Faculty Profile



Dr. S. SURESH, M.Sc., M.Phil., B.Ed., Ph.D. Associate Professor

HIGHLIGHTS:

- Number of Journal Publications: 40
- h-Index:14
- i10 index- 21
- Project Funding Received: 1
- Patents Published: 3
- Patents Granted: Nil

PROFESSIONAL LINKS:

- Scopus ID: 57870757200
- Scopus Link: <u>https://www.scopus.com/authid/detail.uri?authorId=35790365200</u>
- Google Scholar
 ID: <u>https://scholar.google.co.in/citations?user=6cmukIQAAAAJ&hl=en</u>
- Anna University Faculty ID: 2122370
- AICTE Faculty ID:13550183413
- Anna University Supervisor ID:
- LinkedIn: https://www.linkedin.com/in/dr-suresh-s-92385875

PROFESSIONAL BACKGROUND:

- Teaching Experience till date: 23 Years
- Industrial Experience: NA

INTERNATIONAL EXPOSURE:

• Guest Editor – Chemical Physics Impact (Elsevier)

AREA OF SPECIALIZATION:

- Vibrational Spectroscopy
- Materials Science
- Nano materials

Ph.Ds. GUIDING:

- Full Time Scholars: 1
- Part Time Scholars: 1

S.No	Name	Register No	Area	FT/PT
1.	Ebenezer	25147991145	Crystal Growth	PT
2.	Lincy G	25247991210	Energy Storage	FT

SPONSORED RESEARCH / FUNDING APPLIED / CONSULTANCY:

• TNSCST funded project Applied, (Mar 2020) "Exhaust Pollutants gas Control in light and heavy vehicles by using nanofluids as a coolant for free pollution environment" **Co-Principal Investigator- 5 lakhs**

PATENTS PUBLISHED/GRANTED: 3

ACHIEVEMENTS AND AWARDS:

- Best Faculty Award and Best Researcher Award (2024), received from Saveetha Engineering College, Chennai.
- Best Faculty Award and Best Researcher Award (2020), received from Saveetha Engineering College, Chennai.
- Best Faculty Award and Best Researcher Award (2019), received from Saveetha Engineering College, Chennai.
- Founder Chancellor Research Excellence Award (2015) received in Dr. MGR Educational and Research Institute University, Chennai.
- Sir C.V. Raman Research Award (2014) received in Dr. MGR Educational and Research Institute University, Chennai.

LIST OF INSTRUMENT HANDLING

- FT-IR Spectrophotometer JASCO (FT/IR-410)
- FT-Raman Spectrophotometer
- Spectrofluorometer HITACHI, U-3310
- UV-Visible Spectrometer

SPECIAL SESSIONS DELIVERED:

- For the FDP at AMET University on November 11th, 2024, an invited speaker sharing insights on cutting-edge developments in spectroscopy and materials science at AMET University, Chennai, on November 11, 2024.
- Invited as a Speaker for presenting a seminar on the topic "Evolution of Nuclear physics, Spectroscopy and its Biomedical Applications" Prince shri Venkateswara Padmavathy Engineering college, Ponmar, Chennai, Tamil Nadu, India, Feb 3, 2023.
- Invited as a Session Chairman in the International Conference on Materials Research (IVCMR-22) at Eswari Engineering College, (SRM), Ramapuram, Chennai on 15th September 2022
- Invited as a Jury member in the International Conference at Kings Engineering College, Chennai.
- Invited as a Speaker on "Spectroscopy and its Applications" which takes place at VELS University, Chennai, Tamil Nadu, India, Feb 26, 2022.

- Invited as a Speaker on "Role on Physics in Engineering Domain" which takes place at Dr. MGR Educational and Research Institute University, Chennai, Tamil Nadu, India, Sep 12, 2021.
- Invited as a Speaker on "Role on Physics in Engineering Domain" takes place at Vivekananda college of Engineering, Chennai, Tamil Nadu, India, June 25, 2021.

