# **CURRICULUM VITAE**

# Dr. A. MUSHIRA BANU

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# **PERSONAL DETAILS:**

Father's Name Date of Birth Nationality	: :	A.N. Ahmed Meeran 30.06.1985 Indian Tamil English Undu
Languages Known Address: Residential	:	Tamil, English, Urdu Plot No.158, 9th Street, Sri Koothaipar Nagar, Thiruverumbur, Tiruchirappalli - 620 013, Tamilnadu.
Official	:	Assistant Professor, PG & Research Dept. of Chemistry, Jamal Mohamed College (Autonomous) Tiruchirappalli - 620 020, Tamilnadu Phone: +91-431-2331235*215.

## **EDUCATIONAL QUALIFICATIONS:**

S. No.	Examination Passed	University / College	Year of Passing
1	Ph.D. (Chemistry)	Jamal Mohamed College, (Bharathidasan University), Trichy.	2020
2	M.Phil. (Chemistry)	St. Joseph's College, (Bharathidasan University), Trichy.	2010
3	M.Sc. (Chemistry)	Bishop Heber College (Bharathidasan University), Trichy.	2007
4	B.Sc. (Chemistry)	Holy Cross College, (Bharathidasan University), Trichy.	2005

### **AWARDS AND PRIZES:**

- > Won **Gold medal in Tamil language**, Holy Cross College, 2004.
- Won Best Outgoing Student Award and Gold Medal in M.Sc., Bishop Heber College, Tiruchirappalli, 2008.
- Won Best Outgoing Student Award and Gold Medal in M.Phil., St. Joseph's College, Tiruchirappalli, 2011.
- Won Distinguished Women Academician Award, Research Education Solutions, Noida, U.P., Regd. under MSME, Govt. of India, 2022.
- Won Research Excellence Award 2022, Institute of Scholars, IIP, MSME, Govt. of India, Karnataka, 2022.

#### **TEACHING EXPERIENCE:**

S. NO.	Name of the Institution	Period	Experience
1	Bishop Heber College, (Bharathidasan University), Trichy.	Jan 2011-April 2011	3 Months
2	Jamal Mohamed College, (Bharathidasan University), Trichy.	June 2011-Till Date	12 years

#### **RESEARCH AREA:**

- Electro Chemistry
- > Nano technology
- > Organic Synthesis
- Environmental Science

#### **PROJECTS DETAILS:**

### > M.Sc., Projects: 30 Students

Type of Research Project	Project Title	Name of the Funding Agency	Amount Sanctioned (Rs.)	Duration of the Project
Minor	Biogenic synthesis of carbon nano dots as an anti- corrosive coating material for mild steel	Seed Money Project, Jamal Mohamed College, Trichy	₹ 10,000	One Year

## **DETAILS OF PATENTS PUBLISHED:**

Title	Date of Filing	Application Number
Novel Carbon dots derived <i>Beta vulgaris</i> as potential anti-cancer and anti-oxidant agents	26-05-2022	202241030127
Synthesis of superhydrophobic silica nanoparticles and method for preparing non-stick paint by using same	23-09-2022	202241047698
A method for the synthesis and biological evaluation of new Sulfonamide-Analogs (German Patent)	09-11-2022	202022106287
A system for synthesis of Sulfonamides (South Africa Patent)	29-03-2023 (Granted)	2022/12010

### **DETAILS OF PAPER PUBLICATIONS:**

National Journals	International Journals	Books/Chapters
-	17	2

- International journal of recent scientific research, 8(12), 22417-22422, 2017. (International)
  - Title: "Corrosion Mitigation Of Mild Steel In Acid Media By Wattakaka Volubilis Leaves Extract"
- World Journal of Pharmaceutical Research, 6(17), 410-418, 2017. (International)
   Title: "Natural Products as Corrosion Inhibitors-A Review"
- European Journal of Biomedical and Pharmaceutical Sciences, 5(2), 938-945, 2018. (International)
  - Title: "Gomphrena Globosa Leaves Extract as An Effective Green Corrosion Inhibitor on Mild Steel In 1.0 N HCl"

