

CURRICULUM VITAE OF Dr. C. K. MAHADEVAN

1. Name: Dr. Chelliah Kamalakshiammal MAHADEVAN
(Initial 'K' added later)

2. Age and Date of Birth : 60 years; July 25, 1958

3. Permanent Address : 4-134/B-39, Ananda Illam
Kamarajar Nagar Colony
Erumbukkadu PO
Nagercoil – 629 004
Tamil Nadu, INDIA



Mobile : +91-9442161237

E-mail : mahadevan58@yahoo.co.in

Current Mailing Address : C/o Dr. M. S. Gajanand
Door 307, 3rd Street, Eastern Avenue
I. I. M. Trichy Faculty Quarters
Pudukkottai Main Road
Trichy-620024, Tamil Nadu, INDIA

4. Sex : Male

5. Citizenship : Indian; Passport No: P5457630
(Valid up to November 02, 2026)

6. Marital Status : Married and having two children (Boys)

7. Last Position : Associate Professor of Physics [Also, Coordinator
for Science Research] (Up to 31-01-2014)
S. T. Hindu College, Nagercoil-629002
[Affiliated to Manonmaniam Sundaranar University]

Currently, Professor of Physics, PSN College of Engineering and Technology (Autonomous),
Tirunelveli-627152 [Affiliated to Anna University, Chennai] (From 25-09-2014)

8. Academic Qualifications:

Qualifications	Name of University (or) Institution	Year of Completion	Class Obtained
a) B.Sc. (Physics)	Madurai Kamaraj University	1978	First
b) M.Sc. (Physics – Theoretical Nuclear Physics)	Madras University	1980	First

- c) Ph.D. (Physics – I.I.T., Madras 1984 By Thesis
Crystallography)

Thesis Title : “Structures of Some Dithiolene and Diphosphine Complexes”

Thesis Adviser: Dr.(Mrs.) M. Seshasayee

- d) D.Sc. (Physics- Madurai Kamaraj University 2002 By Thesis
Crystallography)

Thesis Title : “1, 2 – Dithiolene Complexes of Transition Metals-Structural
Systematics and Physical Properties”

Thesis Adviser: Self

9. Other Academic Courses Attended:

- Workshop on Educational Television (ETV) Script Writing held during 4-7 April 1990 in the Audio Visual Research Centre, Madurai Kamaraj University, Madurai;
- UGC Refresher Course in Physics held during 1-17 April 1991 in the Department of Physics, Indian Institute of Science, Bangalore - 560 012;
- UGC Orientation Programme for Teachers held during 1-28 September 1993 in the Academic Staff College, Madras University, Madras – 600 005;
- Short Term Course on Teaching of History of Science held during 5-9 July 1995 in the Pondichery (Central) University, Pondichery;
- Orientation Programme on History of Science held during December 9-10, 1996 in the Manonmaniam Sundaranar University, Tirunelveli;
- XXX National Workshop on Radiochemistry and Applications of Radioisotopes held during 3-9 November 1997 at S.T. Hindu College, Nagercoil;
- UGC Refresher Course on Recent Trends in Crystal Growth held during 18 January - 7 February 1999 in the Crystal Growth Centre, Anna University, Chennai - 600 025;
- UGC Refresher Course in Physics (Condensed Matter Physics) during 11 October - 1 November 2000 in the Academic Staff College, University of Kerala, Thiruvananthapuram – 629 014; etc.

10. Ancillary Subjects Studied:

- Six full papers in Chemistry (covering all areas in Chemistry) at Undergraduate level and one full paper in Inorganic Chemistry (Covering co-ordination and solid state aspects) at Postgraduate level;
- Four full papers in Mathematics (covering all areas in Mathematics) at Undergraduate level and two full papers in Mathematical Physics at Postgraduate level;
- One paper (partial only) (covering the portions about proteins) in Biochemistry at Undergraduate level; etc.

11. Research Experience:

About 36 years with more than 32 years at postdoctoral level in the fields of:

- X-ray Crystallography (Crystal and Molecular Structure Analysis);
- Crystal Growth and Characterization;

- iii) Alternate Energy Sources;
- iv) Semiconductor Nanomaterials;
- v) Nanocomposites;
- vi) Advanced Functional Nanomaterials;
- vii) Tamil Literature;
- viii) Higher Education; etc.

Philosophy: As per the facilities available, choose the field of research and problems for investigations and contribute to the maximum level possible. Try to improve the quality and quantity of research along with increasing the facilities.

12. Research Guiding Experience:

Guided 2 Postdoctoral Research Associates, (more than) 40 Ph.D., 116 M.Phil. and several other small (B.Sc. and M.Sc.) research projects. The major research field is ‘Solid State Materials - Crystalline and Nanostructured Materials (Condensed Matter Physics – Materials Synthesis and Characterization) ’.

13. Teaching Experience:

i. Papers Taught: (Medium of instruction is English)

- a) Physics (theory and practical) for Higher Secondary School students;
- b) Physics (theory and practical covering all areas) for Chemistry and Mathematics Major Undergraduate students;
- c) Physics (theory and practical covering all areas) for Physics Major Undergraduate students;
- d) Solid State Physics, Spectroscopy, Nuclear Physics, Mathematical Physics, Quantum Mechanics, Materials Science, Crystalline Materials Science and Nanophysics for Physics Major Postgraduate students;
- e) History of Science, Environmental Science, Social Value Education and Personality Development (Foundation Course Papers) for Undergraduate students;
- f) Research Methodology, X-ray Crystallography, Crystal Growth and Characterization and Crystalline Materials Science for M.Phil and Ph.D. students;
- g) Synthesis of Nanomaterials and Characterization of Nanomaterials for Ph.D. students; etc.

ii. Duration:

- a) 2 months at Higher Secondary level;
- b) More than 26 years at Undergraduate level;
- c) More than 31 years at Postgraduate level; etc.

iii. Philosophy:

As per Students’ requirements, plan and execute the teaching.

14. Details of Employment:

Position held	Name of Institution	Period	Nature of Duties
---------------	---------------------	--------	------------------

a)	Lecturer	Dept. of Nuclear Physics, Madras University, Chennai-600025	08.04.1985(AN) to 09.08.1985	Teaching and Research
b)	CSIR Pool Officer	School of Physics, Madurai Kamaraj University, Madurai-625021	16.02.1987 to 23.08.1987	Teaching and Research
c)	Assistant Professor(Lecturer, Senior Lecturer & Reader)	Dept. of Physics, S.T. Hindu College, Nagercoil- 629002 (Affiliated to Manonmaniam Sundaranar University)	24.08.1987 to 26.07.2001	Teaching and Research
d)	Associate Professor	”	27.07.2001 to 31-01-2014	Teaching and Research
e)	Professor	Center for Scientific and Applied Research, PSN College of Engineering and Technology, Tirunelveli- 627152 (Affiliated to Anna University)	25-09-2014 to Date	Teaching and Research

15. Professional recognition, awards, fellowships received :

A. Professional Recognition

- (i) (a) Life Member of the National Academy of Sciences, India and (b) Fellow of the Academy of Sciences, Chennai;
- (ii) First person to be awarded the highest degree (D.Sc. by thesis) in Physics in the Southern Tamilnadu and first and only (so far) awardee of the Madurai Kamaraj University;
- (iii) First person to publish research papers in international journals and produce Ph.D. degrees in Physics from any college affiliated to the Manonmaniam Sundaranar University, Tirunelveli;
- (iv) Fully responsible for the development of the Physics Department of S.T. Hindu College as a recognized research center;
- (v) Fully responsible for bringing the UGC's Innovative Programme (M.Sc. Nanoscience and Nanotechnology) [UGC has granted Rs. 47 lakhs and full salary for 1 teaching staff];
- (vi) Delivered several lectures in the Refresher Courses conducted by the Anna University, University of Kerala and Pondicherry (Central) University and in the

neighbouring institutions to encourage research activity by the young teachers of colleges and universities;

- (vii) Authored the text books ‘History of Science’ – ‘Vignana Varalaru’ (Tamil version of the above, won the Tamilnadu State Government award), ‘Research Methodology’ and ‘Physics’ (for engineering students);
- (viii) Organised 1 state level seminar (on Nanostructured Materials), 3 national conferences (one on Physics Curriculum Development and the other two on Crystalline Materials Science) and 1 national and 6 regional conferences (covering all subjects) at S.T. Hindu College, Nagercoil:
 - (a) South Indian Physics Teachers Convention (March 13-15, 1992)- TNSCST and IPS sponsored
 - (b) National Conference on Crystal Growth and Characterization (March 22-23, 2001)- UGC sponsored
 - (c) National Conference on Preparation and Characterization of Crystalline Materials (January 19-21, 2006) – UGC sponsored
 - (d) First Seminar of 1999-2000 of Mano Research Forum (25-09-1999)
 - (e) Second Seminar of 1999-2000 of Mano Research Forum (20-11-1999)
 - (f) Third Seminar of 1999-2000 of Mano Research Forum (22-01-2000)
 - (g) Fourth Seminar of 1999-2000 of Mano Research Forum (18-03-2000)
 - (h) First Seminar of 2000 -2001 of Mano Research Forum (12-01-2001)
 - (i) Second Seminar of 2000 -2001 and a Special Seminar on Environmental Biology of Mano Research Forum (10-03-2001)
 - (j) Sixth All India Conference of KAAS (September 10-11, 2010)
 - (k) State Level Seminar on Nanostructured Materials (February 11-12, 2011)-TANSCHE sponsored
- (ix) Chaired more than 50 sessions and delivered more than 70 Invited/Keynote Talks in national/international conferences held at various places in India;
- (x) Edited and published : (1) “Proceedings of the South Indian Physics Teachers Convention (March 13-15, 1992)” and (2) “Proceedings of the Mano Research Forum 2000”. Also, authored the chapter ‘Crystal Structure Analysis’ in “Horizons of Physics – Vol. II” published (1996) by New Age International Publishers, New Delhi;
- (xi) Served as a
 - (a) Member of the Academic Excellence Committee, S.T. Hindu College;
 - (b) Member of the Advisory Committee for Physics, Malankara Catholic College;
 - (c) Member of the Board of Studies (Physics), Scott Christian College (Autonomous);
 - (d) Member of the Board of Studies (Physics), St. Xavier’s College (Autonomous);
 - (e) Member of the Board of Studies (P.G.Physics) Manonmaniam Sundaranar University, Tirunelveli;
 - (f) Member of the Board of Studies (UG Physics), Manonmaniam Sundaranar University, Tirunelveli;
 - (g) Member of the Board of Studies (M.Sc. Nanoscience and Nanotechnology), Manonmaniam Sundaranar University, Tirunelveli;

- (h) Member of Research Committee, PSN College of Engineering and Technology (Autonomous), Melathediyoar;
 - (i) Research Co-ordinator for Science, S.T. Hindu College;
 - (j) Member of the Board of Studies (Engineering Physics I & II and M.Sc. Materials Science course), PSN College of Engineering and Technology (Autonomous), Melathediyoar;
 - (k) Member of the Board of Studies (Physics), Sri GVG Vishalakshi College for Women (Autonomous), Udumalpet;
 - (l) Member of the Board of Studies (Nanoscience), Sarah Tucker College (Autonomous), Tirunelveli;
 - (m) Member of the Board of Studies (Physics), St. Mary's College (Autonomous), Thoothukudi;
 - (n) Chairman, Board of Studies for the School of Basic Engineering and Science, PSN College of Engineering and Technology (Autonomous), Tirunelveli; etc.
- (xii) Reviewer for the journals :
- (1) Spectrochimica Acta-Part A;
 - (2) Materials Letters;
 - (3) Crystal Growth and Design;
 - (4) Materials Chemistry and Physics;
 - (5) Physica B;
 - (6) Journal of Materials Science;
 - (7) Journal of Applied Physics;
 - (8) Indian Journal of Physics;
 - (9) Crystal Research and Technology;
 - (10) Philosophical Magazine Letters;
 - (11) Physica Status Solidi (b);
 - (12) Journal of Physics and Chemistry of Solids;
 - (13) Indian Journal of Pure and Applied Physics;
 - (14) Materials and Manufacturing Processes;
 - (15) Indian Journal of Science and Technology;
 - (16) Journal of Molecular Liquids;
 - (17) Indian Journal of Radio & Space Physics;
 - (18) Journal of Noncrystalline Solids;
 - (19) Journal of Thermal Analysis and Calorimetry;
 - (20) Journal of Crystallization Process and Technology;
 - (21) Materials Research Bulletin;
 - (22) Applied Physics A :
 - (23) Indian Journal of Engineering and Materials Sciences
 - (24) Asian Journal of Physics;
 - (25) IONICS;
 - (26) Journal of Optoelectronics and Advanced Materials;
 - (27) Nanoscience and Nanotechnology Letters;
 - (28) Journal of Alloys and Compounds;
 - (29) Physical Review and Research International;
 - (30) Journal of Materials Science:Materials in Electronics;

- (31) Surface Engineering;
- (32) Acta Physica Polonica A;
- (33) International Journal of Nanoscience;
- (34) Journal of Optics and Laser Technology;
- (35) Materials Research; etc.
- (xiii) Reviewed the following books for Tata McGraw Hill Education Private Ltd.
 - (a) Thermal Physics
 - (b) Concepts of Modern Physics
- (xiv) (a) Question paper setting and valuation done for B.Sc., M.Sc., M.Phil., M.Tech., and Ph.D. (Methodology papers) examinations (University)
- (b) Examined several M.Sc. and M.Phil. and 7 Ph.D. dissertations.
- (xv) Acted as the Coordinator of Mano Research Forum (Nagercoil Circle) of the Manonmaniam Sundaranar University, Tirunelveli for two years (1999-2001).
- (xvi) Selected as one of the Eminent Personalities of India by the International Biographical Research Foundation, India.
- (xv) Acted as the Coordinator for M.Sc. Nanoscience and Nanotechnology (UGC's Innovative) Programme for about 2 Semesters (in 2010).
- (xvi) Acted as the Coordinator for Science Research (S.T.Hindu College) for about 6 years (2008-2014).

B. Awards

- (i) Certificate of Merit for the Proficiency in Mathematics (1973 – 1974);
- (ii) Dr. Kalyanasundaram Prize for the Proficiency in M.Sc. Practicals (1978 – 1980);
- (iii) Special Award for the Research work carried out at S.T. Hindu College from the Management of S.T. Hindu College (1995 – 1996);
- (iv) **Tamil Nadu State Government Award (1995) for the book “Vignana Varalaru” [‘History of Science’ in Tamil];**
- (v) Best Paper Presentation Award in National Conference on Preparation and Characterization of Crystalline Materials held at S.T. Hindu College, Nagercoil (January 19-21, 2006);
- (vi) Best Poster Presentation Award in Seminar on Future Trends in Materials and Characterization held at Loyola College, Chennai (February 28, 2006);
- (vii) Best Paper Presentation Award in National Conference on Crystal Growth for Electro-Optic Applications held at Karunya Institute of Technology and Sciences, Coimbatore (June 16 –17, 2006);
- (viii) **Research Award (2006) of University Grants Commission, New Delhi;**
- (ix) Best Paper Presentation Award in XI National Seminar on Crystal Growth held at SSN College of Engineering, Chennai (December 7 –9, 2006);
- (x) **Prof. P. Ramasamy National Award for Crystal Growth for the year 2006 from Indian Association for Crystal Growth;**
- (xi) Best Paper Presentation Award in 6th National Conference on Emerging Trends in Crystal Growth and Nano Materials held at Loyola College, Chennai (February 28 – 29, 2008);
- (xii) **Tamil Nadu Scientist Award (2008) from Tamilnadu State Government;**
- (xiii) **Best (College) Teacher Award (2008-2009) from Tamil Nadu State Government;**

- (xiv) **Academic Achievement Award (2010) from Kanniyakumari Academy of Arts and Sciences;**
- (xv) Best Poster Presentation Award in XXXIX National Seminar on Crystallography held at University of Jammu, Jammu (October 25-27, 2010);
- (xvi) Best Paper Presentation Award in National Seminar on Recent Trends in Physics held at Shivani Engineering College, Trichy (March 18 – 19, 2011);
- (xvii) Best Paper Presentation Award in National Conference on Exploring the Frontiers of Vibrational Spectroscopy held at Women's Christian College, Nagercoil (September 1-2, 2011);
- (xviii) Best Paper Presentation Award in National Seminar on Current Trends in Materials Science held at NSS College, Changanacherry (March 07-08, 2012);
- (xix) **Life -Time Achiever Award (2012) from Scott Alumni Association;**
- (xx) Best Poster Presentation Award in National Seminar on New Materials Research and Nanotechnology held at Government Arts College, Ooty (September 12-14, 2012);
- (xxi) Best Paper Presentation Award in National Conference on Nanomaterials held at Karunya University, Coimbatore (December 3-4, 2012);
- (xxii) Two Best Paper Presentation Awards in National Conference on Advanced Materials held at St.Mary's College, Thoothukudy (February 15-16, 2013);
- (xxiii) Best Paper Presentation Award in National Seminar on Novel Materials held at Shivani Engineering College, Tiruchirappalli (March 08, 2013);
- (xxiv) Best Paper Presentation Award in National Seminar on Recent Trends in Crystal Growth and Nano Materials held at National College, Tiruchirappalli (March 13-15, 2013);
- (xxv) Best Paper Presentation Award in International Conference on Advanced Nanomaterials & Emerging Engineering Technologies held at Sathyabama University, Chennai (July 24-26, 2013);
- (xxvi) Three Best Paper/Poster Presentation Awards in Second National Seminar on New Materials Research and Nanotechnology held at Government Arts College, Ooty (September 25-27, 2013);
- (xxvii) Best Paper Presentation Award in National Conference on Emerging Trends in Applied Physics held at Lekshmipuram College of Arts and Science, Neyyoor (February 19-20, 2015); etc.

C. Fellowships / Associateships Awarded

- (i) Junior Research Fellowship (13-10-1980 to 12-10-1982) at Department of Physics, I.I.T. Madras, Chennai;
- (ii) Senior Research Fellowship (13-10-1982 to 31-07-1984) at Department of Physics, I.I.T. Madras, Chennai;
- (iii) CSIR Research Associateship (01-02-1985 to 08-04-1985) at Department of Physics, I.I.T. Madras, Chennai;
- (iv) Postdoctoral Fellowship (01-09-1985 to 31.08.1986) at Department of Biochemistry, University of California, Riverside, USA;
- (v) Visiting Scientist (18-03-1991 to 26-03-1991) at Crystal Growth Centre, Anna University, Chennai;

- (vi) Visiting Professor (25-09-2017 to 18-10-2017) at Photoelectric Functional Materials Engineering Research Center of the Ministry of Education, Changchun University of Science and Technology, Changchun, China; etc

16. Number of Publications

- (i) Research review article in international journal – 1;
- (ii) Original research papers in international journals – 226;
- (iii) Original research papers in international proceedings – 29;
- (iv) Articles in other journals / proceedings – 109;
- (v) Book chapter – 1;
- (vi) Books – 11 (Text books - 4 & Others - 7);
- (vii) Presentations in Conferences – 665 (including 71 invited talks and 3 keynote addresses); etc.

17. Funded Projects Availed:

- i) Preparation and properties of single crystals of some organic semi conductors – UGC sponsored - Rs.11,000/- (1989-1991);
- ii) [*Through his Ph.D. Scholar T.H. Freeda*] Studies on KDP single crystals added with some ammonium compounds – UGC sponsored – Rs.31,000/- (1997 – 1999);
- iii) Growth and characterization of $(\text{NaCl})_x(\text{NaBr})_{y-x}(\text{NaI})_{1-y}$ single crystals – UGC sponsored - Rs.40,000/- (1998 – 2000);
- iv) Growth, structure and physical properties of ternary mixed crystals of potassium halides - TNSCST sponsored - Rs.2,23,000/- (1999 – 2002);
- v) In-vitro studies on some urinary crystals – CSIR sponsored - Rs.5,25,867/- (2000 – 2003);
- vi) Growth and characterization of some novel metal organic nonlinear optical crystals – DST sponsored - Rs.8,88,857/- (2001-2004);
- vii) In search of efficient NLO materials for defence applications – DRDO sponsored – Rs.14,96,000/- (2005 – 2008);
- viii) [*Through his Ph.D. Scholar M. Priya under Women Scientist Scheme*] Growth and characterization of multiphased and ternary mixed crystals of alkali halides – DST sponsored – Rs.9,30,000/- (2005 – 2008);
- (ix) Preparation and properties of nanocrystalline $\text{Zn}_x\text{Cd}_{1-x}\text{S}$ – UGC sponsored – Rs.90,000/- (2006-2008);
- (x) Investigations on ZnS-ZnO nanocomposites – CSIR sponsored – Rs.9,42,180/- (2008-2011);
- (xi) Large size potassium bromide single crystal and alkali halide mixed crystal – Project jointly declared along with Prof. Jinghe Liu (Changchun University of Science and Technology, Changchun, China) and approved by the Jilin Provincial of Foreign Experts Affairs, China – (2017-2019); etc.

