

EVALUATIVE REPORT OF THE CHEMISTRY DEPARTMENT

1. Name of the Department & : Chemistry
Its year of establishment 1979-1980
2. Names of Programme /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 (2013-14)	Remarks
1.	B.Sc.	Chemistry	1979-80	2	48+44+24	106	I, II & III Year
2.	M.Sc.	Chemistry	2012-13	1	25+24	49	I & II year
3	Ph.D.	Chemistry	2011-12	-	15	15	----

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 second year and 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.

Interdisciplinary courses		Departments involved
UG Level	Skill Based Elective	Botany, Zoology, History
	Non - Major Elective	Nutrition and deities
PG Level	Extra Disciplinary	Nano-Science and Technology

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:

- ✚ Our department extending the research oriented Skills to Zoology and Physics PG Students and Research Scholars
- ✚ Handling Ancillary Chemistry to the departments like Mathematics, Physics and Zoology.

6. Number of teaching posts sanctioned and filled (Professors/Associate Professors/Asst. Professors)

Post	Sanctioned	Filled	Vacant
Associate Professors	-	01 (Promoted)	-
Asst. Professors	13	06	07
Guest Faculty		04	-

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

Sl. No.	Name & Qualification	Designation	Specialization	No. of Years' Experience	No. of Ph.D. students guided in the last 5years
01	Dr. S. Arivoli, M.Sc., M.Phil., Ph.D	Associate Professor	Physical and Environmental Chemistry	22	10
02	Mr. C. Vijayaraj, M.Sc., M.Phil.	Assistant Professor	General Chemistry	10	-
03	Mrs. R. Poongodi, M.Sc., M.Phil.,	Assistant Professor	General Chemistry	08	-
04	Dr. P. Sudha, M.Sc., M.Phil., Ph.D	Assistant Professor	Organic Chemistry	11	-
05	Dr. G. Selvarajan, M.Sc.,B.Ed.,M.Phil.Ph.D	Assistant Professor	Environmental Chemistry	15	2
06	Dr. M. Mariyappan, M.Sc., M.Phil., Ph.D	Assistant Professor	General Chemistry	14	2
07	Dr. S. Parthasarathy, M.Sc., M.Phil., Ph.D	Assistant Professor	General Chemistry	15	1
08	Mrs. V. Subha, M.Sc., M.Phil.,	Guest Faculty	General Chemistry	06	-
09	Mis. A. Mangaiyarkarasi M.Sc., M.Phil.,	Guest Faculty	General Chemistry	05	-
10	Mis. S. Subasri M.Sc., M.Phil., (Ph.D.,)	Guest Faculty	General Chemistry	05	-
11	Dr. V. Marimuthu M.Sc., M.Phil., Ph.D.,	Guest Faculty	General Chemistry	05	-



8. Percentage of classes taken by temporary faculty - Programme-wise information

Sl. No.	Programmes	Session
1.	UG	12
2.	PG	04

9. Programme-wise Student Teacher Ratio

Sl. No.	Name of the Programme	Student teacher ratio
1.	UG	24:1
2.	PG	25:1

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

Sl. No.	Staff	Sanctioned	Filled
1.	Technical-Lab Assistant	02	01
2.	Administrative-Store Keeper	01	-

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.

Completed Projects:

Sl. No.	Name of the Faculty	Project title	Name of the Project	Grant Agency	Amount Sanctioned (Rs.)
01	Dr. S. Arivoli	Adsorption of cationic dyes by acid activated low cost carbon prepared from natural plant materials	Minor	UGC	1,00,000/- (MRP-No. 3163/09 SERO-UGC)
02	Dr. S. Arivoli	Implementation of Science and Technology to Rural Area	ASTRA	TNSCST, Chennai	1,00,000/-

On-Going Projects:

