#### Department of Science and Humanities

#### HEAD OF THE DEPARTMENT



Name: Dr. V. Suresh Kumar

Qualification: M.Sc., M.Phil, Ph.D

Department: Science and Humanities - Chemistry

The department of Science and Humanities were established in the year 2001. It is well equipped with research laboratories and has dedicated staff members. The department has highly qualified faculty members with Ph.Ds. in diverse fields. They have several publications in reputed international and national journals and also organized many conferences and seminars.

. The Department of Science and Humanities initiates and prepares the students to achieve critical thinking, the ability to innovate, work in multicultural environments, and adapt to professional courses. It typically focuses on providing a strong base in basic sciences and humanities to first-year students, preparing them for their specialized engineering courses. Courses such as Mathematics, Physics, Chemistry, English, Tamil and also incorporating Environmental Science taught by the Department of Science and Humanities during the first year, facilitate a better understanding of the courses of their specialization.

The Science and Humanities courses impart essential skills like effective communication, leadership skills, and team spirit in the first year of Engineering. The faculty focuses on moulding quality engineers who are capable of making great contributions for a better tomorrow. The curriculum and syllabi are designed and periodically updated to meet the societal and technological needs of the times. The department regularly organizes seminars, guest lectures, short-term training programs, workshops, and conferences for the professional development of students and faculty within and beyond the institute.

Name: Dr. V. Suresh Kumar			
Designation	Professor & Head		
Qualification:	M.Sc.,M.Phil,Ph.D.,PGDBA		
Area of Specialization	Chemistry – Corrosion Inhibitors Environmental Science		
Experience	Teaching: 26.3 Years		
	Industry: 3 Years		
No of Workshop /Conference /FDP /Seminar / STTP / Refresher Course / Book	Workshop: 15 International Conference 15 Conference Publications Publications  FDP (ATAL & NITTR): 9  Seminar:9  STTP:7  Refresher Course: 2  Book: 5		
Seminars / Conferences Organized	10		
Guest Lecture Delivered	18		
Publications (International Journal)	7		
Membership	Indian Society for Technical LM 57944 Education(ISTE)		
	Association of Chemistry LM 1309 Teachers(ACT)		
	Indian Red Cross Society(IRCS) LM 4473		
	St. John Ambulance LM 5368		

### **Research Publication:**

S.No	Title of the Paper	Journals		
		International	Issue	
1	Influence of Polythiophene-p- Toluenesulphonic acid on corrosion inhibition of carbon steel in acid medium	International Journal of Pharmaceutical and Chemical Sciences ISSN 2277 - 5005	Vol.1(4), Oct- Dec 2012, 1429- 1438	
2	Polythiophene-β-Naphtholsulphonic acid: New and effective corrosion inhibitor for carbon steel in acid solution	Res. J. of Chem. Sci ISSN 2231- 606X	Vol. 2(10),Oct- 2012, 87-94	
3	Influence of Polythiophene-Citric Acid (PTh-CA) Nanopowder on Corrosion Inhibition of Mild Steel in HCL Solution	International Journal of Advanced Chemical Science and Applications ISSN 2347-7601(Print)	2347-761X, Volume -3, Special Issue -1, Sep'2015	
4.	Synthesis and characterization of Polythiophene Anthraquinone Sulphonic Acid(Pth-AQSA) Nano powder on corrosion inhibition of mild steel in I N HCL Solution.	International Journal of Environmental Pollution and control Research ISSN 2454 7573	Vol. 02, No.02, pp. 14-20, July 2016	
5.	Kinetics and Isotherm studies on the adsorption of Methylene Blue dye onto termite sand	International Recent Research Journal on Science and Technology ISSN 2455 5614	Vol. (3) 2, PP1-8 Apl2017	
6.	Biosorption of Victoria blue using Zizyphus oenoplia seed: Evaluation of experimental and modeling studies		IEEE International Conference Publications	
7.	Influence of polythiophene- Anthraquinone Sulphonic acid (PTh- AQSA) Nano powder on Corrosion inhibition of mild steel in 1N HCl Solution		IEEE International Conference Publications	