CONFERENCES/SEMINARS/WORKSHOPS ATTENDED:

International Conference: 15

National Conference: 25

Seminars: 12

Workshops: 10

PROFESSIONAL MEMBERSHIPS:

- ISPA Membership Indian Spectro Physics Association (Life Member)
- IACG Membership Indian Association for Crystal Growth (Life Member)

REVIEWER OF JOURNALS

- Journal of Spectrochimica Acta Part A: Molecular and Biomolecular spectroscopy
- Journal of Molecular Structure (Elsevier)
- Journal of Molecular Structure (Elsevier)
- Journal of Chemical Physics Impact- Guest Editor (Elsevier)
- Journal of Applied Physics A (Springer)
- Journal of Material Science (Springer)
- Journal of Materials Science: Materials in Electronics (Springer)
- Journal of Material Research Innovation (Springer)
- Asian Journal of Physical Science
- Materials Today proceedings Reviewer Board member (Elsevier)
- Brazilian Journal of Physics (Springer)
- Journal of Molecular Modelling (Elsevier)

PUBLICATIONS

- Lakshmishri, S., T. Jayavarthanan, S. Suresh, S. Periandy, Muthumareeswaran Muthuramamoorthy, Abdullah N. Alodhayb, and Saravanan Pandiaraj. "Molecular interaction, Drug suitability and Protein-Ligand Interaction on 4-chloro-4'methylbutyrophenone by spectroscopic and DFT approaches." *Journal of Molecular Structure* 1329 (2025): 141318.
- Venkitachalapathy, K., I. Manivannan, S. Periandy, S. Suresh, and M. Priya. "Nano Boron Carbide Reinforcement in Al6061 Metal Matrix Composite." *Recent Innovations in Sciences and Humanities* (2025): 13.
- Kumaran, M., T. Sivaranjani, S. Suresh, S. Periandy, S. Soundhariya, Khuloud A. Alibrahim, and Abdullah N. Alodhayb. "Investigation of the molecular structure of CHBP, biological activities and SARS-CoV-2 protein binding interaction by molecular and biomolecular spectroscopy approaches." *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy* 322 (2024): 124853.

- Dhanjayan, R., S. Suresh, and S. Srinivasan. "Growth, structural, spectroscopic and thermal analyses of novel organic brucinum-3, 5–dihydroxybenzoate dihydrate single crystals for NLO applications." *Polycyclic Aromatic Compounds* 44, no. 8 (2024): 5247-5260.
- Ishwariya, M., T. Sivaranjani, S. Suresh, S. Periandy, and S. Soundhariya. "Spectroscopic (FT-IR, FT-Raman, NMR and UV–vis), quantum calculation, molecular structure, solvent interaction, ADME and molecular docking investigation on 4-oxo-4h-1-benzopyran-2-carboxylic acid." *Journal of Molecular Structure* 1302 (2024): 137452.
- Ezhilan, Saritha, P. Rajesh, S. Suresh, and D. Pradhabhan. "Green synthesis, molecular structure, spectroscopic, ADME, DFT and molecular docking studies on methyl 10-trans, 12-cis-octadecadienoate." *Journal of Molecular Structure* 1300 (2024): 137164.
- Dhanalakshmi, E., P. Rajesh, S. Suresh, M. Priyadharshini, and M. Prabhaharan. "Green synthesis, spectroscopic investigation, quantum chemical and molecular docking studies of 3-methylisoxazolo [4, 5-b] pyridine." *Journal of Molecular Structure* 1298 (2024): 136964.
- Vinodkumar, R., T. Jayavarthanan, S. Suresh, S. Periandy, and V. S. K. Venkatachalapathy. "Spectroscopic (FTIR, FT-Raman, UV-Vis) studies, NMR, NBO analysis, Molecular docking studies on 2-Cyano-5-Fluoropyridine and 3-Cyano-2-Fluoropyridine." *Chemical Physics Impact* (2023): 100378. Impact factor: 2.2 (Elsevier)
- Aiswarya, P., T. Jayavarthanan, S. Periandy, S. Suresh, and S. Soundhariya. "Molecular Structural Analysis, Conformers and Spectral (FT-IR, FT-Raman, NMR and UV-Visible), Importance of solvent role in molecular, ADME and Molecular docking investigation on alpha-cyano-4-hydroxycinnamic acid." Chemical Physics Impact (2023): 100353. Impact factor: 2.2 (Elsevier)
- Shabna, S., J. Eugin Shaji, S. Dhas, S. Suresh, Arun Aravind, Susmi Anna Thomas, V. Sherlin Vinita, J. Samuel, and C. S. Biju. "Photocatalytic Degradation of Crystal Violet Using SnO2/ZnO Nanocomposite Synthesized by Facile Sol-Gel Method." Journal of Cluster Science (2023): 1-10. Impact factor: 4.2 (Taylor & Francies)
- R Dhanjayan, S Suresh, S Srinivasan, Growth, Structural, Spectroscopic and Thermal Analyses of Novel Organic Brucinum-3, 5–Dihydroxybenzoate Dihydrate Single Crystals for NLO Applications, Polycyclic Aromatic Compounds, Taylor & Francis Impact factor: 3 (Taylor & Francies)
- G. Viju, T. L. Annusha, S. Sahaya Jude Dhas, Anthoniammal Panneerselvam, S. Suresh, A. S. Jebamalar, N. S. Nirmala Jothi & A. Jeya Rajendran, "Crystal growth, optical, thermal and dielectric properties investigation on cadmium chloride doped L-alanine P-linear optical applications" *Opt Quant Electron 55, 836 (2023).* Impact factor: 3.43 (Springer)
- N Mani, S.Suresh, M Govindammal, S Kannan, E Isac Paulraj, D Nickson sebastin, M Prasath," Spectroscopic (FT-IR, FT-Raman, NMR and UV-Visible), ADMET and Molecular docking investigation of Aztreonam as Anti-Tuberculosis agent, *Chemical Physics Impact, Volume 6, June 2023, 100254*. Impact factor: 2.232 (Elsevier)