Sl. No.	Name of the Faculty	Project title	Name of the Project	Grant Agency	Amount Sanctioned (Rs.)
01	Dr. S. Arivoli	Adsorptive removal of Harmful metal ions and dyes by Activated Nano-Materials derived from Natural Plant Materials and Minerals.	Major	UGC	Rs.12,00,000/= (41-344/2012 (SR) Dated: 13.08.2012)
02	Dr. S. Arivoli	Adsorption Studies using Nano Adsorbent	RGNF	UGC	Rs. 9,36,000 (F. No.: RGNF-2015-2017-SC-TAM-25572)



Accepted Projects:

Sl. No.	Name of the Faculty	Project title	Name of the Project	Grant Agency	Amount Sanctioned (Rs.)
01	Dr. S. Arivoli	A Study on the Adsorption ability of Nano Carbon activated by Silver Nano-Particle derived from marine Algae's	Major	DST-Nano-Mission	Rs.55,00,000/= (SR/NM/NS-1416/2014)
02	Dr. S. Arivoli	A study on the decomposition of dissolved ammonia from water bodies by eco-friendly marine algae's	Major	CSIR-HRDG	Rs.16,00,000/= (5417/NS-EMRII)

12. Departmental projects funded by DST-FIST; DBT, ICSSR, etc.; total grants received :

Applied for Major Research Projects to CSIR and DST-Water Technology, New Delhi. The Possibility of getting the same is very bright.

13. Research facility / Centre with

✦ State recognition

- * Four Staff members pursuing research by guiding Ph.D., scholars as the Department has got the recognition of Bharathidasan University, Thiruchirappalli, as an affiliated "Research Centre".
- * All the research supervisors of the department are members of Department Research Committee and members of Doctoral Committees of other affiliated research centers of the University.
- * Research Laboratories of the department have been recognized as a "nodal centre" for using research equipment's by the scholars and Staff members of other institutions.

✦ National and International recognition

- * Staff members of the department are entrusted with academic responsibilities like reviewer/referee in many reputed national and international journals.
- * Research supervisors of the department are in the Panel of Indian Evaluators of M.Phil., and Ph.D. theses of Various Universities
- * Staff and Scholars of the department have presented research articles in many scientific forum of National and International Status and published research articles in well reputed Journals.



- * 2 Ph.D., theses were awarded during 2010-13 from the department.

14. Publications:

- ✓ Number of papers published in peer reviewed journals (national/international)

S. No.	Name of the staff	No. of papers published in reputed journals	No. of books Published	No. of papers presented in Seminars	Citation Index	h-index	i10-index	Invited Lectures
1	Dr. S. Arivoli*	149	01	38	2954	28	89	7
2.	Mr. C. Vijayaraj	01	01	02	-	-	-	-
3.	Mrs. R. Poonkodi	-	-	-	-	-	-	-
4.	Dr. P. Sudha	-	-	01	-	-	-	-
5.	Dr. G. Selvarajan	01	-	10	-	-	-	-
6	Dr. M. Mariappan	20	-	01	108	07	03	-
7	Dr. S.Parthasarathy,	08	-	03	32	04	03	-
8	Mrs. V. Subha	-	-	-	-	-	-	-
9	Mis.A.Mangaiyarkarasi	-	-	-	-	-	-	-
10	Mis. S. Subasri	04	-	01	-	-	-	-
11	Dr. V. Marimuthu	24	-	02	45	05	01	-

* Author for correspondence for all the Research papers and Papers presented in Seminars

- ✓ Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.):
- ✓ All the 150 research papers are published during this assessment period were found in
 - ❖ Google Scholar
 - ❖ Research Gate
 - ❖ Scopus
 - ❖ Get cited
 - ❖ Web of Science

For instance, all the faculty names of our department are in almost all the scientific journals data base.

- ✓ Citation Index – range / average:
 - * The articles which are published from the department having Citation indices from **1 to 100**
- ✓ SNIP and SJR:
 - * The research articles were published from the department in various reputed journals are covered by Scopus and other



data base along with their SNIP (Source normalized Impact per journal) and SJR (SCImago Journal Rank).

