

Dr. J. Felicita Florence,

Assistant Professor,
PG and Research Department of Chemistry,
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Dr.J.Felicita Florence is an Assistant Professor of Chemistry, Holy Cross College(Autonomous), Tiruchirappalli. She is an enthusiastic and passionate professor cum Researcher in the field of Chemistry. She is having nearly 15 years of Teaching and Research Experience. Her area of Research is Electrodeposition, Electroless deposition, Green Nanoparticles synthesis and characterisation. She has completed one minor project funded by UGC. At present she is guiding 5 Research Scholars. She has published 20 papers in reputed International and National Journals and filed 4 patents.

She has shouldered various responsibilities at college level which includes Exnora coordinator, Cultural Coordinator, NIRF- Student support Progression Coordinator, NAAC- Student Support and Progression Coordinator, Overall Timetable committee coordinator for Science Departments etc.

PERSONAL PROFILE:

Date of Birth : 12th December, 1980
Age : 43 Years
Sex : Female
Marital Status : Married
Nationality : Indian
Religion : Christian - Roman Catholic
Qualification : M.Sc., M.Phil., Ph.D

WORK EXPERIENCE

TOTAL YEARS OF TEACHING EXPERIENCE :

- Under Graduate : 17 Years 10 months
- Post Graduate : 17 Years 10 months
- M.Phil : 15 years 10 months

- Served as an Assistant Professor in Department of Chemistry, J.J. College of Arts and Science, Pudukkottai from 5th September 2005 to 30th April, 2006.
- Presently working as an Assistant Professor in Department of Chemistry, Holy Cross College, Tiruchirappalli from 2006 to till date.

EDUCATIONAL QUALIFICATION: M.Sc., M.Phil., Ph.D.

- Ph.D Chemistry, Madurai Kamaraj University, Madurai. (2014)
- M.Phil Chemistry, Bharathidasan University, Tiruchirappalli (2007)
- M.Sc.Chemistry, Holy Cross College(Autonomous), Tiruchirappalli-2(2004)
- B.SC. Chemistry, Holy Cross College(Autonomous),Tiruchirappalli-2 (2002)

FIELDS OF SPECIFICATION UNDER THE SUBJECT / DISCIPLINE :

1. Teaching - Organic Chemistry, Stereo Chemistry, Pericyclic reactions. Environmental Chemistry, Surface Chemistry.
2. In research -Electrochemistry (Corrosion and Electrodeposition, Electroless Deposition Nanotechnology and its applications.

POSITIONS HELD IN COLLEGE:

S.No	Name of the Position	Period
1.	EXNORA Coordinator, Shift II	2007-2008
2.	NAAC Core Committee member	2010 onwards
3.	IQAC- Core Committee Member	2014 -2018
4.	Bible Day Coordinator- Dove	2015-2018
5.	Learning Management System Core Member	2014- 2018
6.	NIRF – Student Progression Coordinator	2016 Onwards
7.	College Day Prize Coordinator	2016-2021
8.	Cultural Group Core member	2018 -2019
9.	Cultural Coordinator	2019- 2022
10.	NAAC Criterion V- Coordinator	2020 onwards
11.	Time Table Committee Coordinator (Science Stream)	2018 onwards

POSITIONS HELD IN DEPARTMENT:

S.No	Name of the Position	Period
1.	EXNORA Coordinator, Shift II	2007-2008
2.	PG Coordinator, Department of Chemistry,	2011-2012
3.	M.Phil Coordinator	2013-14
4.	NAAC – Curriculum Incharge	2010 onwards
5.	Association Incharge	2015-16, 2021-22
6.	Learning Management System Incharge	2014- 2018
7.	Fine arts incharge	2014-15
8.	Sports incharge	2015-16, 2018-19
9.	Class teacher	2015-18, 2018-21, 2022-
10.	Admission Incharge	2014-15, 2017-18, 2022-23
11.	Staff Club representative	2017-18, 2022-23
12.	Parent Teachers Association Incharge	2017-18
13.	Internal test committee	2020-21
14.	ERP Incharge	2023 -24