## 13. Research Publication (International Conference):

S.No	Title of the Programme	Organization	Dura	ation
0.110	This of the Frogramme	Organization	From	То
1	presented a paper titled "Role of Chemistry in Heart diseases" in International conference on Life through Chemistry	P.R. Engineering College, Vallam, Thanjavur.	25.02.06	26.02.06
2	presented a paper in International conference on Biological Inorganic Chemistry(ICBIC-2013)	Periyar University, Salem.	20.02.13	23.02.13
3.	Paper presented in ICETETS- 2016 INFLUENCE OF POLYTHIOPHENE - ANTHRAQUINONE SULPHONIC ACID (PTh-AQSA) NANOPOWDER ON CORROSION INHIBITION OF MILD STEEL IN HCI SOLUTION	Kings College of Engineering, Thanjavur	24.02.16	26.02.16
4.	Paper presented in ICETETS- 2016 Biosorption of Victoria blue using <i>Zizyphus oenoplia</i> seed: Evaluation of experimental andmodeling studies	Kings College of Engineering, Thanjavur	24.02.16	26.02.16
5.	Paper presented in APST- 2016 Effect of temperature in the corrosion inhibition of polythiophene derivatives in HCL solution	VIT University, Vellore	24.10.16	26.10.16
6.	presented a paper in International conference on Innovations in Science, Engineering and Technology for Sustainable Development(ISETSD-2018)	Muthayammal Engineering College, Rasipuram	30.03.18	31.03.18

7.	presented a paper in International conference on Recent Applications in Advanced Materials(IC- RAAM 2019)	E.B.K.Arts & Science College,Dharmapuri(DT)	11.07.19	12.07.19
8	presented a paper in International conference on Emerging Trends and Innovations in Chemistry(IC-ETIC- 2019)	Sengamala Thayaar Educational Trust Women's College, Mannargudi,	20.08.19	
9	presented a paper in International conference on Recent Applications in Advanced Materials(IC- RAAM 2019)	Bangkok, Thailand	24.12.19	26.12.19
10	Presented a paper in e- International Conference on Recent Trends in Smart Materials (ICRTSM – 2022)	Kings College of Engineering	25.06.22	
11	Presented a paper in two day International conference on Current Trends in Advanced Functional Materials	Saranathan College of Engineering, Trichy.	26.09.23	27.09.23
12	Presented a paper in two day International conference on Molecular Basis of Cancer and Prevention	PRIST Deemed - To - Be - University, Thanjavur	07.02.24	08.02.24
13	Presented a paper in two day International conference on Recent Advancement and Multidisciplinary Research in Science and Humanities(ICMRSH-2024)	SNS College of Technology, Coimbatore	23.02.24	_
14	Presented a paper in One day International conference on Recent Trends in Chemistry and Energy Science(RTCES- 2024)	Saraswathi Narayanan College, Madurai	13.09.24	-

15	Presented a paper in two day International Conference on Funtional Nanomaterials for energy, Environmental and Biomedical Applications	STET women's College  Mannargudi	12.0924	13.09.24
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### 14. Research Publication (National Conference):

S.No	Title of the Programme	Organization	Durat	ion
0.110	This of the Frogramme	Organization	From	То
1	presented a paper in "National conference on Photonics for advanced technology"	Research and Development Wing, PRGI, Vallam, Thanjavur.	22.02.07	24.02.07
2	presented a paper in" National conference on Recent advances in Textile and Electrochemical sciences"(RATES-2009)	Alagappa University, Karaikudi.	22.12.09	25.12.09
3.	presented a paper in "National conference on Recent advances in Textile and Electrochemical sciences" (RATES-2012)	Alagappa University, Karaikudi.	22.03.12	23.03.12
4	presented a paper in "National Conference on recent applications of Nano Materials in chemistry and environmental research" (RANCER-2012)	Kongu Engineering College, Perundurai, Erode.	24.07.08	25.07.08
5	Presented A paper in "National conference on Recent Advances in Chemistry"	P.G. and Research Department of Chemistry, E.R.K. Arts & Science College, Dharmapuri	07.08.15	
6	presented a paper titled in 2 <sup>nd</sup> "National conference on New Renaissance in Chemical Research" (NCNRCR-2015)	Department of Chemistry, SRM University, Ramapuram, Chennai.	28.08.15	29.08.15

