**CURRICULUM VITAE**



**Dr. G. Dayana Jeyaleela M.Sc., Ph.D., FBSS**

No-1 Thiyagi Arunachalam Colony,

Ware house, Palakarai,

Tiruchirappalli-620002, Tamilnadu, India.

Email id:

[princedayana1221@gmail.com](mailto:princedayana1221@gmail.com), [dayanajeyaleelag\_ch2@mail.sjctin.edu](mailto:dayanajeyaleelag_ch2@mail.sjctin.edu)

Contact No: +91 9123511848, 9003300640

**PROFESSIONAL QUALIFICATION:**

* **Ph.D in Chemistry [2015-2020]**

Bharathidasan University

Research Center: Holy Cross College (Autonomous), Trichy.

Thesis Title: ‘*Isolation and Characterization of Bioactive Principles from Melia dubia and Combretum ovalifolium and their Applications in Pharmacology’*

* **M.Sc in Chemistry [2013-2015]**

St. Joseph’s College (Autonomous), Trichy

Project Title: ‘*Phytochemical Screening and Antimicrobial Studies on the Medicinal Plant Vitex Altissima’* **(During M.Sc published two articles)**

* **B.Sc in Chemistry [2010-2013]**

Holy Cross College (Autonomous), Trichy

Project Title : ‘*Phytochemical Screening and Characterization of Flavonoids of the Methanolic Extract of Peel of Punica Granatum’*

* **Higher Secondary Education (12th) and Secondary School Education (10th) [2008 & 2010]**

St. Philomena’s Girl’s Higher Secondary School, Trichy

**SPECIALIZATION :**

* Molecular Docking
* Phyto-Chemistry
* Nano-Chemistry
* Corrosion
* In-vitro Analysis
* Crystal Growth

**TEACHING/ACADEMIC EXPERIENCE:**

* Previously Worked as an **Assistant Professor of Chemistry** at Shrimati Indira Gandhi College and Holy Cross College (Autonomous), Trichy, Tamilnadu, India.
* **CRITERIA-2 (NAAC) Champion** at Shrimati Indira Gandhi College, Trichy.
* **RESEARCH AND DEVELOPMENT CELL member** for Physical Sciences at Shrimati Indira Gandhi College, Trichy.
* Acted As **Resource Person** for an “Orientation Programme” for First year NSS Volunteers of Shrimati Indira Gandhi College, Trichy on 18.02.2023.
* **Trainer** in private institute “Bio Techno Solutions Training and Research Institute”, Subramaniyapuram, Tiruchirappalli, Tamilnadu, India.

**PROFESSIONAL MEMBERSHIP:**

* **Received “Professor C.N.R Rao Best Young Scientist Award”** from Bose Science Society, Tamilnadu Scientific Research Organisation,Pudukkottai, Tamilnadu, India.
* **Reviewer** in ‘Oriental Journal of Chemistry’
* **Reviewer** in ‘Journal of Pharmaceutical Research International’
* **Reviewer** in ‘Asian Journal of Research in Biochemistry’
* **Reviewer** in ‘Asian Journal of Research in Medical and Pharmaceutical Science’
* **Member** and **Reviewer** in International Journal “Advance Journal of Pharmaceutical Research”
* **Member** and **Fellow** in **Bose Science Society**, Tamil Nadu Scientific Research Organisation, Pudukkottai - 622 003.
* Member in Google Scholar **(Citation- 55, H-index-5, i10 index-1)**
* Member in Research gate **(Citation-71, Research score-85.9, H-index-4)**
* Member in Scopus:  [**(Author ID: 57210796054**](http://www.scopus.com/inward/authorDetails.url?authorID=57210796054&partnerID=MN8TOARS)**, Citation- 13, H-index-2)**

URL: <https://www.scopus.com/authid/detail.uri?authorId=57210796054>

* Member in ORCID, **(ORCID ID: 0000-0001-5038-4389**)