18. Significant Research Contributions Made

In my earlier research career (before joining S.T. Hindu College, Nagercoil), I have contributed enormously along with my Ph.D. Guide (Dr. M. Seshasayee) and some other workers in the field of X-ray Crystallography. After joining S.T. Hindu College, I switched

over to take up research work in the field of crystal (including nanocrystal) growth and characterization. In this field also, with very limited support available, I have contributed a lot along with my B.Sc., M.Sc., M.Phil. (from other institutions also) and Ph.D. students. In addition, I have contributed to some extent in the fields of alternate energy sources, higher education and Tamil literature.

In the field of X-ray crystallography (crystal structure analysis) I have determined the crystal and molecular structures of eighteen compounds and derived several useful results. Disproved the idea that bulky counterions lead to nonplanar structures. Observed, **for the first time**, mixed stacking and double stacking in some 1,2 – dithiolene complexes. Also, observed possible exchange interaction by means of diadic stacking. His analysis of the significance of the overall charge of $[\text{Ni}(\text{mnt})_2]^{n-}$ shows that the ionic effect is prevalent in these systems. Observed that the charge donating efficiency of the phosphorous atoms in the 1, 2-diphosphine complexes is less when compared to that of the sulphur atoms in 1, 2- dithiolene complexes. Observed, **for the first time**, $\lambda\lambda\lambda$ ring confirmation in some $[\text{M}(\text{en})_3]^{2+}$ systems. In addition, **published an informative review article** on the structural systematics of 1, 2-dithiolene complexes of transition metals.

In the field of crystal growth and physicochemical characterization, I have contributed a lot. **Proposed a new method** (by growing the anthracene single crystals), gel-solution method, to grow organic compound single crystals using silica gel. Succeeded in growing thiourea, CdS, KNO_3 and calcium tartrate tetrahydrate crystals in silica gel media. Grown by the free evaporation (solution) method K-PbBr_2 , Na-PbBr_2 , BTCC-BTCI, anhydrous sodium formate, hydrous barium succinate, sodium-potassium phthalate, calcium-barium succinates, sodium-potassium pentaborates, $(\text{LHC})_x(\text{LHB})_{1-x}$, $(\text{ZTS})_x(\text{MTS})_{1-x}$, $\text{CaCd}(\text{SCN})_4$, $\text{Zn}_x\text{Cd}_{(2-x)}(\text{SCN})_4$, $\text{ZnHg}(\text{SCN})_4$, $\text{CdHg}(\text{SCN})_4$, $\text{Mg}_x\text{Zn}_{1-x}\text{SO}_4 \cdot 7\text{H}_2\text{O}$, $\text{Ni}_x\text{Zn}_{1-x}\text{SO}_4 \cdot 7\text{H}_2\text{O}$ and $\text{Ni}_x\text{Mg}_{1-x}\text{SO}_4 \cdot 7\text{H}_2\text{O}$ crystals, **for the first time**, and characterized them.

Systematically studied the effect of soluble impurities on **the homogeneous nucleation parameters** of several inorganic and organic crystals **and grouped the results into four rules**. Studied the effect of several impurities (both organic and inorganic) on the optical, electrical, thermal, etc properties of KDP, ADP, $(\text{ADP})_x(\text{KDP})_{1-x}$, TGS, ZTS, BTCC, $\text{MnHg}(\text{SCN})_4$, $\text{ZnCd}(\text{SCN})_4$, $\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$, $\text{NiSO}_4 \cdot 7\text{H}_2\text{O}$, LAA, LAHCl, TGSP, p-MHB, glycine metal (Na/K) sulphates, strontium formate dihydrate, KAP, calcium succinate, potassium formate and calcium tartrate tetrahydrate single crystals and obtained several useful results. **Proposed a new method** (called seeded free evaporation method) to grow large size single crystals of Na_2HPO_4 , $(\text{NH}_4)_2\text{HPO}_4$, ADP, KDP, etc.

Several metal (Co, Mn, Ni, Cd, Cu, Sr, etc) malonate single crystals have been grown by the gel methods and characterized. Large size single crystals of GaTe and several organic materials like benzyl, naphthalene, 2-hydroxypyridine, 2-amino-5-chloropyridine, 2-methylamino-5-chlorobenzophenone and 2-hydroxy-4-methoxybenzophenone have been grown by the melt methods and characterized.

In-vitro studies made on urinary stone crystals (investigating the effect of drugs and vegetable and fruit juices on the formation of urinary stone crystals) may probably help to carry out further study in the treatment of urinary calculi.

L-arginine acetate, L-arginine oxalate, manganese malonate, cadmium malonate, nickel malonate, copper malonate, $\text{MnHg}(\text{SCN})_4$, $\text{CaCd}(\text{SCN})_4$, 2-amino-5-chloropyridine, KDP (doped with urea and L-arginine) and $\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$ (doped with urea

or glycine) single crystals are **found to be low dielectric constant value dielectric materials.**

Non-stoichiometric single crystals of $K_3BaCl_5 \cdot 2H_2O$, $K_3CaCl_5 \cdot 2H_2O$ and $Na_3CaCl_5 \cdot 2H_2O$ have been grown, **for the first time**, and found that non-stoichiometric $K_3BaCl_5 \cdot 2H_2O$ is a dielectric material and the other two are **ionic conductors**. It is understood that a journey from dielectric material to ionic conductor is possible when we are able to prepare highly non-stoichiometric complex crystals by combining an alkali halide and an alkaline earth metal halide.

Grown multiphased ternary mixed crystals of alkali halides, **for the first time**, and found that these crystals have more hardness and more dielectric constant and are more stable than the end member and monophased mixed crystals. Also, **with the collaboration** of research workers from **Changchun University of Science and Technology**, China, **grown** by the Czochralski method **and characterized large size (weighing about 5 kg) single crystals of $KCl_{1-x}Br_x$.**

The depth profile study made on II-VI compound added alkali halide crystals indicated that the dopant addition creates different layers along the crystal with increase of dopant content from the top to bottom. The crystals cut into thin wafers will be highly useful for devices as each wafer will have different physical properties. Ultimately the **study indicated that a series of materials with different properties can be prepared in a single growth experiment.**

Designed and used a simple and low cost crystal sample holder to carry out the electrical measurements (both AC and DC) by the two-probe (parallel plate capacitor) method. When the area of crystal sample touching the electrode is smaller than the plate area, correction for the air capacitance has to be done. So, **a new formula was derived** by me **to estimate the dielectric constant** which is often called as Mahadevan's formula/relation.

Proposed a new simple solvothermal method using a domestic microwave oven (often called as **Mahadevan's method**) to prepare nanostructured materials. **Succeeded in preparing (with good yield, good quality and useful physical properties) pure and doped nanoparticles** of ZnO, ZnS, CdO, Cd(OH)₂, CdCO₃, CdS, CdSe, PbS, PbO, NiO, NiS, NiSi_{1.03}, Ni(OH)₂, Mn₃O₄, MnS₂, Co₃O₄, α -Fe₂O₃, Cu₉S₅, CuS, CuO, etc and **nanocomposites** of PbO-PbS, CdS-CdSe, ZnS-CdS, ZnO-CdS, ZnO-ZnS, ZnO-CdO, CdCO₃-Mn₃O₄, CdS-MnS₂, Ni(OH)₂-Mn₃O₄, Mn₃O₄-MnS₂, etc (all without and with impurity added) by using the above method and cheaper chemicals. Nanoparticles of ZnO, ZnS, CdO and CdS could also be **prepared (with good yield, good quality and useful physical properties) at room temperature** by using NaOH as the capping agent.

Succeeded in preparing **water soluble (slightly) ZnS and CdS nanoparticles (normally insoluble in water)** by using Mahadevan's method with ethylene diamine as the capping agent. The **SHG efficiency of ADP and KDP single crystals could be increased and dielectric constant could be decreased significantly** by adding water soluble ZnS and CdS as impurities to them. Succeeded in forming **high quality PVA polymer film sheets** by a simple low-cost solution casting method and found that the use of **different solvents** leads the PVA film to possess **different optical and electrical properties**. Moreover, succeeded in preparing **ZnO/CuO nanoparticles dispersed PVA polymer (nanocomposite) films.**

Found that the $\text{Zn}_x\text{Cd}_{1-x}\text{O}:\text{Mn}$ nanocrystals are dilute magnetic semiconductor (DMS) materials with ferromagnetic order at room temperature. Discovered that forming two – component nanocomposites with ZnO and ZnS and with ZnO and CdS leads to strong enhancement in photoluminescence yield and consequently to new useful materials for photonic applications. Found that amorphous phase of $\gamma\text{-Fe}_2\text{O}_3$ nanoparticles exhibits super paramagnetism. Discovered that doping with Mn enhances the coercivity of $\alpha\text{-Fe}_2\text{O}_3$ nanoparticles by more than seven times. Succeeded in preparing all the five phases (amorphous, α -, β -, γ - and ε -) of Fe_2O_3 nanoparticles with high purity by Mahadevan's method. Also, succeeded in preparing all the four phases (amorphous, α -, β - and $\text{NiS}_{1.03}$) of NiS nanoparticles with high purity by Mahadevan's method. Discovered that anionic doping makes $\alpha\text{-NiS}$ nanocrystals a better electrochemical sensing performer.

CURRENT INTEREST

Very much interested in developing new low-cost and non-toxic pure & hybrid ferrite-polymer nanocomposites for highly efficient clean energy storage, photonic and EMI shielding, etc devices. Also interested in developing pure and hybrid alkali halide nanocrystals.

SOME PROPOSALS FOR THE FUTURE

- (1) Development of new low-cost and clean ferrite-polymer nanocomposites for EMI shielding, energy storage and photonic applications
- (2) Development of pure and hybrid alkali halide nanocrystals

19. Fellowship / Membership in Professional Societies:

- i) Life Member of The National Academy of Sciences, India (NASI);
- ii) Fellow of The Academy of Sciences, Chennai (ASCC);
- iii) Fellow (Life Member) of the Indian Chemical Society (ICS);
- iv) Life Member of the Indian Association of Physics Teachers (IAPT);
- v) Life Member of the Indian Association for Crystal Growth (IACG);
- vi) Life Member of the Indian Physical Society (IPS) [Council Member (1993-1996) and Vice President (2005 – 2006)];
- vii) Fellow (Life Member) of the Optical Society of India (OSI);
- viii) Life Member of the Materials Research Society of India (MRSI);
- ix) Life Member of the Solar Energy Society of India (SESI);
- x) Founder Vice President, Conference Organising Committee Member and Editorial Board Member of the Kanniyakumari Academy of Arts and Sciences (KAAS) (1996-Date);
- xi) Member of the American Physical Society (APS) (1990-1997);
- xii) Life Member of the Indian Science Congress Association (ISCA);
- xiii) Life Member of the Indian Physics Association (IPA);
- xiv) Fellow (Life Member) of The Society for Advancement of Electrochemical Science and Technology (SAEST);
- xv) Member of the Materials Research Society of Singapore (MRS-S) (2011-2013) etc.

20. Travel to or Work in Abroad:

- (i) Have worked as a Postdoctoral Fellow in the Department of Biochemistry,

University of California, Riverside, California, USA for one year from September 1, 1985 to August 31, 1986.

- (ii) Visited National University of Singapore and presented 4 research papers in the International Conference on Materials for Advanced Technologies (June 26-July 01, 2011) held at Suntec, Singapore.
- (iii) Have worked as a Visiting Professor in the Photoelectric Functional Materials Engineering Research Center of the Ministry of Education at Changchun University of Science and Technology, Changchun, China for 24 days from September 25 to October 18, 2017.

21. Languages Known:

- i) Tamil : To read, write, speak and comprehend well (Mother tongue) (Part I up to B.Sc. Course);
- ii) English : To read, write, speak and comprehend well (Part II up to B.Sc. Course);
- iii) Hindi : To read and write (Pradhamic passed);
- iv) Malayalam : To speak; etc.

22. Co-curricular and Extra-curricular Activities:

- i) Awarded Second Prize in Long Jump (Junior) (1974-1975);
- ii) Member of the Social Service League of Scott Christian College, Nagercoil –3 (1974-1975);
- iii) Member of the Planning Forum of Scott Christian College, Nagercoil-3 (1974-1975);
- iv) Member of the Student Union for Mathematics in Scott Christian College, Nagercoil-3 (1974-1975);
- v) Member of the Student Union for Chemistry in Pioneer Kumaraswamy College, Nagercoil-3 (1977-1978);
- vi) Founder, Secretary and Treasurer of Sivajeevaswamy Trust (1987-2008);
- vii) President of Kamarajar Nagar Colony Residential Association (1997-2002);
- viii) Life Member of Scott Alumni Association; etc.

23. Contributions to the Society

Organised 1 state level seminar (on Nanostructured Materials), 3 national conferences (one on Physics Curriculum Development and the other two on Crystalline and Nanostructured Materials Science) and 1 national and 6 regional conferences (covering all subjects) at S.T. Hindu College, Nagercoil. Acted as the Coordinator of Mano Research Forum (Nagercoil Circle) of the Manonmaniam Sundaranar University, Tirunelveli for two years (1999-2001).

More than 31 years teaching experience and taught all papers for B.Sc. (Major and Allied Physics) students and Solid State Physics, Spectroscopy, Nuclear Physics, Mathematical Physics, Quantum Mechanics, Crystalline Materials Science and Nanophysics for M.Sc. (Physics) students. Also, have taught Research Methodology, X-ray Crystallography, Crystal Growth and Characterization, Crystalline Materials Science and Nano Materials Science for M.Phil. and Ph.D. students. In addition, have rich

experience in serving as a question paper setter and examiner (at University level) for B.Sc., M.Sc., M.Phil. and Ph.D. examinations (including assessment of M.Phil., M.Tech., and Ph.D. dissertations).

Have rich experience in Curriculum Development. Have served as a Member of the Academic Excellence Committee, S.T. Hindu College as well as Member of Board of Studies (Physics), Scott Christian College (Autonomous), Member of Board of Studies (Physics), St. Xavier's College (Autonomous) and Member of the Board of Studies (P.G. and UG Physics), Manonmaniam Sundaranar University, Tirunelveli. Also, served as a Member of Research Committee and Board of Studies, PSN College of Engineering and Technology (Autonomous), Member of the Board of Studies (M.Sc.Nanoscience and Nanotechnology), Manonmaniam Sundaranar University, Tirunelveli, Member of the Board of Studies (Physics), Sri GVG Vishalakshi College for Women (Autonomous), Udumalpet, Member of the Board of Studies (Physics), St. Mary's College (Autonomous), Tuticorin, Member of the Board of Studies (Nanoscience), Sarah Tucker College (Autonomous), Tirunelveli, Research Co-ordinator for Science, S.T. Hindu College and Chairman, Board of Studies, PSN College of Engineering and Technology (Autonomous), Tirunelveli. In addition, have done good service in my capacity as the Founder Vice-President, Conference Organising Committee Member and Editorial Board Member of Kanniyakumari Academy of Arts and Sciences (KAAS) (1996 - Date).

Have delivered several lectures in the neighbouring institutions to encourage research activity by the Physical Sciences teachers of these institutions. Also, have delivered lectures in several refresher courses organized by the Anna University, Kerala University and Pondichery (Central) University. Served as a Member of Advisory/ Technical/ Organising Committee for various National/International Conferences held at several places in India.

In addition, have done good service to the society in the capacity as the Founder, Secretary and Treasurer of the Sivajeevaswamy Trust (1987 – 2008) and as the President of Kamarajar Nagar Colony Residential Association (1997-2002).

Thus, contributed a lot to the society on the whole and, in particular, to the learning society (mainly faculty and students of Physical Sciences).

24. Chairmanship in Conferences:

1. VIII National Seminar on Crystal Growth (February 1999) held at Anna University, Chennai
2. Symposium on Crystal Growth of Laser Related Materials (August 2000) held at Anna University, Chennai
3. National Conference (in Tamil) on Crystal Growth (August 2000) held at Anna University, Chennai
4. Symposium on Fundamentals of Crystal Growth (November 2000) held at Anna University, Chennai
5. IX National Seminar on Crystal Growth (February 2003) held at Anna University, Chennai

6. International Workshop on Crystal Growth and Characterization of Technologically Important Materials (February 2004) held at Anna University, Chennai
7. First All India Conference of KAAS (September 2004) held at Scott Christian College, Nagercoil
8. First Multidisciplinary National Seminar of Scott Research Forum (September 2004) held at Scott Christian College, Nagercoil
9. Tenth National Seminar on Crystal Growth (January 2005) held at Kongu Engineering College, Erode
10. Symposium on Nonlinear Optical Crystals and Modelling of Crystal Growth (February 28 – March 1, 2005) held at Anna University, Chennai.
11. National Symposium on Crystal Growth and Characterization (September 29-30, 2005) held at Loyola College, Chennai
12. Second All India Conference of KAAS (October 21, 22 2005) held at Scott Christian College, Nagercoil;
13. Second National Symposium on Crystal Growth of Laser Related Materials (December 19-20, 2005) held at SSN College of Engineering, Chennai
14. Second National Conference on Crystal Growth (in Tamil) (December 21, 2005) held at SSN College of Engineering, Chennai
15. National Seminar on Post Tsunami Changes On Marine System, Environment and Socio Economic Status of Coastal People (March 17-18, 2006) held at Lekshmipuram College of Arts and Science, Nayyoor;
16. National Conference on Crystal Growth for Electro-Optic Applications (June 16-17, 2006) held at Karunya Institute of Technology and Sciences, Coimbatore
17. Eleventh National Seminar on Crystal Growth (December 7-9, 2006) held at SSN College of Engineering, Chennai
18. Second National Symposium on Nonlinear Optical Crystals And Modelling in Crystal Growth (March 26-27, 2007) held at Anna University, Chennai
19. Second International Conference on Emerging Adaptive Systems and Technologies (October 25-27, 2007) held at Noorul Islam College of Engineering, Kumaracoi
20. Twelfth National Seminar on Crystal Growth (December 21-23, 2007) held at SSN College of Engineering, Chennai
21. 6th National Conference on Emerging Trends in Crystal Growth and Nano Materials (February 28-29, 2008) held at Loyola College, Chennai
22. National Seminar on Global Warming and Impact on Environment along Indian Ocean (August 2008) held at Lekshmipuram College of Arts and Science, Neyyoor
23. First International Conference of KAAS (December 5-6, 2008) held at Women's Christian College, Nagercoil
24. Thirteenth National Seminar on Crystal Growth (January 27-29, 2009) held at SSN College of Engineering, Chennai
25. National Seminar on Crystalline Materials and Nanotechnology (February 26-27, 2009) held at Malankara Catholic College, Mariagiri
26. National Conference on Advanced Materials – Processing, Characterization and applications (August 27-29, 2009) held at PSN college of Engineering and Technology, Triunelveli

27. Fifth All India Conference of KAAS (December 4-5, 2009) held at Holy Cross College, Nagercoil
28. UGC sponsored National Conference on Recent and Emerging Developments in Physics (January 7-9, 2010) held at Women's Christian College, Nagercoil.
29. XIV National Seminar on Crystal Growth (March 10-12, 2010) held at VIT University, Vellore
30. Sixth All India Conference of KAAS (September 10-11, 2010) held at S.T.Hindu College, Nagercoil
31. Conference on Crystal Growth Science and Technology (in Tamil) (October 18-19, 2010) held at Anna University, Chennai
32. State Level Seminar on Nanostructured Materials (February 11-12, 2011) held at S.T.Hindu College, Nagercoil
33. National Seminar on Recent Trends in Physics (March 18 – 19, 2011) held at Shivani Engineering College, Trichy
34. National Seminar on Luminescent and Lasing Materials (August 19-21, 2011) held at St. Aloysius College, Edathua
35. National Conference on Exploring the Frontiers of Vibrational Spectroscopy (September 1-2, 2011) held at Women's Christian College, Nagercoil
36. Seventh All India Conference of KAAS (September 16-17, 2011) held at Women's Christian College, Nagercoil
37. State Level Seminar on Culture and Health (October 3-4, 2011) held at S.T.Hindu College, Nagercoil
38. National Conference on Recent Trends in Arts, Science and Management (February 17, 2012) held at Women's Christian College, Nagercoil
39. National Conference on Physics of New Materials (April 20-21, 2012) held at Noorul Islam University, Kumaracil
40. National Seminar on New Materials Research and Nanotechnology (September 12-14, 2012) held at Government Arts College, Ooty
41. Eighth All India Conference of KAAS (October 5-6, 2012) held at Sree Ayyappa College for Women, Chunkankadai
42. III National Conference on Advanced Materials – Processing, Characterization and Applications (January 23-25, 2013) held at PSN College of Engineering and Technology, Tirunelveli
43. National Conference on Advanced Materials (February 15-16, 2013) held at St. Mary's College, Tuticorin
44. National Seminar on Recent Trends in Crystal Growth and Nano Materials (March 13-15, 2013) held at National College, Tiruchirappalli
45. National Conference on Innovative Trends in Materials Science (August 23-24, 2013) held at Arignar Anna College, Aralvoimozhi
46. Second International Conference of KAAS (September 20-21, 2013) held at Sree Ayyappa College for Women, Chunkankadai
47. Second National Seminar on New Materials Research and Nanotechnology (September 25-27, 2013) held at Government Arts College, Ooty
48. National Seminar on Spectroscopic Techniques and its Applications for Material Characterization (October 03-04, 2013) held at University of Kerala, Thiruvananthapuram

49. XVIII National Seminar on Crystal Growth (February 24-26, 2014) held at SSN College of Engineering, Chennai
50. National Conference on Emerging Trends in Applied Physics held at Lekshmipuram College of Arts and Science, Neyyoor (February 19-20, 2015);
51. National Conference on Graphene and Liquid Crystals for Smart Nanoengineering Applications held at Saveetha Engineering College, Thandalam (November 7-9, 2016);
52. XXII National Seminar on Crystal Growth and Applications held at Sacred Heart College, Tirupattur (January 29-31, 2018); etc.

