Curriculum Vitae

Dr. I. VETHA POTHEHER M.Sc., Ph.D.,
Assistant Professor
Department of Physics
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- **Research Area: Synthesis of metal and metal oxide nano materials for supercapacitor, electrical, photocatalytic and biological applications**
- **Educational Qualifications:**

Examination Passed	Name of Institution	Name of University	Year of Passing	% of Marks
Ph.D., (Physics)	Loyola College, Chennai.	University of Madras	February 2009	By thesis
M.Sc., (Physics)	V.H.N.S.N. College, Virudhunagar	Madurai Kamaraj	June 2004	73.50
B.Sc., (Physics)	St. Joseph's College, Trichy.	Bharathidasan	April 2002	64.09

- **Ph. D., Thesis:**

"A Study on the growth and physicochemical properties of metallo organic NLO complex crystals of ATMB, CMTWMP, CMTG and MMTG"

- **Experience (Teaching)**

Institution	Designation	From	To	Experience
Noorul Islam University	Lecturer	01-07-2009	25-09-2009	3 months
Anna University Trichy	Assistant Professor	30-09-2009	Till date	15 Years

- **Administrative Experience:**
  - Serving as **Library Coordinator** at University College of Engineering BIT Campus
  - Served as **Exam Cell Coordinator** at University College of Engineering BIT Campus

- Served as **Additional First Year Coordinator** at University College of Engineering BIT Campus
- Served as **Coordinator (Placement),** Indian Institute of Information Technology (IIIT) Srirangam.
- Served as **Deputy Warden** Indian Institute of Information Technology (IIIT) Srirangam.

➢ **Accomplishments:**

1.	**Teaching experience**	**: 16 years**
2.	**Publications in International Journals**	**: 79 Nos.**
3.	**Publications in national Journals**	**: 03 Nos.**
4.	**PhD scholars guided**	**: 07 Nos.**
5.	**PhD scholars guiding**	**: 01 No**
6.	**Funded Project**	**: 01 No.**
7.	**Citation index**	**: 2215 (as on 02-05-2025)**
8.	**Book / Book Chapter published**	**: 01 / 01**
9.	**Publications in International conferences**	**: 13 Nos.**
10.	**Publications in National conferences**	**: 63 Nos.**
11.	**Conferences/FTP organized**	**: 08 Nos.**
12.	**Mentor for post doctoral fellow**	**: 01 No**
13.	**MTech (Nanoscience and Technology) Student projects**	**: 06 Nos**
14.	**Membership of Scientific and Professional Societies**	**: 03 Nos (Life member)**
15.	**Honours and Awards**	**: 03 Nos.**
16.	**Reviewer for International Publishers**	**: Elsevier, RSC, Taylor & Francis, Springer**
17.	**Editorial board member**	**: Current Chinese Science – Bentham Science - UAE**
18.	**Administrative responsibilities**	**: Coordinator – Exam cell Coordinator – Library Coordinator – Placement cell (IIIT) Deputy warden – IIIT Hostel**
19.	**PhD viva-voce subject expert**	**: Bharathidasan University, Thiruvalluvar University**
20.	**Doctoral Committee member**	**: Bharathidasan University SRM University VIT University Thiruvalluvar University**
21.	**Invited talk (FDP, resource person and conferences)**	**: 55 Nos.**

2. Publications in International Journals: 79 Nos

- **List of Publications**

International Journals: (Citation Index 2215, h-index = 26 as on 02-05-2025)

1. Broadband Laser Protection and Enhanced Nonlinear Optical Response of Samarium-Metal–Organic Framework Based White/Black Carbon Hybrids, M. Saravanan, Vinod K. Rajput, K. Suresh**,** Sri Ram G Naraharisetty, Sajan D. George**, I. Vetha Potheher**, Marek Brzeziński, and B. N. Vedha Hari, **RSC Nanoscale (2025) (Accepted and Article in Press)** (Impact Factor 5.8)
2. Highly selective turn-off fluorogenic chemosensor for the detection of toxic metal Cu2+ ion in environment: A DFT, MTT assay and docking studies, A. Steffy, R. Sujatha, J. Shakina, P. Tharmaraj, R. Mary Jenila, **I. Vetha Potheher, Journal of Molecular Structure 1333 (2025) 141725** (Impact Factor 4.0)
3. Impact on bandgap, electrical and magnetic properties of SnO_2 nanoparticles by cerium and samarium, E. Anja, **I. Vetha Potheher**, M. Meena, M. Vimalan, **Journal of Molecular Structure 1320 (2025) 139617** https://doi.org/10.1016/j.molstruc.2024.139617 (Impact Factor 4.0)
4. Noble metals functionalized reduced graphene oxide as an efficient optical limiter: a combined experimental and theoretical investigation, M. Saravanan Manikandan Kandasamy, K. Suresh, Brahmananda Chakraborty, Sajan D. George, T. C. Sabari Girisun, **I. Vetha Potheher,** V. Parthasarathy, **Carbon Letters 34 (2024)1817 – 1831.** (Impact factor 4.5)
5. Influence of Co and Ni concentration on the Structural, UV Transparency and Electrical behavior of ZnO Nanorod, N. Senthilkumar, **I. Vetha Potheher**, A. Pramothkumar, M. Meena and R. Mary Jenila, **Materials Science & Engineering B 302 (2024) 117213** https://doi.org/10.1016/j.mseb.2024.117213 (Impact factor 3.6)
6. Improved antibacterial activity and biocompatibility of porphyrin functionalized metal decorated reduced graphene oxide, M. Saravanan, B.N. Vedha Hari, Marek Brzeziński, Weronika Gonciarz, **I. Vetha Potheher** and T. C. Sabari Girisun, **Surfaces and Interfaces 46 (2024) 103932** https://doi.org/10.1016/j.surfin.2024.103932 **(**Impact factor 6.2)
7. A study on NLO, ultraviolet transparency, photoconductivity and dielectric response of organic single crystal, R. Purusothaman, M. Shankar, A. Dennis Raj, M. Vimalan, and I. Vetha Potheher, **Journal of Materials Science: Materials in Electronics 34 (2023) 2292** DOI: https://doi.org/10.1007/s10854-023-11691-1 (Impact factor 2.8)

8. Bifunctional rGO incorporated $NiSe_2$ Nanocomposite as a photocatalyst and an electrode in supercapacitor, K. Mahalakshmi, R. Mary Jenila, **I. Vetha Potheher,** V. Lakshmi, V. Thangaraj, **Journal of Alloys and Compounds 972 (2023) 172699** DOI: https://doi.org/10.1016/j.jallcom.2023.172699 (Impact factor – 6.2)
9. Studies on dielectric, thermal and electrochemical characteristics of rGO incorporated $CoSe_2$ nanocomposite for energy storage application, K. Mahalakshmi, R. Mary Jenila, E. Vivek, **I. Vetha Potheher** and V. Thangaraj, **Synthetic Metals 299 (2023) 117450**. DOI: https://doi.org/10.1016/j.synthmet.2023.117450 (Impact factor - 4.4)
10. Perovskite solar cells: investigation of structural, optical and device performance analysis on Al-Sn co-doped ZnO electron transport layer: A. Pramothkumar, N. Senthilkumar, Selvakumar Pitchaiya, Nandhakumar Eswaramoorthy, Venkatraman Madurai Ramakrishnan and **I. Vetha Potheher, Journal of Materials Science: Materials in Electronics 34 (2023) 627 – 646.** DOI: https://doi.org/10.1007/s10854-023-10000-0 (Impact factor - 2.77)
11. Optical and electrical properties of pure and doped tin oxide nanoparticles: T. Amutha, M. Ramesh babu, E. Manikanadan, S. Sasi Florence**, I. Vetha Potheher** and K. Prabha, **Particulate Science and Technology 41 (2023) 268-276.** DOI:https://doi.org/10.1080/02726351.2022.2080618 (Impact factor-2.62)
12. Enhanced UV assisted photocatalytic activity of doped and co-doped SnO_2 nanostructured material: T. Regin Das, M. Meena and **I. Vetha Potheher, Particulate Science and Technology (2022)** DOI: https://doi.org/10.1080/02726351.2022.2135148 (Impact factor-2.62)
13. Pure and Al-Bi Co-doped SnO_2 Nanoparticles as Bacterial Inhibitors: Anuja E., Pramoth kumar A., R. Brindha and **Vetha Potheher I., Toxicological & Environmental Chemistry (2022)** DOI:https://doi.org/10.1080/02772248.2022.2117361 (Impact factor-1.56)
14. A comparative analysis on electrical and nonlinear optical properties of pure and Co-Ni co-doped SnO_2 nanoparticles: A. Pramothkumar, E. Vivek, T. C. Sabari Girisun, M. Meena, **I. Vetha Potheher, Optical Materials 130 (2022) 112546** DOI:https://doi.org/10.1016/j.optmat.2022.112546 (Impact factor-3.75)
15. Green and sustainable preparation of flower like ZnO nanstructures via soft bio-template approach for the enhancement of biomedical applications, N. Senthilkumar, E. Nandhakumar, P. Priya, M. Selvakumar, **I. Vetha Potheher, Journal of Applied**

Physics A 128 (2022) 1-15. DOI:https://doi.org/10.21203/rs.3.rs-825393/v1 (Impact factor-2.28)

16. Samarium hydroxide nanorolls anchored graphitic carbon nitride nanosheets: An active electrode material for supercapacitors: E. Vivek, A. Arulraj, Mohammad Khalid, **I. Vetha Potheher**, **Journal of Alloys and Compounds 908 (2022) 164541.** DOI:https://doi.org/10.1016/j.jallcom.2022.164541 (Impact factor-6.37)
17. Novel nanostructured $Nd(OH)_3$/g-C_3N_4 nanocomposites (nanorolls anchored on nanosheets) as reliable electrode material for supercapacitors: E. Vivek, A. Arulraj, Syam G. Krishnan, Mohammad Khalid and **I. Vetha Potheher, Energy and Fuels 35 (2021) 15205-15212.** DOI:https://doi.org/10.1021/acs.energyfuels.1c02621 (Impact factor-4.65)
18. Sensitivity enhancement in rGO/Mn_3O_4 hybrid nanocomposites: A modified glassy carbon electrode for the simultaneous detection of dopamine and uric acid: G. Vinodhkumar, Sujin P. Jose, S. Logeswara reddy, C. Sekar, **I. Vetha Potheher**, A. Cyrac Peter, **Synthetic Metals 280 (2021) 116859.** DOI:https://doi.org/ 10.1016/j.synthmet.2021.116859 (Impact factor – 4.0)
19. 2-Methyl-4-Nitroaniline Derived Novel Organic NLO Crystal: Experimental and Theoretical Analysis: M. Shankar, K. Thirupugalmani, K. Nehru, S. Athimoolam, V. Tamilmani and **I. Vetha Potheher, Journal of Molecular Structure 1243 (2021) 130905.** DOI:https://doi.org/10.1016/j.molstruc.2021.130905 (Impact factor-3.84)
20. Facile synthesis of 2D $Ni(OH)_2$ anchored g-C_3N_4 as electrode material for high-performance Supercapacitor: E. Vivek, A. Arulraj, Mohammad Khalid and **I. Vetha Potheher, Inorganic Chemistry Communication 130 (2021) 108704.** DOI:https://doi.org/10.1016/j.inoche.2021.108704 (Impact factor-3.42)
21. Sunlight driven rapid and facile synthesis of silver nanoparticles using Allium Ampeloprasum extract with enhanced antioxidant and antifungal activity: V. Uma Maheshwari Nallal, K. Prabha, **I. Vetha Potheher**, Balasubramani Ravindran, Alaa Baazeem, Soon Woong Chang, Gloria Aderonke Otunola, M. Razia, **Saudi Journal of Biological Sciences 28 (2021) 3660-3668.** DOI:https://doi.org/10.1016/j.sjbs.2021.05.001(Impact factor -4.05)
22. A study on the electrical, magnetic and optical limiting behaviour of pure and Cd-Fe co-doped CuO NPs: A. Pramothkumar, N. Senthilkumar, R. Mary Jenila, M. Durairaj, T. C. Sabari Girisun, **I. Vetha Potheher, Journal of Alloys and Compounds**

