

Mrs. G.BANU KARTHI,

Assistant Professor,
PG and Research Department of Chemistry (SF),
Jamal Mohamed College, Trichy.
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**OBJECTIVES:**

To be closely associated with a team of professionals to acquire knowledge that will help to accept challenges in research and development and to achieve greater heights.

EDUCATIONAL PROFILE:

Qualification	Name of the College / School	University/ Board of Education	Percentage secured	Year of Passing
Ph.D	H.H. The Rajah's College, Pudukottai.	Bharathidasan University	Pursuing	Pursuing
SET	Tamilnadu State Eligibility Test	Mother Teresa University		2016
M.Phil., Chemistry	S.Vellaichamy Nadar College, Madurai	Madurai Kamaraj University	78.60	2009
M.Sc., Chemistry	Ururu Dhanalakshmi College, Trichy	Bharathidasan University	73.33	2008
B.Sc., Chemistry	Seethalakshmi Ramaswami College, Trichy	Bharathidasan University	82.13	2006
H.Sc	S.V.S Hr. Sec. School, Trichy	State Board	76.17	2003
S.S.L.C	R.S.K Hr. Sec School, Trichy	Central board for Secondary Education	81.2	2001

WORKING EXPERIENCE:

UG / PG teaching experience: 7 years

Jamal Mohamed College, Trichy	: June 2023 till now
CARE College of Engineering, Trichy	: Oct 2022 to May 2023
National College, Trichy	: Dec 2016 to May 2020
Shrimati Indira Gandhi College of arts and science	: July 2011 to Oct 2013
JJ college of arts and science, Pudukottai	: Nov 2009 to May 2010

RESEARCH CONTRIBUTION:

GOOGLE SCHOLAR ID : https://scholar.google.com/citations?hl=en&user=kDP_eGIAAAAJ
ORCID ID : <https://orcid.org/0000-0002-7152-7702>
RESEARCH GATE ID : <https://www.researchgate.net/profile/G-Banu-Karthi>
RESEARCH ID : [rid62306](https://orcid.org/0000-0002-7152-7702)

AREA OF SPECIALISATION:

Coordination Chemistry, Organic Chemistry, Nanochemistry

PAPERS PUBLISHED:

- Karthi GB, Suvaikin MY, Kalaivanan C, Dheivamalar S, Banu KB. Fabrication, Characterization, DFT interpretations, and biological applications of 1-morpholin-4-ylmethyl-pyrrole-2, 5-dione. European Chemical Bulletin, 2023, 12 (Special Issue 4), 13803-13812: doi: [10.48047/ecb/2023.12.si4.12532023.29/05/2023](https://doi.org/10.48047/ecb/2023.12.si4.12532023.29/05/2023)
- Karthi GB, Suvaikin MY, Kalaivanan C. Fabrication and Characterisation of 1-[(4, 5-dihydro-furan-2-yl)-morpholin-4-yl-methyl]-pyrrole-2, 5-dione and its cobalt (II) complex. European Chemical Bulletin 2023, 12(1), 1391-1407: doi: [10.31838/ecb/2023.12.1.1152023.26/04/2023](https://doi.org/10.31838/ecb/2023.12.1.1152023.26/04/2023)
- Kalaivanan C, Sankarganesh M, Suvaikin MY, Karthi GB, Gurusamy S, Subramanian R, Asha RN. Novel Cu (II) and Ni (II) complexes of nicotinamide based Mannich base: Synthesis, characterization, DFT calculation, DNA binding, molecular docking, antioxidant, antimicrobial activities. Journal of Molecular Liquids. 2020 Dec 15;320:114423. doi:<https://doi.org/10.1016/j.molliq.2020.114423>. Impact Factor - 6.
- Published a paper in the **Journal of Emerging Technologies and Innovative Research.**, November 2018; Volume 5, Issue 11; 54-61 in the topic **“Degradation of Reactive Dyes using Supporting Electrolytes by Electrochemical Oxidation Method”**
- Anu M, Prabha L, Banukarthi G, Kanjana PR, Rajeswari K. UV-visible, IR and NMR spectra on Copper (II) Schiff base Complex. International Journal of Institutional Pharmacy and Life Sciences. 2013;3(6):23-32.
- Lakshmi Prabha, & Mohamed Naveed, Jannathul Firdous & Karpagam, Thirunethiran & Karthi, Banu & Subashini. A New Photometric Method of Vitamin C in Tomato. (2011); 1(2): 66-74.