- ✓ **Impact factor – range / average:**
 - * All the papers with impact factor ranging from **0.5 to 2.5**
- ✓ **h-index:**
 - * All the Research Supervisors and Scholar with publications do have individual **h-index** ranging between **1 and 15**.
- ✓ **i10-index:**
 - * All the Research Supervisors and Scholar with publications do have individual **i10-index** ranging between **1 and 20**.

15. Details of patents and income generated:

- ✓ Patent to be applied for the generated activated Carbons

16. Areas of consultancy and income generated :

Expertise of the faculty members are in designing the teaching methodology and Chemistry Practical's for nearby Matriculation Schools and Government Higher Secondary Schools in the form of consultancy is a regular practice of the department in a non-profitable basis.

17. Faculty recharging strategies

Orientation / Refresher and Training Programmes

Sl. No.	Name of the faculty	Number of Attended Orientation/ Refresher Courses
1.	Dr. S. Arivoli	03
2.	Mr. C. Vijayaraj	03
3.	Mrs. R. Poongodi	02
4.	Dr. P. Sudha	02
5.	Dr. G. Selvarajan	03
6.	Dr. M. Mariyappan	02
7.	Dr. S. Parthasarathy	-
8.	Mrs. V.Subha	-
9.	Mis. A. Mangaiyarkarasi	-
10.	Mis. S. Subasri	-
11.	Dr. V. Marimuthu	-



Papers presented in Seminars

Sl. No.	Year	No. of Papers Presented		
		State	National	International
1.	Dr.S.Arivoli	16	09	03
2.	Mr. C. Vijayaraj	-	02	-
3.	Mrs. R. Poongodi	-	-	-
4.	Dr. P. Sudha	-	01	-
5.	Dr.G.Selvarajan	06	03	01
6.	Dr.M.Mariyappan	-	-	-
7	Dr. S. Parthasarathy	04	-	-
8	Mrs.V.Subha	-	-	-
9	Mis.A.Mangaiyarkarasi	-	-	-
10	Mis. S. Subasri	-	01	-
11	Dr. V. Marimuthu	-	01	01

18. Student projects

- ✓ **Percentage of students who have done in-house projects including inter-departmental**

All the Post-graduate students are permitted to undertake a project work to gain extra-credit in the existing CBCS. They mostly make use of department of Chemistry. However, the percentage seems to be in decreasing trend in single digits.

All the M.Sc., Students do their project as it is mandatory in curriculum. Apart from the parent department, they do collaborative work with institutions like CECRI, CPCL (for non-destructive measurements) etc. during their project work.

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

✚ Faculties

- ✓ The **Autobiography of Dr. S. Arivoli** is in the prestigious register of "Who's Who in the World", USA, in the inventors category.
- ✓ **Dr. S. Arivoli** was awarded **Sheik Jalaludeen Memorial Cup** for academic excellence for getting first Ranks in **B.Sc., and M.Sc., degree University Examinations** during the year 1984-1989
- ✓ **Dr.S.Arivoli** has been Serving as a Referee for the international journals such as International Journal of physical science, Langmuir and Desalination (Elsevier



group), European Journal of Chemistry, Journal of Current Environmental Engineering, International Journal of Chemical & Pharmaceutical Analysis, Journal of the Turkish Chemical Society, Section A: Chemistry, SCIENCEDOMAIN international (SDI), Hindawi Publishing Corporation, British Journal of Applied Science & Technology, Orbital - The Electronic Journal of Chemistry, Access International Journals Ltd, Bulletin of the Chemical Society of Ethiopia