25. Conferences Attended and/or Papers Presented:

I. Regional level

1. Workshop on Identification of Thrust Areas and Curriculum Development for Resource Utilization (July 1992) held at Manonmaniam Sundaranar University, Tirunelveli (One paper presented);
2. First Meeting of the Mano Research Forum (Nagercoil Circle) (August 1998) held at Scott Christian College, Nagercoil (One paper presented);
3. Second Meeting of the Mano Research Forum (Nagercoil Circle) (November 1998) held at S.T. Hindu College, Nagercoil (Two papers presented);
4. Fourth Meeting of the Mano Research Forum (Nagercoil Circle) (April 1999) held at N.M. Christian College, Marthandam (One paper presented);
5. First Seminar of 1999-2000 of the Mano Research Forum (Nagercoil Circle) (September 1999) held at S.T. Hindu College, Nagercoil (Five papers presented);
6. Second Seminar of 1999-2000 of the Mano Research Forum (Nagercoil Circle) (November 1999) held at S.T. Hindu College, Nagercoil (Two papers presented);
7. Third Seminar of 1999-2000 of the Mano Research Forum (Nagercoil Circle) (January 2000) held at S.T. Hindu College, Nagercoil (Two papers presented);
8. Thirukkural Vizhipunarvu Karutharangam (January 2000) held at S.T. Hindu College, Nagercoil (One paper presented);
9. Fourth Seminar of 1999-2000 of the Mano Research Forum (Nagercoil Circle) (March 2000) held at S.T. Hindu College, Nagercoil (Three papers presented);
10. First Seminar of 2000-2001 of the Mano Research Forum (Nagercoil Circle) (January 2001) held at S.T. Hindu College, Nagercoil (Four papers presented);
11. Second Seminar of 2000-2001 of the Mano Research Forum (Nagercoil Circle) (March 2001) held at S.T. Hindu College, Nagercoil (Four papers presented);
12. One Day Seminar on Radiation Physics (January 2005) held at S.T. Hindu College, Nagercoil;
13. State Level Seminar on Global Challenges in Higher Education – Let us Face it with New Vistas (March 2005) held at S.T. Hindu College, Nagercoil;
14. Seminar on Nano Materials (March 2008) held at S.T. Hindu College, Nagercoil;
15. State Level Seminar on Emerging Trends in Nanotechnology (September 29, 2008) held at Pioneer Kumaraswamy College, Nagercoil (One invited Lecture delivered);

16. State Level Seminar on Crystal Growth and Nanotechnology (October 18, 2008) held at Aditanar College of Arts and Science, Tiruchendur (One Invited Lecture delivered);
17. One Day Seminar on Crystal Growth and Nanotechnology (March 6, 2009) held at Sree Ayyappa College for Women, Chunkankadai (One invited talk presented);
18. Seminar on Natural Radioactivity (January 19, 2010) held at S.T.Hindu College, Nagercoil;
19. State Level Seminar on Nanostructured Materials (February 11-12, 2011) held at S.T.Hindu College, Nagercoil (One Invited Lecture delivered);
20. Seminar on Nanoscience and Nanotechnology (May 05, 2011) held at Udaya College of Engineering, Vellamodi (One Invited Lecture delivered);
21. State Level Seminar on Culture and Health (October 3-4, 2011) held at S.T.Hindu College, Nagercoil;
22. One Week Workshop on Nanotechnology in Engineering Applications (November 14-19, 2011) held at Government College of Engineering, Tirunelveli (One Invited Lecture delivered);
23. One Day Seminar on Nanophysics (February 08, 2012) held at Malankara Catholic College, Mariagiri (One Invited Lecture delivered);
24. Seminar on Nanoscience and Nanotechnology (March 10, 2014) held at Udaya College of Engineering, Vellamodi (One Invited Lecture delivered);
25. Interactive Workshop on Faculty Research Initiatives (December 8-9, 2014) held at PSN College of Engineering and Technology, Tirunelveli (One Invited Lecture delivered);
26. National Science Day Seminar (February 27, 2015) held at KCG College of Technology, Chennai (One Invited Lecture delivered);
27. One Day Lecture Workshop on Applications and Development of Advanced Materials (March 23, 2018) held at St. John's College, Palayamkottai (One Invited Lecture delivered); etc

II. National level

1. VI Annual Symposium in Chemistry (March 1981) held at I.I.T., Madras;
2. XIII National Seminar on Crystallography (March 1982) held at Nagpur University, Nagpur (One paper presented);
3. XIV National Seminar on Crystallography (December 1982) held at I.I.T., Kharagpur (One paper presented);
4. Special Symposium on Molecular Biocrystallography in honour of Prof. G.N. Ramachandran (December 1982) held at Madras University, Madras;
5. Conference on Semiconductors and Related Technology (September 1983) held at I.I.T., Madras;
6. XV National Seminar on Crystallography and Special Symposium in Honour of Prof. S. Ramaseshan (April 1984) held at I.I.Sc., Bangalore (Twelve papers presented);
7. IV National Seminar on Crystal Growth (August 1989) held at University of Mysore, (One paper presented);
8. Symposium on Crystal Nucleation, Solution Growth and Surface Morphology (January 1990) held at Anna University, Madras (Two papers presented);

9. National Seminar on Crystal Growth of High T_c Superconductors (May 1990) held at Anna University, Madras;
10. XXII National Seminar on Crystallography (December 1990) held at I.A.C.S., Calcutta (One paper presented);
11. VI Annual Convention of IAPT (November 1991) held at American College, Madurai (One paper presented);
12. III Annual General Meeting of the MRSI (February 1992) held at I.I.Sc., Bangalore (Three papers presented);
13. South Indian Physics Teachers Convention (March 1992) held at S.T. Hindu College, Nagercoil (One paper presented);
14. IV Annual General Meeting of the MRSI (February 1993) held at Regional Research Laboratory (CSIR), Trivandrum (Three papers presented);
15. V National Seminar on Crystal Growth (November 1993) held at Anna University, Madras (Six papers presented);
16. National Conference on Fundamentals of Crystal Growth (January 1996) held at Anna University, Madras (Three papers presented);
17. XXXIII Annual Convention of Chemists (December 1996) held at P.S.G. College of Technology, Coimbatore (One paper presented);
18. VII National Seminar on Crystal Growth (January 1997) held at Alagappa University, Karaikudi (Ten papers presented);
19. XXVIII National Seminar on Crystallography (September 1997) held at Mahatma Gandhi University, Kottayam (Thirteen papers presented);
20. IX Annual General Meeting of the MRSI (February 1998) held at I.I.T. Madras, Chennai (Two papers presented);
21. Seminar cum Workshop on Materials and Characterization (July 1998) held at Central Electrochemical Research Institute, Karaikudi (Three papers presented);
22. XXIX National Seminar on Crystallography (December 1998) held at Madras University, Chennai (Two papers presented);
23. VIII National Seminar on Crystal Growth (February 1999) held at Anna University, Chennai (Five papers including one invited talk presented);
24. XXX National Seminar on Crystallography (June 2000) held at Sri Venkateswara University, Tirupati (Three papers presented);
25. Symposium on Crystal Growth of Laser Related Materials (August 2000) held at Anna University, Chennai (Three papers presented);
26. National Conference (in Tamil) on Crystal Growth (August 2000) held at Anna University, Chennai (One Invited Talk presented);
27. Symposium on Fundamentals of Crystal Growth (November 2000) held at Anna University, Chennai (Three papers presented);
28. National Conference on Crystal Growth and Characterization (March 2001) held at S.T. Hindu College, Nagercoil (Nine papers including one invited talk presented);
29. XIII Annual General Meeting of the MRSI (February 2002) held at Defence Metallurgical Research Laboratory (DRDO), Hyderabad (Four papers presented);

30. XIV Annual General Meeting of the MRSI (February 2003) held at Bhabha Atomic Research Centre, Mumbai (Four papers presented);
31. IX National Seminar on Crystal Growth (February 2003) held at Anna University, Chennai (Twenty three papers including one invited talk presented);
32. XI National Convention of Electrochemists (December 2003) held at Bishop Heber College, Tiruchirappalli (Two papers presented);
33. XXXIII National Seminar on Crystallography (January 2004) held at National Chemical Laboratory, Pune (Thirteen papers presented);
34. XV Annual General Meeting of the MRSI and Symposium on Materials for Light and Smart Structures (February 2004) held at Banaras Hindu University, Varanasi (Four papers presented);
35. National Seminar on Modern Trends in Applied Spectroscopy (March 2004) held at Annamalai University, Annamalaiagar (One paper presented);
36. First All India Conference of KAAS (September 2004) held at Scott Christian College, Nagercoil (Four papers presented);
37. First Multidisciplinary National Seminar of Scott Research Forum (September 2004) held at Scott Christian College, Nagercoil (Three papers presented);
38. National Seminar on Growth and Characterization of Solid Materials (November 2004) held at Nagpur University, Nagpur (One paper presented);
39. Fourth DAE-BRNS National Laser Symposium (January 2005) held at Bhabha Atomic Research Centre (BARC), Mumbai (Two papers presented);
40. Tenth National Seminar on Crystal Growth (January 2005) held at Kongu Engineering College, Erode (Four papers presented);
41. XVI Annual General Meeting of the MRSI and Symposium on Materials for Automotive Industries (February 2005) held at National Chemical Laboratory, Pune (Four papers presented);
42. Symposium on Nonlinear Optical Crystals and Modelling of Crystal Growth (February 28 – March 1, 2005) held at Anna University, Chennai. (Four papers including one invited talk presented);
43. National Conference on Optics and Related Phenomena (August 29-30, 2005) held at S.N. College, Kollam (Two papers presented);
44. National Symposium on Crystal Growth and Characterization (September 29-30, 2005) held at Loyola College, Chennai (One invited talk presented);
45. National Seminar on Recent Advances in Nano Science and Technology (September 29-30, 2005) held at Periyar University, Salem (One paper presented);
46. Second All India Conference of KAAS (October 21, 22 2005) held at Scott Christian College, Nagercoil (Two papers presented);
47. Second National Symposium on Crystal Growth of Laser Related Materials (December 19-20, 2005) held at SSN College of Engineering, Chennai (One invited talk presented);
48. Second National Conference on Crystal Growth (in Tamil) (December 21, 2005) held at SSN College of Engineering, Chennai (One invited talk presented);

49. National Conference on Preparation and Characterization of Crystalline Materials (January 19-21, 2006) held at S.T. Hindu College, Nagercoil (Fifteen papers including 1 invited talk presented);
50. Seminar on “Future Trends in Materials and Characterization” (February 28, 2006) held at Loyola College, Chennai (One paper presented);
51. National Seminar on Post Tsunami Changes On Marine System, Environment and Socio Economic Status of Coastal People (March 17-18, 2006) held at Lekshmipuram College of Arts and Science, Neyyoor;
52. National Conference on Crystal Growth for Electro-Optic Applications (June 16-17, 2006) held at Karunya Institute of Technology and Sciences, Coimbatore (Six papers including one invited talk presented);
53. National Conference on Advances in Technologically Important Crystals (October 12 – 14, 2006) held at University of Delhi, New Delhi (Three papers presented);
54. Eleventh National Seminar on Crystal Growth (December 7-9, 2006) held at SSN College of Engineering, Chennai (Six papers including one invited talk presented);
55. Second National Symposium on Nonlinear Optical Crystals And Modelling in Crystal Growth (March 26-27, 2007) held at Anna University, Chennai (Three papers including one invited talk presented);
56. National Conference on Recent Trends in Optoelectronics and Laser Technology (April 9-11, 2007) held at University of Kerala, Thiruvananthapuram (Three papers presented);
57. Regional Level Seminar on Crystal Growth and Nanoscience with National Level Participation (August 30-September 1, 2007) held at Aditanar College of Arts and Science, Tiruchendur (Six papers including one invited talk presented);
58. Twelfth National Seminar on Crystal Growth (December 21-23, 2007) held at SSN College of Engineering, Chennai (Six papers including one invited talk presented);
59. National Conference on Advances in Materials Science (February 4-5, 2008) held at Manonmaniam Sundaranar University, Tirunelveli (One paper presented);
60. 6th National Conference on Emerging Trends in Crystal Growth and Nano Materials (February 28-29, 2008) held at Loyola College, Chennai (Three papers including one invited talk presented);
61. National Seminar on Global Warming and Impact on Environment along Indian Ocean (August 22-23, 2008) held at Lekshmipuram College of Arts and Science, Neyyoor;
62. National Seminar on Crystal Growth of Laser and Nonlinear Optical materials (September 25-26, 2008) held at National College, Tiruchirappalli (One paper presented);
63. Thirteenth National Seminar on Crystal Growth (January 27-29, 2009) held at SSN College of Engineering, Chennai (Twelve papers including one invited talk presented);

64. National Seminar on Applications of Computer Science (February 25-27,2009) held at University Institute of Technology (University of Kerala), Neyyattinkara (One invited talk presented);
65. National Seminar on Crystalline Materials and Nanotechnology (February 26-27,2009) held at Malankara Catholic College, Mariagiri (Six papers including one invited talk presented);
66. National Conference on Recent Trends in Crystal Growth, Thin Films and Nanostructured Materials (August 5-6, 2009) held at Aditanar College of Arts and Sience, Triuchendur (Two papers including one invited talk presented);
67. National Conference on Advanced Materials – Processing, Characterization and applications (August 27-29, 2009) held at PSN college of Engineering and Technology, Triunelveli (Five papers including one invited talk presented);
68. National Conference on Materials Science (October 9-10, 2009) held at Annamalai University, Annamalainagar (Seven papers presented);
69. National Workshop on Quantum Confined Systems and Nanoscale Devices (December 3-5, 2009) held at St.Thomas College, Palai (Two papers presented);
70. Fifth All India Conference of KAAS (December 4-5, 2009) held at Holy Cross College, Nagercoil (Six papers including one invited talk presented);
71. UGC sponsored National Conference on Recent and Emerging Developments in Physics (January 7-9, 2010) held at Women's Christian College, Nagercoil (Fourteen papers including one invited talk presented);
72. XIV National Seminar on Crystal Growth (March 10-12, 2010) held at VIT University, Vellore (Seven papers including one invited talk presented);
73. X Tamilnadu Science Congress (May 21-23, 2010) held at Manonmaniam Sundaranar University, Tirunelveli (Twenty two papers presented);
74. II National Conference on Advanced Materials – Processing, Characterization and Applications (August 25-27,2010) held at PSN College of Engineering and Technology, Tirunelveli (Five papers including one invited talk presented);
75. Sixth All India Conference of KAAS (September 10-11, 2010) held at S. T. Hindu College, Nagercoil (Ten papers presented);
76. Conference on Crystal Growth Science and Technology (in Tamil) (October 18-19, 2010) held at Anna University, Chennai (One invited talk presented);
77. XXXIX National Seminar on Crystallography (October 25-27, 2010) held at University of Jammu, Jammu (One paper presented);
78. Recent Advances in Biomaterials (December 17-18,2010) held at Saveetha University, Chennai (one paper presented) ;
79. National Conference on Recent Trends in Crystal Growth and Nanotechnology (January 28-29, 2011) held at Arignar Anna College, Aralvaimoli (Seven papers including one invited talk presented);
80. XV National Seminar on Crystal Growth (February 23-25, 2011) held at PSN College of Engineering and Technology, Tirunelveli (Six papers including one invited talk presented);
81. National Seminar on Recent Advancement in Materials Research (March 3-4, 2011) held at Scott Christian College, Nagercoil (One paper presented);

82. National Seminar on Recent Trends in Physics (March 18 – 19, 2011) held at Shivani Engineering College, Trichy (2 papers including one invited talk presented);
83. National Conference on Emerging Trends in Engineering, Management and Computer Applications (April 1-2, 2011) held at Anna University of Technology, Tiruchirappalli (One paper presented);
84. VIII All India Conference of Scott Research Forum (April 2, 2011) held at Scott Christian College, Nagercoil (One paper presented);
85. National Seminar on Luminescent and Lasing Materials (August 19 – 21, 2011) held at St.Aloysius College, Edathua (4 papers including one invited talk presented);
86. National Conference on Exploring the Frontiers of Vibrational Spectroscopy (September 1-2, 2011) held at Women's Christian College, Nagercoil (One paper presented);
87. E.James R.Daniel Endowment Lecture (September 6, 2011) held at Scott Christian College, Nagercoil (One invited talk presented);
88. Seventh All India Conference of KAAS (September 16-17, 2011) held at Women's Christian College, Nagercoil (Fourteen papers presented);
89. National Conference on Emerging Trends in Arts and Science (October 7-8, 2011) held at Nesamony Memorial Christian College, Marthandam (One paper presented);
90. National Seminar on Physical and Bio-medical Applications in Nano Technology (October 12-14, 2011) held at S.N.College, Kollam (One paper presented);
91. National Conference on Recent Trends in Materials Science-2011 (November 11-12, 2011) held at K.S.Rangasamy College of Technology, Tiruchengode (One paper presented);
92. DAE-BRNS National Laser Symposium-XX (January 09-12, 2012) held at Anna University, Chennai (One paper presented);
93. XVI National Seminar on Crystal Growth (January 19-21, 2012) held at Aditanar College of Arts and Science, Tiruchendur (Six papers including one invited talk presented);
94. National Conference on Recent Trends in Arts, Science and Management (February 17, 2012) held at Women's Christian College, Nagercoil;
95. National Conference on Advanced Materials Science (March 01-02, 2012) held at Annamalai University, Chithambaram (Three papers presented);
96. One Day National Level Workshop on Nanoscience and Nanotechnology (March 07, 2012) held at Sri GVG Visalakshi College for Women, Udumalpet (One Invited Lecture presented);
97. National Seminar on Current Trends in Materials Science (March 07-08, 2012) held at NSS College, Changanacherry (Three papers including one invited talk presented);
98. National Conference on Physics of New Materials (April 20-21, 2012) held at Noorul Islam University, Kumaracoil (Ten papers including one invited talk presented);