7	presented a paper in "National conference on Emerging Trends in Information Science and Technology" (NCETIST-2K16)	Department of Chemistry, RVS Padmavathy college of Engg. and Tech, Chennai	30.03.16	31.03.16
8.	presented a paper in TEQIP II sponsored "National conference on Research Advances in Materials Science and Applications" (RAMSA'16)	Department of Chemistry, Anna University, BIT Campus, Tiruchirappalli.	19.08.16	20.08.16
9.	Presented a paper in National Conference on "Chemistry of Heterogeneous emerging Materials"	P.G. and Research Department of Chemistry,  E.R.K Arts and Science College, Dharmapuri.	19.08.16	
10	Presented a paper on "Evaluation of Synthesized water system Application", National conference on RACS – 2017	Sri Ramakrishna Institute of Technology, Coimbatore.	28.10.17	
11.	Presented a paper on Study of Adsorption of Methylene blue dye on Termite Sand in National conference on Recent Innovations in Engineering and Science(NCORIES2K18)	University College of Engineering, Anna University, Rajamadam.	06.04.18	
12	Presented a paper entitled A Study on Homocysteine statusMyocardial infection among Tamilians in the Adroit Conference on Emerging Trends in Chemistry(ACETIC-2K18)	Jeppiaar SRR Engineering College, Padur, Chennai	02.08.18	
13	Presented a paper in National conference on Chemical, Environment, energy and Engineering Research	Arasu Engineering College, Kumbakkonam	17.12.2021	
14	Presented a paper in National Conference on "Recent Trends in Smart Materials (NCRTSM 2023)	Kings College of Engineering	06.10.23	

Ī	4 =	Presented a paper in international	Dept. of HRC	0.4.00.04	0= 00 04
	15	Muthamil Murugan Conference	Govt. of Tamilnadu	24.08.24	25.08.24

# 15. Research Publication (National Seminar):

S.No	Title of the Programme	Organization	Duration	
	o rogramme	J. 34.112411911	From	То
1	presented a paper in one day Seminar on" Recent Advances in Biotechnology"	P.R. Engineering College, Vallam, Thanjavur	19:.03.07	
2	presented a paper in TNSCST sponsored "National Seminar on Nano Technology and consumer products"	P.R. Engineering College, Vallam, Thanjavur	10.08.07	11.08.07
3.	presented a paper in National Seminar on "chemistry education and research" and National Convention on Chemistry Teachers  (NCCT – 2013)	Annamalai University Annamalai Nagar	8.11.13	10.11.13
4	presented a paper in3 <sup>rd</sup> "National Seminar on Technologically Important Crystalline and amorphous Solids"(TICAS-2014)	Kalasalingam University Krishnankovil	28.02.13	01.03.14
5.	Presented a paper in National Seminar on Modern Trends in Chemistry	Sengamala Thayaar Educational Trust Women's College, Mannargudi – 614 016	20.12.17	
6.	Presented a paper in 3 <sup>rd</sup> National Seminar on Recent Trends in Smart Materials(NSSM-2018)	Kings College of Engineering, Thanjavur.	17.02.18	
7.	Presented a paper in 3 <sup>rd</sup> National Seminar on Recent Trends in Smart Materials(NSSM-2018)	Kings College of Engineering, Thanjavur.	29.03.19	