✚ Doctoral/ Post-Doctoral fellows - Nil

✚ Students

University Rank Details from 2006-2007 to Onwards

Academic Year	No. of Students appeared	Pass %	% of first class	No. of Dist.	University Rank obtained	Students went for higher education (%)	Students went for Job (%)	
April 2005	27	74.07	66.00	6	4	66.00	18.00	
April 2006	19	94.70	94.70	6	1	57.89	36.84	
April 2007	23	73.90	73.90	1	-	47.82	21.73	
April 2008	20	85.00	85.00	5	1	70.00	20.00	
April 2009	26	92.30	92.30	15	6	57.69	30.76	
April 2010	29	86.20	86.20	11	1	51.72	27.58	
April 2011	26	78.00	65.69	1	1	38.46	30.76	
April 2012	28	75.00	64.45	3	1	64.00	25.00	
April 2013	25	68.00	68.00	-	-	50.00	20.00	
April 2014	UG	25	70.00	100	2	1	55.00	15.00
	PG	24	65.00	100	3	2	40.00	30.00
April 2015	UG	24	75.00	80	4	-	60.00	25.00
	PG	24	83.40	100	5	1	75.00	50.00
April 2016	UG	46	50.00	75.00	4	1-Expected	25.00	60.00
	PG	25	88.00	100	8	3-Expected	50.00	50.00

Name of the Student with placement and prize won

Year	Name of student	Participated programs	Placement/Prize won	Month and Date	Organized by
April2005	D. Arasi	University exam	3rd Rank	April2005	Bharathidasan university
April2005	K. Devibagavathi	University exam	7th Rank	April2005	Bharathidasan university
April2005	R. Nithya	University exam	15th Rank	April2005	Bharathidasan university
April2005	P. Brindha	University exam	17th Rank	April2005	Bharathidasan university
April2006	G. Gunasekaran	University exam	15th Rank	April2006	Bharathidasan university
April2008	K. Revathi	University exam	15th Rank	April2008	Bharathidasan university



April2009	T. Venkadasubramaniyan	University exam	6th Rank	April2009	Bharathidasan university
April2009	S. Karthiga	University exam	10th Rank	April2009	Bharathidasan university
April2009	T. Muthulakshmi	University exam	13th Rank	April2009	Bharathidasan university
April2009	S. Anusha	University exam	19th Rank	April2009	Bharathidasan university
April2009	G. Muthulakshmi	University exam	19th Rank	April2009	Bharathidasan university
April2009	K. Selvanayaki	University exam	20th Rank	April2009	Bharathidasan university
April2010	P. Karthiga	University exam	13th Rank	April2010	Bharathidasan university
April2011	S. Gnanasundhari	University exam	13th Rank	April2011	Bharathidasan university
April2012	A. Bharathi	University Exam	13th Rank	April2012	Bharathidasan University
April2014	A. Bharathi	PG University Exam	14th Rank	April2014	Bharathidasan University
April2014	A. Akilan	PG University Exam	17th Rank	April2014	Bharathidasan University
April2015	J. Karthika	PG University Exam	2 nd Rank	April2015	Bharathidasan University

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

Workshops organized by Dr. S. Arivoli

Sl. No.	Workshop Title	Status	Date	Grant from Agency	Amount sanctioned Rs.
01	Implementation of Science and Technology	Kidarangondan, Thiruvarur (District)	04 April 2014	TNSCST	20,000/-
02	Implementation of Science and Technology	Melarathanallur, Thiruvarur (District)	27 May 2014	TNSCST	20,000/-
03	Implementation of Science and Technology	VidaiyapuramThiruvarur (District)	28 May 2014	TNSCST	20,000/-
04	Implementation of Science and Technology	Kankodutha Vanitham Thiruvarur (District)	29 May 2014	TNSCST	20,000/-
05	Implementation of Science and Technology	Paruthiyur Thiruvarur (District)	30 May 2014	TNSCST	20,000/-