REFRESHER COURSES ATTENDED:

- 1. 93rd Orientation Programme, Conducted by** UGC-HRDC, Bharathidasan University from 02.03.2017-29.03.2017 (28 days)
- 2. Online Refresher Course Swayam Arpit in Chemistry for Higher Education, from 1st December 2020 to 31st March 2021, conducted by S.G.T.B. Khalsa College, University of Delhi**
- 3. Refresher Course in Chemistry, Batch - XXX (Online) conducted by the UGC - Human Resource Development Centre, University of Madras, Chennai - 600 005 (Sponsored by the UGC) for 14 days from 14.09.2022 to 27.09.2022**

RESOURCE PERSON :

- Guest Lecturer from 2010 -2012 for PG course, Centre for Distance Education, Bharathiar University, Trichy
- Resource Person during the Training Programme for Higher Secondary School Teachers on “Samacheer Kalvi” on 27th August, 2011.
- Resource Person in the National Workshop on “ Green Techniques in Chemistry Laboratory Experiments (GTCLT- 2013)”, (9th, January, 2013)
- Resource Person in the training Programme for Post Graduate Teachers on “Microscale Experiments with Green Techniques”, 23rd August 2013.
- Organizing Secretary of International Conference on” Chemistry of Biomolecules- Current Trends and Future Perspectives” [ICCBCTP-2016]
- M.Phil Examiner in Mother Theresa University, Kodaikanal. (2016-18)
- Resource Person and gave a talk on “Chemistry in Every Day Life” in the association Meeting Organised by Department of Chemistry, Nirmala College, Coimbatore on 24th July,2021
- Resource person in the training Programme on Green Methods in Chemistry Laboratory Experiments Organised by E.M.G.Yadava College For women, Madurai, on 26th September,2021
- Visiting professor in the Department of Chemistry and Biotechnology, Patna Women’s College (Autonomous),Patna, Bihar from 7th September, 2022 to 12th September, 2022.

CONFERENCES/ FDP ORGANIZED:

1. Organizing Secretary in the International Conference on Chemistry of Biomolecules-Current Trends and Future Perspectives (ICCBCTFP-2016), on 27th and 28th July .2016.
2. Five days National Level Online Faculty Development Cum Certificate Programme on “Recent Advances in Analytical Research Techniques” held from 27 th September to 1st October, 2021.
3. Two days International Virtual Conference On “Futuristic Aspects of Sensors And Biosensors (IVCFASB-22). 3rd and 4th March. 2022.
4. One-Day Workshop on “Preparation of Chemical reagents and Laboratory safety measures” for Newly Recruited Staff and Non –Teaching Staff, on 28th June, 2024

AWARDS RECEIVED:

- Best cultural Coordinator of Aided College award, (October 2019), BARD FEST, Bharathidasan University, Tiruchirappalli-2
- Professor C.N.R. Rao Best Young Scientist Award 2018-19 awarded by Bose Science Society, DST, Pudukkottai.
- Research Excellence Award 2022 from InSc Institute of Scholars, India in April 2022.
- Best Teacher Award 2023 from InSc Institute of Scholars, India in March 2023.
- A P J Abdul Kalam Award 2024 for Outstanding Researchers sponsored by Association of Researchers and Academicians India (ARAI), on March, 2024.

PAPER PUBLICATIONS:

