

CURRICULUM VITAE

Name : Dr.M.K.MURALI.
Designation : Head, Department of Physics
Qualification : M.Sc., M.Phil., P.G.D.C.A., B.Ed.,
M.S (IT), Ph.D.,
Date of Birth : 12.09.1965
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Teaching Experience : 25 Years



S.No	Name of the Institution	Period of Service
1.	J.J. College of Arts and Science (Autonomous)	21.08.1995 to Till Date

Publications

Research papers : 17
Citations / h – index / i 10 - index : 51 / 3 / 3
Cumulative Impact Factor : 1.9
Book (s) Published : 2
Book Chapter : Nil

- **M.K.Murali.,**V. Balachandran.,2012. FT-IR, FT-Raman, DFT structure, vibrational frequency analysis and Mulliken charges of 2-chlorophenylisothiocyanate, *Indian Journal of Pure & Applied Physics* 50 (2012) 19- 25, 201.
- **M.K.Murali.,** V. Balachandran.,M.Murgan2012. FT-IR and FT-Raman Spectra, HOMO-LUMO and NBO Analysis of 2-Bromo-4-Nitrotoluene: an Ab Initio and DFT Approach, *Journal of Basic and Applied Physics*, 3 (2012) 79-88.
- M,Karan.,V. Balachandran.,M.Murugan.,**M.K.Murali.,**2013. Vibrational (FT-IR and FT-Raman) spectra, NBO, HOMO–LUMO, Molecular electrostatic potential surface and computational analysis of 4-(trifluoromethyl) benzylbromide, *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, 116 (2013) 84-95.
- M.Karan., V. Balachandran.,M.Murugan.,**M.K.Murali.,**2014. Quantum chemical vibrational study, molecular property,FTIR, FT-Raman spectra, NBO, HOMO–LUMO

- energies and thermodynamic properties of-methyl-2-phenyl benzimidazole, *Spectrochimica Acta PartA Molecular and Biomolecular Spectroscopy*, 130 (2014) 143-151.
- **M.K.Murali.,** V. Balachandran.,2015. Vibrational analysis HOMO–LUMO, NBO and first order hyperpolarizability of N-butyl thalamide, *Asian journal of physics*, (2015).
 - M.Murugan.,**M.K.Murali.,**M.Karan., V. Balachandran.,2015. Molecular Structural and spectroscopic analysis of 2, 6 dichlorophenyl isocyanate: F-IR, FT-Raman, NMR, NBO, HOMO-LUMO and DFT Studies, *Vibrational Spectroscopy, Elixir Vib. Spec.* 88 (2015) 36441-36450.
 - M.Murgan.,**M.K.Murali.,**M.Karan., V. Balachandran.,2016. Scaled Quantum Chemical Calculations and FTIR, FT-Raman Spectra,NBO, Thermodynamic behaviour, HOMO-LUMO and Electronic Structure Calculations on 4-(Dimethylamine) Benzophenone, *Vibrational Spectroscopy, Elixir Vib. Spec.* 91 (2016) 38114-38124
 - M.Murugan.,**M.K.Murali.,**M.Karan., V. Balachandran.,2016. Scaled Quantum Chemical Calculations and FTIR, FT-Raman Spectra, Thermodynamic behaviour, HOMO-LUMO and Electrostatic Potential Surface Analyses on N,N-Dimethyl-M-Anisidine, *Elixir Vib. Spec.* 95 (2016) 40950-40960.
 - M.Murugan.,**M.K.Murali.,**M.Karan.,V. Balachandran.,2016.Vibrational Spectral Studies, HOMO-LUMO, Thermodynamic Properties and Electrostatic Potential Surface Analysis of 3-Amino-4-Methyl Benzoic Acid Based on Density Functional Theory, *Elixir Vib. Spec.* 95 (2016), 40870-40880.
 - **M.K.Murali.,** P.K. Abhilash., 2018. Green Synthesis of Silver Nano particles (AG - NPS) for photocatalytic Anti bacterial performance under UV and visible light irradiation. *Research Direction*, Vol. 6 issue 6 (Dec 2018).
 - **M.K.Murali.,** P.K. Abhilash., 2018. Green Synthesis of Silver Nano particles using Seaweed extracts of SW and their bacterial activity against Pathogenic Bacteria. *Review of Research*, Vol. 6 issue 1 (Oct 2018).
 - **M.K.Murali.,** R.Vishnupriya., 2019. Nano Sctrual, Opto-electronic and surface enhancement characterization of Sn doped Ag₂O thin film. *International Journal of Basic and applied research*.Vol. 9 issue 2 (Feb 2019).
 - **M.K.Murali.,** R.Vishnupriya., 2019. Nano Ag₂O Thin film; Fabrication, characterization and photo voltaic interpretation using spectroscopic tool. *International Journal of Basic and applied research*. Vol. 9 issue 3 (March 2019).

- **M.K.Murali.,** S.Lavanya., 2019. Preparation and characterization of In₂O₃ Nano material by Jet Net bulizer method. International Journal of Basic and applied research. Vol. 9 issue 4 (April 2019).
- **M.K.Murali.,** S.Lavanya., 2019. Analaysis on Photo-sensive and photo catalytic properties of Sn doped In₂O₃ Nano composite using Sol-Gel combustion method. International Journal of Basic and applied research. Vol. 4 issue 4 (April 2019).

Paper Presentation in Conference/Seminar/Workshop

S.No.	Presented/ Participated	Date & Place	Topic
1	Participated	15.03.2012- 17.03.2012, National College (A), Tiruchirappalli.	National Seminar on Recent Trends in Crystal Growth and Nanomaterials (NSCGNM-2012)
2	Participated	28.08.2012, Shrimati Indira Gandhi College, Tiruchirappalli.	National Level Seminar on Material Research
3	Presented	23.01.2013& 24.01.2013, Cauvery College for Women, Tiruchirappalli.	National Seminar on Current Trends in Material Science and Nanostructured Materials
4	Presented	08.07.2014& 12.07.2014, Mar Ivanios College & The Kerela State Higher Education Council, Trivandrum.	5 th International Conference on Perspectives in Vibrational Spectroscopy (ICOPVS 2014)
5	Participated	08.12.2016& 09.12.2016, St.Joseph College of Arts & Science (A), Cuddalore.	International Conference on Nanomaterials and Molecular Research (ICNMR – 2016)
6	Participated	2 nd and 3 rd September, 2016, PG and Research department of Microbiology, Biotechnology and Biochemistry, J.J. College of Arts and Science(A), Pudukkottai, Tamilnadu	New frontiers and innovative trends in biosciences
7	Participated	8 th & 9 th March, 2018, PG and Research Department of Physics and Chemistry, J.J. College of Arts and Science(A), Pudukkottai, Tamilnadu – 622 422.	ATwo Days National Conference on New Vistas in Materials Science (NCNVMS-2018) held at 8 th & 9 th March, 2018

Research Guidance

1	Ph.D.	Guiding : 06	Completed : 1
2	M.Phil.	Guiding : 01	Completed :25

Awards and Achievements

1. **Teacher Senator - Bharathidasan University, Tiruchirappalli** from April 2015 to April 2018
2. **BOS Member in Physics - Srimad Andavan Arts and Science College, Trichy** from April 2016 to March 2018.
3. **SERB Member** – From 2015 onwards
4. **Reviewer of *Spectrochimica Acta Part A***–From 2014 onwards