### 16. Projects carried out: NIL

## 17. Short Term Courses/FDP/Seminar/Workshop Attended:

S.No	Title of the Programme	Organization	Dur	ation
	<b>.</b>	3	From	То
1	Short Term Course on "Effective Classroom Management for Engineering college Teachers"	ISTE – CAP, Anna University, Chennai.	15.02.02	16.02.02
2	AICTE-ISTE sponsored Short Term Training Program(STTP) on "Recent Trends in waste water management"	Sathyabama University, Chennai.	30.12.04	13.01.05
3	Short Term Course on "Instructional Design and Delivery "(QIP)	National Institute of Technical Teachers Training & Research, Tharamani, Chennai.	29.05.06	02.06.06
4	STTP-" Science and Technology Capacity Building for Industrial Needs"	University College of Engineering,  Anna University, Pattukkottai.	23.07.14	25.07.14
5	One day "National Workshop on Environment and Pollution Awareness"	1	12.04.04	
6	AICTE sponsored One day "National level Workshop on Environment and Pollution Awareness"	Kamaraj college of engineering and Technology, Virudhunagar.	13.08.04	
7	ISDR, CGSI, IAPSO sponsored "workshop on Tsunami Rehabilitation"	AVC College of Engineering, Mayiladuthurai.	8.04. 05	10.04.05
8	IRCS sponsored Two day work shop- "District Disaster Response Team Basic Training"	IRCS, Thanjavur.	29.03.10	30.03.10
9	TANSCHE, Chennai sponsored "Workshop on Art of Scientific Article Writing"	Department of chemistry, Periyar E.V.R. College(Autonomous), Tiruchirappalli.	11.03.11	12.03.11

10	Two day Workshop on "Art of Counseling"	Kings College of Engineering, Punalkulam, Thanjavur	27.12.13	28.12.13
11	Science Academies sponsored Two day Lecture "Workshop on Recent Advances in Materials Chemistry"	Department of chemistry, Anna University, Tiruchirappalli	7.03.14	08.03.14
13	One day International "Workshop on Environmental Protection and Sustainable Development"	Department of Chemistry, University College of Engineering, Pattukkottai.	26.03.15	
14	Two Days Lecture workshop on Chemistry for Sustainable Green Environment	Department of Chemistry  Anna University(BIT Campus), Tiruchirappalli.	11.03.16	12.03.16
15	Atomic energy regulatory board, Govt. of India sponsored "National Seminar on Atomic energy, Environment and Human welfare"	P.R. Engineering College, Vallam,Thanjavur.	25.08.05	26.08.05
16	Participated in "National Seminar on Nanotechnology for Energy and Environmental Applications" (NTEEA-09)	Department of chemistry, Kalasalingam University, Krishnankoil	09.04.09	
17.	Participated in National Conference on Frontiers of Chemistry	Department of chemistry, SRM University, Kattankulathur	24.01.08	25.01.08
18.	Participated in National level workshop on Advancements in Chemical Sciences	Department of chemistry, Sri Sai Ram Institute of Technology Chennai	18.07.16	
19.	Participated in National level workshop on Revealing the Advances in Material Science	Department of Physics, Sri Sai Ram Institute of Technology Chennai	19.07.16	20.07.16

20.	Participated in an AICTE sponsored Short Term Course on "Introduction to Smart Materials with Energy Harvesting Application"	Department of Applied Mechanics, Indian Institute of Technology, Madras	02.09.18	07.09.18
21.	Participated in One Day National Seminar on Solar fuel source for CO <sub>2</sub> emission free environment	Department of Science and Humanities EGS Pillai Engineering College Nagapatinam	21.01.19	
22.	Participated in STTP through ICT Mode on NBA Accreditation	NITTTR, Kolkata.	22.04.19	26.04.19
23.	Online Refresher course on Science Academics	A.P.A College of Arts and Culture, Palani	24.06.20	07.07.20
24	Online FDP on 3D Printing and Design	ATAL- AICTE	24.08.20	28.08.20
25	Attended Two weeks Short Term Training program through ICT mode on Drinking water purification Technologies organized by NITTTR, Kolkata	NITTTR, Kolkata	20.09.21	01.10.21
26	Attended one week online AICTE- ATAL- FDP on Water Technology organized by NITTTR, Kolkata	NITTTR, Kolkata	25.10.21	29.10.21
27	Attended three day online FDP on Emerging Trends in Chemistry, organized by.	Kongu Engineering College, Perunthurai	13.12.21	15.12.21
28	Participated in six days SACSE and IGCAR sponsored FDP on Advances in Analytical Techniques	Dept. of Chemistry  SRM University(Ramapuram)  Chennai	25.07.22	30.07.22
29	Completed One week STTP on National Education Policy (NEP2020)rganized by NITTTR, Kolkata	NITTTR, Kolkata	08.08.22	12.08.22

