# EVALUATIVE REPORT OF THE DEPARTMENT

1. Name of the Department & : CHEMISTRY (PG and Research)

its year of establishment 1959 – 60

2. Names of Programmes/Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)

Sl. No.	Name of Programme	Subject	Year of affiliation	No. of sections	Sanctioned strength	Total Student strength (2011-12)	Remarks
1.	B.Sc.	Chemistry	1959-60	03	170	437	I, II & III Year
2.	M.Sc.	*Industrial Chemistry	1983 -84				
3.	M.Sc.	Chemistry	2002-03	03	100	241	I & II year
4.	M.Phil.	Chemistry	1985-86	01	49	24	One Year
5.	Ph.D.	Chemistry	1986-87		56	42	
6.	PG Diploma	Chemistry	1993-94	01	24	15	One Year
7.	Certificate Course	Chemistry for Human welfare	2005–06	- 1	30	25	One Year

<sup>\*</sup> M.Sc. Industrial Chemistry was converted into M.Sc. Chemistry from 2008 – 09 onwards

## 3. Interdisciplinary courses and departments involved

- In UG level, in **Part IV** interdisciplinary Courses like **Skill Based Elective** are offered in all the six semesters and **Non-Major Elective** in the final year as mandatory to all the students.
- In PG level, in the final year **Extra Disciplinary Courses** are offered mandatory to all the students.

Interdi	sciplinary courses	Departments involved	
		History, Economics, Tamil, Indian Culture,	
	Skill Based Elective	English, Commerce, Mathematics, Physics,	
	Skiii based Elective	Botany, Zoology, Computer Science and Physical	
UG Level		Education	
UG Level		History, Economics, Tamil, Indian Culture,	
	Non – Major Elective	English, Commerce, Mathematics, Physics,	
		Botany, Zoology, Computer Science and Physical	
		Education	
		History, Economics, Tamil, English, Commerce,	
	Extra Disciplinary	Mathematics, Physics, Botany and Zoology,	
PG Level		Computer Science	
	Comprehensive	English, Computer Science and Management	
	Viva & Soft skill	Studies	

4. Annual/Semester/Choice Based Credit System:

Semester pattern with Choice Based Credit System

# 5. Participation of the department in the courses offered by other departments:

In addition to Allied Chemistry in departments like Physics, Botany and Zoology, our department participates in the courses offered by other departments by extending Skill Based Elective and Non-Major Elective at UG level and Extra Disciplinary Courses at PG level to all the students.

### Skill Based Courses - UG Level

- Water Chemistry & Separation Techniques
- **❖** Agricultural Chemistry
- Domestic Chemistry
- Health Chemistry
- **❖** Textile Chemistry
- Textile Chemistry Practical

# Non Major Elective courses – UG Level

- ❖ Food chemistry I
- **❖** Food Preservation

## Extra disciplinary course – PG Level

- Chemistry in Every Day Life
- 6. Number of teaching posts sanctioned and filled (Professors/Associate Professors/Asst. Professors)

#### **AIDED SECTION**

Post	Sanctioned	Filled	Vacant
<b>Associate Professors</b>	-	04 (promoted)	-
Asst. Professors	14	07	03

#### **SELF-FINANCE SECTION**

Post	Sanctioned	Filled	Vacant
Asst. Professors	17	20*	-

<sup>\*</sup> including 3 teachers appointed temporarily against permanent vacancies.

# 7. Faculty profile with name, qualification, designation, specialisation (D.Sc./D.Litt./ Ph.D./M.Phil., etc.)

Sl. No.	Name	Qualifi cation	Designation	Specialization	No. of Years of Experience	No. of Ph.D. students guided in the last 4 years	Remarks
	Aided Section:						
1.	Dr.G.Chandramohan	Ph.D.	Assoc. Prof.	Kinetic and Reaction mechanism, Co- ordination complexes Corrosion inhibition and Natural dyes		8	
2.	Dr.R.Venkatachalam	Ph.D.	Assoc. Prof.	Dye chemistry & Environmental Chemistry	27	2	
3.	Dr.K.Balakrishnan	Ph.D.	Assoc. Prof.	Dye chemistry &	26	5	