1. R. Sangeetha*, J. Felicita Florence¹, Optimisation of Zinc Electrodeposition in the Presence of Aqueous Lawsonia Inermis Linn Leaf Extract, International Journal of Scientific & Engineering Research, Volume 7, Issue 8, August-2016 .
2. A.Jaini Flora, R.Sangeetha, J. Felicita Florence ,Electrodeposition of Nanocrystalline Zinc from Acid Sulphate Bath in the Presence of Aqueous Lawsonia Inermis Linn. Leaf Extract and its Corrosion Study , International Journal of Scientific & Engineering Research, Volume 7, Issue 8, August-2016 .
3. R. Viji1,J. Felicita Florence,A Study on the Effect of Lawsone (2-Hydroxy 1, 4-Napthoquinone) Isolated from Lawsonia Inermis Linn. Leaf on Nickel Electrodeposition from Waats Bath, International Journal of Scientific & Engineering Research, Volume 7, Issue 8, August-2016 .
4. Felicita Florence¹, Nisha¹, Susai Rajendran², S. John³, Studies on Electrodeposition of Copper from Methanesulphonic Acid Bath, International Journal of ChemTech Research, 3(3) July-Sept 2011 pp 1318-1325.
5. J. Felicita Florence¹, Susai Rajendran² and K.N. Srinivasan, Effect of Henna (Lawsonia inermis) extract on electrodeposition of nickel from Watt's bath, Electroplating and Finishing, 31 (7) 2012 1-4.
6. J. Felicita Florence, Electrodeposition of Zinc-Nickel Alloy in the Presence of Lawsone Isolated From Lawsonia Inermis Linn Leaf, International Journal of Research in Engineering ,and Technology, Volume: 05 Issue: 07 | Jul-2016
7. J. Felicita Florence¹, Susai Rajendran², K.N.Srinivasan³ * A Study on the effect of Lawsonia Inermis Linn. (Henna) Leaf Extract on Zinc-Nickel Alloy Electrodeposition mild steel from acid Sulphate bath, International Journal of Innovative Science, Engineering & Technology, Vol. 2 Issue 11, November 2015
8. T. Muthamil Selvi. K.Nancy and J.Felicita Florence .A Study on Effect of

- Pharmacologically active Lawsonia inermis Linn extract on Zinc electrodeposition on carbon Steel, International Journal of Research and Development in Pharmacy & Life Sciences (IJRDPL), (ISSN 2278– 0238), December - January, 2015, Vol. 4, No.1, pp 362-1370.
9. J. Felicita Florence*, M. Lavanya, J. Amala Infant Joice, H. Asia Thabassoom And R. Kanmani. Nanocrystalline Nickel Electrodeposition on Carbon Steel Using Eco-Friendly Aqueous Ananas comosus Juice, Asian Journal of Chemistry; Vol. 31, No. 11(2019), 2425-242
 10. Dr. Kanmani R, Ms. Kalaiselvi B, Dr. Felicita Florence and Dr. Amala Infant Joice J Synthesis and antimicrobial studies of copper nanoparticles from Costus pictus: Green method Journal of Pharmacognosy and Phytochemistry, ISSN: 2278-4136, vol 8 issue 3, (2019) pp:1763-1767
 11. F.Femina, Dr.J.Felicita Florence. Biological synthesis of nickel nanoparticles by Beta vulgaris extract and its antimicrobial activity against human pathogens, The International journal of analytical and experimental modal analysis, Volume XII, Issue III, March,2020,2168-2178
 12. H.Asia Thabassoom , Dr.J.Felicita Florence. Electroless nickel deposition on mild steel using lawsone isolated from lawsonia inermis linn leaf, The International journal of analytical and experimental modal analysis, Volume XII, Issue III, March,2020,2107- 2121
 13. B.Kalaiselvi,J. Amala Infant Joice, J. Felicita Florence,R. Kanmani, Studies on Extraction andExtraction of Biodiesel parameters in six cyanobacteria strains International Journal of Research Ayurveda and Pharmacy, 11(3), May – June 2020, ISSN Online:2229-3566.
 14. F.Femina, H.Asia Thabasoom and J.Felicita Florence, Phocatalytic reduction of Methyl orange, Antibacterial and Antibreast cancer Activities of Biogenic silver nanoparticle synthesized from Beta vulgaris extract, Asian J. Chem, (2021), Volume 33(12), pp 2993-2998.
 15. F.Femina, H.Asia Thabasoom and J.Felicita Florence, Bio Synthesis of Beta Vulgaris Mediated ZnO Nanoparticles and Their Anti-Bacterial, Anti-Fungal, Anti-Diabetic and Anti-Cancer Activities, Orient J Chem 2021; 37(4).
 16. J. Amala Infant Joice, G. Ramya, J. Felicita Florence, R. Kanmani, A. Motcha Rakkini, L.Arul Mary Rosaline, Amany Salah Khalifa, Ashraf Elfakhany and