878 (2021) 160332. DOI:https://doi.org/10.1016/j.jallcom.2021.160332 (Impact factor-6.37)

23. Hydrothermal synthesis and characterization of tin oxide nanoparticles: T. Regin Das, M. Meena, **I. Vetha Potheher,** P. AjiUdhaya, **Journal of Environmental Nanotechnology 9 (2020) 15-19.** DOI:https://doi.org/10.13074/jent.2020.06.202408 (Impact factor-0.86)

24. Solvothermal synthesis of magnetically separable reduced graphene oxide/Fe_3O_4 hybrid nanocomposites with enhanced photocatalytic properties: G. Vinodhkumar, J. Wilson, S. S. R. Inbanathan, **I. Vetha Potheher**, Muthupandian Ashok kumar and A. Cyrac Peter, **Physica B: Condensed Matter 580 (2020) 411752.** DOI:https://doi.org/10.1016/j.physb.2019.411752 (Impact factor-2.98)

25. A Comparative Analysis on the Dye Degradation efficiency of Pure, Co, Ni and Mn-Doped CuO Nanoparticles, A. Pramothkumar, N. Senthilkumar, K. C. Mercy Gnana Malar, M. Meena, and **I. Vetha Potheher**, **Journal of Materials Science: Materials in Electronics 30 (2019) 19043 – 19059.** DOI:https://doi.org/10.1007/s10854-019-02262-4 (Impact factor-2.77)

26. Synthesis of flower-like copper oxide microstructure and its photocatalytic property, E. Vivek, N. Senthilkumar, A. Pramothkumar, M. Vimalan and **I. VethaPotheher, Physica B: Condensed Matter 566 (2019) 96 – 102.** DOI:10.1016/j.physb.2019.05.009 (Impact factor-2.98)

27. Synthesis of reduced graphene oxide/Co_3O_4nanocomposite electrode material for sensor application, G. Vinodhkumar, R. Ramya, **I. Vetha Potheher**, M. Vimalan and A. Cyrac Peter, **Research on Chemical Intermediates 45 (2019) 3033-3051.** DOI:10.1007/s11164-019-03777-5(Impact factor-3.13)

28. Studies on optical, electrical, mechanical and theoretical investigation of 4-nitro-benzoic acid (3-ethoxy-2-hydroxy-benzylidene)-hydrazide: A novel Schiff base organic NLO material, M. Shankar, A. Dennis Raj, R. Purusothaman, M. Vimalan, S. Athimoolam and **I. Vetha Potheher, Journal of Molecular Structure 1181 (2019) 348 – 359.** DOI:10.1016/j.molstruc.2018.12.082 (Impact factor-3.84)

29. Studies on Structural and Optical properties of pure and Transition Metals (Ni, Fe and Co-Doped Ni-Fe) Doped Tin Oxide (SnO_2) Nanoparticles for Anti-microbial Activity, T. Amutha, M. Rameshbabu, S. Sasi Florence, N. Senthilkumar, **I. Vetha Potheher** and K. Prabha, **Research on Chemical Intermediates 45 (2019) 1929-1941.** DOI:10.1007/s11164-018-03713-z (Impact factor-3.13)

30. Studies on Electrochemical Properties of Hetarolite ($ZnMn_2O_4$) Nanostructure for Supercapacitor Application, N. Senthilkumar, V. Venkatachalam, M. Kandiban, P. Vigneshwaran, R. Jayavel and **I. Vetha Potheher, Physica E: Low-dimensional systems and nanostructures 106 (2019) 121 – 126.** DOI:https://doi.org/10.1016/j.physe.2018.10.027 (Impact factor-3.36)
31. A comparative analysis on optical, photo luminescence and laser damage properties of conventional and uniaxial method grown semi organic nonlinear optical material – sodium potassium tartrate tetrahydrate: R. Purusothaman, M. Shankar, A. Dennis Raj, M. Vimalan, K. Rajarajan and **I. Vetha Potheher, Materials Research Innovations 23 (2019) 172-181.** DOI:10.1080/14328917.2017.1405562 (Impact factor-0.30)
32. Reduced graphene oxide based on simultaneous detection of neurotransmitters: G. Vinothkumar, R. Ramya, M. Vimalan, **I. Vetha Potheher** and A. Cyrac Peter, **Progress in Chemical and Biochemical Research 1 (2018) 40-49.** DOI: 10.29088/SAMI/PCBR.2018.1.4049.
33. Characterization, antibacterial, anti-arthritic and in-vitro cytotoxic potentials of biosynthesized Magnesium Oxide nanomaterial: B. Balraj, N. Senthilkumar, **I. Vetha Potheher,** M. Arulmozhi, **Materials Science & Engineering B 231 (2018) 121 – 127**. DOI:10.1016/j.mseb.2018.10.011(Impact factor-3.40)
34. Synthesis, crystal growth, thermal and laser damage threshold properties of new Schiff base NLO material 4-Nitro-benzoic acid (3-ethoxy-2-hydroxy-benzylidene)-hydrazide: M. Shankar, A. Dennis Raj, M. Jeeva, R. Purusothaman, M. Vimalan, **I. Vetha Potheher, Materials Letters 232 (2018) 113 – 117.** DOI:https://doi.org/10.1016/j.matlet.2018.08.090 (Impact factor-3.57)
35. Green mediated synthesis of plasmonic nanoparticle (Ag) for antireflection coating in bare mono silicon solar cell: N. Senthilkumar, A. Arulraj, E. Nandhakumar, M. Ganapathy, M. Vimalan and **I. Vetha Potheher**, **Journal of Materials Science: Materials in Electronics 29 (2018) 12744 – 12753.** DOI:10.1007/s10854-018-9392-6 (Impact factor-2.77)
36. Coriandrum Sativum Mediated Synthesis of Silver Nanoparticles and Evaluation of their Biological Characteristics: N. Senthilkumar, V. Aravindhan, K. Ruckmani and **I. Vetha Potheher**, **Materials Research Express 5 (2018) 055032. DOI:** 10.1088/2053-1591/aac312(Impact factor-2.02)

37. Two step synthesis of ZnO/Ag and ZnO/Au Core/Shell Nanocomposites: Structural, Optical and Electrical property Analysis: N. Senthilkumar, M. Ganapathy, A. Arulraj, M. Meena, M. Vimalan, **I. Vetha Potheher, Journal of Alloys and Compounds 750 (2018) 171-181.** DOI:10.1016/j.jallcom.2018.03.348 (Impact factor-6.37)

38. Studies on optical and electrical properties of green synthesized TiO_2@Ag core-shell nanocomposite material: M. Ganapathy, N. Senthilkumar, M. Vimalan, R. Jeysekaran and **I. Vetha Potheher, Materials Research Express 5 (2018) 045020**. **DOI:** 10.1088/2053-1591/aab91b (Impact factor-2.02)

39. Synthesis of ZnO Nanorods by One Step Microwave-Assisted Hydrothermal Route for Electronic Device Applications: N. Senthilkumar, E. Vivek, M. Shankar, M. Meena, M. Vimalan and **I. Vetha Potheher**, **Journal of Materials Science: Materials in Electronics 29 (2018) 2927-2938.** DOI:10.1007/s10854-017-8223-5 (Impact factor-2.77)

40. Synthesis of ZnO nanoparticles using leaf extract of Tectonagrandis (L.) and their anti-bacterial, antiarthritic, anti-oxidant and in vitro cytotoxicity activities: N. Senthikumar, E. Nandhakumar, P. Priya, D. Soni, M. Vimalan and **I. Vetha Potheher, New Journal of Chemistry 41 (2017) 10347-10356.** DOI:https://doi.org/10.1039/C7NJ02664A (Impact factor-3.06)

41. Equilibrium studies on removal of lead (II) ions from aqueous solution by adsorption using modified red mud: S. Lakshmi Narayanan, G. Venkatesan and **I. Vetha Potheher, International Journal of Environmental Science and Technology 15 (2018) 1687-1698.** DOI:10.1007/s13762-017-1513-x (Impact factor-3.51)

42. Synthesis, Growth, Physicochemical properties and DFT calculations of 2-naphthol substituted Mannich base 1-(morpholino(phenyl) methyl) naphthalen-2-ol:A Non linear Optical Single crystal: A. Dennis Raj, M. Jeeva, M. Shankar, G. Venkatesa Prabhu, M. Vimalan, **I. Vetha Potheher, Journal of Molecular Structure 1147 (2017) 763 – 775.** DOI:https://doi.org/10.1016/j.physb.2016.08.016 (Impact factor-3.84)

43. ZnO/$Ni(OH)_2$ Core-Shell Nanoparticles: Synthesis, Optical, Electrical and Photoacoustic Property Analysis: N. Senthil Kumar, M. Ganapathy, S. Sharmila, M. Shankar, M. Vimalan, **I. Vetha Potheher**, **Journal of Alloys and Compounds 703 (2017) 624-632.** DOI:10.1016/j.jallcom.2017.01.323 (Impact factor-6.37)

44. 1-((4-methylpiperazin-1-yl)(phenyl)methyl)naphthalen-2-ol: A novel Mannich base organic NLO crystal for the analysis of electro-optic applications: A. Dennis Raj,

M. Jeeva, R. Purusothaman, G. Venkatesa Prabhu, M. Vimalan and **I. Vetha Potheher**, **Journal of Materials Science: Materials in Electronics 28 (2017) 7802-7810.** DOI:10.1007/s10854-017-6476-7 (Impact factor-2.77)