Sl. No.	Name	Qualifi cation	Designation	Specialization	No. of Years of Experience	No. of Ph.D. students guided in the last 4 years	Remarks
				Environmental		last 4 years	
				Chemistry			
				Dye chemistry &			
4.	Dr.V.Nandhakumar	Ph.D.	Asst. Prof.	Environmental	23	6	
				Chemistry			
5.	Mr.M. Pramesh	M.Phil.	Asst. Prof.	Synthetic organic chemistry	12		Doing Ph.D
6.	Mr.G.Muruganandha m	M.Phil.	Asst. Prof.	Electro – Organic Synthesis	14		Doing Ph.D
7.	Mr.M. Pugazhendhi	M.Phil.	Asst. Prof.	Electro – Organic Synthesis	14		Doing Ph.D
8.	Mrs.C.Thillaiyadi Valliyammai	M.Phil.	Assoc. Prof.	Electro – Organic Synthesis	16		Doing Ph.D
9.	Dr. S. Shankar	Ph.D.	Asst. Prof.	Phyto Chemistry	15	7	
10.	Dr. N. Mani	Ph.D.	Asst. Prof.	Phyto Chemistry	14	6	
11.	Dr.V.Thirumurugan	Ph.D.	Asst. Prof.	Phyto chemistry & Environmental Chemistry	15 ½	8	
	<b>Self Finance Section:</b>						
1.	Mr.T. Periathambi	M.Phil.	Asst. Prof.	Textile chemistry	14		Doing Ph.D
2.	Mr.S. K. Thiyagarajan	M.Phil.	Asst. Prof.	Environmental Chemistry	9		Doing Ph.D
3.	Dr.S.Sivajiganesan	Ph.D.	Asst. Prof.	Electro – organic Synthesis	9		
4.	Ms.V. Roopa	M.Phil.	Asst. Prof.	Dye Chemistry	9		Doing Ph.D
5.	Ms.K. Bharathy	M.Phil.	Asst. Prof.	Chemical Kinetics	9		Doing Ph.D
6.	Ms.B. Amutha	M.Phil.	Asst. Prof.	Chemical Kinetics	7		Doing Ph.D
7.	Ms.G. Thilagam	M.Phil.	Asst. Prof.	Dye Chemistry	7		Doing Ph.D
8.	Mr.B. Ashok kumar	M.Phil.	Asst. Prof.	Environmental chemistry	7		Doing Ph.D
9.	Mr.G.Vishnu vardhanaraj	M.Phil.	Asst. Prof.	Geo chemistry & Phyto Chemistry	7		Doing Ph.D
10.	Mr.T. Thirugnanam	M.Phil.	Asst. Prof.	Dye Chemistry	6		Doing Ph.D
11.	Mr.S.Jothirama lingam	M.Phil.	Asst. Prof.	Environmental Chemistry	6		Doing Ph.D
12.	Mr.M.Chandramohan	M.Phil.	Asst. Prof.	Environmental Chemistry	4		Doing Ph.D
13.	Mr.K.Mohammed Faizal	M.Phil.	Asst. Prof.	Environmental Chemistry	4		Doing Ph.D
14.	Ms.R. Yamuna	M.Phil.	Asst. Prof.	Dye Chemistry	4		Doing Ph.D
15.	Ms.K. Matheswari	M.Phil.	Asst. Prof.	Physical Chemistry	1		Doing Ph.D
16.	Ms.K. Aruna Devi	M.Phil.	Asst. Prof.	Inorganic Chemistry	1		Doing Ph.D
17.	Ms.S. Durga Devi	M.Phil.	Asst. Prof.	Organic Chemistry	1		Doing Ph.D
18.	Ms.J. Mahalakshmi	M.Phil.	Asst. Prof.	Phyto Chemistry	1		
19.	Ms.A. Rajathi	M.Sc.	Asst. Prof.	Physical Chemistry			
20.	Ms.S. Suriya	M.Sc.	Asst. Prof.	Phyto Chemistry			

# 8. Percentage of classes taken by temporary faculty – programme-wise information

Sl. No.	Programmes	Morning session	<b>Evening session</b>
1.	UG	66.3	100
2.	PG	34	92.3

# 9. Programme-wise Student Teacher Ratio



Sl. No.	Name of the programme	Student teacher ratio
1.	UG	23:1
2.	PG	20:1
3.	M.Phil	24:1

10. Number of academic support staff (technical) and administrative staff: sanctioned and filled

Sl. No.	Staff	Sanctioned	Filled
1.	Technical	09	09
2.	Administrative	03	03

11. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Mention names of funding agencies and grants received project-wise:

Sl. No	Programme	Amount sanctioned (Rs.)	Duration	Name of The Investigator
1.	Ph.D.	1,35,320 (CSRI–SRF, New Delhi)	(Completed) 2006 to 2009	Ms.D.Abirami (Guided by Dr.T.K.Krishnamurthy)

- 12. Departmental projects funded by DST-FIST; DBT, ICSSR, etc.; total grants received : Nil
- 13. Research facility / centre with
  - State recognition
    - Our department is Bharathidasan University Recognized Research Centre and our faculty serves as member of doctoral committee of various intuitions and various universities in Tamilnadu.
  - National and International recognition
    - \* The staff members have presented Research Papers in National, International Seminars, Conferences, Symposia and Workshops and published Research Articles in National and International Journals.

#### 14. Publications:

\* Number of papers published in peer reviewed journals (national/international)

CI No	Voor of Dublication	No. of papers Published		
Sl. No.	Year of Publication	National	International	
1.	2008 – 2009		2	
2.	2009 – 2010	5	3	
3.	2010 – 2011		9	
4.	2011 – 2012	2	11	

\* Monographs
: Nil
\* Chapter(s) in Books
: Nil
\* Editing Books
: Nil
\* Books with ISBN numbers with details of
: 07



### publishers

S. No.	Book name	Author	Year	Publisher	ISBN Number
1.	Group theory and Statistical Thermodynamics	Mr.M.Pramesh	2007	Sarada Pathipakam, Chennai	978-81- 907021-9-5
2.	Computer Application in Chemistry	Dr.G.Chandramohan	Sep. 2008	Nawal Publications, Trichy	81-88295- 16-7
3.	Environmental Chemistry	Dr.G.Chandramohan	Sep. 2008	Nawal Publications, Trichy	81-88295- 17-5
4.	Engineering Chemistry-I for Anna University, Chennai	Dr.G.Chandramohan	June 2009	Sri Murugan Publications, Thanjavur	978-81- 907949-8-5
5.	Engineering Chemistry-II for Anna University, Chennai	Dr.G.Chandramohan	Dec. 2009	Sri Murugan Publications, Thanjavur	978-81- 907949-6-1
6.	Engineering Chemistry-I for Anna University, Trichy	Dr.G.Chandramohan	June 2010	Sri Murugan Publications, Thanjavur	978-81- 907949-7-8
7.	Engineering Chemistry-I for Polytechnic Students	Dr.G.Chandramohan	June 2011	Sri Murugan Publications, Thanjavur	978-93- 814290-1-3

- \* Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database International Social Sciences Directory, EBSCO host, etc.)
- \* Citation Index range / average
- \* SNIP
- \* SJR
- \* Impact factor range / average
- \* h-index

## 15. Details of patents and income generated : Nil

### 16. Areas of consultancy and income generated :

Giving consultation on non profitable basis about Chemistry in daily life, Water Harvesting, Waste Management to students and villagers in the surrounding area.

### 17. Faculty recharging strategies

Staff members have undergone **Orientation**, **Refresher Courses**, attended seminars and presented papers.

### **Orientation / Refresher Programmes**

Academic	Nun	Number of Programmes participated by our faculty					
Year	Orientation Courses	Refresher Courses	Seminars/ Symposia/ Conferences/ Workshops	Educational Tours			
2007- 2008	2		15	2			
2008- 2009	2		17	2			
2009- 2010			14	3			
2010- 2011		4	7	2			
2011- 2012		4	15	2			

## Papers presented and Seminars Attended

		No	o. of Papers Pi	Seminars/	
Sl. No.	Year	State	National	International	Symposia/ Conferences/ Workshops
1.	2007 - 2008	04	15	-	15
2.	2008 - 2009	07	10	-	17
3.	2009 - 2010	01	07	01	14
4.	2010 - 2011	11	06	02	7
5.	2011 – 2012	04	09	-	15

### 18. Student projects

• percentage of students who have done in-house projects including inter-departmental

Project Work finds a place in the curriculum at M.Sc. & M.Phil. level.