- Kathirvel Brindhadevi, Synthesis, characterization and photocatalytic activity of potassium Titanate nanocatalyst, Appl. Nanosci. 2022.
17. H.Asia Thabassoom, F.Femina, J.Felicita Florence, R.Kanmani, J.Amala InfantJoice, Study on the effect of Lawsone as complexing agent in the Electroless Zn-P Deposition, Oriental journal of Chemistry, Vol 38 (2), (2022).
18. H. Asia Thabassoom A study on the effect of Lawsone isolated from Lawsonia inermis linn leaf extract on Ni-W-P alloy electroless deposition, Research Journal of Chemistry and Environment, Vol.26 (9), (2022).
19. Ms. S. Auxilia Ruby, Dr. J. Felicita Florence, Dr. R. Kanmani, Dr. J. Amala Infant Joice, "A Review on Modern Advances in Plant Mediated Green Synthesis of Silver Nanoparticles and their Biomedical Applications", IJRAR - International Journal of Research and Analytical Reviews (IJRAR), E- ISSN 2348-1269, P-ISSN 2349-5138, Volume.10, Issue 4, Page No pp.292-303, December 2023, <http://doi.one/10.1729/Journal.37137>

RESEARCH EXPERIENCE:

- Research Experience: More than 10 years of Research experience.
- Guided 5 M.Phil Scholars and completed more than 30 M.Sc Projects.
- Ph.D- Produced 1, thesis Submitted -1/ Presently Guiding 3 Ph.D Scholars.

RESEARCH INTEREST:

- Electrodeposition and Electroless Deposition,
- Nanoparticle Synthesis and Characterization

MINOR RESEARCH PROJECT:

UGC Funded Minor Project entitled “Zinc-Nickel Alloy Electrodeposition in the Presence of Eco- friendly Lawsone isolated from Lawsonia inermis Linn. Leaf extract – An alternative to toxic cadmium plating”

Amount Sanctioned : Rs. 1,90,000 **Completed**

PATENTS :

1. Patent Received - “A Water Recycling and Power Generating Apparatus for Sanitation” 202041039528 dated 12.09.2020. Dr. J. Felicita Florence, Dr. J.Amala Infant Joice, S. Hafila Khairun, A. Alphin Punitha and D. Charithra Iswarya.

2. Patent Published : 3

Dr. J. Felicita Florence and H. Asia Thabassoom

Patent Application No. of Ni-W-P is **202341038454** dated 05/06/2023;

Patent Application No. of Ni-W-Zn-P is **202341038455** dated 05/06/2023;

Patent Application No. of Ni-Zn-P is **202341038456** dated 05/06/2023;

SEMINAR/ WORKSHOP/CONFERENCE/FDP: From the year 2020 onwards

S.No	Seminar/Workshop/Conference	Sponsored by	Place and Duration
1.	National Webinar on Towards Excellence in Higher Education in India in the 21 st century: Challenges and Opputunities	MHRD	GAD-TLC Centre of MHRD under PMMMMNMTT, University of Delhi 1 st May,2020
2.	Elemental Arts: Evolution of Modern Periodic Table		IIC, Sri Krishna College of Engineering and Technology, Coimbatore 1 st and 2 nd May,2020
3.	One Day Online Workshop for Enhancing Research Communication Skills through Science Direct and Mendeley		DAYALBAGH EDUCATIONAL INSTITUTE in Collaboration with Elsevier ,3 rd May,2020
4.	Recent advancement of Education Technology		International Journal of Advance Study and Research Work in association with Department of Engineering Science , Dr D Y Patil School of Engineering, Lohegaon, Pune ,3 rd May,2020
5.	Basics in Chromatography		Deepam Foundation, Gujarat 7 th May to,16 th May,2020
6.	'Crystallography and its Applications'		Department of Science & Humanities, Er. PerumalManimekalai college of Engineering, Hosur , 8 th May,2020
7.	National Level Live Webinar On "How to create Educational Videos"		Knowledge Publications and Chemtoons YouTube Channel 10 th May,2020
8.	G chemPaint		D.K.M. College for Women, in collaboration with Spoken tutorial project, IIT, Bombay, 11 th May,2020
9.	Organic reagents for Competitive examinations		Department of Chemistry, G.T.N.Arts College (Autonomous), Dindigul .12 th May,2020