- J. Samuel, S. Suresh, S. Shabna, V. SherlinVinita, N. Joslin Ananth, P.M. Shajin Shinu, A. Mariappan, Turibius simon, Y. Samson, C.S. Biju, 2023 "Characterization and antibacterial activity of Ti doped ZnO nanorods prepared by Hydrazine assisted wet chemical route" Journal of *Physica E: Low-dimensional Systems and Nanostructures*, 143, 115374. Impact factor: 4.38 (Elsevier)
- T Sivaranajani, T Jayavarthanan, S Suresh, CS Biju, A Jayanthi, L Sangeetha, C Saveetha, A Alfind Paul Frit, M Muruganandam, 2023 "Vibrational spectra and quantum chemical investigations on nicotinium nitrate monohydrate single crystal for antibacterial studies, *Chemical Physics Impact*, Volume 6, June 2023, 100200. . Impact factor: 2.232 (Elsevier)
- K Jayamoorthy, NR Rajagopalan, SM Prakash, B Subash, G Murugan, KI Dhanalakshmi, S Suresh, R Sasikala, K Saravanan, M Venkatesh Perumal, 2023, "Catalytic synthesis and characterization of aryl benzimidazole and its interaction with TiO2 nanoparticles: ESIPT process" Chemical Physics Impact, *Volume 6, June 2023, 100184.* . Impact factor: 2.232 (Elsevier)
- John Samuel, Joseph Eugin shaji, Sathiya Dhas Sahaya Jude Dhas, Savarimuthu Suresh, Varghese Sherlin vinita, Chellaswamy Saraswathy Biju, 2023 "UV-blocking performance and antibacterial activity of Cd, Ba co-doped ZnO nanomaterials prepared by a facile wet chemical method" Surface and Interface Analysis 55 (4), 307-320 Impact factor: 2.824 (Wiley)
- S. Srinivasan, S. Suresh, S. Gunasekaran, 2023"Device Performance Analysis of Tin based Perovskite Solar Cell with efficiency more than 25%" *Journal of Materials Letters:* X Impact factor: 2.56 (Elsevier)
- Samuel, J., S. Suresh, S. Shabna, V. Sherlin Vinita, N. Joslin Ananth, PM Shajin Shinu, A. Mariappan, Y. Samson, and C. S. Biju. "Characterization and antibacterial activity of Ti doped ZnO nanorods prepared by hydrazine assisted wet chemical route." Physica E: Low-dimensional Systems and Nanostructures 143 (2022): 115374.
- J. Thomas, A. Alfind Paul Frit, S. Suresh, S. Gunasekaran, E. Sailatha, 2021 "Structural, Optical, Electrical and Topology Studies on PbO nano Structured Thin film Deposited by Thermal evaporation Technique" *Journal of Materials Science* Impact factor: 2.86 (Springer)
- R. Dhanajayan, S. Suresh, S. Srinivasan, S. Sahaya Jude Dhas, 2021 "Crystal growth and Investigation on Photonic application of organic NLO single crystal: LHPNP" *Journal of Polycyclic Aromatic compounds*. Impact factor: 2.824 (Taylor & Francis)
- N. Joslin Ananth, R. Gowri Shankar Rao, V. Sherlin Vinita, J. Samuel, S. Shabna, P.M. Shajin Shinu, S. Suresh, Y. Samson, C.S. Biju 2021 "Structural, Raman and Optical investigations of TiO2 nanoparticles prepared using hexamethylenetetramine" *Journal of Phosphorus, Sulfur, and Silicon and the Related Elements*. Impact factor: 2.824 (Taylor & Francis)
- V. Sherlin Vinita, R. Gowri Shankar Rao, J. Samuel, S. Shabna, N. Joslin Ananth, P.M. Shajin Shinu, S. Suresh, Y. Samson, C.S. Biju 2021 "Structural and Raman investigation of barium titanate nanoparticles" *Journal of Phosphorus, Sulfur, and Silicon and the Related Elements.* Impact factor: 2.824 (Taylor & Francis)