AWARDS RECEIVED:

Got the **Best Paper Award** in the International e-Conference on “Advancements in Material Science and Technology” (iCAM 2020), organized by Sathyabama Institute of Science and Technology, India in association with Gyeongsang National University, Republic of Korea, during 23-25 November, 2020 for the Paper entitled “Synthesis, Characterization, Antioxidant property and Antimicrobial studies of a novel Maleimide Derivative and its Metal (II) complexes”.

CONFERENCES AND SEMINARS:

Presentation:-

- Presented a poster in the Two Days International Conference on “Unveiling the Frontiers in Life Science”, ICFLS 2023, organized by Department of Biochemistry & PG and Research Department of Microbiology on 17-08-2023 and 18-08-2023 in the topic **“Synthesis, Characterization, DNA Binding and Biological Evaluation of Morpholine based Mannich ligand and its Cu(II) and Zn(II) Complexes: Assessment of Anti-inflammatory, antioxidant, Antimicrobial properties”**.
- Presented a Poster in the International Conference on “Innovative Green Materials for Sustainable Engineering”, IGMSE-2023, organized by Division of Chemistry on 27th and 28th February 2023 at SIMATS Engineering, Chennai in the topic **“Synthesis, Characterization**

and Determination of antimicrobial, antioxidant, DNA binding and anticancer properties of the succinaldehyde based mannich base and its metal(II) complexes”

- Presented a Paper entitled **“Synthesis, Characterization, Antioxidant property and Antimicrobial studies of a novel Maleimide Derivative and its Metal (II) complexes”**, in the International e-Conference on “Advancements in Material Science and Technology” (iCAM 2020), organized by Sathyabama Institute of Science and Technology, India in association with Gyeongsang National University, Republic of Korea, during 23-25 November, 2020 and won the **best paper award**.
- Presented on **“A new mannich base and its Cu(II and Ni(II) complexes – Synthesis, Structural Characterization and Antimicrobial activity”**, in an International Conference on Frontiers in Chemical and Material Sciences (ICFCMS – 2020) organized by Department of Chemistry, The Gandigram Rural Institute (Deemed to be University), Dindigul on 24th and 25th February 2020.
- Presented on **Synthesis, characterization and antimicrobial nicotinamide derivative metal (II) complex of Mannich Base Ligand**, in an International conference on Frontiers in chemical and material sciences (ICFCMS – 2020) organized by Department of Chemistry, The Gandigram Rural Institute (Deemed to be University), Dindigul on 24th and 25th February 2020.
- Presented in the international conference on **Evaluation of dye degradation potential of TiO₂ nanoparticle synthesized using Delonix Elata and its characterization**, hosted by Mohamed Sathak Engineering College, Kilakarai, Ramanathapuram, on 23rd and 24th Jan 2020 in the topic Recent Trends Green Chemistry and material science.
- Presented in the International conference on nanomaterials driven advances in chemical and biosensors (Nanose 2019) during 27-29th Nov 2019 in association with the Biosensor Society of India (BSI) on **Synthesis, spectral characterization and biological activities metal (II) complex from Mannich base ligand** at ALAGAPPA UNIVERSITY-2019, Karaikudi.
- Presented in the International seminar on **Antimicrobial And Radical Scavenging Activities of Co(II) and Ni(II) complexes of Nicotinamide based Mannich base ligand**. International conference on Multifunctional and Hybrid Composite Materials for Energy, Environment and Medical Applications, NIT-2019, Trichy on 9th to 11th September 2019.
- Presented in the International seminar on **Copper Complexes of Mannich Base 2-(Diethyl aminomethyl Isoindoline-1,3-Dione Synthesis, Spectral, Thermal, Electrochemical & Biological Studies**, International conference on Recent Trends In Nanomaterials for energy, Environmental and Engineering Applications at K.Ramakrishnan College of Technology, Trichy (ICONEEEA-2K19) on 14-3-2019 and 15-3-2019.
- Presented in the International conference on Innovations in Engineering, Technology and Science (SICIETS-18) Chittoor, Andhra Pradesh on 28th October 2018 to 29th October 2018 organized by Sreenivasa Institute of Technology and Management Studies (SITAMS) Chittoor, Andhra Pradesh, on **“Degradation of reactive dyes using supporting electrolytes by electrochemical oxidation method”**.
- Presented a paper entitled **“Design of Amperometric Methanol Sensor using the blend of Pt/C with LaRu_{0.2}Cr_{0.2}O₃”** in the National Seminar on **“Modern Trends in Chemistry”** organized by Sengamala Thayaar Educational Trust Women’s College, Sundarakkottai, Mannargudi, Department of Chemistry on 20.12.2017.
- Presented a paper on **“Design Fabrication and Performance Calibration aspects of Amperometric Methanol Sensor”** in the **International Conference (ICONNECT – 2K17)** organized at K. Ramakrishnan College of Technology, Trichy on 28th and 29th March, 2017.