URL: <https://orcid.org/0000-0001-5038-4389>

* Member in ResearcherID, **([ResearcherID: T-4227-2017](http://www.researcherid.com/rid/T-4227-2017" \t "_blank))**

URL: <https://www.researcherid.com/rid/T-4227-2017>

**TECHNICAL SKILLS**

* Auto Dock Vina, Swiss Dock
* Chemsketch, Chemdraw
* Origin Pro, Curve Expert
* Mestrenova, X’pert High Score plus

**INSTRUMENT HANDLING SKILLS:**

* Ultraviolet–visible spectroscopy **(UV-Visible)**
* Fourier Transform Infrared Spectroscopy **(FT-IR)**
* Attenuated Total Reflection- FT-IR **(AT-FTIR)**
* Electrochemical work station
* High performance liquid chromatography **(Analytical)**

**LIST OF PUBLICATIONS:**

Papers Published : **21**

Papers in Communication : **02**

Books/Book chapters Published : **01**

**LIST OF ARTICLES PUBLISHED IN INTERNATIONAL JOURNALS:**

1. **Dayana Jeyaleela**, Green synthesis of paspalum scrobiculatum mediated copper oxide nanoparticles and its anti-bactericidal activities, Asia-Pacific Journal of Science and Technology, 28 (1) (2023), 1-8.
2. **Gnanasekar Dayana Jeyaleela**, Biosynthesis and antimicrobial activity of aluminium oxide nanoparticles using Lyngbya majuscula extract, Materials Letters, 311 (2022), 131569.
3. **Gnanasekar Dayana Jeyaleela**, Comparison of anti-inflammatory activities of biogenic gymnema sylvestre- and panicum sumatrense-mediated titanium dioxide nanoparticles, Biomedical and Biotechnology Research Journal, 5(4) (2021), 405-411.
4. **Gnanasekar Dayana Jeyaleela,** Anticancer Activity of Tin Oxide and Cerium‑Doped Tin Oxide Nanoparticles Synthesized from Ipomoea carnea Flower Extract. Biomedical and Biotechnology Research Journal, 6 (2022), 337-340.
5. **Gnanasekar Dayana Jeyaleela**, Anti‑Oxidant and Anti‑Cancer Activities of Biogenic Synthesized Copper Oxide Nanoparticles. Biomedical and Biotechnology Research Journal, 6 (2022), 341-348.
6. **Gnanasekar Dayana Jeyaleela**, Inhibitory Effect of Basella alba‑Mediated Zinc Oxide Nanoparticles against the Infection‑Causing Bacteria, Biomedical and Biotechnology Research Journal, 6 (2022), 353-359.
7. **G. Dayana Jeyaleela**, In vitro Pharmacological Activities of Delonix Elata Extract Mediated Zinc Oxide Nanoparticles, Oriental Journal of Chemistry, 38(4), (2022), 1037-1046.
8. **G. Dayana Jeyaleela**, Biofabrication of Zinc Oxide Nanoparticles using the Isolated Flavonoid from Combretum ovalifolium and its Anti-oxidative Ability and Catalytic Degradation of Methylene Blue Dye, Oriental Journal of Chemistry 36(4) (2020), 655-664.
9. **G. Dayana Jeyaleela** , Growth Evaluation of Marine Microalgae Chlorella sp. BDU G91771 in Calcium Rich Ossein Effluent–A Bioremediation Perspective, Asian Journal of Chemistry, 31(10) (2019) 2361-2366.