99. Emerging Nanoscience and Its Future in Biology (August 21-23, 2012) held at St. Aloysius College, Edathua (Three papers including one invited talk presented);
100. National Seminar on New Materials Research and Nanotechnology (September 12-14, 2012) held at Government Arts College, Ooty (Eleven papers including one invited talk presented);
101. Eighth All India Conference of KAAS (October 5-6, 2012) held at Sree Ayyappa College for Women, Chunkankadai (Eleven papers presented);
102. National Conference on Nanomaterials (December 3-4, 2012) held at Karunya Unpversity, Coimbatore (One paper presented);
103. Twenty Fourth National Seminar on Crystal Growth (December 20 – 22, 2012) held at CGC, Anna University, Chennai (Two papers including one invited talk presented);
104. Seventeenth National Seminar on Crystal Growth (January 9 – 11, 2013) held at Department of Physics, Anna University, Chennai (Six papers including one invited talk presented);
105. III National Conference on Advanced Materials – Processing, Characterization and Applications (January 23-25, 2013) held at PSN College of Engineering and Technology, Tirunelveli(Five papers including one invited talk presented);
106. National Conference on Advanced Materials (February 15-16, 2013) held at St. Mary's College, Thoothukudy(Nine papers including one invited talk presented);
107. National Seminar on Materials and Nanomaterials (March 7-8, 2013) held at St. Xavier's College, Palayamkottai (One paper presented);
108. National Seminar on Novel Materials (March 08, 2013) held at Shivani Engineering College, Tiruchirappalli (One paper presented);
109. National Seminar on Recent Trends in Crystal Growth and Nano Materials (March 13-15, 2013) held at National College, Tiruchirappalli (Three papers including one invited talk presented);
110. National Conference on Innovative Trends in Materials Science (August 23-24, 2013) held at Arignar Anna College, Aralvoimozhi (Eight papers including one invited talk presented);
111. National Seminar on Current Developments in Physics (September 20, 2013) held at Women's Christian College, Nagercoil (One invited talk presented);
112. Second National Seminar on New Materials Research and Nanotechnology (September 25-27, 2013) held at Government Arts College, Ooty (Fifteen papers including one invited talk presented);
113. National Seminar on Spectroscopic Techniques and its Applications for Material Characterization (October 03-04, 2013) held at University of Kerala, Thiruvananthapuram (Two papers including one invited talk presented);
114. Materials Process and Applications of Novel Technologies (November 07 – 08, 2013) held at HHMSPBNSS College for Women, Thiruvananthapuram (Six papers including one invited talk presented);
115. National Conference on Future Proposals in Multidisciplinary Research (February 14, 2014) held at Women's Christian College, Nagercoil (One paper presented);
116. XVIII National Seminar on Crystal Growth (Febuary 24-26, 2014) held at SSN College of Engineering, Chennai (One invited talk presented);

117. Ninth All India Conference of KAAS (August 22-23, 2014) held at Sree Ayyappa College for Women, Chunkankadai (Four papers presented);
118. Prof. A. James Endowment Lecture (September 16, 2014) held at Scott Christian College, Nagercoil (One invited talk presented);
119. National Seminar on Emerging Trends in Theoretical and Experimental Physics (January 08-09, 2015) held at Sree Ayyappa College for Women, Nagercoil (Four papers including one keynote address presented);
120. National Conference on Emerging Trends in Applied Physics (February 19-20, 2015) held at Lekshmipuram College of Arts and Science, Neyyoor (Ten papers including one invited talk presented);
121. Three Day National Seminar on Materials Science with a Special Emphasis on Crystallography (September 9-11, 2015) held at Government College, Kottayam (One invited talk delivered);
122. Tenth All India Conference of KAAS (September 18-19, 2015) held at Women's Christian College, Nagercoil (One paper presented);
123. National Seminar on Design and Properties of Nanomaterials for Emerging Technologies (December 9-10, 2015) held at St. Thomas College, Ranni (One invited talk delivered);
124. National Conference on Advanced Materials (February 27, 2016) held at Nanjil Catholic College of Arts and Science, Kaliakkavilai (One keynote address delivered);
125. National Conference on Graphene and Liquid Crystals for Smart Nanoengineering Applications (November 7-9, 2016) held at Saveetha Engineering College, Thandalam (One invited talk delivered);
126. National Conference on Materials for Energy Devices (November 23-24, 2016) held at Standard Fireworks Rajaratnam College for Women, Sivakasi (Two papers presented);
127. National Conference on Current Advancement in Physics (February 3-4, 2017) held at St. John's College, Palayamkottai (One paper presented);
128. XXI National Seminar on Crystal Growth and Applications (March 6-8, 2017) held at National College, Tiruchirappalli (Four papers including one invited talk presented);
129. National Seminar on Recent Trends in Nano and Other Materials for Energy Efficient Devices (July 20-22, 2017) held at St. Aloysius College, Edathua (One invited talk delivered);
130. XXII National Seminar on Crystal Growth and Applications (January 29-31, 2018) held at Sacred Heart College, Tirupattur (One invited talk presented);
131. National Seminar on New Materials Research and Nanotechnology (March 19-21, 2018) held at The Sethupathy Government Arts College, Ramanathapuram (Two papers including one invited talk presented); etc.

III. International level

1. Ninth Annual Biochemistry Research Conference (October 1985) held at University of California, Riverside, CA, USA;

2. International Workshop on Preparation and Characterization of Technologically Important Single Crystals (February 2001) held at National Physical Laboratory (CSIR), New Delhi (Two papers presented);
3. International Symposium on Recent Advances in Inorganic Materials (December 2002) held at I.I.T. Bombay, Mumbai (Twelve papers presented);
4. International Conference on the Role of Indian Systems of Medicine and Homeopathy (February 2003) held at Chennai (One paper presented);
5. International Seminar on Modern Concept of Development and its Impact on Environment (January 2004) held at S.T. Hindu College, Nagercoil;
6. International Workshop on Crystal Growth and Characterization of Technologically Important Materials (February 2004) held at Anna University, Chennai (Six papers presented);
7. Sixth International Conference on Solvothermal Reactions (August 2004) held at University of Mysore, Manasagangothri (Three papers presented);
8. International Conference on Spectrophysics (February 2005) held at Pachaiyappa's College, Chennai (One paper presented);
9. International Workshop on Nanoscience and Technology (February 13-17, 2006) held at Anna University, Chennai (One paper presented);
10. Indo-Australian Symposium on Nano Science and Nano Technology (March 31 to April 1, 2006) held at Indian Institute of Science, Bangalore (One paper presented);
11. International Conference on Nanoscience and Nanotechnology (August 26-28, 2006) held at University of Madras, Chennai (Two papers presented);
12. International Conference on Lasers and Nanomaterials (November 30 – December 2, 2006) held at University of Calcutta, Kolkata (One paper presented);
13. Eighth International Conference on Optoelectronics, Fiber Optics and Photonics (December 13-16, 2006) held at University of Hyderabad, Hyderabad (Three papers presented);
14. International Symposium For Research Scholars on Metallurgy, Materials Science and Engineering (December 18-20, 2006) held at Indian Institute of Technology (Madras), Chennai (One paper presented);
15. Second International Conference on Emerging Adaptive Systems and Technologies (EAST – 2007), Theme “Emerging, Exciting Worlds of Nanotechnology” (October 25-27, 2007) held at Noorul Islam College of Engineering, Kumaracole (Three papers including one invited talk presented);
16. International Conference on Materials Science Research and Nanotechnology (ICMSRN 2008) (February 27-29, 2008) held at Mother Teresa Women's University, Kodaikanal (One paper presented);
17. First International Conference of KAAS (December 5-6, 2008) held at Women's Christian College, Nagercoil (One invited talk presented);
18. International Conference on Active/Smart Materials (January 7-9, 2009) to be held at Thiagarajar College of Engineering, Madurai (Two papers presented);
19. International Conference on Functional Materials for Advanced Technology (January 29-30, 2009) to be held at Velammal Engineering College, Chennai (Five papers presented);
20. International Conference on Nanoscience and Nanotechnology (February 24-26, 2010) held at SRM University, Chennai (One paper presented);

21. International Conference on Materials for Advanced Technologies (June 26 - July 01, 2011) held at Suntec, Singapore (Four papers presented);
22. International Conference on Advanced Materials (January 5-7, 2012) held at Loyola College, Chennai (Twenty two papers including one invited talk presented);
23. International Conference on Recent Trends in Advanced Materials (February 20-22, 2012) held at VIT University, Vellore (One paper presented);
24. International Conference on Materials Science and Technology (June 10-14, 2012) held at St. Thomas College, Pala (Seventeen papers presented);
25. International Workshop on Crystal Growth and Characterization of Advanced Materials and Devices (December 16 – 19, 2012) held at Anna University, Chennai (One invited talk presented);
26. International Conference on Advanced Nanomaterials & Emerging Engineering Technologies (July 24-26, 2013) held at Sathyabama University, Chennai (One paper presented);
27. Second International Conference of KAAS (September 20-21, 2013) held at Sree Ayyappa College for Women, Chankkandai (Five papers presented);
28. Indo-German Conference on LASER Application and Nanoscience (December 05-07, 2013) held at Srinivasa Ramanujan Institute for Basic Sciences, Thiruvananthapuram (One paper presented);
29. International Conference on Advances in Engineering and Applied Sciences (April 29-30, 2015) held at Noorul Islam University, Kumaracoil (One keynote address presented);
30. International Conference on Functional Materials (September 07-10, 2016) held at PSN College of Engineering and Technology, Tirunelveli (Ten papers presented);
31. The Seventh Asian Conference on Crystal Growth and Crystal Technology (October 15-18, 2017) held at Changchun University of Science and Technology, Changchun, China (Four papers presented); etc.

26. List of Research Scholars Guided :

A) Postdoctoral Research Associates Guided

(i) Dr. T. Asaithampi

In-vitro studies on urinary stones

(ii) Dr. M. Vimalan

II-VI compound nanostructured materials

B) Ph.D. Scholars Guided

1. **T. H. Freeda (Degree awarded on 19.04.2002)**
Studies on KDP single crystals added with some ammonium compounds
2. **K. Jayakumari (Degree awarded on 18.12.2002)**
Growth and characterization of $(\text{NaCl})_x(\text{KCl})_{y-x}(\text{KI})_{1-y}$ single crystals
3. **G. Selvarajan (Degree awarded on 01.09.2003)**
Studies on $(\text{NaCl})_x(\text{KBr})_{y-x}(\text{KI})_{1-y}$ solid solutions
4. **S. Perumal (Degree awarded on 06.02.2004)**
Growth, structure and physical properties of the crystals grown from the starting compositions for $x = 0.1$ to 0.4 and $y = 0.2$ to 0.8 $(\text{KCl})_x\text{KBr}_{y-x}(\text{KI})_{1-y}$.
5. **Thresiamma Chacko (Degree awarded on 20.04.2006)**
In-vitro studies on some urinary stone crystals

6. **X. Sahaya Shajan (Degree awarded on 04.07.2007)**
Growth and characterization of pure and impurity added calcium tartrate single crystals
7. **N. Neelakanda Pillai (Degree awarded on 10.03.2008)**
Growth and characterization of ternary mixed crystals of NaCl, NaBr and NaI
8. **C. M. Padma (Degree awarded on 25.04.2008)**
Studies on some binary alkali halide solid solutions
9. **M. Priya (Degree awarded on 14.07.2008)**
Studies on some alkali halide mixed crystals
10. **V. N. Praveen (Degree awarded on 07.11.2008)**
Growth and characterization of some novel metalorganic nonlinear optical crystals
11. **M. Meena (Degree awarded on 22.01.2010)**
Studies on some L-arginine derivative crystals
12. **R. Sakthi Sudar Saravanan (Degree awarded on 27.08.2010)**
Studies on some II-VI compound materials
13. **G. Janita Christobel (Degree awarded on 22.10.2010)**
Investigations on ZnS-ZnO nanocomposites
14. **I. S. Prameela Kumari (Degree awarded on 29. 02.2012)**
Studies on cadmium based metal organic crystals
15. **C. Kaladevi (Degree awarded on 29. 02. 2012)**
Studies on some ternary alkali lead bromide crystals
16. **D. Shiney Manoj (Degree awarded on 05. 04. 2012)**
Preparation and properties of nanocomposites based on some manganese compounds
17. **G. Deepa (Degree awarded on 18. 04. 2012)**
Investigations on nanocrystals based on some cadmium and manganese compounds
18. **K. Usha (Degree awarded on 25. 05. 2012)**
Studies on nanomaterials based on some nickel and manganese compounds
19. **J. Asbalter (Degree awarded on 31. 05. 2012)**
Growth and characterization of some transparent conducting oxide thin films
20. **R. Sunitha (Degree awarded on 31. 05. 2012)**
Studies on nanocrystals based on manganese and cadmium sulphide compounds
21. **M. Vaitheeswari (Degree awarded on 10. 04. 2013)**
Studies on epsomite single crystals
22. **S. Goma (Degree awarded on 08. 01. 2014)**
Preparation and properties of cobalt oxide nanocrystals
23. **S. Nagaveena (Degree awarded on 10.03.2014)**
Preparation and properties of nickel sulphide based nanomaterials
24. **J. M. Kavitha (Degree awarded on 09.04.2014)**
Growth and characterization of some metal sulphate heptahydrate single crystals
25. **O. V. Mary Sheeja (Degree awarded on 31.07.2015)**
Studies on nanomaterial added KDP single crystals
26. **S. I. Srikrishna Ramya (Degree awarded on 13.08.2015)**
Studies on α -Fe₂O₃ nanoparticles
27. **V. Rajalekshmi (Degree awarded on 16.06.2017)**

Preparation and properties of some hydrogen bonded crystals

C). Ph.D. Scholars (Officially) Co-guided (But they, except G. Pious Michael & K. Janaki, have been fully guided in the real sense)

1. **N. Manonmani (Degree awarded on 18.09.2007)**
Growth and characterization of some crystals with structurally incommensurate phases
2. **S. Meenakshi Sundar (Degree awarded on 13.06.2008)**
Studies on some oxide nanocrystals
3. **N. Joseph John (Degree awarded on 24.11.2009)**
Growth and characterization of some hydrogen phosphate single crystals
4. **N. Theresita Shanthi (Degree awarded on 11.12.2009)**
Studies on TGS single crystals doped with halide compounds
5. **M. Annie Freeda (Degree awarded on 25. 05. 2012)**
Synthesis and characterization of pure and doped CuS nanocrystals
6. **C. Latha (Degree awarded on 20. 09. 2012)**
Studies on some bimetallic thiocyanate single crystals
7. **G. Pious Michael (Degree awarded on 10. 10. 2012)**
Rainfall in northern boundary western ghat states – An analysis
8. **A. Karolin (Degree awarded on 19. 06. 2013)**
Growth and characterization of glycine metal sulphate crystals
9. **N. Saraswathi (Degree awarded on 29. 01. 2015)**
Studies on some metal oxide nanocrystals
10. **J. Suja Rani (Degree awarded on 18-03-2015)**
Growth and characterization of semiorganic NLO mixed crystals (LHC-LHB)
11. **R. Divya (Degree awarded on 13.05.2015)**
Studies on some nanoparticle dispersed polymer thin films
12. **P. V. Radhika (Degree awarded on 25-06-2015)**
Growth and characterization of pure and doped L-arginine acetate single crystal material
13. **J. Anitha Hudson (Degree awarded on 26.06.2015)**
Studies on II-VI compound added ADP single crystals
14. **K. Janaki (Thesis submitted)**
Studies of global warming using near surface weather parameters

NOTE: J. V. Libija, K. U. Madhu, S. M. R. Joseph Ramesh, A. Darlin Mary, T. Vijayakumari, C. Amuthambigai, S. Muthupoongodi, S. Benita Jeba Silvia and D. S. Christy have also been supported (by guiding unofficially) to acquire their Ph.D. degrees.

D) M.Phil. Scholars Guided

1. **P. Sekar Ramasubramanian (1989)**
Growth kinetics and physical properties of KCl doped KDP single crystals
2. **E. Arumugadoss (1989)**
Growth and dissolution kinetics and physical properties of ZnCl₂ single crystals
3. **D. Dooslin Mary (1990)**

- Crystal structure and thermal properties of MgAl_2O_4
4. **P. Kumaradhas (1991)**
X-ray investigations on KCl doped KDP single crystals
5. **T. Josephine Rani (1992)**
Studies on chromate doped KDP single crystals
6. **K. Jayakumari (1992)**
X-ray and optical investigations on $\text{Mg}_x\text{Zn}_{1-x}\text{SO}_4 \cdot 7\text{H}_2\text{O}$ single crystals
7. **T. Chithambarathanu (1992)**
Studies on ferricyanide doped KDP single crystals
8. **S. Perumal (1992)**
Nucleation parameters of $\text{Mg}_x\text{Zn}_{1-x}\text{SO}_4 \cdot 7\text{H}_2\text{O}$ and dielectric constants of $\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$ crystals
9. **C. S. Jegatheesan (1996)**
Studies on K_2CrO_4 doped KDP single crystals
10. **G. Janiland Angel (1996)**
Investigations on KBr doped KDP single crystals
11. **V. Anton Sophana (1996)**
Studies on $\text{K}_2\text{Cr}_2\text{O}_7$ doped KDP single crystals
12. **Y. Premila Rachelin (1996)**
Studies on NH_4Cl and KCl doped $(\text{NH}_4)\text{H}_2\text{PO}_4$ single crystals
13. **E. Easwaramoorthy (1996)**
Effect of solute impurities and critical nucleus shape on the nucleation parameters of K_2SO_4 single crystals
14. **X. Sahaya Shajan (1997)**
Investigations on $\text{Na}_x\text{K}_{1-x}\text{Cl}$ and $(\text{NaCl})_x(\text{KCl})_{0.9-x}(\text{KBr})_{0.1}$ mixed crystals grown from aqueous solutions
15. **D. Irene Latha (1997)**
Studies on Zn and Mg doped nickel sulphate heptahydrate single crystals
16. **T. K. Jeya Shobha (1997)**
Studies on ADP single crystals doped with sodium compounds
17. **S. Puspha Latha (1997)**
Studies on pure and urea and urea nitrate doped thiourea single crystals
18. **S. Anitha (1997)**
Studies on pure and thiourea and urea oxalate doped urea nitrate single crystals
19. **S. S. Sreeja Kumari (1997)**
Studies on pure and nitrate and oxalate doped urea single crystals
20. **C. Anitha (1998)**
Studies on gel grown KDP crystals doped with KNO_3 and NaNO_3
21. **Beaulah Shanthini (1998)**
Investigations on gel grown KDP crystals doped with KCl and NaCl
22. **Elaine Brintha Christudhas (1998)**
X-ray determination of Debye temperatures of KCl doped KH_2PO_4 crystals
23. **J. M. Kavitha (1998)**
Nucleation parameters and specific refractive energies of urea crystals doped with ammonium and sodium nitrates
24. **K. Seethalakshmi (1998)**