- Journal for Advanced Research in Applied Sciences, 5(3), 153-158, 2018. (International)
  - Title: "Electro-Chemical Studies of Gomphrena Globosa Leaves Extract as A Green Corrosion Inhibitor for Mild Steel in Acid Medium"
- Der Pharma Chemica, 10(1), 16-23, 2018. (International)
  - Title: "Green Approach to Corrosion Inhibition of Mild Steel in Acid Medium by Aqueous Extract of *Pedalium Murex* L. Leaves"
- International Journal of Research and Analytical Reviews, 6(1), 238-244, 2019. (International)
  - Title: "Investigation of The Corrosion Inhibition of Mild Steel in Sulphuric Acid Solution by Using *Turnera Ulmifolia* Aqueous Leaves Extract"
- International Journal of Basic and Applied Research, 9(3), 555-565, 2019. (International)
  - Title: "Exploring *Nelumbo Nucifera* Aqueous Leaves Extract as A Green Corrosion Inhibitor for Mild Steel in Acid Medium"
- International Journal of Pharmacy and Biological Sciences, 9(2), 38-44, 2019. (International)
  - Title: "Evaluation of *Barleria prionitis* Leaves Extract as A Green Corrosion Inhibitor for Mild Steel in Acid Medium"
- Materials Today: Proceedings, 47(9), 2036 2047, 2021. (International)
  - Title: "Evaluation of Inhibitive Performance of Allamanda cathartica Leaves Extract As Green Corrosion Inhibitor On Mild Steel In Acid Medium"
- Materials Today: Proceedings, 47(9), 2080 2090, 2021. (International)
  - Title: "Andrographis echioides Leaves Extract as An Eco-friendly Corrosion Inhibitor for Mild Steel in Acid Medium" Applied Biochemistry and Biotechnology, 2022. <u>https://doi.org/10.1007/s12010-022-03925-5</u>, Springer (International).
  - Title: "Evaluation of Corrosion Mitigation Behaviour of *Bombax ceiba* Leaves Extract"

### REVIWER

- > American Journal of Applied and Industrial Chemistry (AJAIC)
- Basic and Medical Sciences

### **DETAILS OF PAPERS PRESENTED:** (National / International)

- Presented a paper in the International Conference on Chemical and Environmental Research (ICCER-2015), organized by PG & Research Department of Chemistry, Jamal Mohamed College, Tiruchirappalli, Tamilnadu, held on 17-12-2015.
   Title: Green Approach to Corrosion Inhibition of Mild Steel In Acid Medium By The Extract of Ecbolium Lingustrinum Leaves
- 2. Presented a paper in the International Conference on **"Chemical and Environmental Research" (ICCER-2014)** organized by the PG & Research Department of Chemistry, Jamal Mohamed College (Autonomous), Tiruchirappalli held on 11-03-2014 to 12-03-2014.

### Title: Inhibition Action of Mild Steel Corrosion In 1N HCl Solution Using Enicostema Axillare

- Presented a paper in the "International Conference on Chemical and Environmental Research (ICCER-2017)" organized by the Department of Chemistry, Jamal Mohamed College, Trichy held on 7-01-2017.
   Title: Corrosion Mitigation of Mild Steel in Acid Media by Sphaeranthus Zeylanicus Leaves Extract
- Presented a paper in the "National conference on Advances in Innovative Materials for Energy and Environment (AIMEE-2017)", organized by SRM University, Ramapuram, Chennai, Tamilnadu.
   Title: Aqueous Extract of Pedalium Murey Leaves as Eco-Friendly Corrosion

Title: Aqueous Extract of *Pedalium Murex* Leaves as Eco-Friendly Corrosion Inhibitor for Mild Steel In 1.0 N HCl