45. A Study on the L-Lysine-Iodic acid: Semi Organic Non Linear Optical Single Crystals for Electro-Optic Applications: M. Kumar, R. Kanagadurai, S. Chithra, S. Tamilselvan, **I. Vetha Potheher** and M. Vimalan **Journal of Materials Science: Materials in Electronics 28 (2017) 5154-5164.** DOI:10.1007/s10854-016-6171-0 (Impact factor-2.77)

46. Synthesis and characterization of Zinc Oxide nanoparticles using marine Streptomyces sp. with its investigations on anticancer and antibacterial activity: B. Balraj, N. Senthilkumar, C. Siva, R. Krithikadevi, A. Julie, **I. Vetha Potheher**, M. Arulmozhi, **Research on Chemical Intermediates 43 (2017) 2367-2376.** DOI:10.1007/s11164-016-2766-6. (Impact factor-3.13)

47. Synthesis, Growth, Optical and DFT calculation of 2-naphthol derived Mannich base Organic Non Linear Optical Single Crystal for Frequency Conversion Applications: A. Dennis Raj, M. Jeeva, M. Shankar, R. Purusothaman, G. Venkatesa Prabhu, **I. Vetha Potheher, Physica B: Condensed Matter 501(2016) 45-56.** DOI:10.1016/j.physb.2016.08.0166 (Impact factor-2.98)

48. Growth, optical and electrical properties of L-Lysine-L-tartaric acid (LLLT) nonlinear optical single crystals for electro-optic applications: N. Y. Maharani, **I. Vetha Potheher,** M. Vimalan, A. Cyrac Peter, **Journal of Materials Science: Materials in Electronics 27 (2016) 12719-12728.DOI: 10.1007/s10854-016-5406-4** (Impact factor-2.77)

49. Synthesis, growth and characterization of (tri) glycine barium chloride single crystal for applications in the domain of optoelectronics and photonics: S. Chennakrishnan, S. M. Ravi Kumar, D. Sivavishnu, M. Ganapathi, **I. Vetha Potheher,** M. Vimalan, **Journal of Materials Science: Materials in Electronics 27 (2016) 10113-10121.** DOI:10.1007/s10854-016-5086-0 (Impact factor-2.77)

50. Growth and Characterization of amino based organic nonlinear optical L-Lysine-L-Aspertate (LLA) single crystal for electro-optic applications: N. Y. Maharani, A. Cyrac Peter, S. Gopinath, S. Tamilselvan, M. Vimalan and **I. Vetha Potheher, Journal of Materials Science: Materials in Electronics27 (2016) 5006 – 5015.** DOI:10.1007/s10854-016-4387-7 (Impact factor-2.77)

51. A Study on the Synthesis and Characterization of $CoMn_2O_4$ electrode material for supercapacitor applications: P. Vigneshwaran, M. Kandiban, N. Senthil Kumar, V. Venkatachalam, R. Jayavel and **I. Vetha Potheher, Journal of Materials Science: Materials in Electronics 27 (2016) 4653 – 4658.** DOI: 10.1007/s10854-016-4343-6 (Impact factor -2.77)

52. A Comparative analysis on growth and physicochemical properties of pure and impurity added NH_4SbF_4 single crystals: A novel electro-optic material: R. Mary Jenila, **I. Vetha Potheher,** M. Vimalan and T. R. Rajasekaran, **Journal of Materials Science: Materials in Electronics 26 (2015) 6419 – 6426.** DOI:10.1007/s10854-015-3231-9 (Impact factor -2.77)

53. Growth and comparison of physicochemical properties of Lewis base adduct of MMTC and CMTC: Efficient nonlinear optical single crystals: **I. Vetha Potheher,** K. Rajarajan, R. Jeyasekaran and P. Sagayaraj, **IOP Conf. Series, Materials Science and Engineering 73 (2015) 012054.** DOI:10.1088/1757-899X/73/1/012054 (Impact factor-6.0)

54. Morphological and topographical analysis of CuSnano thin films grown by silar technique: P. Mani, K. Manikandan, **I. Vetha Potheher**, P. Fermi Hilbert Inbaraj, J. Joseph Prince, **Journal of Chemical and Pharmaceutical Sciences** 4 (2014) 55 – 58.

55. Generation of 532 nm laser radiation and Phase matching properties of organic nonlinear optical material:S. Tamilselvan, M. Vimalan, **I. Vetha Potheher,** R. Jeyasekaran, F. Yogam, J. Madhavan, **Optik – International Journal for Light and Electron Optics 125 (2014) 164 – 169.** DOI:10.1016/j.ijleo.2013.06.024 (Impact factor-2.84)

56. Growth, thermal, dielectric and mechanical properties of L-Phenylalanine-Benzoic acid: A nonlinear optical single crystal: S. Tamilselvan, M. Vimalan, **I. Vetha Potheher,** S. Rajasekar, R. Jeyasekaran, M. Antony Arockiaraj and J. Madhavan, **Spectrochimica Acta Part A: Molecular and Bimolecular Spectroscopy 114 (2013) 19 – 26.** DOI:10.1016/j.saa.2013.05.017 (Impact factor-4.83)

57. Growth, thermal and optical properties of L-Asparagine Monohydrate NLO single crystal: F. Yogam, **I. Vetha Potheher**, R. Jeyasekaran, M. Vimalan, M. Antony Arockiaraj and P. Sagayaraj, **Journal of Thermal Analysis and Calorimetry 114 (2013) 1153 – 1159.** DOI:10.1007/s10973-013-3138-8(Impact factor-4.75)

58. Synthesis, Structural characterization, Bio potential efficiency and DNA cleavage applications of nicotinamide metal complexes: C. Surendra Dilip, V. Siva Kumar, S.

John Venison, **I. Vetha Potheher** and D. Rajalaxmi (a) Subahshini, **J. Molecular Structure 1040 (2013)192 – 205.** DOI:10.1016/j.molstruc.2013.02.019 (Impact factor-3.84)

59. Growth and Comparison of Physicochemical Properties of Pure, Ca^{2+} and Sr^{2+} Doped $NH_4Sb_3F_{10}$ Single Crystals for electro optic applications: R. Mary Jenila, S. Anna Venus, **I. Vetha Potheher**, T. R. Rajasekaran and J. Benet Charles, **Optik – International Journal for Light and Electron Optics 124 (2013) 3618 – 3622.** DOI:10.1016/j.ijleo.2012.11.008 (Impact factor-2.84)
60. Growth, Optical, thermal and Conductivity behaviour of nonlinear optical single crystals of $CdHg(SCN)_4(CH_3OC_2H_5O)$: **I. Vetha Potheher**, K. Rajarajan, R. Jeyasekaran, M. Vimalan, F. Yogam and P. Sagayaraj, **Journal of Thermal Analysis and Calorimetry 111 (2013) 1491 – 1497.** DOI:10.1007/s10973-012-2533-x (Impact factor-4.75)
61. Growth and Physicochemical properties of L-Phenylalaninium Maleate: A novel nonlinear optical crystal: F. Yogam, **I. Vetha Potheher,** M. Vimalan, R. Jeyasekaran, T. Rajesh Kumar and P. Sagayaraj, **Spectrochimica Acta Part A: Molecular and Bimolecular Spectroscopy 95 (2012) 369 – 373.** DOI:10.1016/j.saa.2012.03.088 (Impact factor – 4.83)
62. Synthesis and electrical properties of PbSxO1-x Nanocomposites: S. Rajasekar, S. Tamilselvan, R. Jeyasekaran, M. Gulam Mohamed, P. Marimuthu, **I. Vetha Potheher** and M. Vimalan, **Nanocomposite materials 50 (2012) 10624 – 10627.** (Impact factor-3.97)
63. Investigation on the optical and electrical properties of MMTG crystal: A Lewis base adduct: **I. Vetha Potheher**, K. Rajarajan, M. Vimalan, S. Tamilselvan, R. Jeyasekaran and P. Sagayaraj, **Physica B: Physics of Condensed Matter 406 (2011) 3210 – 3214. DOI:** https://doi.org/10.1016/j.physb.2011.05.025 (Impact factor-2.98)
64. Studies on the nucleation kinetics and growth of tu-SCN ligand based NLO crystal of TMTZ: R. Jeyasekaran, P. Dennis Christy, A. Muthuvinayagam, **I. Vetha Potheher** and P. Sagayaraj, **Archives of Applied Science Research 3 (2011) 83 – 91**.
65. Growth and Characterization of organic nonlinear optical single crystal of L-Asperginium Picrate (LASP): F. Yogam, **I. Vetha Potheher,** A. Cyrac Peter, S. Tamilselvan, M. Vimalan and P. Sagayaraj, **Archives of Applied Science Research 3 (2011) 267 – 276.**

66. Growth and characterization of novel semiorganic nonlinear optical crystals of L-phenylalanine hydrochloride (LPHCl): F. Yogam, **I. Vetha Potheher**, A. Cyrac Peter, S. Tamilselvan, A. Leo Rajesh, M. Vimalan and P. Sagayaraj, **Advances in Applied Science Research 2 (2011) 261 – 268. (Impact factor :3.98)**
67. Investigation on the growth and characterization of nonlinear optical single crystals of Tris-AllylThiourea Mercury Bromide (ATMB): **I. VethaPotheher,** K. Rajarajan, M. Vimalan, T. Rajesh Kumar, R. Jeyasekaran and P. Sagayaraj, **Archives of Applied Science Research 2 (2010) 171 – 182.**
68. Electrical properties of Mg doped ZnS_xO_{1-x} nanocomposites: M. Vimalan, T. Rajesh Kumar, **I. Vetha Potheher,** M. Gulam Mohamed and C. K. Mahadevan, **Archives of Applied Science Research 2 (2010) 68 – 73.**
69. Growth and Characterization of Diaquatetrakis (thiocyanato) cobalt (II) mercury (II) N-methyl-2-pyrolidone (CMTWMP) single crystals: **I. Vetha Potheher,** K. Rajarajan, K. S. Nagaraja, J. Madhavan and P. Sagayaraj, **Journal of Crystal Growth 310 (2008) 124 – 130.** DOI: https://doi.org/10.1016/j.jcrysgro.2007.10.022 (Impact factor: 1.83)
70. Investigations on the nucleation kinetics of tetrathiourea mercury (II) tetrathiocyanato zinc (II) single crystals, K. Rajarajan, R. Sankar, **I. Vetha Potheher** and P. Sagayaraj, **Materials Letters 62 (2008) 4480 – 4482.** DOI: https://doi.org/10.1016/j.matlet.2008.08.018 (Impact factor: 3.57)
71. Growth and Characterization of a new nonlinear optical L-histidine acetate single crystals. J. Madhavan, S. Aruna, A. Anuradha, D. Premanand, **I. Vetha Potheher**, K. Thamizharasan, P. Sagayaraj, **Optical Materials 29 (2007) 1211 – 1216.** DOI: https://doi.org/10.1016/j.optmat.2006.04.013 (Impact factor: 3.75)
72. Growth and optical studies of a novel organometallic complex NLO crystal: Tetrathiourea cadmium (II) tetrathiocyanato zinc (II) K. Rajarajan, Ginson P. Joseph, S. M. Ravi Kumar, **I. Vetha Potheher**, A. Joseph Arul Pragasam, K. Ambujam and P. Sagayaraj, **Materials and Manufacturing Processes 22 (2007) 370 – 374.** DOI: https://doi.org/10.1080/10426910701190857 (Impact factor: 4.78)
73. Thermal, optical and electrical properties of gel grown ZMTC: K. Ambujam, S. Selvakumar, Ginson P. Joseph, **I. Vetha Potheher**, A. Joseph Arul Prakasam and P. Sagayaraj **Materials and Manufacturing Processes 22 (2007) 351 – 356.** DOI:https://doi.org/10.1080/10426910701190766 (Impact factor: 4.78)