10. **G. Dayana Jeyaleela,** Isolation, Characterization, Molecular docking and In-vitro studies of Inhibitory effect on the Growth of Struvite crystal of Bioactive Principle Derived from *Melia dubia* leaf Extract, Asian Journal of Chemistry, 31(11) (2019) 2628-2634.
11. **G. Dayana Jeyaleela**, Potential Use of Copper Oxide Nanoparticles from *Solanum Trilobatum* against Pathogenic Bacteria, Oriental Journal of Chemistry 37(4) (2020), 991-996.
12. **G. Dayana Jeyaleela,** Phytochemical Screening and Antimicrobial Studies on the Medicinal Plant Vitex altissima L, World Journal of Pharmacy and Pharmaceutical Sciences, 4(9) (2015) 705-716.
13. **G. Dayana Jeyaleela,** Phytochemical Screening and Antimicrobial Studies on the Medicinal Plant Flueggea leucopyrus (willd.), World Journal of Pharmacy and Pharmaceutical Sciences, 4(9) (2015) 717-726.
14. **G. Dayana Jeya leela** , Studies on Phytochemical, Nutritional Analysis and Screening of In Vitro Biological Activities of Meliadubia Leaf Extract, International Journal of Scientific & Engineering Research, 7(8) (2016) 56-68.
15. **G. Dayana Jeya Leela**, Biosynthesis of Silver Nanoparticles by Melia dubia Leaf Aqueous Extract and its Antibacterial Activity, World Journal of Pharmaceutical Research, 5(3) (2016) 973-981.
16. **G. Dayana Jeyaleela**, GC-MS Analysis and Green Synthesis of Copper Nano Particles using Vitex Negundo. L Leaf Extract, International Journal of Scientific & Engineering Research, 7(8) (2016) 154-161.
17. **G. Dayana Jeyaleela**, Isolation of 2-Chlorobenzimidazole from Melia dubia Leaf Extract and its Structural Characterisation, International Journal of Pharmacy and Pharmaceutical Sciences, 9(10) (2017) 67-72.
18. **G. Dayana Jeyaleela,** Comparative studies on yield and the phytochemical appraisal (Quality and Quantity) of Manilkara hexandra (Roxb) Dubarb using leaf, stem, and bark, Journal of Pharmacognosy and Phytochemistry, 6 (4) (2017) 2052-2058.
19. **G. Dayana Jeyaleela,** Isolation and Identification of Flavonoid from Borreria hispida(linn), International Journal of Scientific Research and Reviews, 7 (3) **(2018)** 1696-1704.
20. **G. Dayana Jeyaleela,** Isolation and Characterization of Antioxidant (Flavone-3- Rutinoside, 3,3’,4’,5,7-Pentahydroxy) from Leaves of Melia dubia, Asian Journal of Pharmaceutical and Clinical Research, 12 (2) **(2019)** 107-114 **(Scopus Indexed)**.
21. **G. Dayana Jeyaleela,** Preliminary Phytochemical Analysis, Antioxidant activity and Identification of Bioactive Compound in Stem and Leaf of *Combretum Ovalifolium*, International Journal of Scientific & Technology Research, 9(3) (2020) 3125-3132.