- Presented a paper in the "National Conference on Recent Developments in Chemistry NCRDC-2018)" organized by the PG & Research Department of Chemistry, Jamal Mohamed College (Autonomous), Tiruchirappalli held on 20-01-2018.
   Title: Gomphrena Globosa Leaves Extract as A Green Corrosion Inhibitor for Mild Steel In Acid Medium
- 6. Presented a paper in the National conference on "Emerging trends in Material science", organized by Department of Physics, Chemistry and Electronics, Erode Arts and Science College (Autonomous), Erode, Tamil Nadu, held on 07-02-2018. Title: Leaves Extract of Gomphrena Globosa as An Eco-Friendly Corrosion Inhibitor for Mild Steel In 0.5 M H<sub>2</sub>SO<sub>4</sub>
- Presented a paper in the "4<sup>th</sup> International Conference on Chemical and Environmental Research (ICCER-2018)", PG & Research Department of Chemistry, Jamal Mohamed College (Autonomous), Tiruchirappalli, Tamilnadu held on 19-12-2018.
   Title: Corrosion Mitigation of Mild Steel in Acid Medium by Merrmia Emeginata Leaves Extract
- Presented a paper in the National conference on "Emerging Trends in Chemical and Biological Science", Department of Chemistry, D.K.M. College for Women, Sainathapuram, Vellore, Tamilnadu, held on 04-01-2019.
   Title: Evaluation of Barleria Prionitis Leaves Extract as A Green Corrosion Inhibitor for Mild Steel In Acid Medium
- Presented a paper in the International conference on Emerging Trends in Chemical Sciences organized by Department of Chemistry, Arulmigu Palaniandavar Arts College for Women, Palani, Tamilnadu, held on 06-09-2019.
   Title: Evaluation of Guettarda Speciosa Leaves Extract as A Natural Corrosion Inhibitor for Mild Steel in Acid Medium
- Presented a paper in the 5<sup>th</sup> International Conference on Chemical and Environmental Research (ICCER-2020), Organized by PG and Research Department of Chemistry, Jamal Mohamed College, Trichirappalli, Tamilnadu, held on 08-01-2020.
   Title: *Pergularia Daemia* as A Green Corrosion Inhibitor for Mild Steel In 1 M Hydrochloric Acid Solution
- 11.Presented a paper in the International Conference on Challenges to Environment and Health, Organized by Department of Zoology, Jamal Mohamed College, Trichirappalli, Tamilnadu, held on 08-01-2020.

Title: Bombax Ceiba as A Green Corrosion Inhibitor for Mild Steel in Acid Solution

12.Presented a paper in the "4<sup>th</sup> International Conference on Chemical and Environmental Research (ICCER-2018)", PG & Research Department of Chemistry, Jamal Mohamed College (Autonomous), Tiruchirappalli, Tamilnadu held on 19-12-2018.

Title: Evaluation of corrosion inhibition on mild steel in acid medium using Limonia acidimissima leaves extract

- 13. Presented a paper in the International Web Conference on Advanced Materials Science and Engineering, (ICAMSE-2020), Department of physics, Bannari Amman Institute of Technology, Sathyamangalam, held on 11-09-2020 to 12-09-2020.
   Title: Evaluation of Inhibitive Performance of Allamanda Cathartica Leaves Extract As A Green Corrosion Inhibitor On Mild Steel In Acid Medium
- 14. Presented a paper in the International Virtual Conference on Frontiers in Chemical Research-ICFCR'21, Bishop Heber College, Trichy, held on 3-02-2021 to 4-02-2021.
  Title: Green corrosion inhibition and Adsorption characteristics of Limonia acidissima leaves extract on mild steel in 1.0 M H<sub>2</sub>SO<sub>4</sub> environment
- 15. Presented a paper in the International conference on "Smart Materials Chemistry" (CHEMSMAT-21), organized by Department of Chemistry, St. Joseph's College, Trichy, held on 29-07-2021 to 31-07-2021.

Title: Performance evaluation and Optimization of *Trichosanthes cucumerina* Leaves extract as a green corrosion inhibitor for mild steel in acidic medium

16. Presented a paper in the Indo-South Korea International e-Conference on Nanoscience and Nanotechnology for Energy, Environment and Bio-medical applications, Department of Chemistry, Vinayaka missions Kirupananda Variyar arts and science college, Gyeonsang national university, Republic of Korea, held on 29-07-2021 to 31-07-2021.

Title: Investigation and Evaluation of *Bombax ceiba* leaves extract as a green corrosion inhibitor on mild steel in acid medium

17. Presented a paper in the International E-Conference on Sustainable and Futuristic Materials (SFM-2021), International research centre, J.M Patel Arts and Science college, Bhandra and Kamala Nehru Mahavidyalaya, Nagpur, held on 29-11-2021 to 30-11-2021.