Sl. No.	Year	In-house projects including inter-departmental	In collaboration with industries/institutes
1.	2007 – 2008	70.9%	29.1%
2.	2008 - 2009	58.3%	41.7%
3.	2009 - 2010	72.0%	28.0%
4.	2010 - 2011	61.0%	39.0%
5.	2011 - 2012	70.8%	29.2%

In this academic year 2012-13, three M.Sc. students have done their Project Work in Indian Institute of Technology, Chennai and 29 M.Sc. students are doing projects in the department.

# 19. Awards / recognitions received at the national and international level by

Faculty

Faculty Name	Award	Awarding Organization	Level
Dr.G.Chandramohan	Best Teacher	Chemical Research Society of India, TISC, Bangalore	National

- Doctoral / post doctoral fellows : Nil
- Students:
- Mr.S.Mohandoss, II M.Sc. Industrial Chemistry published a book entitled Hand Book of Chemistry for Competitive Examinations on 28.02.2008
- Ms.Sudhanandhini, II M.Sc. Chemistry have got I prize in paper presentation at S.M.T. Indira Gandhi College, Trichirappalli on 19.08.2011

Sl. No.	Name	Course	Activity	Place	Venue	Date
1.	Mr.S.Arul Xavier Stang	II M.Sc.	Chemistry Festa Programme	I Prize	D.S.College, Perambalur	11.10.07
2.	Mr.S.Manikandan	I M.Sc.	Chemistry Festa Programme	I Prize	D.S.College, Perambalur	11.10.07
3.	Mr.G.Prabhu	II M.Sc.	Dumb Charade in Chemistry Festa Programme	II Prize	Dhanalakshmi Srinivasan College, Perambalur	11.10.07
4.	Mr.S.Manikandan	I M.Sc.	Dumb Charade in Chemistry Festa Programme	II Prize	D.S.College, Perambalur	11.10.07
5.	Mr.K.Veeraiyan	II M.Sc.	Quiz Chemistry Festa Programme	II Prize	D.S.College, Perambalur	11.10.07
6.	Mr.T.Veeraiyan	II M.Sc.	Quiz Chemistry Festa Programme	II Prize	D.S.College, Perambalur	11.10.07
7.	Mr.G.Prabhu	II M.Sc.	Quiz Chemistry Festa Programme	II Prize	D.S.College, Perambalur	11.10.07

20. Seminars/Conferences/Workshops organized and the source of funding (national/ international) with details of outstanding participants, if any: Nil

# 21. Student profile course-wise:

# **UG Programmes**

Year of	Applications	Selected		Pass percentage	
study	received	Male	Female	Male	Female
2007-08	120	77	35	81	96
2008-09	96	69	22	71	95
2009-10	128	70	50	56	66
2010-11	159	77	73	63	69
2011-12	240	80	80	32	43

## **PG Programmes**

Year of	Applications	Selected		Pass percentage	
study	received	Male	Female	Male	Female
2007-08	152	70	51	85	100
2008-09	146	67	44	84	92
2009-10	130	79	29	74	82
2010-11	140	79	50	81	98
2011-12	197	70	42	72	75

# M.Phil. Programmes

Year of	Applications	Sele	ected	Dogg novembers
study	received	Male	Female	Pass percentage
2007-08	34	09	22	96.7
2008-09	26	04	20	100
2009-10	27	08	17	100
2010-11	32	11	07	33.3
2011-12	37	08	16	68.8

Ph.D. Programmes



Doing				during the nt period	
Male	Female	Male	Female	Male	Female
23	19	-	-	03	01

## **PG Diploma Programmes**

Voor of stade	Adn	nitted	Pass percentage	
Year of study	Male	Female	Male	Female
2007 - 2008	24		100	
2008 - 2009	08		100	
2009 - 2010	20		100	
2010 - 2011	18		100	
2011 - 2012	15		80	

### **Certificate Course**

Year of study	Applications received	Selected	Pass percentage
2007-08	18	18	100
2008-09	22	22	100
2009-10	16	16	100
2010-11	23	23	100
2011-12	25	25	100

## **22.** Diversity of students

Name of the Course (refer question no. 2)	% of students from the College	% of students from the State	% of students from other States	% of students from other countries
B.Sc.		100		
M.Sc.	30.7	69.3		
M.Phil.	33.3	66.7		
Ph.D.	51	49		
PG Diploma		100		

# 23. How many students have cleared Civil Services, Defence Services, NET, SLET, GATE and any other competitive examinations?