21. Outstanding participants who graced the occasions

1. Prof. Dr. S. Arunachalam, Bharathidasan University, Trichy.
2. Prof. Dr. A. Akbar Hussain, Khadir Mohideen College, Adirampattinam
3. Prof. Dr. S. Raja Mohamed, Khadir Mohideen College, Adirampattinam
4. Prof. Dr. K. Ravichandran, Gandhigram Rural University, Gandhigram
5. Dr. R. Gopinath, Director, Akshaya Enviro Solutions, Chennai
6. Mr. J. Raju, General Manager, TNSC Bank Ltd., Chennai
7. Prof. Dr. Viswanathan, Alagappa University, Karaikkudi
8. Prof. Dr. M. Hema, Anna University, Chennai-Thirukkuvalai
9. Prof. Dr. V. Vijayakumaran, Anna University, Chennai-Pattukkottai
10. Prof. Dr. S. K. Mohandoss, Anna Institute of Management Studies (IAS Coaching Centre) , Chennai

22. Student profile course-wise

Academic Year	No. of Students appeared	Pass %	% of first class	No. of Dist.	University Rank obtained	Students went for higher education (%)	Students went for Job (%)	
April 2005	27	74.07	66.00	6	4	66.00	18.00	
April 2006	19	94.70	94.70	6	1	57.89	36.84	
April 2007	23	73.90	73.90	1	-	47.82	21.73	
April 2008	20	85.00	85.00	5	1	70.00	20.00	
April 2009	26	92.30	92.30	15	6	57.69	30.76	
April 2010	29	86.20	86.20	11	1	51.72	27.58	
April 2011	26	78.00	65.69	1	1	38.46	30.76	
April 2012	28	75.00	64.45	3	1	64.00	25.00	
April 2013	25	68.00	68.00	-	-	50.00	20.00	
April 2014	UG	25	56.00	100	2	1-expected	75.00	15.00
	PG	24	60.00	100	3	2	40.00	30.00
April 2015	UG	24	75.00	80	4	-	60.00	25.00
	PG	24	83.40	100	5	1	75.00	50.00
April 2016	UG	46	50.00	75.00	4	1-Expected	25.00	60.00
	PG	25	88.00	100	8	3-Expected	50.00	50.00

22. (a) Admission Details

Academic Year	Total Admission	OC		BC		MBC		SC		ST	
		M	F	M	F	M	F	M	F	M	F
2006-2007	28	-	-	3	11	2	3	3	6	-	-
2007-2008	33	-	-	5	14	-	8	3	3	-	-
2008-2009	27	-	-	5	7	1	2	7	5	-	-
2009-2010	31	-	-	6	4	2	4	8	7	-	-
2010-2011	25	--		-	7	1	1	4	12	-	-
2011-2012	28	-	-	1	5	-	8	3	11	-	-



2012-2013	UG	24	-	-	2	4	2	3	6	7	-	-
	PG	26	-	-	3	7	-	4	6	6	-	-
2013-2014	UG	44	-	-	2	8	1	5	6	22	-	-
	PG	24	-	-	3	12	1	-	1	7	-	-
2014-2015	UG	48	-	-	6	16	1	13	-	11	1	-
	PG	25	-	-	2	7	2	4	3	7	-	-
2015-2016	UG	60	-	1	8	18	2	3	8	20	-	-
	PG	25	-	-	2	11	1	3	-	8	-	-
Total		448			48	131	16	61	58	132	1	

22 (b) UG Programmes

Year of study	Applications received	Selected		Total
		Male	Female	
2006-07	60	08	20	28
2007-08	75	08	25	33
2008-09	101	13	14	27
2009-10	127	16	15	31
2010-11	199	05	20	25
2011-12	243	04	24	28
2012-13	276	10	14	24
2013-14	243	05	39	44
2014-15	261	08	40	48
2015-16	352	15	45	60
2016-17	500	-	-	-

22. (c) PG Programmes

Year of study	Applications received	Selected	
		Male	Female
2012-13	125	09	17
2013-14	95	05	19
2014-15	48	07	18
2015-16	60	03	22

22. (d) Ph.D. Programmes

Doing		Awarded before the assessment period		Awarded during the assessment period		Thesis Submitted
Male	Female	Male	Female	Male	Female	
11	05	-	--	04	-	02