Title: Anti-corrosive effect of *p-semidine-p-phenylenediamine-formaldehyde resin* on mild steel in acid medium

 Presented a paper in the International Virtual Conference on Recent Trends in Materials Science (ICRTMS-2021), Bannari Amman Institute of Technology, Sathyamangalam, held on 20-12-2021 to 21-12-2021.
 Title: Correction inhibition by acupacity of Customer and another set of Customer and Statemer and

Title: Corrosion inhibition by aqueous extract of Guettarda speciosa on mild steel

19. Presented a paper in the International Conference on Frontiers in chemical research (ICFCR'22- 2022), Bishop Heber College, Tiruchirappalli, held on 03-02-2022 to 04-02-2022.

Title: Performance evaluation and optimization of *Guettarda speciosa* leaves extract as a green corrosion inhibitor for mild steel in acid medium

20. Presented a paper in the 7<sup>th</sup> International conference on Innovations in Chemical and Environmental Research, Bishop Heber College, Tiruchirappalli, held on 25-05-2022 **Title: Corrosion inhibitive performance of** *Alocanthus indicus* extract on mild steel in acid medium 21. Presented a paper in the Materials Science for Sustainable Environment (ICMSSE-2022), PG and Research Department of Chemistry, Holy Cross College, Trichy-2., held on 23-08-2022 & 24-08-2022

# Title: Inhibition of Corrosion by aqueous Extract of Alocasia indica on mild steel in acid medium

22. Presented a paper in the Indo-South Korea-Thailand 2<sup>nd</sup> International e-Conference on Nanoscience and Nanotechnology for Energy, Environment and Biomedical Applications (iNEEBA2022) organized by Vinayaka Missions Kirupananda Variyar Arts and Science College, India., held on 24-11-2022 & 25-11-2022.

# Title: Novel carbon dots as efficient green corrosion coating for mild steel in HCl solution

# **DETAILS OF SEMINARS / CONFERENCES / WORKSHOPS PARTICIPATED: (National / International)**

- 1. Participated in UGC sponsored State Level Seminar on **"Emerging Trends in Chemistry"** held on 9<sup>th</sup> March, 2006, at Jamal Mohamed College, Tiruchirappalli, Tamilnadu.
- 2. Participated a seminar on **"Nano particles-Horizon 2006"** held on 6<sup>th</sup> &7<sup>th</sup> October, 2006, by Department of Chemistry, National Institute of Technology, Tiruchirappalli, Tamilnadu.
- 3. Presented a Poster entitled **"Transmission Electron Microscopy of Nanomaterials**" organized by the Department of Chemistry, National Institute of Technology, Deemed University, Trichy, on 6<sup>th</sup> & 7<sup>th</sup> October 2006.
- 4. Participated in the State Level Seminar on **"New Vistas in Chemistry" (NVS-2012)** organized by the PG & Research Department of Chemistry, Jamal Mohamed College (Autonomous), Tiruchirappalli on the 4<sup>th</sup> & 5<sup>th</sup> January 2012.
- Participated in the National Level Conference on "Current Scenario in Material Chemistry" (CSIMC-2015) organized by the PG & Research Department of Chemistry, Jamal Mohamed College (Autonomous), Tiruchirappalli on the 09<sup>th</sup> & 10<sup>th</sup> February 2015.
- Participated in the "Three-day NLP-Based Faculty Empowerment Programme", organized by the Internal Quality Assurance Cell, Jamal Mohamed College, Trichy on the 17th, 19th & 20th July 2017.
- 7. Participated in the State level **"Intercollegiate Extravaganza Symphoria'18"**, organized by the PG & Research Department of Chemistry, Jamal Mohamed College (Autonomous), Tiruchirappalli on 20<sup>th</sup> February 2018.
- 8. Participated in the College level **"Soft Skills development Programme"**, Jamal Mohamed College (Autonomous), Tiruchirappalli on 22<sup>nd</sup> June 2018.

- Participated in the College level "Staff Enrichment Programme on Ownership Culture", organized by Internal Quality Assurance Cell, Jamal Mohamed College (Autonomous), Tiruchirappalli on 18<sup>th</sup> & 14<sup>th</sup> June 2019.
- 10.Participated in the International level "2<sup>nd</sup> Indo-Korea virtual conference on development of Advanced Materials for Future technologies (DAMFT-2021) jointly organized by KAIST DAEJEON, South Korea & Vellore Institute of Technology, Chennai, India", organized by Internal Quality Assurance Cell, Jamal Mohamed College (Autonomous), Tiruchirappalli on 18<sup>th</sup> & 14<sup>th</sup> June 2019.