30	Attended two day Workshop on "Crafting Competitive Grant Proposals"	Dhanalakshmi Srinivasan University, Samayapuram, Tiruchirappalli	9.09.22	10.09.22
31	Participated in One day DST SERB CRG sponsored workshop on Advanced Electrochemical Techniques'	Dept. of Nano Science and Tech Bharathiar University Coimbatore	26.09.22	-
32	Attended one day IP Awareness training program	National Intellectual property rights mission, India	18.1	0.22
33	Attended One day Indo-UK International workshop on Water- Energy-Nexus	VIT University Vellore	07.1	11.22
34	Online FDP on Recent Trends in Chemical and Petrochemical Industries	JCT College of Engineering and Technology Coimbatore	21.11.22	25.11.22
35	One Day CSIR-CECRI sponsored workshop on Patent Writing	CECRI - Karaikudi	27.07.23	
36	Six days CEST, Anna University sponsored Certificate Course on EV Battery Technology	A C Tech, Anna University, Chennai	05.02.24	10.02.24
37	Five days online FDP on Renewable and non renewable energy sources and theirimpact on current energy scenario	Nehru Institute of Technology, Coimbatore	27.08.24	31.08.24
38	participated in the One Day FDP on Outcome based Education	IQAC Cell Kings College of Engineering	27.08.24	_
39	Participated in the One week ATAL FDP on Innovations in Neurodegeneration Disorder Diagnotics	SASTRAUniversity	16.12.24	21.12.24

Ī		Participated in the One week			
	40	ATAL FDP on Artificial Intelligence	NIT. Nagaland	17.02.25	22.02.25
		for Science and Engineering			

## 18. Short Term Courses/FDP/Seminar/Workshop/Conference Organized:

S.No	Title of the Programme	No. of Participants	Duration	
0.110	Title of the Frogramme	No. of Farticipants	From	То
1	CSIR Sponsored One Day National Seminar on Recent Trends in Smart Materials (NSSM-2014)	19	19.04.2014	
2	Second One Day National Seminar on Recent Trends in Smart Materials (NSSM-2015)	43	20.02.2015	
3.	National Conference on Recent Trends in Science and Green Communication(NCRTSGC2016)	70	27.12.2016	
4.	3 <sup>rd</sup> National Seminar on Recent Trends in Smart Materials (NSSM-2018)	62	17.02.2018	
5.	4 <sup>th</sup> National Seminar on Recent Trends in Smart Materials (NSSM-2019)	120	29.03.19	
6.	e-National Conference on Advancements of Science and Humanities(e-NCASH)	132	13.07.20	
7.	Online webinar on Green Chemistry and Green Engineering- A Unique solution for engineering Disasters.	110	17.05.20	
8.	Online webinar on Ozone for Life	220	29.09.21	
9.	e-International Conference on Recent Trends in Smart Materials (ICRTSM – 2022)	44	25.06.22	-

	National Conference on "Recent			
10	Trends in Smart Materials	52	06.10.23	
	(NCRTSM 2023)"			

### 19. Membership in Professional Bodies: ISTE, ACT, IRCS, St John's Ambulance

S.No.	Name of the Professional Bodies/Association/Society	Nature of Membership
1	Indian Society for Technical Education(ISTE)	LM 57944
2	Association of Chemistry Teachers(ACT)	LM 1309
3	Indian Red Cross Society(IRCS)	LM 4473
4	St. John Ambulance	LM 5368

### 20. No. of Books published with details:

Category	Name of the Book	Year	Publication	ISBN
Text Book	Engineering Chemistry	2002	Naalanda Publications Salem.	NIL
Text Book	Engineering Chemistry – I	2009	Nalankilli Pathippagam Thanjavur.	978-93-80433-13-4
Text Book	Chemistry in Environmental Science and Engineering	2009	Nalankilli Pathippagam Thanjavur.	978-93-80433-12-7
Text Book	Engineering Chemistry	2021	Kings Publication, Punalkulam, Pudukkottai	789-38-50572-4-3
Text Book	Environmental Sciences and Sustainability	Sep 2024	Sri Krishna Hi Tech Publishing Company Pvt.Ltd	978-81-980760-3-8