10.	Everything Started with Nothing- Make a start		Institution Innovaion Council, Holy Cross College (Autonomous), Trichy. 13 th May,2020
11.	5days free online workshop for Teachers on Animations		Universal teachers Academy, Pondicherry. 14 th May to 18 th May,2020
12.	3 days faculty enrichment Program on Frontiers in Smart Learning	DBT	DBT-Star Scheme College, Bangalore 14 th May to 16 th May,2020
13.	International Faculty Development Program on Novel Materials for Energy and Biomedical (Covid-19) Healthcare Applications		Department of Science & Humanities, M.Kumarasamy College of Engineering, Karur 11 th to 16 th May 2020.
14.	ONE WEEK FACULTY DEVELOPMENT PROGRAM Multimedia enriched e- Content Development	MHRD	GAD-TLC Centre of MHRD under PMMMMNMTT, University of Delhi 21st-26th May 2020
15.	Certificate Course on Basics of Organic Farming		Department of Botany and IQAC, AthalyeSapre-Pitre College, Devrukh (Autonomous). May 17 to May 23, 2020
16.	Optimising Family during lockdown		Holy Cross College (Autonomous), Trichy 19 th May,2020
17.	Healthy Parenting Styles		Holy Cross College (Autonomous), Trichy 27 th May,2020
18.	Androgogy of Online teaching		IQAC, Holy Cross College (Autonomous), Trichy 29 th May,2020
19.	Remote Classrooms- Digital technology in Teaching and learning		IQAC, Holy Cross College (Autonomous), Trichy 30th May,2020
20.	Seed and Weed- Nurturing relationships		Holy Cross College (Autonomous), Trichy
21.	Menstrual hygiene and Reproductive Health Care		Alumnae Association, Holy Cross College (Autonomous), Trichy, 3 rd June,2020
22.	Obesity and its role in Breast Cancer"		Dr. Rama Balaraman, Florida Cancer Affiliates (FCA) Medical Oncology, Hematology, USA organised by CICRSD June 6th 2020
23.	Faculty Development Programme- Online workshop on "Virtual Teaching- A Paradigm Shift from Offline to Online Teaching"		PG & Research Department of Biotechnology & Bioinformatics Holy Cross College (Autonomous), Trichy 15th, 17th and 19th June,2020

24.	Create, Develop and Capture the value for your product-BMC		Institution Innovaion Council, Holy Cross College (Autonomous), Trichy 25 th June,2020
25.	A Simple Perspective of Glyco Sciences”		Dr. T. Mohan Das, Professor & Head, Department of Chemistry, Central University of Tamil Nadu (CUTN), Thiruvarur 30th June 2020.
26.	“Adipattamum veetuthotamum”		Mr. Jegan, Founder-Ulavan Trust, Lalgudi, Tiruchirappalli, 20th July 2020.
27.	FDP WEBINAR SERIES-III”Capacity building of your talent in transdisciplinary Research for dudtainable Development of society”		Centre for Research and Publications, holy Cross College(Autonomous), Tiruchirappalli-2 13 th to 18 th July, 2020
28.	“Artificial Intelligence and IoT-Heuristic Transdisciplinary perspectives”		CICRSD, Holy Cross College (Autonomous), Tiruchirappalli-2 4th – 10th July 2020
29.	National Virtual Conference on “Recent Advances in analytical Techniques-2020	Uttarakhand Science Education & Research Centre, Department of science and Technology, Uttarkhand.	Dept. of Chemistry & ADDP Shri Varshney College Aligarh. August 16 th -17 th ,2020
30.	“The Implications of the NEP 2020 forHigher Education and Role of Teachers”		IQAC, Holy Cross College (Autonomous), Tiruchirappalli. 25th August 2020.
31.	One week Faculty Development programme on” E-Content Development	MHRD	27-31, July, 2020
32.	Learning Management System (Moodle) For Online Teaching Learning	MHRD	11-17 October, 2020
33.	Online workshop on Learner Centric Content Design Tools	-	Sanatan Dharma College, Ambala Cantt, 11 – 20 Febraury 2021
34.	Online workshop on ICT Tools for Chemistry Teachers	MHRD	SGTB Khalsa College, 22, Febraury 2021
35.	Online FDP on Enhancing Quality of Chemistry Education in India	MHRD	Sri Guru Tegh Bahadur Khalsa College, 25 Febraury – 3 March 2021
36.	Online certificate Course on		E-Resource Development Cell, Sanatan