#### **DETAILS ABOUT WEBINARS PARTICIPATED:** (National / International)

- Participated in webinar on "Graphene based Nanocomposites for Energy Storage", Department of Physics, V.O.Chidambaram College, Thoothukudi on 01-06-2020.
- Participated in International webinar on "Advanced materials (IWAM-2020)", Department of physics, LRG Government Arts College, TIRUPUR on 03-06-2020.
- Participated in webinar on "60 Years of Laser: A Fascinating Journey", PG and Research Department of Physics, Loganatha Narayanasamy Government College, Ponneri – 601204, 04-06-2020.
- Participated in International webinar on "Recent Advances in Materials Science & Nanotechnology", Department of physics, Bannari Amman Institute of Technology, Sathyamangalam, 04-06-2020 to 06-06-2020.
- Participated in webinar on "Analytical Instruments", Department of Chemistry and IQAC of Dr. C.V. Raman University, Bilaspur, 15-06-2020 to 17-06-2020.
- Participated in National webinar on "Writing Research Paper: An Art", Department of Chemistry in association with I.Q.A.C. B.N.N. College, Bhiwadi, 19-06-2020.
- Participated in National webinar on "Photofunctional materials tuneable properties through surface anchoring", organized by the chemistry division, School of advanced science, VIT Chennai, 20-06-2020.
- Participated in National webinar on "Use of ICT in good Governance" organized by AKS University Satna, 21-06-2020.
- Participated in National webinar on "Modern Approach to Chemistry and Hands on training on solving spectroscopic problems", Department of Chemistry, Bharathi Womens College with Tamilnadu State council for Science and Technology and Department of Science and Technology, Govt. of India, on 24-06-2020.
- Participated in National webinar on "Metal-Ligand Multiple Bonded Compounds", Department of Chemistry, Ayya Nadar Janaki Ammal College, Sivakasi on 25-06-2020.
- Participated in National Webinar on "EPR Spectroscopy and its Applications" by organized by department of chemistry and physics, Government arts college(A), Salem on 26-06-2020.
- Participated in National Webinar on "Asymmetric Synthesis and its applications", PG Department of Chemistry, Hajee Karutha Rowther Howdia College, Uthamapalayam – 625533 on 30-06-2020.

- Participated in National Webinar on Development of Selected Multi-Valent Metal Ions functionalized Mesoporous Materials and their Applications", Department of Science & Humanities, Vel Tech High Tech Dr. Rangarajan Dr. Sakunthala Engineering College, Chennai, Tamilnadu, on 02-07-2020.
- Participated in Webinar on Ailment therapy: Medicinal & Traditional" organized by the Department of Chemistry, Dr. Zakir Husain College, Ilayangudi - 630 702, Sivagangai District, Tamilnadu, India on 05-07-2020.
- Participated in International webinar on "Leading the Way Forward in Unprecedented Times: With A Special Reference to The Global Market and Economy" CMS, Jain (Deemed-to-be University), Bengaluru, 06-07-2020.
- Participated in National level Webinar on "Dye Moleculess for Sustainable Future energy", PG Department of Chemistry, Hajee Karutha Rowther Howdia College, Uthamapalayam – 625533, on 07-07-2020.
- Participated in International webinar on "Development of Advanced materials for Future Technologies (DAMFT – 2020)", Jeonbuk National University, Jeonju, South Korea & Vellore Institute of Technology, Chennai, on 09-07-2020 to 10-07-2020.
- Participated in International Webinar on "The Journey of Supramolecular Chemistry: From an Accidental Discovery to Advanced Materials", Department of Science and Humanities (Chemistry) at RMK College of Engineering and Technology, RMK college of Engineering and Technology RSM Nagar, Puduvoyal, Tamilnadu, India, on 09-07-2020.
- Participated in Webinar on "Phytoremediation Technologies: An Overview", PG Department of Chemistry, A.P.C. Mahalaxmi College for Women, Thoothukudi, on 11-07-2020.
- Participated in Webinar on "Chemistry & biology of virus, bacteria & parasites" Department of Chemistry, Dr. Zakir Husain College, Ilayangudi – 63070, on 19-07-2020.
- Participated in National webinar on "Fluorescence Spectroscopy & Current research in fluorescent Nanomaterials", PG Department of Chemistry, V.S.S. Government Arts College, Pulankurichi - 630 405, Sivagangai District, Tamilnadu, India on 24-07-2020.
- Participated in webinar on "National Education Policy 2020" organized by Internal Quality Assurance Cell of Jamal Mohamed College, Trichy, on 08-08-2020.
- Participated in webinar on "Best Practices in Acquiring Scholarly Knowledge", Department of Library and Internal Quality Assurance Cell, Jamal Mohamed College, Trichy, on 16-08-2020.
- Participated in International webinar on "Exploration of Main Group compounds for Promoting Metal-Free Transformation in Industries", St. Joseph's College of Engineering, Chennai-119, on 19-08-2020.
- Participated in International webinar on "Log-In to Healthier and Happier Life", Department of Chemistry, PSNA College of Engineering College and Technology, Dindigul-624622, 28-08-2020.
- Participated webinar in "Advances in Chemical Sciences", PG & Research Department of Chemistry, Jamal Mohamed College, Trichy-20 on 03-11-2020.