- Presented a poster in an International Conference held at IICPT on the topic “**Isolation and Characterization of Feecal Oxalate degrading yeast**” on 4th and 5th January 2013.
- Presented a poster in the Two days Seminar on “**Modern Techniques in Chemistry**”, organized by **PG and Research Department of Chemistry, Jamal Mohamed College (Autonomous)** on 5th and 6th March 2008.

Participation:-

- Participated in a **UGC sponsored State level Seminar on “Emerging Trends in Chemistry”** organized by S. Vellaichamy Nadar College, Nagamalai, Madurai – 625019 on 18th and 19th September 2008.
- Participated in a “**National conference on recent trends in chemistry**” (NCRTC -2007) sponsored by DST- FIST in Bishop Heber College (Autonomous) Chemistry at P.G. & Research Department of Chemistry Bishop Heber College, Trichy.

WORKSHOPS:

- Participated in a Five days Online Workshop on “**How to Write a thesis**” from 11.05.2023 to 15.05.2023 organized by Gomsguru Academy, Bangalore-560 064.
- Participated in the One-week Virtual International workshop on “**RECENT TRENDS IN CHEMISTRY**” (RTC-2022) organized by the Department of Chemistry, Sathyabama Institute of Science and Technology from 01st - 06th August 2022.
- Participated in the online Workshop on “**Personality Development – Unlearn to Learn the Skill**” organized by the PG & Research Department of Commerce, National College (Autonomous), Trichy, on 19th May 2020.
- Participated in the “**One day Workshop on Analytical Techniques**” organized by Department of Chemistry and National College Instrumentation Facility (NCIF) at National College, Trichy on 27.07.2018.
- Participated in the “**One day Workshop on XRD Techniques**” organized by Department of Chemistry and National College Instrumentation Facility (NCIF) at National College, Trichy on 16.12.2017.
- Participated in the “**One Day Workshop on Analytical Techniques**” organized by Department of Chemistry and National College Instrumentation Facility (NCIF) at National College, Trichy on 18.8.2017.