Sl. No.	Name of the Examination	No. of Students
1.	NET	01
2.	GATE	01
3.	TET	01

### 24. Student progression

Student progression	Percentage against enrolled	
UG to PG	74.7	
PG to M.Phil.	36.8	
PG to Ph.D.		
Ph.D. to Post-Doctoral		
Employed		
<ul> <li>Campus selection</li> </ul>	02	
<ul> <li>Other than campus recruitment</li> </ul>	24	
Entrepreneurs	03	

# 25. Diversity of staff



Percentage of faculty who are graduates		
of the same parent university	96.7	
from other universities within the State	3.3	
from other universities from other States		

# 26. Number of faculty who were awarded Ph.D., D.Sc. and D.Litt. during the assessment period.

CL No	Year of completion	No. of Ph.D. awarded		
Sl. No.		Faculty	Others	
1.	2007 - 2008	01	01	
2.	2008 – 2009		01	
3.	2009 – 2010	02		
4.	2010 – 2011	02		
5.	2011 – 2012		01	

## 27. Present details about infrastructural facilities

a) Library : General Library : 2231

Department Library: 54

b) Internet facilities for staff and : Internet facility is available in the

students

department for staff and students.

c) Total number of class rooms : 06
d) Class rooms with ICT facility : 01
e) Students' laboratories : 04
f) Research laboratories : 02

# 28. Number of students of the department getting financial assistance from College.

Year	Management Financial Assistance			<b>Government Financial Assistance</b>		
	UG	PG	M.Phil	UG	PG	M.Phil
2007-08	28	12	1	280	122	11
2008-09	45	25	4	122	60	12
2009-10	41	18	3	301	140	27
2010-11	60	20	3	280	130	19
2011-12	51	20	3	432	142	17

# 29. Was any need assessment exercise undertaken before the development of new program(s)? If so, give the methodology.

Need Assessment and Feedbacks are periodically obtained from staff members, Students and Alumni. Based on the suggestions in the need Assessment and feedbacks, M.Sc. Industrial Chemistry Programme (Self-finance Section) has been changed to M.Sc. Chemistry in the year 2007-2008 and M.Sc. Industrial Chemistry Programme (Aided Section) has been changed to M.Sc. Chemistry in the year 2009-2010.

### 30. Does the department obtain feedback from

- a) Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize it?
  - Yes, the department collects feedbacks from internal and external faculties. Based on the feedbacks modification and revision is done in the curriculum during Board of Studies.
- b) Students on staff, curriculum as well as teaching-learningevaluation and what is the response of the department to the same?
  - Students' feedback on staff is obtained every semester and remedial measures are taken accordingly.
  - Outgoing students' feedback on curriculum and teachinglearning evaluation helps in the revision of the same.
  - Students' representation is there in Board of Studies to elicit their points of view.
- c) Alumni and employers on the programmes and what is the response of the department to the same?
  - Alumni and employers feedbacks on the programmes are collected in the Alumni Meet and necessary changes are carried out in framing and revising the curriculum.
  - Representation of Alumni and employers is there in Board of Studies for getting their valued views.

## **31.** List the distinguished alumni of the department (maximum 10)

Sl. No.	Name of the Alumni	Designation	Place
1.	Mr.R.Viswanathan IFS	Former Foreign Ambassador	-
2.	Dr. Jayakumar Gilbert	Assistant Professor	Temple University, Philadelphia, USA
3.	Dr.B.Muralidharan	Associate Professor	BITS Pilani, Dubai
4.	Dr.Elanchezhian	Associate Scientist	University of Mexico, Albuquerque, New Mexico
5.	Dr.Thiyagaraja Ramesh	Assistant Professor Department of Applied Biochemistry	College of Biomedical& Health Science, Konkuk University, Korea
6.	Mr.M.Rengaswamy	MLA	Thanjavur Constituency
7.	Mr.S.Nagamuthu	High Court Judge	Chennai
8.	Mahesh Krishnaswamy	Ex.MLA	Orathanadu Constituency
9.	Dr.S.Sriman Narayanan	Director, Department of Analytical Chemistry	National Centre for Nano science and Nano technology, University of Madras
10.	Dr.S.Pakriswamy	Deputy Director	Ceramic Division, Vikram Sarabai Space Centre, Tiruvanadapuram

Give details of student enrichment programmes (special lectures/

workshops / seminar) with external experts.