- Nucleation parameters and specific refractive energies of NaCl and KCl doped thiourea single crystals
25. **K. U. Madhu (1999)**
Studies on KCl doped urea single crystals
 26. **M. Theivanayagam (1999)**
Studies on $\text{Ni}_x\text{Mg}_{1-x}\text{SO}_4 \cdot 7\text{H}_2\text{O}$ single crystals
 27. **N. Neelakanda Pillai (1999)**
A study on the application of sharpening procedures in crystal structure analysis
 28. **T. Mary Jeeva (1999)**
Lattice variation and Debye temperature of urea doped KDP single crystals
 29. **Dahlia Queen Livingsta, A (1999)**
Studies on KH_2PO_4 single crystals doped with $\text{NiSO}_4 \cdot 7\text{H}_2\text{O}$
 30. **T. M. Maheswari (1999)**
Nucleation parameters of $\text{NH}_4\text{H}_2\text{PO}_4$ single crystal added with some sodium compounds
 31. **S. Anne Shyla (2000)**
Studies on $\text{K}_2\text{Cr}_2\text{O}_7$ added KH_2PO_4 single crystals
 32. **J. Albin Sancta (2000)**
Electrical measurements on KH_2PO_4 crystals added with KCl
 33. **A. Gnana Sutha (2000)**
Studies on gel grown KNO_3 added KH_2PO_4 single crystals
 34. **M. Priya (2000)**
Electrical measurements on KDP crystals added with thiourea
 35. **C. M. Padma (2000)**
Investigations on gel grown urea added KDP single crystals
 36. **C. Gnana Sambandam (2001)**
Preparation and lattice variation of $(\text{NaCl})_x(\text{KBr})_{y-x}$ solid solutions
 37. **A. S. Jebamalar Jaslin (2001)**
X-ray diffraction measurements on $(\text{NaCl})_x(\text{KCl})_{y-x}(\text{KI})_{1-y}$ solid solutions
 38. **M. Freeda (2001)**
Dielectric measurements on $(\text{NaCl})_x(\text{KCl})_{y-x}(\text{KI})_{1-y}$ solid solutions
 39. **Aloysius Xavier Lopez (2001)**
Lattice variation of $(\text{NaCl})_x(\text{KBr})_{y-x}(\text{KI})_{1-y}$ solid solutions
 40. **H. Sudahar (2001)**
A.C. electrical conductivities of $(\text{NaCl})_x(\text{KBr})_{y-x}(\text{KI})_{1-y}$ solid solutions
 41. **R. Sakthi Sudar Saravanan (2002)**
Nucleation parameters of $\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$ single crystals added with urea
 42. **J. V. Libija (2002)**
Dielectric measurements on urea and thiourea added $\text{NiSO}_4 \cdot 7\text{H}_2\text{O}$ single crystals
 43. **V. Anslin Ferby (2002)**
D.C. electrical conductivity measurements on $\text{NiSO}_4 \cdot 7\text{H}_2\text{O}$ single crystals added with urea and thiourea
 44. **H. G. Jeya Harish (2002)**
Nucleation parameters of KDP crystals added with urea
 45. **G. Pushpa Kavitha (2002)**

- Nucleation studies on supersaturated KDP solutions added with thiourea
46. **S. Chenthilnath (2002)**
Dielectric parameters of KDP crystals added with NaCl and NaBr
 47. **G. Deepa (2002)**
D.C. electrical conductivity measurements on KH_2PO_4 crystal added with sodium halides
 48. **S. Maragathaselvi (2002)**
X-ray diffraction measurements on KDP crystals added with sodium bromide
 49. **C. Vincent Jerin (2002)**
Lattice and thermal parameters of KH_2PO_4 crystals added with NaCl
 50. **M. Latha Beatrice (2002)**
X-ray diffraction measurements on $\text{NH}_4\text{H}_2\text{PO}_4$ crystals added with thiourea
 51. **A. Anne Assencia (2002)**
D.C. electrical conductivity measurements on ADP crystals added with urea and thiourea
 52. **S. P. Manju (2002)**
Dielectric measurements on ADP crystals added with organic impurities
 53. **F. Vimala Joice (2002)**
Lattice and thermal parameters of ADP crystals added with KCl
 54. **S. Baby Vilasini (2002)**
Dielectric parameters of KCl and KNO_3 added $\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$ single crystals
 55. **S. Bala Ayyappan (2002)**
D.C. conductivity measurements on ADP crystals added with glycine
 56. **S. N. Sekhar (2002)**
Nucleation studies on supersaturated aqueous solutions of $\text{NH}_4\text{H}_2\text{PO}_4$ added with urea
 57. **C. Ashokan (2002)**
Optical and dielectric measurements on glycine added ADP single crystals
 58. **S. M. R. Joseph Ramesh (2002)**
D.C. electrical conductivity measurements on $\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$ crystals added with urea and thiourea
 59. **N. Saraswathi (2003)**
Dielectric measurements on gel grown $\text{K}_3\text{Fe}(\text{CN})_6$ added KH_2PO_4 single crystals
 60. **M. Chandramathi (2003)**
Nucleation parameters of $\text{NH}_4\text{H}_2\text{PO}_4$ single crystals added with thiourea
 61. **M. J. Sindhu (2003)**
Nucleation parameters of $\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$ single crystals added with KCl
 62. **S. Bhagavathy Ammal (2003)**
Nucleation studies on supersaturated $\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$ solutions added with KNO_3
 63. **C. P. Glory (2003)**
Effect of KBr addition on the nucleation parameters of $\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$ single crystals
 64. **A. Karolin (2003)**

- Dielectric measurements on $\text{NiSO}_4 \cdot 7\text{H}_2\text{O}$ crystals added with KCl and KNO_3
65. **T. Benila (2003)**
D.C. electrical conductivity measurements on $\text{NiSO}_4 \cdot 7\text{H}_2\text{O}$ crystals added with KCl and KNO_3
 66. **S. L. Sugitha Jose (2003)**
Nucleation studies on aqueous solutions of $\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$ added with glycine
 67. **T. Thana Veronica (2003)**
Electrical measurements on glycine added $\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$ single crystals
 68. **C. V. Somasundari (2003)**
Dielectric measurements on KCl added KDP single crystals
 69. **M. Vaitheeswari (2003)**
Dielectric parameters of KDP single crystals added with KNO_3
 70. **A. C. Saji Kumar (2003)**
Growth of struvite crystals added with some head ache killing drugs
 71. **P. Chandrakala (2003)**
Thermal parameters of thiourea added $\text{NiSO}_4 \cdot 7\text{H}_2\text{O}$ crystals
 72. **R. Anbarasi (2003)**
Effect of glucose on the growth of brushite crystals added with fever killing drugs
 73. **R. Mary Jenila (2003)**
D.C. conductivity measurements on Ni^{2+} added ZTS single crystals
 74. **R. Christlin Beula (2003)**
Dielectric measurements on Ni^{2+} added ZTS single crystals
 75. **G. Isabella Alice (2003)**
Dielectric measurements on glycine added KDP single crystals
 76. **J. Johnson (2004)**
Dielectric measurements on thiourea added KDP single crystals
 77. **R. Sarjila (2004)**
Growth of whewellite crystals added with some head-ache killing drugs
 78. **S. Felshia Burnes (2004)**
In-vitro investigations on the growth of calcium oxalate monohydrate single crystals
 79. **M. Nidya (2004)**
Effect of some fever killing drugs on the formation of whewellite crystals
 80. **R. Kemela Vanu Rega (2004)**
D.C. conductivity measurements on $\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$ added ZTS single crystals
 81. **S. Goma (2006)**
Dielectric parameters of KDP single crystals added with urea
 82. **S. Sivakamasundari (2006)**
Growth and D.C. conductivity measurements on KDP – ADP mixed crystals
 83. **R. Sreedevi (2006)**
Growth and dielectric properties of KDP-ADP mixed crystals
 84. **P. Krishnakumari (2006)**

- Growth and X-ray studies of thiourea added ADP crystals
85. **K. M. Mahadevan (2007)**
Nucleation parameters of $(\text{ADP})_x(\text{KDP})_{1-x}$ single crystals
 86. **D. Anitha (2007)**
Electrical measurements on L-arginine added ADP single crystals
 87. **R. Saratha (2007)**
Studies on KDP single crystals added with L-arginine
 88. **S. B. David Xavier (2007)**
Growth and dielectric characteristics of dichromate added KDP single crystals
 89. **B. P. Prathibha (2007)**
Dielectric measurements on $\text{Ni}_x\text{Mg}_{1-x}\text{SO}_4 \cdot 7_2\text{O}$ single crystals
 90. **R. P. Sreenath (2007)**
Preparation and properties of CdS nanocrystals doped with Mn^{2+} and Pb^{2+}
 91. **R. D. Sheebha (2008)**
Preparation and properties of CdS-CdO nanocrystals
 92. **D. Sajeetha (2008)**
Effect of glycine on the electrical properties of $(\text{NH}_4)\text{H}_2\text{PO}_4$ single crystals
 93. **K. Sathiya (2008)**
DC conductivity measurements on $\text{Ni}_x\text{Mg}_{1-x}\text{SO}_4 \cdot 7\text{H}_2\text{O}$ single crystals
 94. **A. Kishore Kumar (2008)**
Dielectric measurements on $\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$ single crystals added with thiourea
 95. **A. K. Ayesha Beevi (2008)**
Studies on $\text{NiSO}_4 \cdot 7\text{H}_2\text{O}$ single crystals
 96. **S. Jaya Chitra (2008)**
Growth and thermal properties of urea added $\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$ crystals
 97. **C. Vijaya Kumar (2008)**
Formation of multiphased mixed crystals from miscible NaBr, KBr and KCl
 98. **T. Sarala (2008)**
Studies on $\text{ZnCd}(\text{SCN})_4$ crystals
 99. **I. Uma (2008)**
DC Conductivity measurements on ZnO-CdS : Mn nanocrystals
 100. **S. Ganesan (2008)**
Dielectric measurements on ZnO-CdS: Mn nanocrystals
 101. **D. Josephine Pappi (2008)**
Effect of glucose on the growth of struvite crystals added with fever killing drugs
 102. **S. Beulah Alagammal (2008)**
Preparation and properties of CdO nanocrystals doped and co-doped with Mn^{2+} and Pb^{2+}
 103. **P. Kamala (2008)**
Preparation and properties of ZnO-CdS nanocrystals
 104. **T. Suthan (2008)**
Growth and characterization of naphthalene single crystals
 105. **I. Rajasree (2008)**
Studies on $\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$ single crystals added with KH_2PO_4
 106. **N. Kalai Selvi (2008)**
Studies on KDP single crystals added with epsomite

107. **D. Josephin Sabina (2008)**
Effect of urea as an impurity on the dielectric parameters of $\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$ single crystals
108. **S. Ganapathi (2008)**
Preparation and properties of PbS nanocrystals doped and co-doped with Mn^{2+} and Cd^{2+}
109. **K. Sreevidhya (2009)**
Synthesis by a novel method and characterization of ZnS nanoparticles
110. **A. Nickelson (2009)**
Preparation and properties of Mn_3O_4 nanocrystals
111. **S. G. Rejith (2009)**
Studies on pure and doped NiO nanocrystals
112. **G. Revathi (2009)**
Preparation and properties of manganese sulphide nanocrystals
113. **P. Noozhil (2009)**
Investigations on pure and oxide added nickel sulphide nanocrystals
114. **K. J. Abirama (2011)**
Preparation by a simple method and characterization of cadmium oxide nanocrystals
115. **M. R. Reeju (2011)**
Investigation on the preparation by the solvothermal method of copper oxide nanocrystals
116. **P. G. Bindhu (2011)**
Effect of capping agent on the preparation of ZnS-ZnO nanocrystals

NOTE: M.Sc. and B.Sc. projects guided are not included here.

27. List of Invited Talks/Keynote Addresses Presented

1. **VIII National Seminar on Crystal Growth (February 1999) held at Anna University, Chennai**
Nucleation studies in aqueous solutions
C. Mahadevan
2. **National Conference (in Tamil) on Crystal Growth (August 2000) held at Anna University, Chennai**
Electrical conductivity of KDP single crystals (in Tamil)
C. Mahadevan
3. **National Conference on Crystal Growth and Characterization (March 2001) held at S.T. Hindu College, Nagercoil**
Crystal growth and characterization research at S.T. Hindu College
C. Mahadevan
4. **IX National Seminar on Crystal Growth (February 2003) held at Anna University, Chennai**
Growth and characterization of ternary mixed crystals of alkali halides
C. Mahadevan
5. **Symposium on Nonlinear Optical Crystals and Modelling of Crystal Growth (February 28 – March 1, 2005) held at Anna University, Chennai**

Soluble impurities and KDP single crystals

C. K. Mahadevan

6. **National Symposium on Crystal Growth and Characterization (September 29- 30, 2005) held at Loyola College, Chennai**
Effect of drugs on the growth of urinary stone crystals
C. K. Mahadevan
7. **National Symposium on Crystal Growth of Laser Related Materials (December 19-20, 2005) held at SSN College of Engineering, Chennai**
Soluble impurities and crystal nucleation in aqueous solutions
C. K. Mahadevan
8. **Second National Conference on Crystal Growth (in Tamil) (December 21, 2005) held at SSN College of Engineering, Chennai**
Crystal growth research and urinary stones (in Tamil)
C. K. Mahadevan
9. **National Conference on Preparation and Characterization of Crystalline Materials (January 19-21, 2006) held at S.T. Hindu College, Nagercoil**
Our investigations on crystalline materials
C. K. Mahadevan
10. **National Conference on Crystal Growth for Electro-Optic Applications (June 16-17, 2006) held at Karunya Institute of Technology and Sciences, Coimbatore**
Investigations on ADP single crystals added with organic impurities
C. K. Mahadevan
11. **XI National Seminar on Crystal Growth (December 7-9, 2006) held at SSN College of Engineering, Kalavakkam)**
Our investigations on $\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$ single crystals
C. K. Mahadevan
12. **Second National Symposium on Nonlinear Optical Crystals and Modelling in Crystal Growth (March 26-27, 2007) held at Anna University, Chennai**
Electrical measurements on L-arginine added ADP and KDP single crystals
C. K. Mahadevan and M. Meena
13. **Regional Level Seminar on Crystal Growth and Nanoscience with National Level Participation (August 30 – September 1, 2007) held at Adithanar College of Arts and Science, Tiruchendhur**
A novel method to prepare II-VI compound nanocrystals
C. K. Mahadevan
14. **Second International Conference on Emerging Adaptive Systems and Technologies (EAST – 2007), Theme “Emerging, Exciting Worlds of Nanotechnology” (October 25-27, 2007) held at Noorul Islam College of Engineering, Kumaracoil**
Alkali halides and nanomaterials
C. K. Mahadevan
15. **Twelfth National Seminar on Crystal Growth (December 21-23, 2007) held at SSN College of Engineering, Chennai**
Our investigations on $\text{NiSO}_4 \cdot 7\text{H}_2\text{O}$ single crystals
C. K. Mahadevan

16. **6th National Conference on Emerging Trends in Crystal Growth and Nano Materials (February 28-29, 2008) held at Loyola College, Chennai**
Studies on ZnO-CdO nanocomposites
C. K. Mahadevan and S. Meenakshi Sundar
17. **State Level Seminar on Emerging Trends in Nanotechnology (September 29, 2008) held at Pioneer Kumaraswamy College, Nagercoil**
Preparation and characterization of II-VI compound nanomaterials
C. K. Mahadevan
18. **State Level Seminar on Crystal Growth and Nanotechnology (October 18, 2008) held at Aditanar College of Arts and Science, Tiruchendur.**
II-VI compound nanomaterials
C. K. Mahadevan
19. **First International Conference of KAAS (Decemeber 5-6, 2008) held at Women's Christian College, Nagercoil**
Research in science and technology – Why we need?
C. K. Mahadevan
20. **Thirteenth National Seminar on Crystal Growth (January 27-29, 2009) held at SSN College of Engineering, Chennai**
Multiphased mixed crystals of alkali halides
C. Mahadevan
21. **National Seminar on Applications of Computer Science (February 25- 27, 2009) held at University Institute of Technology (University of Kerala), Neyyattinkara**
Introduction to nanotechnology
C. K. Mahadevan
22. **National Seminar on Crystalline Materials and Nanotechnology (February 26-27, 2009) held at Malankara Catholic College, Mariagiri**
Nanostructured materials
C. K. Mahadevan
23. **One Day Seminar on Crystal Growth and Nanotechnology (March 6, 2009) held at Sree Ayappa College for women, Chunkankadai**
Crystalline materials
C. K. Mahadevan
24. **National Conference on Recent Trends in Crystal Growth, Thin Films and Nano – structured Materials (August 5-6, 2009) held at Aditanar College of Arts and Science, Triuchendur**
Pure and impurity added ZTS single crystals
C. K. Mahadevan
25. **National Conference on Advanced Materials – Processing, Characterization and applications (August 27-29, 2009) held at PSN College of Engineering and Technology, Triunelveli**
Metal sulphate heptahydrate single crystals
C. K. Mahadevan
26. **Fifth All India Conference of KAAS (December 4-5, 2009) held at Holy Cross College, Nagercoil**

- Quality in higher education and academic excellence in India – How to improve?
C. K. Mahadevan
27. **UGC sponsored National Conference on Recent and Emerging Developments in Physics (January 7-9, 2010) held at Women's Christian College, Nagercoil**
 Homogeneous crystal nucleation in aqueous solutions
C. K. Mahadevan
 28. **XIV National Seminar on Crystal Growth (March 10-12, 2010) held at VIT University, Vellore**
 Growth and characterization of alkali-alkaline chloride single crystals
C. K. Mahadevan and N.Manonmani
 29. **II National Conference on Advanced Materials – Processing, Characterization and applications (August 25-27,2010) held at PSN College of Engineering and Technology, Triunelveli**
 Two-component II-VI compound nanocomposites
C. K. Mahadevan
 30. **Conference on Crystal Growth Science and Technology (in Tamil) (October 18-19, 2010) held at Anna University, Chennai**
 Superionic conducting crystals
C. K. Mahadevan
 31. **National Conference on Recent Trends in Crystal Growth and Nanotechnology (January 28-29, 2011) held at Arignar Anna College, Aralvaimoli**
 Low ϵ_r value dielectric crystals
C. K. Mahadevan
 32. **State Level Seminar on Nanostructured Materials (February 11-12, 2011) held at S.T.Hindu College, Nagercoil**
 Introduction to nanostructured materials
C. K. Mahadevan
 33. **XV National Seminar on Crystal Growth (February 23-25, 2011) held at PSN College of Engineering and Technology, Triunelveli**
 Growth and characterization of L-arginine derivative single crystals
C. K. Mahadevan and M.Meena
 34. **National Seminar on Recent Trends in Physics (March 18 – 19, 2011) held at Shivani Engineering College, Trichy**
 Use of domestic microwave oven for the preparation of semiconductor quantum dots
C. K. Mahadevan
 35. **Seminar on Nanoscience and Nanotechnology (May 05, 2011) held at Udaya College of Engineering, Vellamodi**
 What are nanostructured materials?
C. K. Mahadevan
 36. **National Seminar on Luminescent and Lasing Materials (August 19 – 21, 2011) held at St.Aloysius College, Edathua**
 Single crystals for second harmonic generation
C. K. Mahadevan
 37. **E.James R.Daniel Endowment Lecture (September 6, 2011) held at Scott Christian College, Nagercoil**
 Solid state ordering and second harmonic generation