### 21. Research Projects Carried Out: NIL

### 22. Approved Research Supervisor for M Phil Program

S.No.	Name of the University	Reg.No

1	Periyar University, S	Salem.	MCH 4718/2007
2	Bharathidhasan Tiruchirappalli.	University,	Ref No. 020174/M.Phil/RA/Chemistry/2007

### 23. Lecture delivered details

S.No.	Name of the Institution	Nature of the Program	Date
1	University college of Engineering, Tirukkuvalai	FDTP	19.12.14
2	University college of Engineering, Tirukkuvalai	FDTP	21.12.14
3.	University college of Engineering, Tirukkuvalai	Guest Lecture (Chemistry of Fuels)	25.03.17
4.	Dept. of Education, Chennai and Navina Hr.Sec School, Thiruvonam Jointly rganize one day Carrier Guidance to 10 <sup>th</sup> and 12 <sup>th</sup> Students	Carrier Guidance (motivational talk)	07.04.17
5.	University college of Engineering, Tirukkuvalai	Guest Lecture (Green Environment)	11.08.17
6.	CitizenConsumerClub(CCC), Kings College of Engineering	Guest Lecture  Environmental Hygiene and Pollution Awareness	25.10.17
7.	IQAC, Kings college of Engineering.	Lecture on "How to be an effective Teacher"	11.11.17
8.	Govt.H.Sc School, Thiruvonam, and Uranipuram, Pudukkottai.	Carrier Guidance (motivational talk)	02.02.18
9.	University college of Engineering, Rajamadam, Pattukkottai.	National Conference Resource Person (Environmental Science)	06.04.18
10.	University college of Engineering, Tirukkuvalai	Guest Lecture (Green Chemistry)	08.03.19
11.	NSS programme, Muthukulam, pudukkottai	Resource person(Talk about Environment & Hygienic safety)	14.02.19

12	University college of Engineering, Tirukkuvalai	Guest Lecture (Safe- Environment)	14.02.2020
13	NSS programme, Maikudipatti, pudukkottai(Dt)	Resource person(Role of Hygiene in environmental safety)	04.03.2020
14	AICTE Sponsored three week online refresher course on Chemistry	Resource person(Corrosion Inhibitors)	26.02.21,12.03.21
15	Arasu Engineering College, Kumbakonam	Resource Person (Role of Inhibitors in control of Corrosion)	04.10.21
16	NSS programme, Kadavarayanpatti, pudukkottai(Dt)	Resource person(Awareness about importance of Hygiene)	15.06.22
17	University college of Engineering, Tirukkuvalai	Guest Lecture on "Energy- The need of the hour	03.02.23
18	University college of Engineering, Tirukkuvalai	Guest Lecture (Fuels and Technology at present)	01.12.23

#### 24. Lecture delivered All India Radio

S.No.	Name of the Station	Date of recording	Date of Broadcast	Topic
1	AIR, Tiruchirappalli	26.07.11	8,18,28/08/11	Chinna Chinna Aasaikal(Environmental Science)
2.	AIR, Tiruchirappalli	15.03.16	21.04.16	Maram Valarppom Poomiyai Kappom(Environmental Science)

### 25. Other Responsibilities:

- YRC & RRC coordinator (2 years)
- NSS Programe Officer (2 Years)
- I Year Coordinator (5 Years)
- HoD, Department of Science and Humanities (from 2014)
- Discipline committee Convener (from 2013)

- Lab Monitoring Comm.(LMC) Convener
- Admission Cell Coordinator(3 Years)
- Chemistry Board Chairman in Anna University Central valuation.
- Member of Anna University Environmental Sci. and Engineering. board
- Interview selection committee member (Many colleges)
- Coordinator NTA Exams (UGC NET, TRB, TET, NEET, JEE)
- Liaison officer Kings college of Engineering