**BOOK CHAPTER PUBLICATION:**

1. J. Rosaline Vimala, **G. Dayana Jeyaleela**, Isolation, Characterizations of Bioactive Principles from Melia dubia and its In-Silico and In-Vitro Urolithiatic Activity. Current Perspectives on Chemical Sciences. Vol.11 (2021). Pg: 1-24. Print ISBN: 978-93-90888-69-6, E ISBN: 978-93-90888-77-1. <https://doi.org/10.9734/bpi/cpcs/v11/8110D>.

**LIST OF PAPERS PRESENTED IN INTERNATIONAL CONFERENCES:**

1. Breast cancer & Arthritis activities of isolated bioactive compound from Melia dubia bark by Molecular docking and In-Vitro analysis, International Conference on Expanding Frontiers in Chemistry (EFC-19), PG & Research Department of Chemistry, Arul Anandar College, Madurai. Tamilnadu, held on 13th September-2019. (**GOT BEST PAPER AWARD FOR ORAL PRESENTATION**)
2. Isolation, Characterisation, Molecular docking and In-Vitro studies of Inhibitory effect on the growth of struvite crystal of bioactive principle from *Melia dubia* leaf extract, International conference on research initiatives in chemistry for sustainable development 71 (**ISBN: 978-93-86712-63-9**). Department of Chemistry, Gandhigram rural Institute (Deemed to be University), Dindigul, Tamilnadu. held on 18th & 19th March 2019.
3. Synthesis and characterization of Zinc Oxide nanoparticles Using Flavonoid Rich Fraction of *Melia dubia* and Evaluation of their Catalytic Activity on Reduction of Methylene Blue Dye and Par Indicator, International Conference on “ Networking, Research and Innovation in Higher Education for a Sustainable Society: Challenges and Channels”. Holy Cross College (Autonomous), Trichy, held on 25th to 27th July 2018.
4. Studies on Phytochemical, Nutritional Analysis and Screening of in Vitro Biological activities of *Melia dubia* Leaf Extract, International Conference on Chemistry of Biomolecules-Current Trends and Future Perspectives (ICCBCTFP-2016). Organized by Madurai Kamaraj University, Department of Bio-chemistry and Department of Chemistry, Holy Cross College (Autonomous), Trichy held on 27th 28th July 2016.
5. Biosynthesis of Silver Nanoparticles by *Melia dubia* Leaf aqueous extract and its Antibacterial Activity’, International Conference on Chemical and Environmental Research (ICCER-2015). PG & Research Department of Chemistry, Jamal Mohamed College (Autonomous), Trichy, held on 17th December 2015.
6. Anti-Breast cancer, Anti-Arthritis and Anti-Urolithiatic, activities of bioactive anthocyanin compound derived from *Melia dubia* bark extract by Molecular docking and In-Vitro analysis, International Conference on Sustainable Materials & Technologies for Bio & Energy Applications (SMTBEA-2021). Sri Sivasubramaniya Nadar College of Engineering Department of Electronics and Communication Engineering (ECE) & SSN Research Centre, Chennai. held on 19-21 May 2021.
7. Biogenic Synthesis of Zincoxide Nanoparticles using the Aqueous Leaf Extract of Murraya koeningii, International Conference on ‘Recent Trends in Material Science’ ICRTMS-2K22, Department of Chemistry, Arasu College of Arts & Science for Women, Karur, held on 18.03.2022.
8. Two Days **International Virtual Conference** on “Evolving Trends in Chemistry (ICETC - 2021)” Organised by Cauvery College for Women (Autonomous), held on 11-10-2021 and 12-10-2021.

**LIST OF PAPERS PRESENTED IN NATIONAL CONFERENCES:**

1. Biogenic Synthesis of Copper Nanoparticle using aqueous leaf extract of *Murraya Koenigii*, Nano National Summit-Current Trends and Future Perspectives (NNSCTFP) **(ISBN:978-93-5346-761-6)**. PG& Research Department of Chemistry, Holy Cross College (Autonomous), Trichy, held on 9th &10th January 2019.
2. Preliminary phytochemical analysis and Radical Scavenging activity on the Different Extracts of *Combretum Ovalifolium*, Two-Day National Conference on New Vistas in Material Science. PG& Research Department of Physics & Chemistry, J.J. College of Arts and Science (Autonomous), Pudukkottai, Tamilnadu held on 8th & 9th March, 2018.
3. Isolation of 2-chlorobenzimidazole from *Melia dubia* leaf extract and its Structural Characterisation, Recent Advances in Chemistry research and its Applications (NCRACRIA-17)”. PG & Research Department of Chemistry, St. Joseph’s College (Autonomous), Trichy held on 19th January 2017.
4. **National Virtual Conference** on “Sustainable Chemistry and Renewable Energy (SCRE-2022)” Organized by UNIVERSAL INTELLECTUALS TRUST (UIT), Villupuram on 26th and 27th February 2022.