- E. Priyadharshini, S. Suresh, Srinivasan S, A. Manikandan, 2020 'investigation on electrochemical performance of SnO2-Carbon Nano composite as better anode material for lithium-ion battery' *Journal of Materials Science: Materials in Electronics* Vol.29. pp. 18449-18457. Impact factor: 2.324 (Springer)
- R. Arulraj, S. Sivakumar, S. Suresh, K. Anitha, 2020 'Synthesis, Vibrational Spectra, DFT calculations, Hirshfeld surface analysis and molecular docking study of 3-chloro-3methyl-2-6-diphenylpiperidin-4-one' *Spectrochimica Acta Part A: Molecular and Biomolecular spectroscopy*, vol. 232, pp. 118166. Impact factor: 3.232 (Elsevier)
- Sahaya Jude Dhas S, Suresh S, Britto Dhass A.S, Rita A, Gaurishankar Rao, Biju C.S, 2020, 'Role of Annealing on the ultra violet emission and X-ray induced thermolumescence in europium doped BaSo4 micro gravels prepared by acid –assisted co-precipitation route' *Journal of Materials Science: Materials in Electronics* Vol.29. pp. 18449-18457. Impact factor: 2.324 (Springer)
- M. Manju, S. Suresh, P.A. Vivekanand, S. Gunasekaran, S. Srinivasan, C.S. Biju, 2020 "Vibrational spectroscopic investigation and antibacterial activity studies on Trichloroisocyanuric acid," *Journal of Materials today: proceedings Materials today: proceedings* DOI: 10.1016/j.matpr.2020.07.018 Impact factor : 1.880 (Elsevier)
- Priyadharshini E, Suresh S, Srinivasan S," 2020 Structural, optical, thermal and electrochemical studies of SnO2 by the influence of carbon derived from filter paper as carbon precursor" *Journal of Materials today: proceedings* DOI: 10.1016/j.matpr.2020.07.015 Impact factor : 1.880 (Elsevier)
- V. Janakiraman, V. Tamilnayagam, R.S. Sundarajan, S. Suresh, C.S. Biju 2020 "Structural and Optical properties of Pure SnO2 and V2O5/SnO2 nanocomposite thin films for gas *Journal of Materials Science: Materials in Electronics*. Impact factor: 2.324 (Springer)
- V. Janakiraman, V. Tamilnayagam, R.S. Sundarajan, S. Suresh, C.S. Biju 2020 "Structural, Optical properties and Morphological Properties of Ta2O5/SnO2 nanocomposite thin films prepared by Spray Pyrolysis method. *Journal of Materials Science: Materials in Electronics*. Impact factor: 2.324 (Springer)
- E. Priyadharshini, S. Suresh, S. Srinivasan, A. Manikandan, 2019 'Structural, Optical, thermal and electrochemical analysis of annealed SnO2-C nanocomposite' *Journal of Physica B: Physics of Condensed Matter*, 1 Aug, Vol 566. Pp 17-26. Impact factor: 1.850 (Elsevier)
- Priyadharshini E, S. Suresh, S. Srinivasan, A. Manikandan, 2019 'Investigation on electrochemical performance of SnO2-Carbon Nano composite as better anode material for lithiumion battery.' *Journal of Physica B: Physics of Condensed Matter*, Impact factor: 1.850 (Elsevier)
- S. Bomila, S. Suresh, S. Srinivasan, 2018 'Synthesis, characterization and comparative studies of dual doped ZnO nanoparticles for photocatalytic applications *Journal of Materials Science: Materials in Electronics* Vol.29. pp. 1-11. Impact factor: 2.324 (Springer)