74. Growth and characterization of organometallic nonlinear optical TMTM crystals: K. Rajarajan, Preema C. Thomas, **I. Vetha Potheher,** Ginson P. Joseph, S. M. Ravikumar, S. Selvakumar and P. Sagayaraj **Journal of Crystal Growth 304 (2007) 435 – 440.** DOI: https://doi.org/10.1016/j.jcrysgro.2007.03.005(Impact factor: 1.83)
75. Growth, optical, dielectric and ESR studies on tetrathiourea mercury (II) tetrathiocyanato manganate (II): An organometallic complex NLO crystal, K. Rajarajan, G. Mani, **I. Vetha Potheher,** Joe G. M. Jesudurai, M. Vimalan, P. Dennis Christy and P. Sagayaraj, **Journal of Physics and Chemistry of Solids 42 (2007) 2370 – 2375.** DOI: https://doi.org/10.1016/j.jpcs.2007.07.036 (Impact factor: 4.38)
76. Optical, dielectric and photoconductivity studies of Bis(dimethyl sulfoxide) tetrathiocyanato-cadmium(II) mercury(II) NLO single crystals. K. Rajarajan, S. Selvakumar, Ginson P. Joseph, S. Samikkannu, **I. Vetha Potheher** and P. Sagayaraj, **Optical Materials 28 (2006) 1187 – 1191.** DOI: https://doi.org/10.1016/j.optmat.2005.07.006 (Impact factor: 3.75)
77. Growth and characterization of a novel NLO crystal bis-glycine hydrogen chloride (BGHC), K. Ambujam, K. Rajarajan, S. Selvakumar, **I. Vetha Potheher**, Ginson P. Joseph, P. Sagayaraj, **Journal of Crystal Growth 286 (2006) 440 – 444.** DOI: https://doi.org/10.1016/j.jcrysgro.2005.10.013 (Impact factor: 1.83)
78. Growth, dielectric and photoconducting studies of tetrathiourea mercury (II) tetrathiocyanato Zinc (II) NLO single crystals, K. Rajarajan, S. Selvakumar, Ginson P. Joseph, **I. Vetha Potheher**, M. Gulam Mohamed and P. Sagayaraj, **Journal of Crystal Growth 286 (2006) 470 – 475.** DOI: https://doi.org/10.1016/j.jcrysgro.2005.10.092 (Impact factor: 1.83)
79. Growth and characterization of pure and metal doped bis(thiourea) zinc chloride single crystals. S. Selvakumar, K. Rajarajan, S. M. Ravi Kumar, **I. Vetha Potheher,** D. Prem Anand, K. Ambujam and P. Sagayaraj, **Crystal Research and Technology 41(2006) 766 – 770.** DOI:https://doi.org/10.1002/crat.200510665 (Impact factor: 1.59).

3. National Journals:

1. Mechanical, dielectric and photoconducting properties of a novel non-linear optical crystal. K. Rajarajan, S. Selvakumar, Ginson P. Joseph, M. Gulam Mohamed, **I. Vetha Potheher** & P. Sagayaraj. Indian Journal of Pure & Applied Physics. 43(2005) 926-930.

2. Growth, optical and dielectric properties of semi-organic non-linear optical crystals of manganese mercury thiocyanate (MMTC), Ginson. P. Joseph, K. Rajarajan, Joe G. M. Jesudurai, **I. Vetha Potheher**, Preema C. Thomas, A. Anuradha, S. M. Ravi Kumar, P. Sagayaraj, **Convergence 8 (2006) 39 – 46.**
3. Optical and dielectric properties of nonlinear optical LALA single crystals, M. Vimalan, V. Joseph, J. Packiam Julius, **I. Vetha Potheher**, S. M. Ravi Kumar, S. Aruna, A. Ramanand and P. Sagayaraj, **Convergence 8 (2006) 47 – 53.**

4. PhD Scholars Guided:

S. No	Name of the Scholar	Title of the Thesis	Year of Completion
1.	Dennis Raj A	SYNTHESIS,GROWTH AND CHARACTERIZATION OF ORGANIC NLO SINGLE CRYSTALS FOR ELECTRO OPTIC APPLICATIONS	2018
2.	Purusothaman R	STUDIES ON GROWTH AND PHYSICOCHEMICAL PROPERTIES OF ORGANIC, SEMI-ORGANIC AND INORGANIC NONLINEAR OPTICAL SINGLE CRYSTALS	2019
3.	Ganapathy M	GREEN MEDIATED SYNTHESIS OF TIO2 CORE-SHELL NANOCOMPOSITES FOR OPTICAL AND ELECTRICAL PROPERTY ANALYSIS	2019
4.	Senthil Kumar N	FABRICATION OF ZnO BASED NANOMATERIALS FOR OPTICAL AND ELECTRICAL APPLICATIONS	2019
5.	Shankar M	SYNTHESIS, GROWTH AND CHARACTERIZATION OF CERTAIN ORGANIC SINGLE CRYSTALS FOR NONLINEAR OPTICAL APPLICATIONS	2020
6.	Vivek E	SYNTHESIS, CHARACTERIZATION AND ELECTROCHEMICAL STUDIES OF METAL HYDROXIDES AND THEIR NANOCOMPOSITES WITH	2022

		GRAPHITIC CARBON NITRIDE FOR SUPERCAPACITOR APPLICATION	
7.	Pramothkumar A	EFFECT OF TRANSITION METAL CODOPANTS ON METAL OXIDE SEMICONDUCTOR NANOPARTICLES FOR OPTICAL LIMITING APPLICATION	2022

6. Funded Projects: 01 No

Title : Graphene-Perovskites Quantum Dots for Broadband Infrared Photodetectors and Eye-safety from Intense Laser Radiations

Duration : 3 Years

Role : Principal Investigator

Agency : SERB-SURE, Government of India

Grant : INR (in Lakhs) 29.50

7. Citation Index

- https://scholar.google.com/citations?user=RV5A_z8AAAAJ&hl=en&authuser=1
- https://orcid.org/my-orcid?orcid=0000-0002-6721-1553

8. Book / Book Chapter published

Book Published:

Title of the Book: **GROWTH AND PHYSICOCHEMICAL PROPERTIES OF METALLO ORGANIC NLO CRYSTALS**

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Chapter title : ADVANCEMENTS AND APPLICATIONS OF NANOTECHNOLOGY IN MATERIAL SCIENCE

Publisher : Iterative International Publishers, USA

9. International Conferences:

1. Growth and characterization of semi organic nonlinear optical crystals of MMTC. Ginson P. Joseph, K. Rajarajan, **I. Vetha Potheher**, S. Selvakumar and P. Sagayaraj (ICOL 2005, IRDE, Dehradun, Dec 12 –15, 2005).
2. Optical and Thermal studies of tetrathiourea cadmium(II) tetrathiocyanato zinc(II) NLO single crystals. Rajarajan K, Selvakumar S, Ginson P. Joseph, **Vetha Potheher I** and Sagayaraj P (ICOL 2005, IRDE, Dehradun, Dec 12 –15, 2005).
3. A comparative study of the mechanical and dielectric properties of NLO organometallic crystals. Selvakumar S, Rajarajan K, Ginson P. Joseph, **Vetha Potheher I**, Thamizharasan K and Sagayaraj P (ICOL 2005, IRDE, Dehradun, Dec 12 –15, 2005).
4. Growth, Optical and ESR studies of CMTWMP: a novel organometllic nonlinear optical single crystals: **I. Vetha Potheher,** K. Rajarajan, Ginson P. Joseph, Preema C. Thomas, M. Vimalan, G. Mani, S. M. Ravikumar and P. Sagayaraj, Photonics 2006, held at Hydrabad University, Hydrabad, Dec 13-16, 2006.
5. Growth and characterization of cu^{2+} doped l-tartaric acid - nicotinamide (LTN) organic NLO single crystals: M. Gulam Mohamed, P. Dennis Christy, K. Rajarajan, K. Ambujam, **I. Vetha Potheher,** V. Joseph and P. Sagayaraj, Photonics 2006, Dec 13-16, Hydrabad University, Hyderabad.
6. Growth and characterization of organic NLO crystals of LAM: M. Vimalan, S. Aruna, Preema C. Thomas, G. Mani, J. Packiam Julius, V. Joseph, **I. Vetha Potheher** and P. Sagayaraj, Photonics 2006, Dec 13-16, Hyderabad University, Hyderabad.
7. Growth, optical and electrical properties of Tri – Allylthiourea mercury bromide (ATMB) single crystal: **I. Vetha Potheher**, K. Rajarajan, R. Jeyasekaran and P. Sagayaraj, ICFMAT – 2009, Velammal Engineering College, Chennai, January 29th and 30th, 2009.
8. Growth and comparison of physicochemical properties of Lewis base adduct of MMTC and CMTC: Efficient non-linear optical single crystals: **I. Vetha Potheher**, ICMST – 2012, St. Thomas College, Pala, Kottayam, Kerala –686 574, June 10-14, 2012.
9. Green Synthesis of Silver Nanoparticles Using Different Leaf Extracts and their Comparative Structural Analysis: N. Senthil Kumar, S. C. G. Kiruba Daniel, M.

Sivakumar and **I. Vetha Potheher**, ICAN 2014, Department of Inorganic Chemistry, University of Madras, Chennai-25, June 20 & 21, 2014.