- Participated webinar in international webinar on "Trends in Convergence Science of Chemistry in Medicine" organized by department of Chemistry, Kongu Engineering College, Perundurai, Erode- 638 060 on 20-11-2020 to 21-11-2020.
- Participated webinar in 2<sup>nd</sup> International Webinar on "Microbes and Neoteric Research (IWMNR – 2020)", PG & Research Department of Microbiology, Jamal Mohamed College, Trichy-20 on 22-12-2020.
- Participated in international webinar on "Global Added Burdens of Diseases and Food Security", PG & Research Department of Nutrition and Dietetics and B.Voc., Food Processing and Safety, Jamal Mohamed College, Trichy-20 on 05-01-2021.
- Participated in National webinar on "ICT Tools for Chemistry Teachers", Guru Angad Dev Teaching Learning Centre, SGTB Khalsa College, University of Delhi under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT) of Ministry of Education on 22-02-2021.
- Participated in National webinar on "Solving Challenging Problems in Chemistry Using Computational Chemistry and Machine Learning", organized by the department of chemistry, The American College, Madurai on 14-06-2021.
- Participated in international level webinar on "Synthesis and Catalytic Applications of Supported Metal Nanoparticles", organized by PG & Research Department of Chemistry, Sadakathullah Appa College (Autonomous), Rahmath Nagar, Tirunelveli, on 15-06-2021.
- Participated in international level webinar on "Green organic chemistry", organized by Department of Chemistry, Sadakathullah Appa College (Autonomous), Rahmath Nagar, Tirunelveli, on 16-06-2021.
- Participated in International level webinar on "Challenges and opportunities", organized by PG & Research Department of Chemistry and IQAC, Government Arts College, Trichy, on 14-07-2021.
- Participated in webinar on "Drug Delivery", organized by organized by PG and Research Department of Chemistry, Jamal Mohamed College, Trichy on 16-07-2021.
- Participated in webinar on "Scanning electron microscopy", organized by the Centre for Healthcare Advancement, Innovation research, Vellore institute of Technology, Chennai on 16-07-2021.
- Participated in webinar on "Iron based MRI contrast agents", organized by organized by PG and Research Department of Chemistry, Jamal Mohamed College, Trichy on 17-07-2021.
- Participated in webinar on "Art of writing in Indexed journal publications", organized by Internal quality assurance cell, Jamal Mohamed College from 21-06-2021 to 28-06-2021.
- Participated in webinar on "Emerging materials for solar hydrogen production", organized by PG and Research Department of Chemistry, Jamal Mohamed College, Trichy on 27-07-2021.