	“MOODLE LMS”		Dharma College,Ambala Cantt,Haryana. October 16 th to 25 th , 2021
37.	International Virtual Conference on” Futuristic Aspects of Sensors and bio Sensors’		Holy Cross College (Autonomous), Tiruchirappalli March 3 rd and 4 th ,2022
38.	National Level Science Week Celebrations	Ministry of Culture, Government of India, UGC,DRDO,AI CTE	Bishop Heber College (Autonomous) Tiruchirappalli-2 February 22 nd to 28 th , 2022.
39.	International Conference on “Material Science for Sustainable Environment”	Presented a Paper on the title “Electroless Deposition Of Ni-P Alloy On Mild Steel Using LawsoniaInermis Linn Leaf”	PG& Research Department of Chemistry, Holy Cross College (Autonomous), Tiruchirappalli. 23 rd and 24 th August 2022
40.	International Conference on “Material Science for Sustainable Environment”	Presented a Paper on the title “Green Synthesis, Characterization and Pharmacological Activities of Aqueous Beta Vulgaris Extract mediated Zinc Oxide Nanoparticle”	PG& Research Department of Chemistry, Holy Cross College (Autonomous), Tiruchirappalli. 23 rd and 24 th August 2022
41.	International Conference on “Material Science for Sustainable Environment”	Presented a Paper on the title “Green Synthesis, Characterizations of Beta Vulgaris Mediated Nickel Oxide Nanoparticles and its	PG & Research Department of Chemistry, Holy Cross College (Autonomous), Tiruchirappalli. 23 rd and 24 th August 2022

		Biomedical Application”	
42.	International Conference on “Material Science for Sustainable Environment”	Presented a Paper on the title “A Study On The Effect Of Beta Vulgaris Extract On Zinc Electro deposition”	PG & Research Department of Chemistry, Holy Cross College (Autonomous), Tiruchirappalli. 23 rd and 24 th August 2022
43.	Webinar on “How to Publish a Book with ISBN”	Participated	Iterative International Publishers, Karnataka, 27 th October 2022.
44.	FDP on “Leveraging Teaching-Learning Process: A Special Focus on NEP and NAAC Accreditation”	GAD-TLC, PMMMMNMTT, MoE, Government of India	KCES's College of Engineering and Management, Jalgaon held from 09 th May to 15 th May, 2023.
45.	Faculty Development Programme on ‘Outcome Based Education’		Tamil Nadu Teachers Education University & Dr.M.G.R Educational Research Institute, Faculty of Education & Academic Staff College, Chennai 05 th June to 09 th June,2023

MEMBER IN ACADEMIC BODIES

- ❖ Doctoral Committee Member, Dept. of Chemistry, Holy Cross College, Trichy.
- ❖ Member in Bose Science Society
- ❖ Reviewer in Chemical Science International Journal.
- ❖ Fellowship of Bose Science Society.
- ❖ Reviewer in INSC International Publishers.
- ❖ Professional member of INSC International Publisher.
- ❖ Reviewer of INSC International Publishers in Basic and Medical Sciences.

e- LESSONS DEVELOPED

- Digestive System
- An introduction to Carbohydrates
- Catalysis
- Stereochemistry
- Cycloaddition reaction
- Inductive effect

Office Address:

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