- C. K. Mahadevan**
38. **One week Workshop on Nanotechnology in Engineering Applications (November 14-19, 2011) held at Government College of Engineering, Tirunelveli**
Nanostructured magnetic semiconductors
- C. K. Mahadevan**
39. **International Conference on Advanced Materials (January 5-7, 2012) held at Loyola College, Chennai**
Preparation by a simple method and properties of II-VI compound quantum dots
- C. K. Mahadevan**
40. **XVI National Seminar on Crystal Growth (January 19-21, 2012) held at Aditanar College of Arts and Science, Tiruchendur**
Preparation and properties of pure and doped $\text{ZnS}_x\text{O}_{1-x}$ quantum dots
- C. K. Mahadevan and G. Janita Christobel**
41. **One Day Seminar on Nanophysics (February 08, 2012) held at Malankara Catholic College, Mariagiri**
Fundamentals of nanophysics
- C. K. Mahadevan**
42. **One Day National Level Workshop on Nanoscience and Nanotechnology (March 07, 2012) held at Sri GVG Visalakshi College for Women, Udumalpet**
Synthesis and characterization of nano materials
- C. K. Mahadevan**
43. **National Seminar on Current Trends in Materials Science (March 07-08, 2012) held at NSS College, Changanacherry**
Superionic conductors from alkali-alkaline earth halides
- C. K. Mahadevan**
44. **National Conference on Physics of New Materials (April 20-21, 2012) held at Noorul Islam University, Kumaracoil**
A novel solvothermal method to prepare simple and composite nanoparticles
- C. K. Mahadevan**
45. **Emerging Nanoscience and Its Future in Biology (August 21-23, 2012) held at St. Aloysius College, Edathua**
Quantum dots for life science applications
- C. K. Mahadevan**
46. **National Seminar on New Materials Research and Nanotechnology (September 12-14, 2012) held at Government Arts College, Ooty**
Preparation by a simple method and characterization of pure and doped CuS nanocrystals
- C. K. Mahadevan and M. Annie Freeda**
47. **International Workshop on Crystal Growth and Characterization of Advanced Materials and Devices (December 16 – 19, 2012) held at CGC, Anna University, Chennai**
Nanocrystals prepared using a domestic microwave oven
- C. K. Mahadevan**
48. **Twenty Fourth National Conference on Crystal Growth (December 20 – 22, 2012) held at CGC, Anna University, Chennai**
Cadmium based metal organic crystals – Growth and characterization

- C. K. Mahadevan** and I.S.Prameela Kumari
49. **Seventeenth National Seminar on Crystal Growth (January 9 – 11, 2013) held at Department of Physics, Anna University, Chennai**
Growth and characterization of some new bimetallic thiocyanate single crystals
C. K. Mahadevan and C.Latha
50. **III National Conference on Advanced Materials – Processing, Characterization and Applications (January 23-25, 2013) held at PSN College of Engineering and Technology, Tirunelveli**
A facile method to prepare high quality semiconductor nanocrystals
C. K. Mahadevan
51. **National Conference on Advanced Materials (February 15-16, 2013) held at St.Mary's College, Thoothukudi**
Studies on epsomite ($\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$) single crystals
C. K. Mahadevan and M.Vaitheeswari
52. **National Conference on Recent Trends in Crystal Growth & Nano Materials**
Nanocrystalline composites based on $\text{Ni}(\text{OH})_2$ and Mn_3O_4
C. K. Mahadevan and K.Usha
53. **National Conference on Innovative Trends in Materials Science (August 23-24, 2013) held at Arignar Anna College, Aralvoimozhi**
Preparation and properties of NiS nanoparticles
C. K. Mahadevan and S.Nagaveena
54. **National Seminar on Current Developments in Physics (September 20, 2013) held at Women's Christian College, Nagercoil**
A simple method to prepare nanostructured materials
C. K. Mahadevan
55. **Second National Seminar on New Materials Research and Nanotechnology (September 25-27, 2013) held at Government Arts College, Ooty**
Preparation and properties of spherical shaped hematite nanoparticles
C. K. Mahadevan and S.I.Srikrishna Ramya
56. **National Seminar on Spectroscopic Techniques and its Applications for Material Characterization (October 03-04, 2013) held at University of Kerala, Thiruvananthapuram)**
Preparation and optical properties of prominent NiS nanophases
C. K. Mahadevan and S.Nagaveena
57. **Materials Process and Applications of Novel Technologies (November 07 – 08, 2013) held at HHMSPBNSS College for Women, Thiruvananthapuram**
Nanoparticles prepared using a domestic microwave oven
C. K. Mahadevan
58. **XVIII National Seminar on Crystal Growth (February 24-26, 2014) held at SSN College of Engineering, Chennai**
ADP and KDP single crystals doped with insoluble inorganic impurities
C. K. Mahadevan
59. **Seminar on Nanoscience and Nanotechnology (March 10, 2014) held at Udaya College of Engineering, Vellamodi**
Semiconductor quantum dots
C. K. Mahadevan

60. **Prof. A. James Endowment Lecture (September 16, 2014) held at Scott Christian College, Nagercoil**
Nanostructured materials
C. K. Mahadevan
61. **Interactive Workshop on Faculty Research Initiatives (December 8-9, 2014) held at PSN College of Engineering and Technology, Tirunelveli**
Research, government funding and reporting
C. K. Mahadevan
62. **National Seminar on Emerging Trends in Theoretical and Experimental Physics (January 08-09, 2015) held at Sree Ayyappa College for Women, Nagercoil**
Preparation and properties of bulk mixed crystals
C. K. Mahadevan
63. **National Conference on Emerging Trends in Applied Physics (February 19-20, 2015) held at Lekshmipuram College of Arts and Science, Neyyoor**
Preparation and properties of cobalt oxide nanocrystals
C. K. Mahadevan and S. Goma
64. **National Science Day Seminar (February 27, 2015) held at KCG College of Technology, Chennai**
Nanostructured materials and their preparation by a simple method
C. K. Mahadevan
65. **International Conference on Advances in Engineering and Applied Sciences (April 29-30, 2015) held at Noorul Islam University, Kumaracil**
Solid state materials-Our experience
C. K. Mahadevan
66. **Three Day National Seminar on Materials Science with a Special Emphasis on Crystallography (September 9-11, 2015) held at Government College, Kottayam**
Crystalline and nanostructured materials-Synthesis and characterization
C. K. Mahadevan
67. **National Seminar on Design and Properties of Nanomaterials for Emerging Technologies (December 9-10, 2015) held at St. Thomas College, Ranni**
Amorphous and crystalline nanophases of NiS
C. K. Mahadevan
68. **National Conference on Advanced Materials (February 27, 2016) held at Nanjil Catholic College of Arts and Science, Kaliakkavilai**
Solid state materials
C. K. Mahadevan
69. **National Conference on Graphene and Liquid Crystals for Smart Nanoengineering Applications (November 7-9, 2016) held at Saveetha Engineering College, Thandalam**
The prominent nanophases of Fe_2O_3 and NiS: Preparation by a facile method and characterization
C. K. Mahadevan
70. **XXI National Seminar on Crystal Growth and Applications (March 6-8, 2017) held at National College, Tiruchirappalli**
Preparation and characterization of the prominent nanocrystalline phases of nickel sulfide
C. K. Mahadevan
71. **National Seminar on Recent Trends in Nano and Other Materials for Energy**

Efficient Devices (July 20-22, 2017) held at St. Aloysius College, Edathua

Preparation of various NiS nanophases – Role of XRD and TG/DTA measurements

C. K. Mahadevan

72. XXII National Seminar on Crystal Growth and Applications (January 29-31, 2018) held at Sacred Heart College, Tirupattur

On the preparation of single phased mixed crystals

C. K. Mahadevan

73. National Seminar on New Materials Research and Nanotechnology (March 19-21, 2018) held at The Sethupathy Government Arts College, Ramanathapuram

Preparation by a simple method and properties of pure and doped α -NiS nanocrystals

C. K. Mahadevan

74. One Day Lecture Workshop on Applications & Development of Advanced Materials (March 23, 2018) held at St. John's College, Palayamkottai

Hybrid crystals

C. K. Mahadevan

28. Impact of Contributions in the Major Field of Research and a Brief Account of Citations:

Most of the research papers published have been well cited. As per Google Scholar Citations (as on November 07, 2018), the **h- and i10- indexes** are respectively **25 and 76**. Total citation is **2229** with a maximum of **121**. A group of scientists from Greece have used the experimental data reported by the candidate in 3 papers (on alkali halide mixed crystals) for theoretical modeling (published 5 papers). Moreover, the candidate has been considered as an expert collaborator to work on alkali halide mixed crystals by a research team from Changchun University of Science and Technology, China. It should be noted that the publications of the candidate have been cited in various articles appeared in several International journals and proceedings, books and Ph.D. theses, etc.

29. List of Publications

A. Research review article in international journal

1, 2 - Dithiolene complexes of transition metals – structural systematics and physical properties

C. Mahadevan

J. Crystallogr. Spectrosc. Res. (1986) **16**, 347-416

B) Original research papers in international journals

1. Dichlorodiphenyl-p-dimethylaminobenzaldehydetin(IV) $C_{21}H_{21}Cl_2NOSn$

C. Mahadevan, M. Seshasayee and A.S. Kothiwal

Cryst. Struct. Commun. (1982) **11**, 1725-1730

2. Structure of trimethyl(phenyl)ammonium bis(dimercaptomaleodinitrilato (2-)-S, S')nickelate (III), $[N(CH_3)_3(C_6H_5)][Ni(C_4N_2S_2)_2]$

C. Mahadevan, M. Seshasayee, B.V.R. Murthy, P. Kuppusamy and P.T. Manoharan

Acta Crystallogr. (1983) **C39**, 1335-1338

3. Structure of tris(ethylenediamine)zinc(II) chloride dihydrate, $Zn(C_2H_8N_2)_3Cl_2 \cdot 2H_2O$

- C. Muralikrishna, **C. Mahadevan**, Shakuntala Sastry, M. Seshasayee and S. Subramanian
Acta Crystallogr. (1983) **C39**, 1630-1632
4. Crystal and molecular structure of tetra-n-butylammonium bis(stilbenedithiolato)nickelate(III)
C. Mahadevan, M. Seshasayee, P. Kuppusamy and P.T. Monoharan
J. Crystallogr. Spectrosc. Res. (1984) **14**, 177-191
 5. Crystal and molecular structure of bis(tetramethylammonium) bis(maleonitrile dithiolato)cuprate(II). Structure of $C_{16}H_{24}CuN_6S_4$
C. Mahadevan and M. Seshasayee
J. Crystallogr. Spectrosc. Res. (1984) **14**, 215-226
 6. Crystal and molecular structure of hexa(antipyrine)cadmium(II) perchlorate $[(C_{11}H_{12}ON_2)_6Cd]^{2+}[ClO_4]^{-}_2$
C. Mahadevan, Akella Radha and M. Seshasayee
Z. Kristallogr. (1984) **169**, 159-163
 7. Structure of bis(tetraethylammonium) bis(dimercaptomaleodinitrilato (2-)-S, S') nickelate(II), $[N(C_2H_5)_4]_2[Ni(C_4N_2S_2)_2]$
C. Mahadevan, M. Seshasayee, Akella Radha and P. T. Manoharan
Acta Crystallogr. (1984) **C40**, 2032-2034
 8. Structure of bis(N,N-bis(2-hydroxyethyl)dithiacarbamate)nickel(II), $C_{10}H_{20}NiN_2O_4S_4$
K. Ramalingam, K. Radha, G. Aravamudan, **C. Mahadevan**
Ch. Subrahmanyam and M. Seshasayee
Acta Crystallogr. (1984) **C40**, 1838-1839
 9. Structure of dichlorobis(P,P,P¹P¹-tetramethyl-o-phenylene(phosphine) nickel(III) hexafluorophosphate dihydrate, $[NiCl_2(P_2(CH_3)_4(C_6H_4)_2)]PF_6 \cdot 2H_2O$
C. Mahadevan, M. Seshasayee, B. L. Ramakrishna and P. T. Manoharan
Acta Crystallogr. (1985) **C41**, 38-40
 10. Crystal and molecular structure of tris(ethylenediamine)cadmium(II) iodide, $[Cd(NH_2CH_2CH_2NH_2)_3]I_2$
C. Mahadevan, M. Seshasayee, Shakuntala Sastry and Ch. Subrahmanyam
Z. Kristallogr. (1985) **171**, 173-178
 11. Crystal and molecular structure of N-methylphenazinium bis(benzene-1, 2-dithiolato)nickelate(III). Structure of $[C_{13}H_{11}N_2][Ni(S_2C_6H_4)_2]$
C. Mahadevan, M. Seshasayee, P. Kuppusamy and P. T. Manoharan
J. Crystallogr. Spectrosc. Res. (1985) **15**, 305-316
 12. Crystal and molecular structure of bromobis(1, 2 bis(diphenylphosphino) ethylene cobalt(II) tetraphenylborate. Structure of $C_{76}H_{64}BP_4CoBr$
C. Mahadevan, M. Seshasayee, C. N. Sethulakshmi and P. T. Manoharan
J. Crystallogr. Spectrosc. Res. (1985) **15**, 317-331
 13. Crystal and molecular structure of N- methylphenazinium bis(maleonitriledithiolato)nickelate(III), $(NMP)^+ (Ni(MNT)_2)^-$
P. Kuppusamy, P. T. Manoharan, **C. Mahadevan** and M. Seshasayee
J. Crystallogr. Spectrosc. Res. (1985) **15**, 359-376
 14. Crystal and molecular structure of bis(tetrathiafulvalene) bis(maleonitrile-1, 2-dithiolato)nickelate (II)

C. Mahadevan

- J. Crystallogr. Spectrosc. Res. (1986) **16**, 159-167
15. Crystal and molecular structure of diaquabis(ethylenediamine) copper(II) tetraphenylborate di(dimethylsulfoxide). Structure of $C_{56}H_{72}N_4O_4S_2B_2Cu$
C. Mahadevan, G. C. Rout, M. Seshasayee and Shakuntala Sastry
J. Crystallogr. Spectrosc. Res. (1986) **16**, 799-805
16. Lattice distortion in KCl doped KDP single crystals grown from aqueous solution
P. Sekar Ramasubramanian and **C. Mahadevan**
Cryst. Res. & Technol. (1991) **26**, K 179-182
17. Growth, dissolution and dielectric properties of $ZnSO_4 \cdot 7H_2O$ and $FeSO_4 \cdot 7H_2O$ single crystals
Anitha R. Nair, M. Backiyam and **C. Mahadevan**
Indian J. Pure & Appl. Phys. (1991) **29**, 145-147
18. Growth kinetics and electrical properties of KCl doped KDP single crystals grown from aqueous solutions
P. Sekar Ramasubramanian and **C. Mahadevan**
Indian J. Pure & Appl. Phys. (1991) **29**, 285-287
19. Investigations on $ZnCl_2$ single crystals grown from aqueous solutions
E. Arumugadoss and **C. Mahadevan**
Indian J. Pure & Appl. Phys. (1991) **29**, 443-444
20. Nucleation studies on supersaturated aqueous solutions of $ZnSO_4 \cdot 7H_2O$ and $FeSO_4 \cdot 7H_2O$
M. Backiyam, Anitha R. Nair and **C. Mahadevan**
Indian J. Pure & Appl. Phys. (1991) **29**, 455-456
21. Growth of anthracene single crystals by gel techniques
C. Mahadevan
Indian J. Pure & Appl. Phys. (1991) **29**, 709-710
22. Optical investigations on $Mg_xZn_{1-x}SO_4 \cdot 7H_2O$ mixed crystals and mixed salts
K. Jayakumari and **C. Mahadevan**
J. Optics (1992) **21**, 22-24
23. X-ray investigations on KCl doped KDP single crystals
P. Kumaradhas, **C. Mahadevan**, C. Suresh Kumar and D. Chandra Sekharam
J. Pure & Appl. Phys. (1992) **4**, 137-140
24. Thomas-Fermi dielectric screening in some binary semiconductors
X. Sahaya Shajan and **C. Mahadevan**
Cryst. Res. & Technol. (1992) **27**, 253-257
25. Debye temperatures of $[Ni(mnt)_2]^{n-}$ (cation) $^{+n}$ complexes
K. Sivaraman and **C. Mahadevan**
Cryst. Res. & Technol. (1992) **27**, K 25-27
26. Lattice variation and stability of NaCl-KCl mixed crystals grown from aqueous solutions
X. Sahaya Shajan, K. Sivaraman, **C. Mahadevan** and D. Chandrasekharam
Cryst. Res. & Technol. (1992) **27**, K 79-82
27. Optical and electrical measurements on aqueous solutions of sodium metasilicate
K. Sivaraman, J. Asbalter, S. P. Shibu and **C. Mahadevan**
J. Pure & Appl. Phys. (1992) **4**, 115-123
28. Materials for bio-emf devices: 1. Studies on hydrilla leaf juice

- G. Selvarajan and **C. Mahadevan**
J. Pure & Appl. Phys. (1992) **4**, 162-168
29. Materials for bio-emf devices: 2. Studies on agave juice
M. Theivanayagom and **C. Mahadevan**
J. Pure & Appl. Phys. (1992) **4**, 169-174
30. Materials for bio-emf devices: 3. Studies on leaf juices of tridax procumbens and coleus aromaticus
G. Selvarajan and **C. Mahadevan**
J. Pure & Appl. Phys. (1992) **4**, 175-181
31. Materials for bio-emf devices: 4. Studies on cucumis sativas juice
R. Pazhani and **C. Mahadevan**
J. Pure & Appl. Phys. (1992) **4**, 182-187
32. Materials for bio-emf devices: 5. Studies on leaf juices of daemia
G. Selvarajan and **C. Mahadevan**
J. Pure & Appl. Phys. (1992) **4**, 188-193
33. Materials for bio-emf devices: 6. Studies on the Cucurbita maxima juice
R. Pazhani and **C. Mahadevan**
J. Pure & Appl. Phys. (1992) **4**, 194-199
34. Materials for bio-emf devices: 7. Power ratings of primary batteries with leaf juices
G. Selvarajan and **C. Mahadevan**
J. Pure & Appl. Phys. (1992) **4**, 247-254
35. Materials for bio-emf devices: 8. Power ratings of primary battery with coconut husk ret liquor
A. Narayanaperumal and **C. Mahadevan**
J. Pure & Appl. Phys. (1992) **4**, 255-259
36. Materials for bio-emf devices: 9. Power ratings of primary battery with cow-dung solutions
A. Narayanaperumal and **C. Mahadevan**
J. Pure & Appl. Phys. (1992) **4**, 260-264
37. Materials for bio-emf devices: 10. Power ratings of primary battery with tamarind
A. Narayanaperumal and **C. Mahadevan**
J. Pure & Appl. Phys. (1992) **4**, 265-275
38. Refraction equivalent measurements on K_2CrO_4 and $K_3Fe(CN)_6$ doped KDP single crystals
T. Chithambarathanu, **C. Mahadevan** and T. Josephine Rani
J. Optics (1993) **22**, 21-22
39. X-ray investigations on $Mg_xZn_{1-x}SO_4 \cdot 7H_2O$ mixed crystals
K. Jayakumari, **C. Mahadevan** and D. Chandrasekharam
J. Pure & Appl. Phys. (1993) **5**, 331-334
40. X-ray investigations on $K_3Fe(CN)_6$ doped KDP single crystals
T. Chithambarathanu, **C. Mahadevan** and D. Chandrasekharam
J. Pure & Appl. Phys. (1993) **5**, 346-348
41. X-ray determination of Debye temperature of $MgAl_2O_4$
D. Dooslin Mary and **C. Mahadevan**
J. Pure & Appl. Phys. (1993) **5**, 356-357
42. X-ray investigations on K_2CrO_4 doped KDP single crystals