### **DETAILS ABOUT FDPS PARTICIPATED: (National / International)**

- Participated in Online Faculty Development Programme on "GChem paint and Libreoffice Suite Writer", Department of Chemistry, D.K.M. College for Women, Vellore, Tamil Nadu in association with Spoken Tutorial Project, IIT Bombay, MHRD, Govt.of India. 04-05-2020 to 10.05.2020.
- Participated in Online Faculty Development Programme on "Outcome Based Education" InPods-Edtech, 05-05-2020.
- Participated in Online Orientation Course on "New Engineering Materials", Department of Science & Humanities, Er. Perumal Manimekalai College of Engineering, Hosur, 06-05-2020.
- Participated in Online Faculty Development Programme on "Role of Chemistry in COVID-19", Department of Chemistry, School of Basic Sciences, Vels Institute of Science Technology and Advanced Studies (VISTAS), 13-05-2020.
- Participated in Online Certification Programme on "Sustainable Materials and Technologies", PG and Research Department of Chemistry, Vivekanandha College of Arts and Sciences for Women, Elayampalayam, Tamilnadu, India, 21-05-2020 to 04-06-2020.
- Participated in National level Online Training Course on "Bee Keeping", PG and Research Department of Zoology, Adirampattinam, Thanjavur District, 19-05-2020 to 23-05-2020.
- Participated in Online Faculty Development Programme on "Online Teaching-learning and Online assessment Demo" InPods-Edtech, Outcome based Education, Pune, India. 28-05-2020.
- Participated in Online Faculty Development Programme on "NAAC Accrediation Management System Demo", InPods-Edtech, Outcome based Education, Pune, India, 29-05-2020.
- Participated in Online Faculty Development Programme on "Advanced Molecular Chemistry" Arulmigu Palaniandavar College of Arts & Culture, Palani on 01-06-2020 to 03-06-2020.
- Participated in Online Faculty Development Programme on "Advancements in science and its applications in engineering", Department of Science and Humanities, Hyderabad Institute of Technology & Management, Approved by AICTE, Medchal Hyderabad, India on 21-06-2020 to 26.06.2020.
- Participated in Online Faculty Development Programme on "Introduction on E-learning and its challenges", The department of corporate secretaryship (Shift-II), Partician college of Arts and Science, Adyar, Chennai-20, on 26-06-2020.
- Participated in Online Faculty Development Programme on "E-Content development", Internal Quality Assurance Cell, Jamal Mohamed College, Trichy – 20 on 30-06-2020 to 04-07-2020.

- Participated in Online Faculty Development Programme on "Spectroscopic Techniques", PG and Research Department of Physics, Jamal Mohamed College, Trichy – 20 on 03-08-2020 to 05-08-2020.
- Participated in "Online Faculty Enrichment Programme", organized by Internal quality assurance cell, Jamal Mohamed College from 21-06-2021 to 25-06-2021.
- Participated in Online Faculty Development Programme on "Art of Writing in Indexed Journal Publications", organized by Internal quality assurance cell, Jamal Mohamed College on 28-07-2021.
- Participated in Online Faculty Development Programme on "Evolution of Smart Materials and their Contemporary advances" organized by S.T. Hindu College, Nagercoil from 25-10-2021 to 30-10-2021.
- Participated in Online Faculty Development Programme on "Emerging Trends in Chemistry" organized by Kongu Engineering College, Perundurai from 13-12-2021 to 15-12-2021.
- Participated in Online Faculty Development Programme on "Effective Teaching" organized by Sri Balaji College of Engineering and Technology, Jaipur from 20-12-2021 to 24-12-2021.
- Participated in "MDP on International Entrepreneurship Summit 'AVLOKAN 2.0' 2022" organized by Faculty Research Cell – Gyanidhi & SRDC- Vidhyanidhi, CMS, Jain (Deemed-to-be University) from 10-01-2022 to 12-01-2022 and 17-01-2022 to 22-01-2022.
- Participated in "FDP on Astronomical studies" organized by Department of Physics and chiguro co Lab, Bangalore, Jamal Mohamed College, Tiruchirappalli from 07-02-2022 to 08-02-2022.
- Participated in "FDP on Intellectual Property Rights" organized by Department of Physics and Institutions innovation council, Jamal Mohamed College, Tiruchirappalli on 09-02-2022.
- Participated in "International Faculty Development Program on Foremost Frontiers of Material Science" organized by Department of Physics, Sathyabama Institute of Science and Technology, Chennai, From 12-09-2022 to 20-09-2022.

### **DETAILS ABOUT WORKSHOPS PARTICIPATED:** (National / International)

- Participated in the College level "UGC CPE Sponsored Two-Day Workshop on Professional Development for Academic Leadership in Curriculum Design", Organized by Curriculum Development Cell, Jamal Mohamed College (Autonomous), Tiruchirappalli on 18<sup>th</sup> & 19<sup>th</sup> January 2019.
- Participated in International Online Workshop on "The Role of Language and Researcher", Department of English, Immaculate College for Women, Viriyur, 27th April 2020 to 29th April 2020.
- Participated in "Chem Draw Online Workshop", Genesin of Educational Impressions, Roorkee, Uttarakhand, India on 5<sup>th</sup> May 2020.