	workshops / seminar) with external experts.					
Sl. No.	Seminar Date	Seminar Title	Resource Persons			
1.	22.08.2008	State Level Seminar on Recent Trends in Chemistry. August - 2008. Business prospects in food processing in India. Nano Chemistry.	<ol> <li>Dr. K. Alagu Sundaram         Director, Indian Institute of Crop             Processing Technology, Thanjavur     </li> <li>Dr. D. Vasudevan,         Electrodic and Electrocatalytic         Division, Central Electro Chemical         Research Institute, Karikudi     </li> </ol>			
2.	25.08.2009	State Level Seminar on Emerging Trends of Research in Chemical and Bio Chemical Sciences. Aug.09 Eco-Friendly Fuel for the Future World Biomedical Anthropological aspects of Enthnophamacology. It challenges and recent developments	<ol> <li>Dr. N. Sulochana         Professor of Chemistry, National Intuitions of Technology, Trichy     </li> <li>Dr. M. Seetharaman         Professor of Biomedical Anthropology, Head Tribal Search Centre, Tamil University, Thanjavur     </li> </ol>			
3.	27.08.2010	State level Seminar on Recent Research Perspectives in Chemistry – August -2010	Dr.V.Arjunan Kanchi Mamuniver Centre for Post Graduate Studies, Pondicherry			
4.	14.12.11	Workshop on Micro scale experiment-Intercollegiate Seminar conducted	Dr. S. Murugan, Former HOD of Chemistry, S. T. Hindu College, Nagercoil			
5.	16.12.2011	Recent Research perspective in chemistry and Bio chemistry-Seminar Chief	Dr.Radhika Michael			
6.	29.12.2011	Special Lecture :X-ray crystallography and its applicants	Dr. S. Govindarajan, Professor of chemistry, Bharathiyar University, Coimbatore-641046			
7.	04.08.2011	Guest Lecture: Opportunities in aborad for Chemistry students	Dr. Thiyagarajan Ramesh, Kokunka University, Korea.			
8.	29.06.2012	Guest lecture organized by Botany, Chemistry and Zoology Topic: Recent Trends in Biomedical Research	Dr.S.Elanchezhian, Associate Scientist, University of New Mexico, Albuquerque, New Mexico			
9.	25.07.2012	Inorganic Electronic Spectra	Dr.S.R.Bheeter, Prof. and HOD, St.Joseph's College, Trichy			
10.	30.07.2012	Higher Studies in USA	Gilbert Jayakumar, Asst. Prof. Temple University, Philadelphia			
11.	28.08.2012	State Level Seminar "Current Research in Chemistry and Biochemistry" conducted by our Dept.	Dr. S.Sriman Narayanan, Director, Department of Analytical Chemistry, National Centre for Nano science and Nano technology, University of Madras			

# 32. List the teaching methods adopted by the faculty for different programmes.

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Sl. No.	Programme	Teaching Methods Adopted		
1.	B.Sc.	Chalk and Talk, Teaching with Chemical Models and Chart, Power Point Presentation, Assignments, Remedial Classes, Bridge course, Learning by doing- Practical classes, Student participation in academic competitions, Quiz competitions and Academic Cricket competition		
2.	M.Sc.	Chalk and Talk, Teaching with Chemical Models, Power Point		

Sl. No.	Programme	Teaching Methods Adopted		
		Presentation, Student Seminar, Student Extempore lecture, Seminars,		
		Assignments, Remedial Class, Bridge course, Learning by doing-		
		Practical classes, Student participation in academic competitions,		
		Quiz competitions and Group competitions		
3.	M.Phil.	Chalk and Talk, Power Point Presentation, Student Seminar, Student		
3.	MI.FIIII.	Extempore lecture and Seminars		
4.	Ph.D.	Journal review and Guiding for research		
_	PGDTP	Chalk and Talk, Teaching with Chemical Models and Chart, Power		
5.		Point Presentation and Assignments		

# 33. How does the department ensure that programme objectives are constantly met and learning outcomes monitored?

Programme objectives and learning outcomes are monitored by Student Final examination and with

- i. Slip Test
- ii. Unit Test
- iii. Viva voce exams
- iv. Multiple Choice Question Tests
- v. CIA-(I& II) Exams
- vi. Assignments,
- vii. Quiz

# 34. Highlight the participation of students and faculty in extension activities.

Participation in Extension Activities is mandatory for all UG students as **Part–V** of studies. In Extension Activities we offer NSS, NCC, YRC, etc.