**PARTICIPATION IN WORKSHOP AND SEMINARS:**

1. Two days’ Workshop on Techniques in Phytochemical Analysis, Holy Cross College (Autonomous), Trichy, Organized by UGC-CPE scheme.31st January to 1st February2019.
2. A 5-day National level Training Programme on Thesis Writing: from Copper Strip to Gold Bar, Centre for Technical and Academic Writing Bharathidasan University, Trichy. 30th October -3rd November 2017.
3. TEQIP II Sponsored Two days Seminar on “Network Pharmacology- A New Horizon in Drug Design, Bharathidasan Institute of Technology (BIT) Campus, Anna University, Trichy. 30th & 31st August 2016.
4. Science Academies Lecture workshop on “Recent Trends in Chemistry”, Seethalakshmi Ramaswami College (Autonomous), Trichy. Organised by Science Academies (IASC, INSA, NASI), 4th &5th March 2016.
5. Lecture-Cum-Workshop on Interpretation of Spectral, Chromatographic, Crystallographic, and Computational Data of Chemical System, CRD, PRIST University, and IICPT Thanjavur. 28th -30th January 2016.
6. National Workshop on Crystal growth, Thin Films, and Solar Cells, PG& Research Department of Physics, National College (Autonomous), Trichy. 4th September 2015.
7. Participated the online webinar on ‘Art of Writing Scientific Articles and Project Proposals’ held on 22nd May 2020, organized by PG & Research Department of Physics, Holy Cross College (Autonomous), Trichy.
8. Attended the webinar on ‘Healthy Immunity in Pandemic Situation’ held on 26th May 2020, organized by Holy Cross College (Autonomous), Trichy.
9. Participated the online programme on ‘Strategic Approach in Chemistry’ held from 9th to 12th May 2020, organized by Directorate of Distance Education, Alagappa University, Karaikudi.
10. Participated the online webinar on ‘Crystallography and its Applications’ organized by Department of Science & Humanities, Er. Perumal Manimekalai College of Engineering, Hosur, on 8th May 2020.
11. Participated the online webinar on ‘A Simple Perspective of Glycosciences’, organized by PG & Research Department of Chemistry, Holy Cross College (Autonomous), Trichy, on 30th June 2020.
12. Participated the International webinar on ‘Writing Proposals for Funding Agencies: Project Design and Project Proposals’ organized by Department of Commerce, Rathinam College of Arts and Sciences, Coimbatore, on 29th May 2020.
13. Participated the online webinar on ‘Analytical Techniques’ and Secured **A+** grade, organized by American College Central Instrumentation Center, The American College, Madurai, on 9th July 2020.
14. Participated the National webinar on ‘Benchmarks of Research’ organized by IQAC of Loyola College of Education, Chennai, held on 15th May 2020.
15. Participated one week online Interdisciplinary ‘Certificate Course on Basics of Organic Farming’ held from 17th to 23rd May 2020, organized by Department of Botany and IQAC, Athalye-Sapre-Pitre College, Devrukh (Autonomous).
16. Participated the online webinar on ‘Asymmetric Synthesis – An Art of Organic Synthesis’ organized by PG & Research Department of Chemistry, Holy Cross College (Autonomous), Trichy, held on 3rd June 2020.
17. Online **National Workshop** on “Improving Scientific Research Writing and Publication Skills ” Organized by RKDF University, Bhopal (MP) held on 16th April 2022.
18. DST-SERB Sponsored National workshop on “Nanomechanical and Tribological Characterization of Materials ”, organized by Centre for Nanoscience and Nanotechnology, Sathyabama Institute of Science and Technology, Chennai, held from 4th and 5th March 2022.
19. **International Webinar** on “Empowering Diversity in Science” held on 16th February 2022, Organized by Department of Chemistry, Kamal Nehru Mahavidyalaya, Nagpur, Association of Chemistry Teachers (ACT), Mumbai and Department of Chemistry, Kalasalingam Academy of Research and Education (KARE), Krishnankoil in collaboration with International Union of Pure & Applied Chemistry (IUPAC), Global Women’s Breakfast-2022.