23. 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.	55	45	--	--
Ph.D.	-	100	--	--

24. How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations?

Sl. No.	Name of the Examination	No. of Students
1.	Competitive examinations	04

- ✚ Miss. **R. Bharathadevi**, M.Sc., B.Ed. of 2012-14 batches has passed PG Teachers Examination Government of Tamil Nadu.
- ✚ Miss. **S. Ganasundari**, B.Sc., B.Ed. of 2008-11 batches has passed UG Teachers Examination Government of Tamil Nadu.
- ✚ Mr. **D. Rajesh**, B.Sc. 2008-11 got selection in Police service with distinction as No.1 in the examination processes.

25. Student progression

Student progression	Percentage against enrolled
UG to PG	45
PG to M.Phil.	30
PG to Ph.D.	20
Ph.D. to Post-Doctoral	--
Employed	
✚ Campus selection	-
✚ Other than campus recruitment	40
Entrepreneurs	50



26. Diversity of staff

Percentage of faculty who are graduates	
Of the same parent university	85
From other universities within the State	15
From other universities from other States	--

27. Number of faculty who were awarded Ph.D., during the assessment period.

Year	Ph.D.,
2006-2014	2 (Dr. G. Selvarajan and Dr. M. Mariyappan)

28. Present details about infrastructural facilities

a) Library:

Department: 1760 books

The Following Journals are available for the students and research scholars:

- Asian Journal of Research in Chemistry
- Arabian Journal of Science and Engineering
- International Journal Scientific Research
- E Journal of Chemistry
- Research Journal of Chemistry and Environment
- Scientific Transaction in Environment and Technovation
- Indian Journal of Environmental Protection

b) Internet facilities for staff and students :

- 24 Hours unlimited Broad band internet facility is available in the Chemistry Department for the use of Staff members and research scholars.

c) Total number of class rooms : 07

d) Class rooms with ICT facility :

- One mini conference cum smart class room is equipped with smart Board, audio-video projection and latest ICT gadgets.

e) Students laboratories : 02

- All Major Practical equipment's related to Chemistry Practical's are available in two separate UG and PG laboratories.

f) Research laboratories : 01



- Research Laboratory: (Experimental lab for Kinetics research)

The newly added equipment's are:

- ✓ 4 decimal digital balance (imported)
- ✓ UV-Visible Double Beam Spectrometer (imported)
- ✓ Doubly distilled water plant
- ✓ Thermostat Shaker
- ✓ Thermostat
- ✓ Water Analyzer
- ✓ Digital pH meter
- ✓ Muffle Furnace
- ✓ Potentiometer
- ✓ Conductivity meter
- ✓ Colourimeter

29. Number of students of the department getting financial assistance from College and Government.

Year	No. of students getting financial assistance
2006 - 07	28
2007 - 08	33
2008 - 09	27
2009 - 10	31
2010 - 11	25
2011 - 12	28
2012 - 13	50
2013 - 14	68
2014 - 15	73

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

- ✓ The basis for the importance for introducing a new Programme will be discussed in the departmental meeting along with the copies of UGC/CSIR/DST brochures/syllabi.

31. 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 suggestions given by the Staff members directly involved in the new Programme or syllabi are always considered as an effective feedback. The merits and demerits posed by the teacher concerned will be discussed in the BOS meeting and subsequent changes are updated periodically.



- ✓ Faculty members from other institutions are also involved in feeding feed-back in regular basis during the Evaluation of practical examinations.
- b) Students on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same?**
- ✓ Students are free to make comments/suggestions upon the methodology of teaching process (class-room teaching as well as laboratory demonstrations) adapted by the individual teachers directly to the Head of the Department
 - ✓ By the directions of the Principal and IQAC, the Head of the department meets all the classes to verify the completion of the syllabus, well in advance, before the last working day of each semester.
 - ✓ Every semester, IQAC conducts Feedback evaluation of teachers, infrastructure, laboratory conditions, etc., of the department and subsequently the report is considered with due weightage for further constructive and progressive implementation.
- c) Alumni and employers on the Programmes and what is the response of the department to the same?**
- ✓ Yes. Conducting the Annual Alumni association meet is in regular practice. Likewise, the meeting with a few noteworthy Entrepreneurs/industrialists/Scientists is one of the regular activities of the department.