**Participation of faculty in Extension Activities** 

Sl. No.	Name of the Faculty	Name of the Extension Activity Participated
i.	Maj. Dr.R.Venkatachalam	NCC 34 Indep.Coy. Commander

# 35. Give details of "beyond syllabus scholarly activities" of the department.

- We have **MoU** with National Centre for Catalytic Research, Indian Institute of Technology, Chennai for research purpose and academic interactions.
- Every year we conduct Academic Competitive Programmes named Pushpam Inter/Intra Collegiate for Chemistry Ingenious Participants. (PIC-CIP) with the components:
  - a. Chem Talk
  - b. Talent Show
  - c. Chem Quiz Programme
  - d. Dumb Charade
- conduct SLET/NET Coaching classes
- conduct State/Inter Collegiate Level Seminars every year with Invited Lectures by Eminent personalities

# 36. State whether the programme/ department is accredited/ graded by other agencies. Give details: Nil



# **37.** Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department

### **Strengths:**

- i. Qualified, inspiring faculty with 24:1 student teacher ratio. They are passionate above their subjects and use creativity with new technology.
- ii. Roof Water Harvesting plant caters to water equivalent to distilled water for practical classes carried out in well equipped 6 laboratories
- iii. Smart Class room with LCD facility and Over Head Projector
- iv. Tutorial system with parental care (Caring for the students' discipline and academic performances and counselling the needy students)
- v. Conducting Bridge courses & Orientation courses to I UG students, Remedial classes to needy students and arranging Educational Tours

#### Weaknesses:

- i. Most of the students hail from uneducated families in rural area
- ii. Most of the students are First Graduates
- iii. Most of the UG students are from Tamil medium and hence lack both in communicative and written English
- iv. Most of the students have secured poor marks in the qualifying examinations

# **Opportunities:**

- i. Ours is the greatest opportunity to educate the rural pupils
- ii. Our students get Job opportunities in teaching field, industries, marketing and administration fields
- iii. Our students will boldly face the world with confidence and sufficient knowledge

### **Challenges:**

- i. Educating Rural and First Graduate Students
- ii. Motivating and Creating interest in the students
- iii. Giving academic, psycho and socio counselling to the students
- iv. Arranging campus interviews in the rural area for rural students

# 38. Future plans of the department.

- i. To be one of the best research consultants for other colleges & industries.
- ii. To have more MoU with reputed Academic institutions and Industries for research purpose and employment purposes
- iii. To educate our students by eminent faculties belonging to reputed institutions through Video conferencing
- iv. To increase the extension activities to rural school students and rural uneducated people by propagating the food adulteration, Hazardous chemicals, Polythene carry bags, Carcinogens and the importance of roof water harvestings.
- v. To help the farmers by the way of soil testing and water analysis and recommending proper fertilizer/manures with the collaboration



of Tamil Nadu Agricultural Departments.

vi. To start the following career oriented programmes.

### **Certificate course on:**

Modern Technology of Agro Processing & Agriculture Waste - I UG

## **Diploma on:**

Modern Technology of Waste Management

- II

UG

## **Advanced Diploma on:**

Textile Processing

- III

UG

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# **Achievements of Department of chemistry**

- ✓ This department has signed **MoU** with National Centre for Catalytic Research, IITM, Chennai.
- ✓ The department has been nominated by MHRD, Delhi & TNSCST, Chennai to conduct 'Young Student Scientist Programme' for meritorious school children for consecutively 3 years (2003-2005).
- ✓ This department has conducted 'Science Exhibition' to school students in collaboration with Physics, Zoology and Botany departments.
- ✓ This department regularly conducts workshop on "Preparation of Domestic Chemical Products", "Iodine awareness programs" to students and nearby villagers.
- ✓ This department regularly conducts scholarly student activity
  programme PIC-CIP (Pushpam Inter/Intra Collegiate Competition for
  Chemistry Ingenious Participants).
- ✓ This department conducts job oriented PG Diploma in Textile Processing Course and many students benefitted by it.
- ✓ The department had conducted "In service training program to school PG Chemistry Teachers".
- ✓ The department has produced thousands of graduated both in General and Industrial Chemistry.

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