**PARTICIPATION IN FDPs:**

1. **National Level Faculty Development Program** on ‘Chemistry in an era of Change’ held from 13th to 16th July 2020, organized by Department of Chemistry, K. Ramakrishnan College of Engineering, Samayapuram, Trichy.
2. **Six days Short Term Faculty Development Program** ‘ERUDITION 2020’ organized by PG Department of Chemistry, IQAC & Chemistry Alumni Association of Payyanur College in Association with the Kerala State Higher Education Council, held from 23rd to 28th May 2020.
3. **Five Days National Level Online Faculty Development/Certificate Program** on “Recent Advances in Analytical Research Techniques” organized by PG and Research Department of Chemistry, Holy Cross College (Autonomous),

Tiruchirappalli, held on 27th September- 1st October 2021.

1. **Five days** **International FDP** on “Smart Materials for New Technology”, Organized by Department of Physics & Marian Star Centre, St. Mary’s College (Autonomous), Thoothukudi from 18th to 23rd February 2022.
2. **One Week FDP** on “Implementation of NEP-2020 in Higher Education”, Organized by RKDF University, and supported by Makhanlal Chaturvedi Rashtriya Patrakarita Vishwavidyalaya, Bhopal (MP) held on 17th to 22nd February 2022.
3. **Faculty Enrichment Program** on “INTRODUCTION TO CLOUD COMPUTING” in virtual mode on 26th February 2022 organized by the Department of Computer Science, Information Technology and Computer Applications, Shrimati Indira Gandhi College, Tiruchirappalli-620 002, Tamil Nadu, India.
4. **Online Faculty Enrichment Programme** on “Needs and Metrics of Green Chemistry”(under DBT Star College Scheme) organized by Postgraduate and Research Department of Chemistry, Vivekananda College, Tiruvedakam West, Madurai - 625 234, Tamil Nadu on 31 st March 2022.
5. **Six Day National Level** **Virtual Faculty Enrichment Program** on “ALIGNING WITH THE NEW EDUCATIONAL ERA”, conducted from 21-02-2022 to 26-02-2022, organised by Primax Foundation, St. Claret College, St Francis de Sales College, Bengaluru, Karnataka, and Shrimati Indira Gandhi College Trichy, Tamil Nadu.

**COURSE/TRAINING**

1. **International Course Online** on “Research Ethics in Higher Education”, Organized by Internal Quality Assurance Cell (IQAC), Rani Anna Government College for Women, Tirunelveli & Globethics.net, India, held on 14th to 17th February 2022.

**ACHIEVEMENT AND AWARDS:**

1. Successfully done service as a NSS **Presidentat Holy Cross College** in year 2011-2012.
2. Got **Gold medal** from HolyCross College **(**2011-2012) for Best volunteer.
3. Got **University Award** from **Bharathidasan University** (2011-2012) for Best volunteer.
4. Won **II-nd** prize for **Short film** making in **year of faith** at **Holy cross college**
5. Attended the **PRE-RD Camp** at Trivandrum (**Kerala**) (year-2011).
6. Also Attended the ***Adventure Camp***  at ***Manali*** (year-2012)(***Himachal Pradesh***).
7. Participated in ***March past*** as a ***Parade Commander*** and won second prize at Holy Cross College.
8. Won first prizes in ‘**Product *Launch’*** & ‘***Event Management***’ organized by Business Administration at Holy Cross College.
9. Wonprizes in the event like **Variety, Skit** and **Dance** during the schooling and B.Sc**.**

**CERTIFICATE OF APPRECIATIONS:**

1. Attended the ***Blood Donation Camp* organized** by doctor’s blood bank & Research Centre.
2. Contribute the community service in imparting ***Traffic Awareness*** for a period of 30 days from 16.08.12-15.09.12 organized by  ***TRICHY CITY POLICE.***

**DECLARATION**

I hereby declare that all the details furnished above are true to the best of my knowledge and belief.