32. List the distinguished alumni of the department (maximum- 05)

SL. No.	Name of the Alumni	Designation	Place
1	Prof. Dr. Viswanathan	Professor of Chemistry	Alagappa University Karaikkudi
2	Prof. C. Vijayaraj	Assistant Professor of Chemistry	Thiru Vi Ka Government Arts College- Thiruvarur
3	Mr. Murugesu Boopathi	Chief Educational Officer	Cuddalore District
4	Dr. B. Swaminathan	Scientist	New Delhi
5	Dr. S. Balaji	Post-Doctoral Fellow	IIT, Chennai



33. Give details of student enrichment Programmes (special lectures/workshops/ seminar) with external experts.

- a) Departmental seminars at UG, PG & Ph.D. levels are a routine academic process in the department

34. List the teaching methods adopted by the faculty for different Programmes.

Sl. No.	Programme	Teaching Methods Adopted
1.	UG	Conventional Chalk and Talk method, questioning and answering approach, displaying of charts, exhibiting the proto-type models, usage of Slide projectors, Motion pictures, OHP presentations, assigning problems to solve independently, library hour, invited talks by external expertise, supply of well -prepared study materials and guidelines for Practical and up-dated theories behind practical's well before the commencement of laboratory experimental Practicals.
2.	PG	Chalk and Talk method, Interaction with individuals, exhibiting e-contents, simulation of physical models, presentation of downloaded talks of NPTEL (National Program on Technology Enhanced Learning) relevant to PG Students, OHP, Guest Lectures, seminars, library hour allotment, visit to out-side laboratories and supply of study materials.

35. How does the department ensure that Programme objectives are constantly met and learning outcomes monitored?

- a) The system in curriculum facilitates to have a periodic and continuous assessment of the students through CIA and compulsory attendance.
- b) Inter-departmental analysis of both teachers and students in council of heads of the department level and departmental level after every semester ensures the status and directions of on-going trend in achieving the objectives of the Programmes.
- c) An effective and result-oriented monitoring mechanism is practiced by the PRINCIPAL to review the results of students and performance of teachers, every year.
- d) The interest and competition in selecting CHEMISTRY subject by the students in admission process is an indicator for the department to ascertain the fulfillment of the objectives of our well-designed Programmes.



- e) No. of students appearing and getting succeeded in Competitive examinations is closely watched in regular manner.
- f) Periodic checking mechanism supported by feedback from students (of both current and out-going) and alumni and reports of IQAC, helps to take suitable remedial measures.

36. Highlight the participation of students and faculty in extension activities.

- ✚ Student's participation in Extension activities is made mandatory for all UG Programmes. The students of Chemistry do advised to participate in NSS, YRC and Sports etc.
- ✚ Students have been conducting awareness Programmes on "learning Science" and in particular, in CHEMISTRY for near school children by deliberations and demonstration.
- ✚ The Staff's have conducted more than 5 one-day Programmes for the Higher Secondary School teachers who have handling Chemistry.
- ✚ Many of the staff members are actively involved in society-involved Associations and Organizations for the purpose of serving their intellectual expertise.