- T. Josephine Rani, **C. Mahadevan** and D. Chandrasekharam
J. Pure & Appl. Phys. (1993) **5**, 358-359
43. Specific refractive energies of KCl and KNO₃ doped KDP single crystals
T. N. Preetha, S. Lalitha, P. G. Bindhu and **C. Mahadevan**
J. Optics (1997) **26**, 193-196
44. Age of Tirukkural
C. Mahadevan
J. Institute of Asian Studies (1997) **XV**, 107-110
45. On improving the quality of higher education in colleges
C. Mahadevan
New Frontiers in Education (1998) **XXXVIII**, 479-487
46. Nucleation studies on supersaturated aqueous solutions of (NH₄)H₂PO₄ doped with NH₄Cl and KCl
Y. Premila Rachelin and **C. Mahadevan**
Indian J. Pure & Appl. Phys. (1998) **36**, 38-42
47. Nucleation studies on supersaturated aqueous solutions of ammonium dihydrogen phosphate doped with ammonium and potassium sulphates
N. P. Rajesh and **C. Mahadevan**
J. Indian Chem. Soc. (1998) **75**, 307-309
48. Nucleation studies on supersaturated aqueous solutions of (NH₄)H₂PO₄ doped with (NH₄)₂C₂O₄·H₂O
R. Ramesh and **C. Mahadevan**
Bull. Mater. Sci. (1998) **21**, 287-290
49. X-ray determination of the Debye temperatures of KCl doped KH₂PO₄ single crystals
C. Mahadevan
Bull. Electrochem. (1998) **14**, 349-350
50. Growth kinetics and electrical resistivities of KI doped KH₂PO₄ single crystals
T. H. Freeda and **C. Mahadevan**
Bull. Electrochem. (1998) **14**, 359-360
51. Nucleation parameters and specific refractive energies of Na₂C₂O₄ doped (NH₄)H₂PO₄ crystals
Angelin Jasper Patricia and **C. Mahadevan**
Bull. Electrochem. (1998) **14**, 361-363
52. Nucleation studies in supersaturated aqueous solutions of chromate doped potassium dihydrogen phosphate
C. Mahadevan and C. S. Jegatheesan
J. Indian Chem. Soc. (1999) **76**, 47-48
53. Nucleation studies in supersaturated aqueous solutions of (NH₄)H₂PO₄ doped with NaCl and NaH₂PO₄·2H₂O
C. Mahadevan, T. K. Jeya Sobha and V. Umayorubhagan
Indian J. Chem. (1999) **38A**, 244-248
54. Studies on the shape of critical nucleus in homogeneous nucleation
C. Mahadevan
Indian J. Phys. (1999) **73A**, 461-470
55. Nucleation studies in supersaturated aqueous solutions of Mg and Zn doped nickel sulphate heptahydrate

- C. Mahadevan**, D. Irene Latha and V. Umayorubhagan
J. Indian Chem. Soc. (1999) **76**, 335-338
56. Nucleation studies in supersaturated aqueous solutions of KH_2PO_4 doped with KBr and $\text{K}_2\text{Cr}_2\text{O}_7$
C. Mahadevan, G. Janiland Angel, V. Anton Sophana and V. Umayorubhagan
Bull. Mater. Sci. (1999) **22**, 817-820
57. Nucleation studies in supersaturated aqueous solutions of urea and thiourea doped with inorganic dopants
J. M. Kavitha, K. Seethalakshmi, **C. Mahadevan** and Y. Premila Rachelin
Bull. Mater. Sci. (1999) **22**, 821-826
58. Electrical resistivity measurements on gel grown KDP crystals doped with KCl, KNO_3 , NaCl and NaNO_3
Beaulah Shanthini, C. Anitha, **C. Mahadevan** and C. Balasingh
Indian J. Phys. (1999) **73A**, 805-809
59. Nucleation studies in supersaturated aqueous solutions of urea and urea nitrate doped with organic dopants
C. Mahadevan, S. S. Sreeja Kumari, S. Anitha and V. Umayorubhagan
Indian J. Chem. (1999) **38A**, 1100-1105
60. Nucleation studies in supersaturated aqueous solutions of KH_2PO_4 doped with KCl and KNO_3
C. Mahadevan, S. Lalitha, T. N. Preetha and P. G. Bindhu
Indian J. Phys. (2000) **74B**, 25-29
61. Nucleation studies in supersaturated aqueous solutions of thiourea doped with urea and urea nitrate
C. Mahadevan, S. Puspha Latha and V. Umayorubhagan
J. Indian Chem. Soc. (2000) **77**, 344-346
62. Electrical conductivity measurements on gel grown KDP crystals added with some ammonium compounds
T. H. Freeda and **C. Mahadevan**
Bull. Mater. Sci. (2000) **23**, 335-340
63. Lattice variation and thermal parameters of KDP single crystals added with urea and $\text{NiSO}_4 \cdot 7\text{H}_2\text{O}$
A. Dahlia Queen Livingsta, T. Mary Jeeva, **C. Mahadevan** and C. Balasingh
Indian J. Phys. (2001) **75A**, 241-244
64. Electrical conductivity measurements on gel grown KDP crystals added with KCl and KNO_3
J. Allbin Sancta, A. Gnana Sutha, T. H. Freeda, **C. Mahadevan** and C. Balasingh
Indian J. Phys. (2001) **75A**, 245-247
65. Lattice variation and thermal parameters of gel grown KDP crystals added with some ammonium compounds
T. H. Freeda and **C. Mahadevan**
Pramana - J. Phys. (2001) **57**, 829-836
66. Lattice variation and thermal parameters of $\text{Ni}_x\text{Mg}_{1-x}\text{SO}_4 \cdot 7\text{H}_2\text{O}$ single crystals

- M. Theivanayagom and **C. Mahadevan**
Bull. Mater. Sci. (2001) **24**, 441-444
67. Electrical conductivity measurements on gel grown KDP crystals added with urea and thiourea
M. Priya, C. M. Padma, T. H. Freeda, **C. Mahadevan** and C. Balasingh
Bull. Mater. Sci. (2001) **24**, 511-514
68. Nucleation parameters of KH_2PO_4 single crystals added with some ammonium compounds
T. H. Freeda and **C. Mahadevan**
Indian J. Phys. (2002) **76A**, 261-266
69. Lattice and thermal parameters of $\text{Ni}_x\text{Zn}_{1-x}\text{SO}_4 \cdot 7\text{H}_2\text{O}$ single crystals
A. D. Q. Livingsta and **C. Mahadevan**
Indian J. Phys. (2002) **76A**, 271-275
70. D.C. electrical conductivity measurements on KDP single crystals added with NaCl and NaBr
G. Deepa, T. H. Freeda and **C. Mahadevan**
Indian J. Phys. (2002) **76A**, 369-372
71. Electrical conductivity measurements on pure and amino acids added triglycine sulphate phosphate single crystals
N. P. Rajesh, **C. Mahadevan**, P. Santhana Raghavan,
Yen-Chieh Huang and P. Ramasamy
Mater. Lett. (2002) **55**, 394-396
72. Lattice variation and thermal parameters of pure and impurity - added calcium tartrate tetrahydrate crystals
X. Sahaya Shajan and **C. Mahadevan**
J. Mater. Sci. (2004) **39**, 4627 – 4629
73. On the growth of calcium tartrate tetrahydrate single crystals
X. Sahaya Shajan and **C. Mahadevan**
Bull. Mater. Sci. (2004) **27**, 327 – 331
74. Effect of organic impurities on the nucleation parameters of KDP single crystals
C. Mahadevan
Indian J. Phys. (2005) **79**, 305-307
75. Lattice variation and thermal parameters of KDP crystals added with NaCl and NaBr
C. Mahadevan, C. Vincent Jerin and S. Maragatha Selvi
Indian J. Phys. (2005) **79**, 377-380
76. Electrical conductivity measurements on pure and impurity added calcium tartrate tetrahydrate single crystals
X. Sahaya Shajan and **C. Mahadevan**
Indian J. Phys. (2005) **79**, 425-427
77. Electrical measurements on ZTS single crystals
V. N. Praveen and **C. K. Mahadevan**
Indian J. Phys. (2005) **79**, 639-642
78. D.C. electrical conductivity measurements on ADP single crystals added with simple organic compounds
A. Anne Assencia and **C. Mahadevan**
Bull. Mater. Sci. (2005) **28**, 415 – 418
79. Effect of some antidiabetic drugs on the formation of brushite and struvite crystals

- Thresiamma Chacko, T. Asaithambi and **C. K. Mahadevan**
Indian J. Phys. (2005) **79**, 1363 – 1371
80. FT-IR spectroscopic and thermal studies on pure and impurity added calcium tartrate tetrahydrate crystals
X. Sahaya Shajan and **C. Mahadevan**
Cryst. Res. Technol. (2005) **40**, 598 - 602
 81. Growth and characterization of multiphased mixed crystals of KCl, KBr and KI : 1. Growth and X-ray diffraction studies
S. Perumal and **C. K. Mahadevan**
Physica B (2005) **369**, 89-99
 82. Growth and characterization of multiphased mixed crystals of KCl, KBr and KI-Part 2. Electrical measurements
S. Perumal and **C. K. Mahadevan**
Physica B (2005) **367**, 172-181
 83. Growth and X-ray studies of $(\text{NaCl})_x(\text{KCl})_{y-x}(\text{KBr})_{1-y}$ single crystals
K. Jayakumari and **C. Mahadevan**
J. Phys. Chem. Solids (2005) **66**, 1705 – 1713
 84. Dielectric parameters of KDP single crystals added with urea
S. Goma, C. M. Padma and **C. K. Mahadevan**
Mater. Lett. (2006) **60**, 3701 – 3705
 85. Studies on $(\text{NaCl})_x(\text{KBr})_{y-x}(\text{KI})_{1-y}$ solid solutions : 1 Lattice and thermal parameters
G. Selvarajan and **C. K. Mahadevan**
J. Mater. Sci. (2006) **41**, 8211-8217
 86. Studies on $(\text{NaCl})_x(\text{KBr})_{y-x}(\text{KI})_{1-y}$ solid solutions : 2. Electrical measurements
G. Selvarajan and **C. K. Mahadevan**
J. Mater. Sci. (2006) **41**, 8218-8225
 87. Nucleation parameters of pure and impurity added $\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$ single crystals
C. K. Mahadevan and R.S.S. Saravanan
Mater. Manuf. Processes (2007) **22**, 357-361
 88. On the preparation of multiphased mixed crystals from NaBr and KCl
C. M. Padma and **C. K. Mahadevan**
Mater. Manuf. Processes (2007) **22**, 362-365
 89. Growth and characterization of disodium hydrogen orthophosphate (DSHP) single crystals
N. J. John, P. Selvarajan, S. Benita Jeba Silviya and **C. K. Mahadevan**
Mater. Manuf. Processes (2007) **22**, 379-383
 90. Growth and studies of the new crystal formed with NaCl and CaCl_2
N. Manonmani, **C. K. Mahadevan** and V. Umayorubhagan
Mater. Manuf. Processes (2007) **22**, 388-392
 91. Preparation and electrical properties of $(\text{NaCl})_x(\text{NaBr})_{y-x}(\text{NaI})_{1-y}$ crystals
N. Neelakanda Pillai and **C. K. Mahadevan**
Materials and Manufacturing Processes (2007) **22**, 393-399
 92. On the preparation of ZnO – CdO nanocomposites
S. Meenakshi Sundar, **C. K. Mahadevan** and P. Ramanathan
Mater. Manuf. Processes (2007) **22**, 400-403
 93. Growth and vibrational spectroscopic studies of some incommensurate crystals

- N. Manonmani, R. Kesavamoorthy and **C. K. Mahadevan**
Physica B. (2007) **393**, 228-234
94. DC electrical conductivity measurements on KCl and KNO₃ added MgSO₄.7H₂O single crystals
C. K. Mahadevan
Physica B. (2008) **403**, 57-60
95. Preparation and dielectric properties of oxide added NaCl-KCl polycrystals
M. Priya and **C. K. Mahadevan**
Physica B. (2008) **403**, 67-74
96. Growth and characterization of multiphased mixed crystals of NaBr and KBr
C. M. Padma and **C. K. Mahadevan**
Mater. Manuf. Processes (2008) **23**, 144-151
97. Growth and studies of two new potassium compound crystals
N. Manonmani, **C. K. Mahadevan** and V. Umayorubhagan
Mater. Manuf. Processes (2008) **23**, 152-158
98. Growth and electrical characterization of L-arginine added KDP and ADP single crystals
M. Meena and **C. K. Mahadevan**
Cryst. Res. Technol. (2008) **43**, 166-172
99. Studies on multiphased mixed crystals grown from NaBr and KCl
C.M. Padma and **C. K. Mahadevan**
Physica B (2008) **403**, 1708-1714
100. Alkali halides and nanomaterials
C. K. Mahadevan
NICE J. Emerging Technol. (2008) **3**, 39-45
101. X-ray diffraction studies on (NaCl)_x(NaBr)_{y-x}(NaI)_{1-y} crystals
N. Neelakanda Pillai and **C. K. Mahadevan**
Physica B (2008) **403**, 2168-2172
102. Growth and dielectric properties of L-arginine acetate and L-arginine oxalate single crystals
M. Meena and **C. K. Mahadevan**
Mater. Lett. (2008) **62**, 3742-3744
103. Thermal parameters of MgSO₄.7H₂O and NiSO₄.7H₂O crystals added with urea and thiourea
C. K. Mahadevan
Physica B (2008) **403**, 3164-3167
104. Studies on NaCl added ADP single crystals
N. Joseph John and **C. K. Mahadevan**
Mater. Manuf. Processes (2008) **23**, 809-815
105. Formation of multiphased mixed crystals from miscible NaBr, KBr and KCl
M. Priya and **C. K. Mahadevan**
Cryst. Res. Technol. (2008) **43**, 1069-1073
106. Effect of impurities on the crystalline perfection of ZTS
V.N. Praveen, N. Vijayan, **C. K. Mahadevan** and G. Bhagavannarayana
Mater. Manuf. Processes (2008) **23**, 816-822
107. Electrical measurements on multiphased (NaCl)_x(KCl)_{y-x}(KBr)_{1-y} single crystals
C. K. Mahadevan and K. Jayakumari

- Physica B (2008) **403**, 3990-3996
108. Growth and characterization of KDP crystal with potassium carbonate as additive
P. V. Dhanaraj, **C. K. Mahadevan**, G. Bhagavannarayana, P. Ramasamy and N. P. Rajesh
J. Cryst. Growth (2008) **310**, 5341-5346
 109. Growth, XRD and dielectric properties of triglycine-sulpho-phosphate (TGSP) Crystal added with magnesium sulphate
P. Selvarajan, A. Sivadhas, T. H. Freeda and **C. K. Mahadevan**
Physica B (2008) **403**, 4205-4208
 110. Studies on multiphased mixed crystals of NaCl, KCl and KI
M. Priya and **C. K. Mahadevan**
Cryst. Res. Technol. (2009) **44**, 92-102
 111. Enhancement of stability of growth, structural and NLO properties of KDP crystals due to additive along with seed rotation
P. V. Dhanaraj, N. P. Rajesh, P. Ramasamy, M. Jeyaprahasam, **C. K. Mahadevan** and G. Bhagavanarayana
Cryst. Res. Technol. (2009) **44**, 54-60
 112. Effect of L-Lysine monohydrochloride dihydrate on the growth and properties of ammonium dihydrogen orthophosphate single crystals
P. Rajesh, P. Ramasamy and **C. K. Mahadevan**
J. Cryst. Growth (2009) **311**, 1156-1160
 113. Growth and characterization of pure and potassium iodide doped zinc tris-thiourea sulphate (ZTS) single crystals
C. Krishnan, P. Selvarajan, T. H. Freeda and **C. K. Mahadevan**
Physica B (2009) **404**, 289-294
 114. Growth, structural, mechanical, spectral and dielectric characterization of NaCl added Triglycine sulfate single crystals
N. Theresita Shanthi, P. Selvarajan and **C. K. Mahadevan**
Curr. Appl. Phys. (2009) **9**, 1155-1159
 115. Electrical properties of $\text{ZnS}_x\text{O}_{1-x}$ nanocomposites
G. Jenita Christobel, M. Vimalan and **C. K. Mahadevan**
Intl. J. Mater. Sci. (2009) **4**, 613-620
 116. Preparation and characterization of ZnO-CdS quantum dots
K. U. Madhu, T. H. Freeda and **C. K. Mahadevan**
Intl. J. Mater. Sci. (2009) **4**, 673-684
 117. Studies on lead oxide nanocrystals added with Mn^{2+}
K. Ramya Ananthi, K. U. Madhu, M. Vimalan and **C. K. Mahadevan**
Intl. J. Mater. Sci. (2009) **4**, 109-120
 118. Effect of Pb^{2+} as impurity on the optical properties of CdO quantum dots
K. J. Abhirama, K. U. Madhu, M. Vimalan and **C. K. Mahadevan**
Intl. J. Mater. Sci. (2009) **4**, 707-716
 119. Studies on CdO nanocrystals
M. Priya and **C. K. Mahadevan**
Intl. J. Mater. Sci. (2009) **4**, 755-764

120. Nucleation studies and characterization of potassium thiocyanate added KDP crystals grown by seed rotation technique
P. V. Dhanaraj, N. P. Rajesh, **C. K. Mahadevan** and G. Bhagavanarayana
Physica B (2009) **404**, 2503-2508
121. Studies on triglycine sulfate (TGS) crystals doped with sodium bromide (NaBr) grown by solution method
N. Theresita Shanthi, P. Selvarajan and **C. K. Mahadevan**
Indian J. Sci. Technol. (2009) **2**, 49-52
122. Growth and characterization of naphthalene single crystals grown by modified vertical Birdgeman method
T. Suthan, N. P. Rajesh, P. V. Dhanaraj and **C. K. Mahadevan**
Spectrochimica Acta: Part A (2010) **75**, 69-73
123. Optical, thermal, mechanical and electrical properties of a new NLO material: Mono-L-alaninium nitrate (MAN)
M. Vimalan, X. Helen Flora, S. Tamilselvan, R. Jajasekaran, P. Sagayaraj and **C. K. Mahadevan**
Arch. Appl. Sci. Res. (2010) **1 (3)**, 44-53
124. Effect of Mn^{2+} addition on the electrical properties of ZnO-ZnS nanocomposites
M. Vimalan and **C. K. Mahadevan**
Arch. Appl. Sci. Res. (2010) **2 (2)**, 337-348
125. Electrical properties of Mg doped ZnS_xO_{1-x} nano composites
M. Vimalan, T. Rajesh Kumar, I. Vetha Potheher, M. Gulam Mohamed and **C. K. Mahadevan**
Arch. Appl. Sci. Res. (2010) **2 (3)**, 68-73
126. Growth and properties of novel organic nonlinear optical crystal: l-alaninium tartrate (LAT)
M. Vimalan, T. Rajesh Kumar, S. Tamilselvan, P. Sagayaraj and **C. K. Mahadevan**
Physica B (2010) **405**, 3907-3913
127. Effect of Ni^{2+} on the structural, optical, thermal and dielectric properties of ADP single crystals
P. Rajesh, P. Ramasamy and **C. K. Mahadevan**
Mater. Lett. (2010) **64**, 1140-1143
128. Effect of added impurities on the electrical properties of L-arginine acetate single crystals
M. Meena and **C. K. Mahadevan**
Arch. Appl. Sci. Res. (2010) **2 (6)**, 185-199
129. Thermal and dielectric studies of nickel malonate dihydrate single crystals
Varghese Mathew, K. C. Mathai, **C. K. Mahadevan** and Abraham K. E.
Physica B (2010) **406**, 426-429
130. Synthesis and characterization of nanostructured materials CuS (covellite) for their applications
M. Annie Freeda, N. Rode Madhav, **C. K. Mahadevan** and S. Ramalingam
Nano Technology and Nanoscience (2010) **1(1)**, 1-4
131. Studies on synthesis and characterization of $Zn_{1-x}Cd_xS$ and $Zn_{1-x}Cd_xS:Mn^{2+}$ semiconductor quantum dots
R. Sakthi Sudar Saravanan, D. Pukazhselvan and **C. K. Mahadevan**
Phil. Mag. (2011) **91**, 389-403