FACULTY DEVELOPMENT PROGRAMME:

- Attended the Five Days National Level FDP on “**Recent Innovations in Technical Research & Teaching**” conducted from 01.08.2023 to 05.08.2023 organized by Department of Computer Science, Bon Secours Arts & Science College for Women, Dindigul.
- Participated in a Five-Day Faculty Development Programme organized by Internal Quality Assurance Cell of Jamal Mohamed College from 05.06.2023 to 09.06.2023.
- Participated in a Five Days online FDP on “**Exploring Research using SEM & XRD**” jointly organized by Department of Mechanical Engineering, CARE College of Engineering, Trichy and Department of Materials and Metallurgical Engineering, IITE, Indus University, Ahmedabad, Gujarat on 19-12-2022 to 23-12-2022.

- Participated in an Online FDP organized by Department of Chemistry, D.K.M. College for Women, Vellore, Tamil Nadu from 04.05.2020 to 10.05.2020.

REFRESHER COURSE:

Participated in a 15 days online “Refresher Course on Selective Topics in Organic Chemistry Phase – IV” organized by Department of Chemistry, Sathyabama Institute of Science and Technology, Chennai – 600119 on 2nd August, 2023 to 19th August, 2023.

PROJECT WORK:

- Ph.D: Provisionally registered PhD under the research supervisor and guide, **Dr. M. Yosuva Suvaikin**, Assistant professor, H.H. The Rajah’s College, Pudukkottai, by November 2018.
- The M.Phil project is done in the “CECRI”, Central ElectroChemical Research Institute, Karaikudi on the topic “**Design, Fabrication and performance evaluation aspects of amperometric methanol sensor using Membrane Electrode Assembly**”, under the guidance of Scientist Dr.V.V.Giridhar, during Dec.2008 – Jul 2009.
- Did the M.Sc project work entitled “**Synthesis, Characterization and Evaluation of anti-microbial activity on Cobalt (II) and Mercury (II) complexes of n-morpholinomethylphthalimide**”.

WEBINAR:

- Participated in a one day online webinar on “**Fine - Tuning research Skills for Effective Writing (Thesis, Article & Proposal)**”, organized by PG & Research Department of Commerce of Vivekanandha College of Arts and Science for Women, held on 3 May 2020.
- Participated in the Webinar on “**Free Statistical Tool for Research Data Analysis and research Publication with Special Reference to Citation, Impact Factor and H Index**”, on 01 and 02 June 2020, organized by Jayaraj Annapackiam College for Women (Autonomous), Periyakulam.
- Participated in the Webinar on “**Assembled Advanced Organic Materials**” held on 03.06.2020, organized by PG & Research Department of Chemistry, National College, Trichy.
- Participated in Virtual Scientific Event “**Webinar on Frontiers in Chemical Sciences**” from 06th -10th July 2020, organized by Department of Chemistry, National Institute of Technology, Rourkela, Odisha – 769008.

EXTRA CURRICULAR ACTIVITY:

- Secured Corporal rank in NCC “A” examination
 - Participated in the annual training camp for Tamilnadu, Pondicherry and Andamans in Vallam.
 - Participated in the combined annual training camp for Tamilnadu, Pondicherry and Andamans in Chennai.
- Interested in handworks like doll making, jewellery making, pot painting etc.,

CO CURRICULAR ACTIVITY:

- A certificate course in Human Resource and Development
- Served as student association secretary in Seethalakshmi Ramaswamy College.
- Acted as ECO CARE club in-charge in CARE College of Engineering, Trichy
- Handled NEET coaching classes.

TECHNICAL SKILLS:

- Basic diploma in computer application.
- C, C++, JAVA, MS-DOS, MS-OFFICE and HTML
- Proficient in working with software applications like Chemdraw, Chems sketch, Origin, GraphPad – Prism and Endnote.

PERSONAL SKILLS:

- Leadership qualities
- Sharp in planning and management of time
- Sincere and dedicated to work.

DECLARATION:

I hereby declare that the above information is true to the best of my knowledge and belief.

G.BANU KARTHI