10. Coriandrum Sativum Mediated Synthesis of Silver Nanoparticle and Evaluation of their Biological Characteristics: N. Senthil Kumar, V. Aravindhan, **I. Vetha Potheher** and K. Ruckmani, International Conference on Nanoscience, Nanotechnology & Advanced Materials (NANOS-2015), December 14-17, 2015.
11. Electrochemical Property Analysis on Mn_3O_4 Nanoparticles Synthesized by Hydrothermal Method: **I. Vetha Potheher,** M. Ganapathy, N. Senthilkumar and M. Vimalan, ICMST – 2016, St. Thomas College, Pala, Kottayam, Kerala – 686 574, June 5-8, 2016.
12. Synthesis of $ZnO/Ni(OH)_2$ Core-shell Nanoparticles using for Optical and Electrical Property: N. Senthil Kumar, M. Ganapathy, S. Sharmila, M. Shankar, M. Vimalan, I. Vetha Potheher, TEQIP II Sponsored International Conference on Advances in Biological, Chemical and Physical Sciences (ABCPS), Department of Bio-Technology, Chemistry and Physics, Anna University BIT Campus, Trichy, March 13-15, 2017.
13. Synthesis of Copper Oxide Nanosheets Anchord on Graphene for Supercapacitor Application: Vivek Elangovan, Vetha Potheher I., 4th International Conference on Nanoscience and Nanotechnology, Department of Physics and Nanotechnology, SRM University, Chennai, August 9-11, 2017.

10. National Conferences:

1. Crystal growth, Optical and dielectric studies of semi organic non-linear optical CMTD single crystals. K. Rajarajan, M. Gulam Mohamed, Ginson P. Joseph, **I. Vetha Potheher** and P. Sagayaraj DAE, Amristar, Dec 26 – 30, 2004.
2. Dielectric and photoconductivity studies of semi organic nonlinear optical crystals of MMTC. Ginson P. Joseph, K. Rajarajan, **I. Vetha Potheher**, S. Selvakumar and P. Sagayaraj DAE, Amristar, Dec 26 – 30, 2004.
3. Growth and characterization of Cd^{2+} and Mg^{2+} doped MMTC crystals. Ginson P. Joseph, K. Rajarajan, **I. Vetha Potheher** and P. Sagayaraj. DAE, Amristar, Dec 26 – 30, 2004.
4. Growth and Optical properties of diaqua tetrakis (thiocyanato) cobalt (II) mercury (II) – n – methyl – 2 – pyrolidone (CMTWMP) **I. Vetha Potheher**, K. Rajarajan, Ginson

P. Joseph, S. Selvakumar, S. M. Ravikumar and P. Sagayaraj, held at Loyola College, Chennai. (September 29th& 30th 2005).

5. Growth and characterization of semi organic nonlinear optical crystals of MMTC. Ginson P. Joseph, K. Rajarajan, **I. Vetha Potheher**, S. Selvakumar and P. Sagayaraj, Loyola College, Chennai. September 29th& 30th 2005.
6. Crystal growth, optical and dielectric studies of a semiorganic nonlinear optical CMTD single crystal. K. Rajarajan, M. Gulam Mohamed, Ginson P. Joseph, **I. Vetha Potheher** and P. Sagayaraj, Loyola College, September 29th& 30th 2005.
7. Growth and Mechanical properties of Pure and cd^{2+} and Mg^{2+} MMTC crystals Ginson P. Joseph, K. Rajarajan, S. Selvakumar, **I. Vetha Potheher** and P. Sagayaraj, National Symposium on Crystal Growth and Characterization, Department of Physics, Loyola College, September 29th& 30th, 2005.
8. Growth, Optical and Dielectric properties of diaqua tetrakis (thiocyanato) cobalt (II) mercury (II)–n–methyl–2–pyrolidone (CMTWMP) **I. Vetha Potheher**, K. Rajarajan, Ginson P. Joseph, S. Selvakumar, S. M. Ravikumar and P. Sagayaraj, held at VIT, Vellore, Dec 7 - 10, 2005. (NLS 2005).
9. Growth, Thermal and Optical studies of bis-glycine hydrogen chloride: K. Ambujam, K. Rajarajan, Preema C. Thomas, K. Praba, S. M. Ravi Kumar, **I. Vetha Potheher** and P. Sagayaraj (Dec 7 - 10, 2005. NLS 2005).
10. Growth and Optical studies of a new organometallic optical single crystal: Tetrathiourea mercury (II) tetrathiocyanato manganese (II): K. Rajarajan, S. Selvakumar, Ginson P. Joseph, **I. Vetha Potheher,** S. M. Ravi Kumar and P. Sagayaraj (Dec 7 - 10, 2005. NLS 2005).
11. Dielectric and Microhardness studies on Zn^{2+} doped bis(thiourea) cadmium acetate single crystals: S. Selvakumar, K. Rajarajan, **I. Vetha Potheher,** S. M. Ravikumar, S. A. Rajasekar and P. Sagayaraj (Dec 7 - 10, 2005. NLS 2005).
12. Growth and characterization of benzamide substituted organic nonlinear hippuric acid: M. Gulam Mohamed, **I. Vetha Potheher,** S. M. Ravi Kumar, Joe G. M. Jesudurai and P. Sagayaraj (Dec 7 - 10, 2005. NLS 2005).
13. Mechanical, Dielectric and Photoconductivity properties of Cu^{2+}, Cd^{2+} and Iodine doped BG crystals: D. Prem Anand, M. Vimalan, **I. Vetha Potheher**, S. M. Ravikumar, J. Packiam Julius and P. Sagayaraj (Dec 30 – 31, 2005, P.S.G.College, Coimbatore).

14. Growth and characterization of Cd^{2+} and Mg^{2+} doped MMTD crystals: Ginson. P. Joseph, K. Rajarajan, S. Selvakumar, **I. Vetha Potheher**, S. M. Ravikumar and P. Sagayaraj (Dec 30 – 31, 2005, P.S.G.College, Coimbatore).
15. FTIR, Dielectric and Microhardness studies on the metal (Cu) substituted LADP single crystals: A. Joseph Arul Pragasam, S. Selvakumar, S. M. Ravikumar, **I. Vetha Potheher**, M. Vimalan and P. Sagayaraj (Dec 30 – 31, 2005, P.S.G.College, Coimbatore).
16. Growth and characterization of diaqua tetrakis (thyocyanato) cobalt (II) mercury (II) – n- methyl-2- pyrolidone (CMTWMP) **I. Vetha Potheher**, K. Rajarajan, Ginson P. Joseph, M. Vimalan, S. Selvakumar, G. Mani and P. Sagayraj, (PADIKA, Jan 19 – 21, 2006, Hindu College, Nagercoil).
17. Growth and characterization of Cd^{2+} and Mg^{2+} doped MMTC crystals: Ginson P. Joseph, K. Rajarajan, S. Selvakumar, **I. Vetha Potheher,** S. M. Ravikumar and P. Sagayaraj (PADIKA Jan 19 – 21, 2006, HinduCollege, Nagercoil).
18. Microhardness and photoconductivity studies of tetrathiocyanato cadmium(II) mercury(II) NLO single crystals: K. Rajarajan, Ginson P. Joseph, K. Thamizharasan, K. Ambujam, **I. Vetha Potheher**, S. M. Ravikumar and P. Sagayaraj (PADIKA Jan 19 – 21, 2006, HinduCollege, Nagercoil).
19. Growth and optical studies of a novel organometallic complex NLO crystal: Tetrathiourea cadmium (II) tetrathiocyanato zinc (II) K. Rajarajan, Ginson P. Joseph, S. M. Ravi Kumar, **I. Vetha Potheher**, A. Joseph Arul Pragasam, K. Ambujam and P. Sagayaraj (PADIKA Jan 19 – 21, 2006, HinduCollege, Nagercoil).
20. Growth, thermal, optical and photoconductivity studies of Bis-glycine hydrogen chloride: K. Ambujam, J. Madhavan, Ginson P. Joseph, **I. Vetha Potheher**, S. M. Ravikumar and P. Sagayaraj (PADIKA Jan 19 – 21, 2006, Hindu College, Nagercoil).
21. Thermal, optical and electrical properties of gel grown ZMTC: K. Ambujam, S. Selvakumar, Ginson P. Joseph, **I. Vetha Potheher**, A. Joseph Arul Prakasam and P. Sagayaraj (PADIKA Jan 19 – 21, 2006, HinduCollege, Nagercoil).
22. Growth and characterization of Organic NLO crystals of LTA: M. Vimalan, M. Gulam Mohamed, J. Packiam Julius, **I. Vetha Potheher**, K. Praba, A. Ramanand and P. Sagayaraj (April 21 – 22, 2006, SRM, Deemed University).
23. Growth, Optical and micro hardness studies of a novel organometallic complex NLO crystal: Diaquatetrakis (thiocyanato) cobalt (II) mercury (II) N-methyl-2-pyrolidone (CMTWMP).**I. Vetha Potheher**, K. Rajarajan, Ginson P. Joseph, S. M. Ravi Kumar,

M. Vimalan, S. Selvakumar and P. Sagayaraj held at University of Delhi, Delhi, October 12- 16, 2006.

24. Growth and Spectroscopic studies of nonlinear optical single crystals of LADN and LADI. Preema C. Thomas, S. Aruna, J. Madhavan, **I. Vetha Potheher,** S. M. Ravi Kumar and P. Sagayaraj held at University of Delhi, Delhi, 12- 16th October 2006).
25. Optical, dielectric and ESR studies on tetrathiourea mercury (II) tetrathiocyanato manganate(II) single crystal: K. Rajarajan, **I. Vetha Potheher**, Ginson P. Joseph, S. M. Ravi Kumar, M. Vimalan, K. Prabha and P. Sagayaraj,11th National seminar on Crystal Growth, SSN College of Engineering, SSN Nagar, Dec 7-9, 2006.
26. Growth, Thermal and Elemental analysis of Diaquatetrakis (thiocyanato) cobalt (II) mercury (II) N-methyl-2-pyrolidone - A nonlinear optical crystal, **I. Vetha Potheher,** K. Rajarajan, M. Vimalan and P. Sagayaraj, Second National Symposium on Nonlinear Optical Crystals and Modeling in Crystal Growth, March 26 - 27, 2007, Department of Physics, Anna University, Chennai.
27. Synthesis, growth and optical properties of Manganese mercury thiocyanate glygol monomethyl ether NLO single crystal - A Lewis base adduct of MMTC: **I. Vetha Potheher,** K. Rajarajan, R. Jeyasekaran and P. Sagayaraj, 7th National Laser Symposium (NLS - 7), Maharaja Shayajirao University of Baroda, Vadodara, Dec - 17 - 20, 2007.
28. Synthesis, growth and elemental analysis of Lewis base adduct of CMTC: Cadmium mercury thiocyanate glygol monomethyl ether (CMTG): **I. Vetha Potheher,** K. Rajarajan, M. Vimalan and P. Sagayaraj, 7th National Laser Symposium (NLS - 7), Maharaja Shayajirao University of Baroda, Vadodara, Dec - 17 - 20, 2007.
29. Second Harmonic Generation by Gadmium Mercury Thiocyanate Glygol Monomethyl Ether (CMTG) Single Crystal: A. Dennis Raj and **I. Vetha Potheher**, DST Sponsored National Seminar on Recent Trends in Physics, Shivani Engineering College, Tiruchirappalli, March – 18-19, 2011.
30. Preparation and characterization of CdS–TiO_2 nanoparticles: M. Ganapathy, R. Jeyasekaran, **I. Vetha Potheher**, M. Vimalan, P. Sagayaraj and P. Dennis Christy, CSIR Sponsored National Seminar on Novel Materials (NSNM 2013), Shivani Engineering College, Tiruchirappalli, March 19, 2013.
31. Growth and characterization of Pure and Ca^{2+}Doped $NH_4Sb_3F_{10}$ Single Crystals: R. Mary Jenila, S. Anna Venus, **I. Vetha Potheher**, T. R. Rajasekaran, and

J. Benet Charles, CSIR Sponsored National Seminar on Novel Materials (NSNM 2013), Shivani Engineering College, Tiruchirappalli, March 19, 2013.