- N. Saravanan, S. Santhanakrishnan, S. Suresh, S. Sahaya Jude Dhas, P. Jayaprakash, Chithambaram V, 2018' Crystal growth and investigation of novel semi organic single crystal: 1-malic acid sodium nitrate for photonic applications' *Journal of Materials Science: Materials in Electronics* Vol.29.pp. 18449-18457. Impact factor: 2.324 (Springer)
- C.S. Biju, S. Suresh, S. Sahaya Jude Dhas, Gaurishankar Rao, 2018, 'Effect of lattice strain on the polychromatic emission in ZnO nanostructures for white light emitting diode application' *Journal of Superlattices and Microstructures*. Vol. 120, PP. 363-369. Impact factor: 2.099 (Elsevier)
- S. Suresh, S. Gunasekaran, S. Srinivasan, 2016, 'Quantum Chemical calculations and molecular docking studies of some NSAID drugs (Aceclofenac, Salicylic acid and Piroxicam) as 1PGE inhibitors. *International Journal of Spectroscopy* vol 7. Impact factor: 2.850 (Hindawi)
- S. Suresh, S. Gunasekaran, S. Srinivasan, 2015, 'Vibrational Spectra (FT-IR, FT-Raman), Frontier molecular orbital, First hyperpolarizability, NBO analysis and thermodynamics properties of Piroxicam by HF and DFT methods.' *Spectrochimica Acta Part A: Molecular and Biomolecular spectroscopy*, vol. 138, pp. 447-459. Impact factor: 4.325 (Elsevier)
- S. Suresh, S. Gunasekaran, S. Srinivasan, 2014, 'Studies of the molecular geometry, vibrational spectra, Frontier molecular orbital, nonlinear optical and thermodynamics properties of Aceclofenac by quantum chemical calculations', *Spectrochimica Acta Part A: Molecular and Biomolecular spectroscopy*, vol. 125, pp. 239-251. Impact factor: 4.325 (Elsevier)
- S. Suresh, S. Gunasekaran, S. Srinivasan, 2014, 'Spectroscopic (FT-IR, FT-Raman, NMR and UV–Visible) and quantum chemical studies of molecular geometry, Frontier molecular orbital, NLO, NBO and thermodynamic properties of salicylic acid', *Spectrochimica Acta Part A: Molecular and Biomolecular spectroscopy*, vol. 132, pp. 130-141. Impact factor: 4.325 (Elsevier)

CONFERENCES

- Vibrational spectroscopic investigation and Antibacterial activity studies on Trichloroisocyanuric acid. M. Manju, S. Suresh, P. A. Vivekanand, S. Gunasekaran, S. Srinivasan "conference on chemistry and materials" 11-12, Dec 2018; Saveetha Engineering College, Chennai.
- Structural, optical, thermal and electrochemical studies of SnO2 by the influence of Carbon derived from filter paper as carbon precursor. Priyadharshini E, Suresh S, Srinivasan S, "conference on chemistry and materials" 11-12, Dec 2018; Saveetha Engineering College, Chennai.
- Spectroscopic (FTIR, FT-Raman and UV-Vis) investigation, Quantum chemical calculation and Antibacterial activity studies on 1, 3, 5 Trichloro 1, 3, 5-Triazine -2, 4, 6-Trione. Manju. M, Suresh. S, Gunasekaran. S, Srinivasan *"International conference on materials and spectroscopy" 11-12, Dec 2018;* Saveetha Engineering College, Chennai.
- Density functional theory and molecular docking studies of some NSAID drugs as 1PGE inhibitors. Suresh. S, Gunasekaran. S, Srinivasan. S "*International conference on recent advances in applied sciences*" 11-13, Feb 2016; St. Peter's University, Chennai.