Participation of faculties in Various Extension Activities

Sl. No.	Name of the Faculty	Name of the Extension Activity Participated
01	Dr. S. Arivoli	<ul style="list-style-type: none">- NAAC Coordinator- IQAC Assistant Coordinator- Physical Director In-charge- NSS Programme Officer- Member, Board of studies- Secretary, Student's Co-operative Society- Chief Superintend of University Examinations- Camp Officer, Central Valuation of Exam Papers- University Subject Expert for the approval of new courses to colleges- Question Paper Setter for TNPSC Examinations- Selection Committee Member for Assistant Professor Recruitment
02	Mr. C. Vijayaraj	<ul style="list-style-type: none">- YRC Programme Officer
03	Dr. G. Selvarajan	<ul style="list-style-type: none">- NSS Programme Officer

37. Givedetails of "beyondsyllabus scholarly activities" of the Department.



- ✓ Coaching to students for the preparation of UGC-CISR JRF cum Lecturer Test, SLET and other competitive examinations.
- ✓ Training the students to participate in Chemistry Quiz Programmes
- ✓ Training the students to inculcate the learning skills, inter-personal and intra-personal skill and career choosing skills (through workshops)

38. State whether the Programme/ department is accredited/ graded by other agencies. Give details: Nil

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

Strengths:

- i. Effective Support in the form of laboratory equipment's from the Government for the introduction of any new and innovative Research Programme.
- ii. Even with moderate research possibilities, the department is capable of pursuing research in par with University departments and many leading institutions.
- iii. Good and conducive opportunities for students vertical progress up to Research Level
- iv. Thirst towards Adaptability towards the up-dating of academic Programmes according to the demand.
- v. Female staff members outnumber the male staff members in the present and in student strength scenario where female students outnumber male students.

Weaknesses:

- i. Substantial decrement in science learning due to the invasion of engineering studies and moreover the Programmes in Chemistry are purely basic.
- ii. Inability to network with other institutions (like other urban Colleges)
- iii. Low profile of Teachers exposure towards advancement in Chemistry.
- iv. Abolition of minor projects for college teachers and financial assistance to individual departments in the form of DST-FIST, has become unforeseen difficulty while progressing towards upwards.



Opportunities:

- i. Wide scope for learning job-oriented certificate, diploma and PG Diploma course concurrently during the course duration.
- ii. Students have chance to appear confidently in competitive examinations as extra-coaching on specific skill is set made available.
- iii. Special coaching classes for NET/SLET/UGC-CSIR pave way to the students to go further in their academic excellence.
- iv. Each student could enrich his/her technical skills as the related opportunities do available in the department.
- v. The past history and positive trend which prevails in the department help each and every student to expand their knowledge in all aspects.

Challenges:

- i. Teaching Chemistry seems to be tough task and that to the first generation learners make more challengeable. The success rate of the department shows the success trend in meeting out such challenges in effective manner.
- ii. Sudden transition from local language to English in Undergraduate level students is a regular taunting task. However, training through Bridge courses and spoken English labs help to get rid of the challenges.
- iii. Teaching Chemistry to ancillary courses seems to be a tough task and has been more challenging one. Proper methodology helps us to come out from this problem.
- iv. Net working with other institutions is a major problem which lies in the department. Recent advancements in the campus improvement, through technological connectivity, we attempt to reduce the same.

Future plans of the department.

- i. To set a Research Centre with the help of DST and UGC.
- ii. To have more enriching programs for Staff and Students (like seminar, Symposia and Workshops).
- iii. To get more projects from UGC,CSIR and DST



Achievements of the Department:

- ✓ Since inception, the department has produced over 1000 graduates in Chemistry
- ✓ One of the research departments in Bharathidasan University to pursue the experimental research.
- ✓ The department has grown with well-structured Programmes such as Undergraduate, Post graduate and Research Programme with the job oriented Skill Based and Non Major Electives.
- ✓ The department has a wide spectrum of Alumni spread all over the world. For instance, in IIT, Anna University Chennai, MS University, Tirunelveli, Bharathiyar University, Coimbatore, Periyar University, Salem as faculties and Scientists.
- ✓ The department has grown to a greater extent to pursue research in the fields of Adsorption Kinetics, Crystal Growth, and Synthesis of Co-ordination Complexes. Over 75 lakhs funding from UGC, DST, CSIR and TNSCST are the ample proof for the department of Chemistry.