32. A comparative analysis of Pure and Sr^{2+}Doped Ammonium fluoro antimonates Single Crystals:R. Mary Jenila, S. Anna Venus, **I. Vetha Potheher**, T. R. Rajasekaran, and J. Benet Charles, CSIR Sponsored National Seminar on Novel Materials (NSNM 2013), Shivani Engineering College, Tiruchirappalli, March 19, 2013.
33. Electrical properties of L-alaninium fumarate (LAF): an organic nonlinear optical single crystal: J. Suja Rani, M. Ganapathy, R. Jeyasekaran, S. Rajasekar, M. Vimalan and **I. Vetha Potheher,** CSIR Sponsored National Seminar on Novel Materials (NSNM 2013), Shivani Engineering College, Tiruchirappalli, March 19, 2013.
34. Studies on semiorganic single crystal: L-Leucine Hydrobromide (LEHBr): Suja Rani, M. Meena, M. Antony Arockiaraj, S. Rajasekar, M. Vimalanand **I. Vetha Potheher,**CSIR Sponsored National Seminar on Novel Materials (NSNM 2013), Shivani Engineering College, Tiruchirappalli, March 19, 2013.
35. Growth and optical properties of organic nonlinear optical single crystal: S. Tamilselvan, M. Vimalan, **I. Vetha Potheher**, R. Jeyasekaran, F. Yogamand J. Madhavan, CSIR Sponsored National Seminar on Novel Materials (NSNM 2013), Shivani Engineering College, Tiruchirappalli, March 19, 2013.
36. Growth and physicochemical properties of L-Asparagine-L-Tartaric acid (LAsT) – Nonliear optical single crystal: S. Tamilselvan, M. Vimalan, **I. Vetha Potheher**, M. Antony Arockiarajand J. Madhavan, CSIR Sponsored National Seminar on Novel Materials (NSNM 2013), Shivani Engineering College, Tiruchirappalli, March 19, 2013.
37. Synthesis, Solubility, Growth and optical properties of L–Phenylalanine-Benzoic acid (LPB) nonlinear optical single crystal: S. Tamilselvan, M. Vimalan, **I. Vetha Potheher**, M. Antony Arockiaraj and J. Madhavan, CSIR Sponsored National Seminar on Novel Materials (NSNM 2013), Shivani Engineering College, Tiruchirappalli, March 19, 2013.
38. Growth, thermal, mechanical and electrical properties of organic nonlinear optical single crystal: S. Tamilselvan, M. Vimalan, **I. Vetha Potheher**, M. Antony Arockiaraj, R. Jeyasekaran and J. Madhavan, CSIR Sponsored National Seminar on Novel Materials (NSNM 2013), Shivani Engineering College, Tiruchirappalli, March 19, 2013.

39. Synthesis and Characterization of CdS Quantum Dots: S. Rajasekar, M. Ganapathy, R. Jeyasekaran, **I. Vetha Potheher**, M. Meena and M. Vimalan, UGC Sponsored National Seminar on Recent Trends in Crystal Growth and Nano Materials (NSCGNM-2013), National College (Autonomous), Tiruchirappalli, March 13 – 15, 2013.
40. Thermal, optical and mechanical properties of a NLO active L-alaninium fumarate(LAF)single crystals: S. Rajasekar, J. Suja Rani, M. Ganapathy, M. Antony Arockiaraj, **I. Vetha Potheher** and M. Vimalan,UGC Sponsored National Seminar on Recent Trends in Crystal Growth and Nano Materials (NSCGNM-2013), National College (Autonomous), Tiruchirappalli, March 13 – 15, 2013.
41. Studies on optical, thermal and mechanical properties of NLO active L-lysine sulphate single crystal: S. Rajasekar, J. Suja Rani, R. Jeyasekaran, **I. Vetha Potheher**, M. Meena and M. Vimalan, UGC Sponsored National Seminar on Recent Trends in Crystal Growth and Nano Materials (NSCGNM-2013), National College (Autonomous), Tiruchirappalli, March 13 – 15, 2013.
42. Growth and characterization of organic nonlinear optical crystals of L-Threoninium picrate (LTHP): S. Rajasekar, M. Ganapathy, R. Jeyasekaran, **I. Vetha Potheher**, J. Suja Rani and M. Vimalan, UGC Sponsored National Seminar on Recent Trends in Crystal Growth and Nano Materials (NSCGNM-2013), National College (Autonomous), Tiruchirappalli, March 13 – 15, 2013.
43. Studies on semiorganic single crystal: L-Leucine Hydrobromide (LEHBr): J. Suja Rani, M. Meena, M. Antony Arockiaraj, S. Rajasekar, M. Vimalanand **I. Vetha Potheher,** National Seminar on Materials and Nano Materials, St. Xavier's College (Autonomous), Palayamkottai, March 7 & 8, 2013.
44. Preparation and characterization of CdS–TiO_2 nanoparticles: M. Ganapathy, R. Jeyasekaran, **I. Vetha Potheher**, M. Vimalan, P. Sagayaraj and P. Dennis Christy, National Seminar on Materials and Nano Materials, St. Xavier's College (Autonomous), Palayamkottai,March 7 & 8, 2013.
45. Electrical properties of L-alaninium fumarate (LAF): an organic nonlinear optical single crystal: J. Suja Rani, M. Ganapathy, R. Jeyasekaran, S. Rajasekar, M. Vimalanand **I. Vetha Potheher**,National Seminar on Materials and Nano Materials, St. Xavier's College (Autonomous), Palayamkottai,March 7 & 8, 2013.
46. Investigation on the Growth, Linear, Non Linear, Z-Scan and Laser Damage Threshold of TMTM single crystal: R. Jeyasekaran, **I. Vetha Potheher**, M. Vimalan, M.

Ganapathyand P. Sagayaraj, National Conference on Emerging Trends in Science and Humanities (NCETSH 2013), Saveetha Engineering College, Chennai, April 5, 2013.

47. Synthesis and Characterization of Mn_3O_4 nanoparticles and its electrochemical studies: P. Vigneshwaran, S. Aravindha Raja, M. Kandiban and **I. Vetha Potheher**, National Conference on Advances in Crystal Growth and Nanotechnology (ACN 2015), C. M. S. College, Kottayam, Kerala, January 15 & 16, 2015.
48. Synthesis and Characterization of MgO nanoparticles for photocatalytic applications:M. Kandiban, P. Vigneshwaran and **I. Vetha Potheher**, National Conference on Advances in Crystal Growth and Nanotechnology (ACN 2015), C. M. S. College, Kottayam, Kerala, January 15 & 16, 2015.
49. Crystal growth and Characterization of novel semi organic nonlinear optical crystal: L-Leucinium perchlorate (LLPCl): P. Baskaran, S. Rajasekar, **I. Vetha Potheher**, M. Vimalan and K. Selvaraju, National Conference on Advanced Materials (NCAM) 2015, St. Joseph's College, Trichy, February 6, 2015.
50. Investigation of electrochemical properties of Mn_3O_4 nanoparticles: P. Vigneshwaran, M. Kandiban, S. Aravindha Raja and **I. Vetha Potheher**, National Conference on Advanced Materials (NCAM) 2015, St. Joseph's College, Trichy, February 6, 2015.
51. A comparative analysis of silver nanoparticles developed by green synthesis using different leaf extracts: N. Senthil Kumar, M. Shankar and **I. Vetha Potheher**, National Conference on Advanced Materials (NCAM) 2015, St. Joseph's College, Trichy, February 6, 2015.
52. A Study on photocatalytic property of MgO nanoparticles: M. Kandipan, P. Vigneshwaran and **I. Vetha Potheher**, National Conference on Advanced Materials (NCAM) 2015, St. Joseph's College, Trichy, February 6, 2015.
53. Optical and electrical properties of TiO_2 nanocrystals: M. Ganapathy, I**. Vetha Potheher**, S. Harikrishna Etti, P. Dennis Christy and M. Vimalan, National Conference on Advanced Materials (NCAM) 2015, St. Joseph's College, Trichy, February 6, 2015.
54. Triethanolamine added copper tin sulfide ($Cu_xSn_{1-x}S_y$) nano semiconductor thin films for photovoltaic applications: Mani P., Manikandan K., **Vetha Potheher I**. and Joseph Prince J., National Conference on Advanced Materials (NCAM) 2015, St. Joseph's College, Trichy, February 6, 2015.
55. Optical and Thermal behavior of semiorganic nonlinear optical single crystals: L-Cystine dihydrobromide (LCHB): P. Baskaran, M. Kumar, **I. Vetha Potheher**, M.

Vimalan and K. Selvaraju, TEQIP – II sponsored National Conference on Physics of Bulk and Nano Materials & Devices (P-BAND-2015), March 19 & 20, 2015.

56. Growth and electrical properties of L-lysine monohydrochloride dehydrate (LLMHCl) single crystals: M. Kumar,**I. Vetha Potheher**,P. Saravanan, S. Tamilselvan and M. Vimalan, TEQIP – II sponsored National Conference on Physics of Bulk and Nano Materials & Devices (P-BAND-2015), March 19 & 20, 2015.
57. Growth and characterization of LPS single crystals: N.Y. Maharani, S. Tamilselvan, **I. Vetha Potheher**, M. Vimalan and A. Cyrac Peter, TEQIP – II sponsored National Conference on Physics of Bulk and Nano Materials & Devices (P-BAND-2015), March 19 & 20, 2015.
58. Synthesis Of MgO Nanoparticle For Dye Degradation Applications: M. Kandiban, P. Vigneshwaran and **I. Vetha Potheher**, TEQIP – II sponsored National Conference on Physics of Bulk and Nano Materials & Devices (P-BAND-2015), March 19 & 20, 2015.
59. Green synthesis of silver nanoparticles from different leaf extracts and their comparative analysis: N. Senthil Kumar, M. Shankar and **I. Vetha Potheher**, TEQIP – II sponsored National Conference on Physics of Bulk and Nano Materials & Devices (P-BAND-2015), March 19 & 20, 2015.
60. Synthesis, Growth, Morphology and ESR Analysis of diaquatetrakis (thiocyanato) cobalt (II) mercury (II) N-methyl-2-pyrolidone (CMTWMP) single crystals: M. Shankar, A. Dennis Raj, M. Vimalan, R. Jeyasekaran, **I. Vetha Potheher**, TEQIP – II sponsored National Conference on Physics of Bulk and Nano Materials & Devices (P-BAND-2015), March 19 & 20, 2015.
61. Synthesis of Mn_3O_4nanoparticles for electro chemical analysis: P. Vigneshwaran, M. Kandiban, S. Aravindha Raja and **I. Vetha Potheher**, TEQIP – II sponsored National Conference on Physics of Bulk and Nano Materials & Devices (P-BAND-2015), March 19 & 20, 2015.
62. Facile synthesis route of $CoMn_2O_4$ electrode and their electrochemical properties in supercapacitor application: P. Vigneshwaran, V. Venkatachalam, M. Kandiban, R. Jayaveland **I. Vetha Potheher**, National Conference on Advanced Functional Materils (NCAFM-2015), May 8 & 9, 2015.
63. Electrochemical Properties of Hetarolite (ZnM_2O_4) Electrode Material for High Energy Storage Supercapacitor Applications: M. Kandiban, V. Venkatachalam, P.