- Vibrational spectroscopic analysis and DFT studies of NSAID drug; Mefenamic acid. Suresh. S, Gunasekaran. S, Srinivasan. S *"National conference on Recent Advances in Applied Sciences"; 5-6, Feb 2015;* C.T.T.E College for Women, Perambur, Chennai.
- FTIR, FTR and UV- Visible spectra and molecular computation on lornoxicam, nonsteroidal anti- inflammatory drugs. Suresh. S, Gunasekaran. S, Srinivasan. S "National Seminar on "Recent Advances on Luminescent Materials" (RALM-2015), 23-24, Jan 2015. Annamalai University, Annamalai nagar, Chidambaram.
- Vibrational Spectroscopic Analysis of Non- Steroidal Anti- inflammatory drug Lornoxicam. Suresh. S, Gunasekaran. S, Srinivasan. S "National Conference on Advanced Materials" 18-19, July 2014; Sri Vidya mandir Arts and Science College, Uthangarai, Krisnagiri.
- The Spectroscopic (FT-IR, FT-Raman), Molecular geometry, Frontier molecular orbital, NBO analysis, NLO and thermodynamics properties of Piroxicam by Quantum chemical calculations. Suresh. S, Gunasekaran. S, Srinivasan. S *"5th International Conference on*
- *Perspective in Vibrational Spectroscopy*" 8-12 July 2014; Mar Ivanious College & Kerala State Higher Educational Council, Trivandrum, Kerala.
- Studies of the Molecular geometry, Vibrational spectra, Frontier molecular orbital, nonlinear optical and thermodynamics properties of Salicylic acid by Quantum Chemical Calculations. Suresh. S, Gunasekaran. S, Srinivasan. S "National Conference in Advanced materials and its Applications" 4-5, April 2014; Annamalai University, Annamalai nagar, Chidambaram.
- Structural, vibrational and quantum chemical investigations on piroxicam. Suresh. S, Gunasekaran. S, Srinivasan. S "National seminar on Recent Advances in Physics" 7-8 March 2014; Presidency College, Chennai.
- Quantum Chemical studies on Non-steroidal anti-inflammatory drug; aceclofenac Suresh. S, Gunasekaran. S, Srinivasan. S "National Conference on perspective in Laser and Spectroscopy" 15th Feb 2013; Dr. MGR University, Chennai.
- Vibrational spectra and quantum chemical computation of Non-Steroidal Antiinflammatory Drug: Aceclofeac. Suresh. S, Gunasekaran. S, Srinivasan. S "International conference on Recent Advances in Physics" 12-13, August 2013; Sri Vidya mandir Arts and Science College, Uthangarai, Krisnagiri.
- FTIR, FTR spectra and Quantum chemical computation on Aceclofenac, Non-steroidal Anti- inflammatory drug. Suresh. S, Gunasekaran. S, Srinivasan. S "*National conference on Recent Advances in Physics*"; 20-21 July 2012; Sri Vidya mandir Arts and Science College, Uthangarai, Krisnagiri.
- Quantum chemical computation and spectral analysis on ibuprofen. Suresh. S, Gunasekaran. S, Srinivasan. S "*National Conference on Spectro Physics*"; 7-8, March 2012; WCC & Pachaiyappa's college, Chennai.
- FTIR, FTR and UV- Visible spectra and molecular computation on ibuprofen and nimesulide, non-steroidal anti- inflammatory drugs. Suresh. S, Gunasekaran. S,

Srinivasan. S "National conference on Recent Advances in Applied Sciences"; 10-11, Feb 2012; Dr.MGR University, Chennai.

- Structural, Optical, Electrical and Topology Studies on PbO nano Structured Thin film Deposited by Thermal evaporation Technique J. Thomas, A. Alfind Paul Frit, S. Suresh, S. Gunasekaran, E. Sailatha. *National conference on Functional Materials*"; 20-22, Jun 2021; Saveetha Engineering college, Chennai & Crystal growth and Investigation on Photonic application of organic NLO single crystal: LHPNP" R. Dhanajayan, S. Suresh, S. Srinivasan, S. Sahaya Jude Dhas *National conference on Functional Materials*"; 10-15, Jun 2021; SSN Engineering college, Chennai.
- "Structural, Raman and Optical investigations of TiO2 nanoparticles prepared using hexamethylenetetramine N. Joslin Ananth, R. Gowri Shankar Rao, V. Sherlin Vinita, J. Samuel, S. Shabna, P.M. Shajin Shinu, S. Suresh, Y. Samson, C.S. Biju, *National*
- Conference on Functional Materials"; 20-22, Jun 2021; Saveetha Engineering college, Chennai & Structural and raman investigation of barium titanate nanoparticles V. Sherlin Vinita, R. Gowri Shankar Rao, J. Samuel, S. Shabna, N. Joslin Ananth, P.M. Shajin Shinu, S. Suresh, Y. Samson, C.S. Biju, National conference on Functional Materials"; 20-22, Jun 2021; Saveetha Engineering college, Chennai.