- Participated in "Scanning Electron Microscopy Online Workshop", Centre for Healthcare Advancement, Innovation and Research, VIT, Chennai.
- Participated in the National level FDP on "Spectral Characterization Techniques", organized by Jayaraj Annapackiam College for Women, on 11<sup>th</sup> May 2022.
- Participated in the National level Workshop on "Crafting competitive Grant Proposals", DST-SERB Sponsored, Dhanalakshmi Srinivasan University, Samayapuram, Trichy on 9th &10th September 2022.

#### **DETAILS OF ONLINE CERTIFICATION COURSES:**

- ✓ Completed the NPTEL Online Certification Course in 'Basics in Inorganic Chemistry', on Jan-Feb 2020.
- ✓ Completed the NPTEL Online Certification Course in 'Patent Drafting for Beginners', on Jan-Feb 2021.
- ✓ Completed the Online Certification Course in Annual Refresher Programme in Teaching (ARPIT-2020).
- ✓ Completed the Online Certification Course in Enhancing Soft skills and Personality, on Feb-Apr 2022.

#### **DETAILS OF ORGANIZING SECRETARY / RESOURCE PERSON / JUDGE:**

- ✓ Acted as a Judge in Science Projects 'Nalaya Vingnyani', Jointly organized by VIT Vellore & Hindu Tamil held at National College, Trichy-1, on 13<sup>th</sup> October 2019.
- ✓ Acted as a Judge in 'Poster Presentation & Drawing competition' Jointly organized by Anti-Dowri Association & National Service Scheme, Jamal Mohamed College, Tiruchirappalli -20, on 30<sup>th</sup> September 2019.
- ✓ Acted as a Judge in 'Glass painting and Embroidery Events' organized by Anti-Dowri Association, Jamal Mohamed College, Tiruchirappalli -20, on 10<sup>th</sup> March 2020.
- ✓ Acted as a Resource person in 'A Five-Day National Level Online Course on Chemistry in Our Day-to-day Life' on 8<sup>th</sup> June 2020.
- ✓ Served as an Organizing Secretary in the '6th International Conference on Chemical and Environmental Research (ICCER-2020)' on 12 November 2020.
- ✓ Acted as a Jury in 'Poster presentation' in National Science Day organized by, Jamal Mohamed College, Tiruchirappalli -20, on 26<sup>th</sup> February 2022.
- ✓ Acted as a Resource person in 'Young Student Scientist Programme', organized by, Tamilnadu government collaborated with Jamal Mohamed College, Tiruchirappalli – 20, on 18<sup>th</sup> May 2022.
- ✓ Acted as a Jury in 'Regional Dance' in 'International Day of the girl Child 2022', organized by, Jamal Mohamed College, Tiruchirappalli -20, on 29<sup>th</sup> October 2022.

- ✓ Acted as a Resource person in 'Understanding Ecosystem for Health and Well-Being' in 30<sup>th</sup> National Children's Science Congress 2022-2023, organized by, Anna University (BIT-Campus), Tiruchirappalli, Tamilnadu on 26<sup>th</sup> November 2022.
- ✓ Served as a **Convener** in **'Chem Fiesta 23'** State Level Intercollegiate Extravaganza, organized by, Jamal Mohamed College, Tiruchirappalli -20, on 01 March 2023.

#### **STRENGTHS AND SKILLS:**

- Effective Communication Skill
- Leadership Skill
- > Ability to work with Team
- Good Interpersonal Skills
- Good Analytical Skills
- Good Organizing Skills

### Academic Responsibilities (Both College & Department):

- Member of question setting and valuation board in Jamal Mohamed College, Trichy and Bharathidasan University, Trichy.
- 4 Cluster in Charge in Moral Education studies in Jamal Mohamed College since 2021
- **4** Member in the preparation of NIRF report for Department
- **4** Member in Curriculum Development Cell since 2019
- **4** Member in the Students monitoring Committee since 2018
- 4 Acting as Department Library in-charge since 2018
- ↓ Member in the Convocation Law and Order Committee since 2017
- Tutor-in-charge for UG and PG Students since 2011
- **4** Member in Examination Committee since 2011



Date: 15.04.2023 Tiruchirappalli-20. (A. MUSHIRA BANU)