Vigneshwaran, R. Jayavel and **I. Vetha Potheher**, National Conference on Advanced Functional Materials (NCAFM-2015), May 8 & 9, 2015.

11. Seminar / Workshops / conferences organized:

- ✓ Served as Organizing Secretary for the TEQIP – II sponsored two days National Seminar on Materials Science and Engineering (NSMSE), 03-12-2013 to 04-12-2013.
- ✓ Served as Organizing Committee member for the TEQIP – II sponsored Faculty Development Program (FDP) on Advances in Physics and Applied Research for Technologists – 2013 (APART 2013), 29-11-2013 to 06-12-2013.
- ✓ Served as Co-coordinator for the TEQIP – II sponsored two days National Workshop on Optoelectronics and Advanced Materials (OPAM – 2013), 12-12-2013 to 13-12-2013.
- ✓ Served as Convener for the CSIR sponsored National Science Day Celebrations – 2014, Regional Level Exposition, 28-02-2014.
- ✓ Served as Steering Committee member for the TEQIP – II sponsored National Conference on Physics of Bulk and Nano Materials & Devices (P-BAND-2015), 19-03-2015 to 20-03-2015.
- ✓ Served as Coordinator for the TEQIP – II sponsored Two Weeks FDP on Advanced Research in Materials for Engineering and Technological Applications (ARMETA-2015), 17-07-2015 to 30-07-2015.
- ✓ Served as Treasurer for the TEQIP – II sponsored International Conference on Recent Advances in Materials (ICRAM-15), 16-10-2015 to 17-10-2015.
- ✓ Served as Coordinator for the TEQIP – II sponsored Two Weeks FDP on Recent Advancements in Materials (FDP RAM-'16), 11-07-2016 to 24-07-2016.

➢ **International conferences attended:**

1. International Conference on Lasers & Their Applications (INCOLA – 2000) organized by the Department of Physics, St. Joseph's College (Autonomous), Tiruchirappalli – 620 002. (March 1- 4, 2000)
2. XXXI Symposium of the Optical Society of India, International Conference on Optics and Optoelectronics (ICOL-2005) held at IRDE, Dehradun (Dec 12 –15, 2005).
3. Eighth International Conference on Optoelectronics, Fiber Optics and Photonics (PHOTONICS 2006), Organized by Hyderabad University, Hyderabad (Dec 13 – 16, 2006).

4. International conference on Functional Materials for Advanced Technology (ICFMAT – 2009), Organized by Velammal Engineering College, Chennai – 600066, 29th& 30th January 2009.
5. International conference on Materials Science and Technology (ICMST 2012), Organized by St. Thomas College, Pala, Kottayam, Kerala – 686 574, June 10 – 14, 2012.
6. International conference on Advances in New Materials (ICAN 2014), Organized by Department of Inorganic Chemistry, University of Madras, Chennai – 600 025, June 20 & 21, 2014.
7. International conference on Materials Science and Technology (ICMST 2016), Organized by St. Thomas College, Pala, Kottayam, Kerala – 686 574, June 5 – 8, 2016.

- **National conferences and seminars attended:**

1. Seminar on "Uses of Renewable Energy & Energy Conservation for Educational Institutions" held at Thiagarajar College of Engineering, Madurai.(Dec 13, 2003).
2. DAE Solid State Physics Symposium held at Gurunanak Dev University, Amristar. (December 26th – 30th, 2004).
3. National Symposium on Crystal Growth and Characterization held at LoyolaCollege, Chennai. (September 29th& 30th, 2005).
4. 5th DAE – BRNS National Laser Symposium (NLS – 2005) held at VIT, Vellore (December 7th – 10th, 2005).
5. National conference on Preparation and Characterization of Crystalline Materials (PADIKA 2006) held at S.T.HinduCollege, Nagercoil. (January 19th – 21st, 2006).
6. Seminar on Future Trends in Materials and Characterization held at LoyolaCollege, Chennai. (February 28th, 2006).
7. Workshop on Thin film Technology (WOTT-2006) held at National Institute of Technology, Trichy (NITT). (March 24th& 25th, 2006).
8. National Conference on Application Oriented Materials (NCAOM 2006) held at SRM Institute of Science and Technology, Deemed University, Kattankulathur – 603 203. (April 21st& 22nd, 2006).
9. National conference on Advances in Technologically Important Crystals, held at Department of Physics, Delhi University, Delhi – 110 007 (October 12th – 14th, 2006).
10. 11th National seminar on Crystal Growth, held at SSN College of Engineering, SSN nagar, Chennai – 603 110 (December 7th – 9th, 2006).

11. Second National Symposium on Nonlinear Optical Crystals and Modeling in Crystal Growth, held at Department of Physics, Anna University, Chennai – 600 025 (March 26th& 27th, 2007).
12. National seminar on Advances in Materials Science, held at Department of Physics, Loyola College, Chennai – 600 034 (February 28th, 2007).
13. Seminar on Curriculum Development – New Perspectives and Innovative Approaches, held at St. Xavier's College, Palayamkottai – 627 002 (September 21st& 22nd, 2007).
14. 7th DAE – BRNS National Laser Symposium (NLS – 7), held at Applied Physics department, Faculty of Technology and Engineering, The M. S. University of Baroda, Vadodara (December 17th – 20th, 2007).
15. 52nd DAE Solid State Physics Symposium held at University of Mysore, Mysore (December 27th – 31st, 2007).
16. Seminar on Teacher Empowerment for Classroom Effectiveness held at St. Xavier's College, Palayamkottai – 627 002 (February 1st and 2nd, 2008).
17. Fourth State level seminar on Recent Advances in Physics held at Scott Christian College, Nagercoil – 629 003 (February 22nd, 2008).
18. 6th National Conference on Emerging Trends in Crystal Growth and Nano Materials (NECAN – 2008) held at Department of Physics, Loyola College, Chennai – 600 034 (February 28th& 29th, 2008).
19. National Seminar on Recent Advances in Physics held at Department of Physics, St. Xavier's College, Palayamkottai – 627 002.
20. Bridge course on Physics conducted by Anna University, Chennai – 600 025 (June 20th and 21st, 2014).

- **Membership:**

  - Life member in **Indian Association for Crystal Growth**.
  - Life member in **Materials Research Society of India.**
  - Life member in **Indian Laser Association.**

- **Awards:**

1. Received **"The Best Paper Presentation Award"** in Second national symposium on nonlinear optical crystals and modeling in crystal growth organized by the Department of Physics, Anna University during March 26 – 27, 2007.

2. Received a special award for the **"Outstanding Performance as Coordinator for Students' Welfare"** in Loyola College during the academic year 2006 – 07.
3. Received **"Star of Loyola Award"** for outstanding achievement in the academic year 2004 – 05.

- **<u>Orientation and Training Program attended:</u>**

  - Attended Faculty Development and Training Program (FDTP) on Engineering Physics I (PH2111), conducted by Centre for Faculty Development, Anna University Chennai, from 20 to 27, June 2012.
  - Attended UGC sponsored Orientation program conducted by UGC-Academic Staff College, Pondicherry University, Pondicherry from 19-12-2012 to 15-01-2013.
  - Attended TEQIP – II sponsored Faculty Development Programme on Advances in Physics and Applied Research for Technologists – 2013 (APART 2013), conducted by the Department of Physics, Anna University BIT Campus, Tiruchirappalli, from 29-11-2013 to 06-12-2013.
  - Attended TEQIP – II sponsored Faculty Development Programme on New Perspectives in Drug Discovery And Progressive Technological Developments(NPDPTD- 2015), conducted by the Department of Pharmaceutical Technology, Anna University BIT Campus, Tiruchirappalli, from 04-05-2015 to 17-05-2015.
  - Attended Management Development Programme on "Academic Leadership Programme" for TEQIP Institutions, Conducted by Indian Institute of Management Kozhikode, from 24-08-2015 to 29-08-2015.
  - Attended Indian Academy of Science sponsored Refresher Course on Experimental Physics – 100, conducted by Panjab University, Chandigarh, from 17-07-2018 to 01-08-2018.
  - Completed three days "FDP for Student Induction (FDP-SI)" organized by AICTE from 27-08-2018 to 29-08-2018.
  - Attended Quality Improvement Program short term course on "Electrochemical Energy Generation and Storage Materials", conducted by Department of Chemical Engineering, IIT Kanpur from 14-08-2019 to 18-08-2019.

- Participated one-week online FDP on "Challenges and Opportunities in Recent Emerging Technologies" conducted by Shri Guru Gobind Singhji Institute of Engineering & Technology, Nanded from 06-07-2020 to 10-07-2020.
- Completed 20 days internship program in the first virtual summer school on "Nanoscience and Nanomaterials" organized by National Centre for Nanoscience and Nanotechnology, University of Madras from 10-07-2020 to 30-07-2020.
- Completed two weeks FDP on "Managing Online Classes and Co-Creating MOOCS 3.0" organized by Teaching Learning Centre, Ramanujam College, Delhi from 25-07-2020 to 10-08-2020.
- Participated in a two weeks online FDP on "ICT tools for teaching, learning process and institute" organized by Electronics and ICT Academies from 10-08-2020 to 21-08-2020.
- Attended Government officials training program on "Industrial training in additive manufacturing & its applications", conducted by National Institute of Electronics and Information Technology (NIELT), Calicut from 02-02-2022 to 15-02-2022.
- Participated in a one-week training program on R & D equipment on the theme "Structural identification of compounds by analytical techniques" organized by Central Research Instrumentation Facility (CRIF), NIT Warangal from 19-07-2022 to 25-07-2022.
- Attended Six-Day Faculty Empowerment Programme on "Tamizhar Marabhum Thozhil Nutppa Arivum" conducted by the Centre for Development of Tamil in Engineering & Technology at UCE, BIT Campus, Anna University Trichy from 11-03-2024 to 16-03-2024.

