civil	Mr. Ram Jawahar, Asst. Controller (Patent and Designs), IPR Chennai.	Intellectual Property Rights	20-09-2017	
5.	EEE	Mr.Vigneshwaran and Mr.Vikranth,Technical engineer/SMECH	Automation	24.1.2018 2 hours	
6.	EEE	Mr.Rajeshwaran/Prolif ic Systems and Technologies	Embedded systems	14.2.2018 2 Hours	
7.	Civil	Dr.P.Partheeban.Dean/ Academic,SPCET	Advanced Transportation Engg.	15.03.2018	
8.	Mechanical	Mr.U.Mugesh ,Abirami Industries Pvt Ltd,Chennai	Advancement in Automotive Pollution & Control in Vehicles	30.03.2017	
9.	Mechanical	Mr.Kovarasan & Mr.Pugazhenthii,I 3 Design	<u>Advancement in Automotive Safety</u>	20.09.2018	
10.	Mechanical	Mr.V.Sundar, CAD School	Product design and Development	3/10/2018	
11.	Mechanical	Dr.Gurusamy SPIHER	Non-Destructive Testing	20.09.2017	



12.	Mechanical	Mr.Charles India Patent Pvt.Ltd.	PR Focused to patent and commercializatio n strategies for Indian Research Scenario	9.8.2018	
13.	Mechanical	Mr.R.Sudhakar CAD/CAM Solutions	CAD/CAM-In Terms of Industry Today	17.03.2017	
14.	Physics	Mrs. Sharon Rubini, Assistant Professor, St. Peter's College of Engineering & Technology, Chennai	"Application of Mathematics, the Queen of Science and Technology"	22 <sup>nd</sup> September	
15.		Dr.R.Sugaraj Samuel, Associate Professor, New college, Chennai.	New Engineering materials' (Metallic glasses, Shape memory Alloys, Nano, NLO and Bio materials)	6.04.18	

#### UGC Visit 2017 (17-12-2017 to 19-12-2017)





## INSUTRIAL VISITS

**M/s Ramesh Fly ash brick works,  
Avadi, IV year on 7.9.17**



**Chennai Port Trust  
IV year on 28.08.17**



**Poondi Dam  
II year on 21.3.18**



**M/s Kayathry Steel truss  
manufacturing plant Sriperumpudur  
III year on 23.03.2018**



**Regional Metrological Center  
(RMC), Adayar  
IV,III,II year ECE on 23.03.18.**



## 6<sup>th</sup> PROJECT EXHIBITION DURING APRIL 2018

The Department of ECE has conducted a project Exhibition on 5<sup>th</sup> April 2018 in the Main Block Room No 111. The show started at 9.30am and gets closed at 3.30pm. The Final year Students of B.E. and M.E. have displayed and demonstrated their Projects. **The project exhibition is sponsored by International Institute of project Management (IIPM). The Project Exhibition is covered by Vasanth T.V and it was telecasted in Sigaram Thodu program.**

The projects were categorized in different fields of specialization such as Embedded System, VLSI, Antenna and Communication. Nearly 20 projects have been displayed by students. All projects are mostly Industrial Application oriented and to the current standard.

The Vice Chancellor, Director Academic and other Heads of variuos departments visited the exhibition hall and interacted with the students who have displayed the projects and they also gave suggestion in order to enhance their project.

A cash prize of Rs 3000 for I prize, Rs 2000 as Second prize and Rs 2000 as 3<sup>rd</sup> prize was given to the students



**Chief Guest "Mr.O.Arivazhagan"**

**CEO International Institute of Project  
Management**



## **Extension Activities**

**First Year Inaugural Function on 17.08.17**

**Dr.Francis C Peter Vice Chancellor, Dr.D.S.Ramachandra Murthy Director (R & D)**

**Dr.P.Periyasamy NSS Coordinator, NSS programme officer and Volunteers**



**Cleaning and tree plantation on 20.10.17 at 2 p.m in our Adopted village**

**Dr.L.Mahesh Kumar, Dr.P.Periyasamy NSS Coordinator, NSS programme officer and Volunteers**



**Concept Development for Human Excellence on 10.02.18 at 2 p.m SPIHER Seminar Hall**

**Dr. S. Gunasekaran Dean (R&D), Dr.P.Periyasamy NSS Coordinator, NSS programme officer & Volunteers**



**NSS Camp from 17.02.18 to 23.02.18 at Karunakaracheri Village Survey of Village People, Motivation and Health Awareness Programme**







**Book Binding for Womens, Awareness Programme for Studets and Certificate Distrinutions**



**Awareness Programme on Organ Donation on 25.05.18 at SPIHER and Annanur Village**



**Awareness Programme on Beat Plastic Pollution/World Environment Day on 05.06.18 at Korattur Area and Lake**





**Yoga Awareness Programme on 01.08.18** at 10.30 a.m SPIHER Auditorium  
 Dr.Francis C Peter Vice Chancellor, Dr.L.Mahesh Kumar, Mr.L.Saravanan Yoga Master  
 Deputy Commissioner Ambattur, Dr.P.Periyasamy NSS Coordinator, officer & Volunteers



**NSS Inaugural Function on 28.09.18** at 2 p.m SPIHER Seminar Hall  
 Dr.L.Mahesh Kumar Registrar, Dr.D.S.Ramachandra Murthy Director (R & D)  
 Chief Guest MFJ.Lion.Dr.GaneshJayaraj, Dr.P.Periyasamy NSS Coordinator



Special training for house wives in and around Chennai had been arranged on 28<sup>th</sup> & 29<sup>th</sup> Feb 2018. Usage of Digital payment, Computer Typing, Using MS Office, Internet usage, Government App usage in Mobiles was explained with hands on experiences. Jewellery making with beads, golden and silver threads was narrated with trainer.