21. Invited Lectures Delivered:

1. Delivered a special lecture on **"Renewable Energy and Its Applications"** organized by the Department of Physics & Mathematics, Meenakshi Chandrasekaran College of Arts and Science, Pattukkottai – 614 626 (15th February 2010).
2. Delivered an invited speak on **"Introduction to Nonlinear Optical Materials and Bimetallic Thiocyanates"** at DST Sponsored National Seminar on Recent Trends in Physics, Shivani Engineering College, Tiruchirappalli, March – 18-19, 2011.
3. Delivered a special lecture on **"Crystal Growth and its Applications"** at Mookambigai College of Engineering, Tiruchirappalli, November 10, 2011.

4. Delivered a lecture on **"Basic Concept of Spectroscopy"** at Sri Saradha College for Women, Perambalur, February 9, 2012.
5. Delivered invited lecture on **"The pristine applications of Science in Technology for future applications"** at Bon Secures College, Tanjore, July 19, 2012.
6. Delivered a invited lecture on **"Research methodology in crystal growth and characterization"** at Sardar Raja College of Engineering, Alangulam, August 18, 2012.
7. Delivered invited lecture on "**Development of metallo-organic NLO crystals for frequency conversion applications"** at Srimathi Indra Gandhi College for Women, Trichy, August 28, 2012.
8. Delivered invited lecture on **"Frequency conversion applications of Lewis base adducts of metal-organic nonlinear optical single crystals"** at CSIR sponsored National seminar on novel materials (NSNM 2013), Shivani Engineering College, Tiruchirappalli, March 19, 2013.
9. Delivered a Special Lecture on **"Transistor based Electronic Circuits and their Applications"** at two days Skill Based Training Programme, organized by the Entrepreneurship Development Cell and Department of Physics, Mother Teresa Women's University, Kodaikanal, 12-09-2013 and 13-09-2013.
10. Delivered a Invited Lecture on **"Development of Metallo – Organic NLO Crystals and their Applications"** at Curriculum Development Cell sponsored two days Workshop on Research in Crystal Growth Processes and Methods, organized by the Department of Physics, Mother Teresa Women's University, Kodaikanal, 23-09-2013 and 24-09-2013.
11. Delivered a **Chief Guest address** at Thirumalai Engineering College, Kanchipuram for the Inauguration of EMPAC Association, 09-11-2013.
12. Delivered a guest lecture on "**Basic methods of crystal growth**" at cluster college meeting, organized by the Department of Physics, ANJA College, Sivakavi, 15-02-2014.
13. Delivered an invited lecture on **FT-IR** at Hands on Training Programme on sophisticated instruments, organized by the Department of Pharmaceutical Technology, Anna University BIT Campus, Tiruchirappalli, 20-02-2015.
14. Served as session chair in the two days "International conference on Advancements in computing and communication Technologies" at Anna University BIT Campus, Trichy (10, 11-04-2015).

15. Served as resource person in Two weeks Faculty Development Programme on Comprehensive Approach of Biotechnological Applications, organized by the Biotechnology department, Anna University BIT Campus, Trichy (24-04-2015).
16. Given Hands on training for the synthesis of organic compounds at Anna University BIT Campus on 19-07-2015. (ARMETA)
17. Given Hands on training for the synthesis of nanoparticles at Anna University BIT Campus on 26-07-2015. (ARMETA)
18. Delivered an invited lecture on **Basics of nonlinear optics and methods of crystal growth"** at Anna University BIT Campus on 27-07-2015. (ARMETA)
19. Delivered an invited lecture on **Basic Techniques in Crystal Growth** at Department of Physics, Mother Teresa Women's University, Kodaikanal, 24-8-2016.
20. Served as judge for the oral presentation in National Conference on Advanced Materials (NCAM 2016) at Department of Physics, St. Joseph's College, Trichy on 07-10-2016.
21. Delivered a guest lecture on **Awareness of Media** for the NSS students of Mother Teresa Women's University, Kodaikanal, 16-02-2017.
22. Delivered an invited lecture on **Green Mediated Synthesis of Metaloxide Nanoparticles for Biological Applications,** at Department of Bio-Chemistry, Holy Cross College, Trichy, 22-03-2017.
23. Served as Chief guest and delivered an invited lecture on **Basic methods of crystal growth & development of organic NLO Crystals for electro optical applications** at Department of Physics, Periyar University PG extension centre, Dharmapuri, 02-08-2017.
24. Served as chair person for the oral presentation of the International seminar on Materials Science and Technology-2017 on 04-08-2017 at Mother Teresa Women's University Kodaikanal.
25. Delivered an invited lecture on **Development of Nanoparticles and Nanocomposites for Electrical Applications,** at National Conference on Preparation and Characterization of Crystalline Materials (NCPCCM - 2017),Government Arts College, Tiruvannamalai, 06-09-2017.
26. Served as resource person and delivered a lecture on **Synthesis of Nanoparticles for Electrical and Biological Applications,** at two days skill training programme

on preparation and demonstration of a nano robot for agriculture fields and smart irrigation, at Mother Teresa Women's University, Kodaikanal, 11-09-2017

27. Given Hands on training for the synthesis of nanoparticles at two days skill training programme on preparation and demonstration of a nano robot for agriculture fields and smart irrigation, at Mother Teresa Women's University, Kodaikanal, 12-09-2017
28. Delivered a guest lecture on **Synthesis of nano materials for electrical and biological applications** at Department of Physics, St. Joseph's College, Trichy, 04-10-2017.
29. Delivered an invited lecture on **Synthesis of metaloxide nanoparticles and their biological applications** at 6th National Conference on Emerging Trends and New Challenges in Biotechnology – Advances in Biomaterials and Applications, Department of Bio-Technology, MGR College, Hosur, 01-02-2018.
30. Delivered an invited lecture on **Synthesis of metal oxide core-shell nanoparticles and their electrical properties** at 5th International Conference on Nanomaterials and Nanocomposites, Department of Physics, VIT University, Chennai, 09-02-2018.
31. Delivered an invited lecture on **Development of metallo-organic NLO crystals for frequency conversion applications**, at Department of Physics, Lakshmipuram College, Nagercoil, 01-03-2018.
32. Delivered a invited lecture on "**Synthesis and growth of Mannich base organic nonlinear optical material for frequency conversion applications**" at National Conference on Advances in Materials Research (NCAMR-18), SRMIST, Vadapalani Campus, Chennai (27, 28-04-2018)
33. Delivered an Invited lecture on **Applications of FT-IR spectrometer** in the characterization of pharmaceuticals at Hands on training programme Eruditio 19, 26-01-2019.
34. Served as judge for oral presentation for Physics Colloquium JOSPHY'09, organized by the department of Physics, St. Joseph's College, Trichy. (22-02-2019)
35. Served as resource person for the state level seminar on Advancements in Physics and delivered a lecture on **Advancements in nanotechnology** at St. Jerome's College, Nagercoil, 27-02-2019.

36. Delivered a lecture on **Scientific Methods** at one day seminar on the Role of Science in Engineering organized by the Department of Science & Humanities, Anna University Regional Campus, Tirunelveli, 28-02-2019.
37. Delivered a special lecture on "**Importance of nanomaterials for supercapacitor and biological applications**" at Department of Physics, Mother Teresa Women's University, Kodaikanal (12-09-2019).
38. Delivered a lecture on "**Advancement of nanotechnology in electrical and biological applications**" at National conference on Recent developments in effective materials, Department of Physics, Sarah Tucker College, Tirunelveli (07-02-2020).
39. Delivered a invited lecture on "**Nanomaterials for energy storage device applications**" at National conference on functional materials (NCFM-2020), Department of Physics, Noorul Islam Centre for Higher Education, Nagercoil (24-02-2020).
40. Delivered a lecture on "**Nanotechnology for sensor and energy storage applications**" at One day national seminar on Highlights of physics in current scenario, Department of Physics, Raja Doraisingam Government Arts College, Sivagangai (10-03-2020).
41. Delivered a lecture on "**Effective role of nanomaterials in supercapacitors**" at Pioneer Kumarasamy College, Nagercoil (29-05-2020).
42. Delivered a keynote lecture on "**Nanomaterials for energy storage devices**", at National webinar, Department of Physics, Muslim Arts College, Nagercoil (17-06-2020).
43. Delivered a lecture on "**Development of single crystals for frequency conversion applications**" at Webinar on Materials Science, Department of Physics, Mookambigai College of Engineering, Pudukottai (24-06-2020).
44. Served as Judge for Oral presentation at the International Confeence on Adbanced Materials (ICAM – 2022) organized by the Department of Physics, St. Joseph's College, Tiruchirappalli (11-02-2022)
45. Served as Judge for Oral presentation at the International Confeence on Adbanced Materials (ICAM – 2022) organized by the Department of Physics, St. Joseph's College, Tiruchirappalli (12-02-2022)

46. Delivered a special lecture in One day International workshop on "Physics of Materials and Nanotechnology" organized by the Department of Physics, Arulmigu Palaniandavar Arts College for Women, Palani. (02-08-2022)
47. Served as guest speaker at National Seminar on "Innovative Nano Materials and its Recent Applications (NSINMRA – 2022)" organized by SIMATS School of Engineering, Thandalam, Chennai (14-10-2022)
48. Delivered a lecture on "**Nano materials for energy storage applications**" at UGC sponsored national conference on energy materials, Department of Physics, Seethalakshmi Ramaswami College, Tiruchirappalli, (20-01-2023).
49. Acted as resource person for the seminar conducted by Craters club of K. Ramakrishnan College of Engineering, Trichy and delivered a lecture on Development of single crystals and nanomaterials for various technological applications. (26-05-2023)
50. Delivered a lecture on "**Nanomaterials for energy storage and biological applications**" at Synergistic Training Program Utilizing the Scientific and Technological Infrastructure (STUTI), Bannari Amman Institute of Technology, Erode (25-06-2023).
51. Delivered a guest lecture on "**Crystal Physics**" Jerusalem College of Engineering, Pallikaranai, Chennai on 09-10-2023.
52. Delivered a chief guest lecture on "**Impact of Science & Technology on Human Life**" during the National Science Day celebration organized by the Department of Physics, St. Xavier's College, Palayamkottai on 13-02-2024.
53. Delivered an invited talk on "**Impact of Single Crystals and Nanomaterials for Device Applications**" during the Illuminators Association Function conducted by the Department of Physics, Srinivasa Ramanujan Centre, SASTRA Deemed University, Kumbakonam on 28-02-2024.
54. Delivered an invited lecture on "Role of Science in Technological Applications" during the National Science Day Celebration organized by Institution Innovation Council, Indra Ganesan College of Engineering, Tiruchirappalli on 29-02-2024.
55. Delivered an invited lecture on **"Role of Physics in Technology for Future Prospects"** during the first year students orientation program organized by Sri Venkateswaraa College of Technology, Sriperumbudur on 04-09-2024.