132. Investigation on the synthesis and quantum confinement effects of pure and Mn^{2+} added $Zn_{(1-x)}Cd_xS$ nano crystals
R. Sakthi Sudar Saravanan, D. Pukazhselvan and **C. K. Mahadevan**
J. Alloys and Compounds (2011) **509**, 4065-4072
133. Structure, morphology and electrical properties of Mn_3O_4 nanocrystals
K. Usha and **C. K. Mahadevan**
Arch. Appl. Sci. Res. (2011) **2 (1)**, 78-80
134. Electrical properties of L-prolinium tartrate (LPT) – A new organic nonlinear optical material
S. Tamilselvan, A. Cyrac Peter, **C. K. Mahadevan**, J. Madhavan and M. Vimalan,
Arch. Appl. Sci. Res. (2011) **3 (1)**, 180-185
135. Growth and electrical properties of NLO crystals of L-Asparaginium nitrate (LAsN)
S. Tamilselvan, X. Helan Flora, A. Cyrac Peter, M. Gulam Mohamed, **C. K. Mahadevan**, M. Vimalan and J. Madhavan
Arch. Appl. Sci. Res. (2011) **3 (1)**, 235-240
136. Growth and characterization of 2-hydroxy-4-methoxybenzophenone single crystal using modified vertical Bridgman technique
T. Suthan, N. P. Rajesh, **C. K. Mahadevan** and G. Bhagavanarayana
Spectrochimica Acta: Part A (2011) **78**, 771-776
137. Thermal and dielectric properties of gel-grown cobalt malonate dehydrate single crystals
Varghese Mathew, Lizymol Xavier, **C. K. Mahadevan** and Abraham K. E.
Physica Scripta (2011) **83**, 035801(3pp)
138. Growth and characterization of benzyl single crystals using nano translation by modified vertical Bridgman technique
T. Suthan, P. V.Dhanaraj, N. P. Rajesh, **C. K. Mahadevan** and G. Bhagavanarayana
CrystEngCom (2011) **13**, 4018-4024
139. Dielectric and magnetic studies on gel-grown copper malonate trihydrate crystals
Varghese Mathew, Sabu Jacob, **C. K. Mahadevan** and Abraham K. E.
Mater. Lett. (2011) **65**, 2142-2145
140. Growth and characterization of organic material 2-methylamino-5-chlorobenzophenone single crystal by modified vertical Bridgman technique
T. Suthan, N. P. Rajesh, **C. K. Mahadevan**, K. Senthil Kumar and G. Bhagavanarayana
Spectrochimica Acta: Part A (2011) **79**, 1443-1448
141. Effect of dichromate addition on the electrical properties of KDP crystals
M. Priya and **C. K. Mahadevan**
Arch. Appl. Sci. Res. (2011) **3(4)**, 233-240
142. Studies on crystal growth and physical properties of 2-amino-5-chloropyridine single crystal
T. Suthan, N. P. Rajesh, **C. K. Mahadevan** and G. Bhagavanarayana
Mater. Chem. Phys. (2011) **129**, 433-438
143. Growth and characterization of organic material 2-hydroxypyridine single crystal by modified vertical Bridgman technique
T. Suthan, N. P. Rajesh, **C. K. Mahadevan**, D. Sajan and G. Bhagavanarayana
Mater. Chem. Phys. (2011) **130**, 915-920
144. Optical and electrical properties of CuS nanorods
M. Annie Freeda, **C. K. Mahadevan** and S. Ramalingom

- Arch. Phys. Res. (2011) **2(3)**,175-179
145. A study of thermal and dielectric behavior of manganese malonate dihydrate single crystals
Varghese Mathew, Lizymol Xavier, **C. K. Mahadevan** and Abraham K. E.
J. Therm. Anal. Calorim. (2011) **105**, 123-127
 146. Structural, electrical and mechanical properties of GaTe for radiation detector applications
P. M. Reshmi, A. G. Kunjomana, K. A. Chandrasekaran, M. Meena and **C. K. Mahadevan**
Intl. J. Soft Computing and Engineering (2011) **I**, 228-232
 147. Growth, structural, optical, mechanical and dielectric characterization of diammonium hydrogen phosphate (DAHP) single crystals
P. Selvarajan, N. Joseph John and **C. K. Mahadevan**
J. Minerals and Mater. Charact. Engineering (2011) **10**, 1379-1389
 148. A study of thermal, dielectric and magnetic properties of strontium malonate crystals
Varghese Mathew, Sabu Jacob, **C. K. Mahadevan** and K. E. Abraham
Physica B (2012) **407**, 222-226
 149. Studies on the synthesis of cubic ZnS quantum dots, capping and optical-electrical characteristics
R. Sakthi Sudar Saravanan, D. Pukazhselvan and **C. K. Mahadevan**
J. Alloys and Compounds (2012) **517**, 139-148
 150. Growth, crystalline perfection and characterization of benzophenone oxime crystal
M. Rajasekar, K. Muthu, V. Meenatchi, G. Bhagavannarayana, **C. K. Mahadevan** and SP. Meenakshisundaram
Spectrochimica Acta: Part A (2012) **92**, 207-211
 151. Novel synthesis and characterization of CdS nanoparticles
M. Priya, R. S. S. Saravanan and **C. K. Mahadevan**
Energy Procedia (2012) **15**, 333-339
 152. Dielectric measurements on urea added ZTS single crystals
V. N. Praveen, N. Vijayan and **C. K. Mahadevan**
Optik (2012) **123**, 1617-1622
 153. Photoluminescence and electrical impedance measurements on alloyed $Zn_{1-x}Cd_xS$ nanocrystals
R. Sakthi Sudar Saravanan and **C. K. Mahadevan**
J. Alloys and Compounds (2012) **541**, 115-124
 154. Optical, thermal and dielectric properties of Sr(II)-doped bis(thiourea)zinc(II) chloride crystals
K. Muthu, M. Rajasekar, K. Meena, **C. K. Mahadevan** and SP. Meenakshisundaram
Spectrochimica Acta: Part A (2012) **96**, 825-830
 155. Preparation by a simple route and characterization of amorphous and crystalline Fe_2O_3 nanophases
S. I. Srikrishna Ramya and **C. K. Mahadevan**
Mater. Lett. (2012) **89**, 111-114
 156. Mechanical and dielectric properties of InTe crystals
T. Mathew, A. G. Kunjomana, K. Munirathnam, K. A. Chandrasekharan, M. Meena and **C. K. Mahadevan**

- Crystal Structure Theory and Applications (CSTA) (2012)**1(3)**, 79-83
157. Growth and characterization of sodium lead bromide crystals
C. Kaladevi and **C. K. Mahadevan**
Intl. J. Engg. Res. Technol. (2012) **1(8)**, 1-12
 158. Hardness measurements on pure and ZnS added $\text{NaCl}_x\text{Br}_{1-x}$ single crystals grown from aqueous solutions
S. Sivanandhan, N. Neelakanda Pillai and **C. K. Mahadevan**
Arch. Phys. Res. (2012) **3(3)**, 239-244
 159. Microhardness studies on $\text{Na}_x\text{K}_{1-x}\text{Cl}$ crystals grown from aqueous solution
C. V. Somasundari, N. Neelakanda Pillai and **C. K. Mahadevan**
Arch. Phys. Res. (2012) **3(4)**, 283-286
 160. Synthesis and structural properties of ZnS-ZnO nanocomposites
G. Janita Christobel and **C. K. Mahadevan**
Intl. J. Adv. Mater. Sci. (2013) **4(1)**, 67-71
 161. Growth and characterization of semiorganic nonlinear optical LHC1-LHBr mixed crystals
J. Suja Rani, **C. K. Mahadevan**, M. Antony Arockiaraj, S. Rajasekar, M. Vimalan and K. Jayakumari
Arch. Appl. Sci. Res. (2013) **5(2)**, 213-221
 162. Investigation on physic-chemical properties of semiorganic nonlinear optical L-lysine sulphate single crystal
J. Suja Rani, M. Meena, **C. K. Mahadevan**, M. Antony Arockiaraj, S. Rajasekar, M. Vimalan and K. Jayakumari
Adv. Appl. Sci. Res. (2013) **4(2)**, 286-297
 163. Growth and characterization of hexaaquacobalt(II) dipotassium tetrahydrogen tetra-o-phthalate tetrahydrate crystals
K. Muthu, G. Bhagavannarayana, **C. K. Mahadevan** and S. P. Meenakshisundaram
Mater. Chem. Phys. (2013) **139**, 623-628
 164. Synthesis by a novel method and application of image processing in characterization of nickel sulphide nanoparticles
S. Nagaveena, S. N. Kumar and **C. K. Mahadevan**
Intl. J. Eng. Res. Appln. (IJERA) (2013) **3(2)**, 1214-1218
 165. Optical and magnetic studies on ZnO nanocrystals both pure and doped prepared by microwave assisted solvothermal method
N. Saraswathi, N. Neelakanda Pillai and **C. K. Mahadevan**
Intl. J. Eng. Res. Appln. (IJERA) (2013) **3(4)**, 2468-2473
 166. Thermal, electrical and photoconductivity properties of L-leucine hydrobromide(LEHBr): A semiorganic nonlinear optical single crystal
J. Suja Rani, K. Jayakumari and **C. K. Mahadevan**
Arch. Appl. Sci. Res. (2013) **5(4)**, 127-136
 167. Growth and characterization of pure and glycine added morenosite single crystals
J. M. Kavitha and **C. K. Mahadevan**
Intl. J. Eng. Res. Appln. (IJERA) (2013) **3(5)**, 1931-1940
 168. A facile method to prepare $\text{CdO-Mn}_3\text{O}_4$ nanocomposite
G. Deepa and **C. K. Mahadevan**
IOSR J. Appl. Phys. (IOSR-JAP) (2013) **5(1)**, 15-18
 169. Dielectric studies of manganese carbonate nanocrystals

- K. U. Madhu and **C. K. Mahadevan**
 Intl.J.Eng.Res.Appl.(IJERA) (2013) **3(4)**, 2264-2267
170. Effect of glycine as an impurity on the properties of Epsomite single crystals
 J. M. Kavitha and **C. K. Mahadevan**
 IOSR J. Appl. Phys. (IOSR-JAP) (2013) **5(4)**, 45-53
171. Optical properties of ZnO-CdS nanocomposites
 K. U. Madhu, T.H.Freeda and **C. K. Mahadevan**
 IOSR J. Eng. (IOSR-JEN)(2013) **3(11)**, 16-20
172. Growth and characterization of zinc-magnesium tris(thiourea) sulphate (ZMTS) single crystals
 A. Darlin Mary, K. Jayakumari and **C. K. Mahadevan**
 Intl. J. Eng. Res. Appl. (IJERA) (2013) **3(6)**, 1183-1196
173. Growth and characterization of BTCC crystals added with urea
 I. S. Prameela Kumari and **C. K. Mahadevan**
 Intl. J. Eng. Res. Appl. (IJERA) (2013) **3(6)**, 1508-1517
174. Growth and characterization of pure and oxalic acid doped L-arginine acetate single crystals
 P. V. Radhika, K. Jayakumari and **C. K. Mahadevan**
 Intl. J. Eng. Res. Appl. (IJERA) (2013) **3(6)**, 1841-1849
175. Growth and characterization of pure and Ni^{2+} added crystals of glycine potassium sulfate
 A. Karolin, K. Jayakumari and **C. K. Mahadevan**
 Intl. J. Eng. Res. Appl. (IJERA) (2013) **3(6)**, 1906-1915
176. Growth and characterization of glycine sodium sulphate crystals
 A. Karolin, K. Jayakumari and **C. K. Mahadevan**
 Intl. J. Res. Eng. Technol. (IJRET) (2013) **2(12)**, 646-651
177. Effect of ZnS as an impurity on the physical properties of $(\text{NH}_4)\text{H}_2\text{PO}_4$ single crystals
 J. Anitha Hudson, **C. K. Mahadevan** and C. M. Padma
 Intl. J. Res. Eng. Tech. (IJRET) (2013) **2(12)**, 675-683
178. Dielectric properties of pure and Ni^{2+} doped glycine sodium sulphate crystals
 A. Karolin, K. Jayakumari and **C. K. Mahadevan**
 Intl. J. Res. Eng. Technol. (IJRET) (2013) **2(12)**, 709-718
179. Growth and characterization of CdS doped KDP single crystals
 O. V. Mary Sheeja and **C. K. Mahadevan**
 Intl. J. Res. Eng. Technol. (IJRET) (2013) **2(12)**, 738-748
180. Effect of Zn^{2+} doping on CuS nanocrystals
 M. Annie Freeda and **C. K. Mahadevan**
 Mater. Sci. Indian J. (MSAIJ) (2013) **9(8)**, 283-288
181. Effect of ZnS as an impurity on the physical properties of KDP single crystals
 O. V. Mary Sheeja and **C. K. Mahadevan**
 Intl. J. Eng. Res. Appl. (IJERA) (2014) **4(1:2)**, 55-65
182. Growth and characterization of ADP single crystals added with CdS
 J. Anitha Hudson, **C. K. Mahadevan** and C. M. Padma
 Intl. J. Eng. Res. Appl. (IJERA) (2014) **4(1:2)**, 257-266
183. Enhancement of second harmonic generation efficiency: Growth and characterization of magnesium(II)-doped tetrakis(thiourea) chloride crystals
 K. Muthu, **C. K. Mahadevan** and S. P. Meenakshisundaram

- Optik (2014) **125**, 50-54
184. Preparation by a facile method and characterization of amorphous and crystalline nickel sulfide nanophases
S. Nagaveena and **C. K. Mahadevan**
J. Alloys and Compounds (2014) **582**, 447-456
 185. Preparation and structural, optical, magnetic, and electrical characterization of $Mn^{2+}/Co^{2+}/Cu^{2+}$ doped hematite nanocrystals
S. I. Srikrishna Ramya and **C. K. Mahadevan**
J. Solid State Chem. (2014) **211**, 37-50
 186. Electrical measurements on zinc-magnesium tris(thiourea) sulphate (ZMTS) single crystals
A. Darlin Mary, K. Jayakumari and **C. K. Mahadevan**
Intl. J. Eng. Res. Technol. (IJERT) (2014) **3(1)**, 615-625
 187. Influence of transition metal doping on tris(thiourea)zinc(II) sulphate crystals
M. Rajasekar, K. Muthu, V. Meenatchi, **C. K. Mahadevan** and S. P. Meenakshisundaram
Optik (2014) **125(2)**, 710-713
 188. Optical and mechanical properties of pure and manganese doped strontium tartrate tetrahydrate single crystals
T. Vijayakumari, C. M. Padma and **C. K. Mahadevan**
Intl. J. Eng. Res. Appl. (IJERA) (2014) **4(2:4)**, 47-52
 189. Growth and optical, thermal and electrical characterization of LHC-LHB mixed crystals
J. Suja Rani, K. Jayakumari and **C. K. Mahadevan**
Intl. J. Eng. Res. Appl. (IJERA) (2014) **4(3:1)**, 741-751
 190. Effect of calcinations on the electrical properties and quantum confinement of Fe_2O_3 nanoparticles
S. I. Srikrishna Ramya and **C. K. Mahadevan**
Intl. J. Res. Eng. Technol. (IJRET) (2014) **3(3)**, 570-581
 191. Growth and characterization of $Ni_xZn_{1-x}SO_4 \cdot 7H_2O$ single crystals
J. M. Kavitha and **C. K. Mahadevan**
Spectrochimica Acta: Part A (2014) **128**, 342-350
 192. Investigation on CuO dispersed PVA polymer films
R. Divya, M. Meena, **C. K. Mahadevan** and C. M. Padma
Intl. J. Eng. Res. Appl. (IJERA) (2014) **4(5:5)**, 01-07
 193. Effect of formic acid as a dopant in tuning the physical properties of L-arginine acetate
P. V. Radhika, K. Jayakumari and **C. K. Mahadevan**
Intl. J. Eng. Res. Technol. (IJERT) (2014) **3(5)**, 136-144
 194. Formation and characterization of mixed crystals based on bis(thiourea)cadmium chloride and bis(thiourea)cadmium iodide
I. S. Prameela Kumari and **C. K. Mahadevan**
Intl. J. Eng. Res. Appl. (IJERA) (2014) **4(7:4)**, 125-144
 195. Formation and properties of ZnO nanoparticle dispersed PVA films
R. Divya, M. Meena, **C. K. Mahadevan** and C. M. Padma
Intl. J. Eng. Res. Technol. (IJERT) (2014) **3(7)**, 722-727
 196. Growth and physical properties of pure and manganese doped strontium tartrate trihydrate single crystals

- T. Vijayakumari, C. M. Padma and **C. K. Mahadevan**
 Intl. J. Res. Eng. Technol. (IJRET) (2014) **3(8)**, 335-340
197. Formation and properties of L-arginine acetate single crystals doped with hydrochloric acid
 P. V. Radhika, K. Jayakumari and **C. K. Mahadevan**
 IOSR J. Appl. Phys. (IOSR-JAP) (2014) **6(4:III)**, 19-29
198. Effect of Co-doping on the structural and physical properties of $\text{SrC}_4\text{H}_4\text{O}_6 \cdot 3\text{H}_2\text{O}$ and $\text{SrC}_4\text{H}_4\text{O}_6 \cdot 4\text{H}_2\text{O}$ crystals
 T. Vijayakumari, C. M. Padma and **C. K. Mahadevan**
 Int. J. Modern Eng. Res. (IJMER) (2014) **4(12)**, 1-9
199. Structural, optical and electrical characterization of Mn^{2+} and Cd^{2+} doped and co-doped PbS nanocrystals
 R. Sakthi Sudar Saravanan, M. Meena, D. Pukazhselvan and **C. K. Mahadevan**
 J. Alloys and Compounds (2015) **627**, 69-77
200. Growth and characterization of $\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$ single crystals added with urea/thiourea
 M. Vaitheeswari and **C. K. Mahadevan**
 Int. J. Innov. Res. Sci. Eng. Technol. (IJIRSET) (2015) **4(7)**, 5951-5969
201. Effect of glycine addition on the structural, thermal, optical, mechanical and electrical properties of $\text{Sr}(\text{HCOO})_2 \cdot 2\text{H}_2\text{O}$ crystals
 S. Muthupoongodi, S. Theodore David Manickam, **C. K. Mahadevan**, J. Angel Mary Greena, S. Balakumar and X. Sahaya Shajan
 J. Cryst. Growth (2015) **428**, 46-53
202. XRD, SEM and Raman spectral studies on ZnO nanoparticles prepared by a simple solvothermal process
 G. Janita Christobel and **C. K. Mahadevan**
 Int. J. Innov. Res. Sci. Eng. Technol. (IJIRSET) (2015) **4(9)**, 8535-8538
203. X-ray, thermal and mechanical studies of potassium acid phthalate single crystals added with aspartic acid/L-citrulline
 C. Amuthambigai, **C. K. Mahadevan** and X. Sahaya Shajan
 Chem. Sci. Trans. (2015) **4(4)**, 1095-1101
204. Effect of glycine as an impurity on the structural and optical properties of KDP-ADP mixed crystals
 V. Rajalekshmi and **C. K. Mahadevan**
 Int. J. Innov. Res. Sci. Eng. Technol. (IJIRSET) (2015) **4(11)**, 10957-10970
205. Growth and characterization of strontium formate dehydrate ($\text{Sr}(\text{HCOO})_2 \cdot 2\text{H}_2\text{O}$) single crystals doped strongly with glycine
 S. Muthupoongodi, S. Theodore David Manickam, **C. K. Mahadevan**, J. Angel Mary Greena, S. Balakumar and X. Sahaya Shajan
 Optik (2016) **127**, 4320-4323
206. Optical studies of potassium acid phthalate single crystals added with amino acids
 C. Amuthambigai, **C. K. Mahadevan** and X. Sahaya Shajan
 Optik (2016) **127**, 5935-5941
207. Thermal and mechanical properties of KDP-ADP mixed crystals added with glycine
 V. Rajalekshmi and **C. K. Mahadevan**
 Int. J. Eng. Res. Technol. (IJERT) (2016) **5(5)**, 717-721
208. Electrical properties of pure and glycine added KDP-ADP mixed crystals

- V. Rajalekshmi, K. U. Madhu and **C. K. Mahadevan**
Int. J. Inov. Res. Sci. Eng. Technol. (IJIRSET) (2016) **5(6)**, 9193-9208
209. Growth, optical, thermal, mechanical and electrical properties of anhydrous sodium formate single crystals
C. Amuthambigai, **C. K. Mahadevan** and X. Sahaya Shajan
Curr. Appl. Phys. (2016) **16**, 1030-1039
210. Growth and characterization of bimetallic (Na and K) phthalate single crystals
C. Amuthambigai, **C. K. Mahadevan** and X. Sahaya Shajan
Applied Physics A (2016) **122**, 901 (8 pages)
211. Effect of added impurities on the properties of LAHCL single crystals
M. Meena, **C. K. Mahadevan**, R. Sakthi Sudar Saravanan and V. N. Praveen
Int. J. Macro & Nano Physics (2016) **1(1)**, 12-18
212. Influence of Mn^{2+} doping on the optical properties of ZnS_xO_{1-x} quantum dots
G. Janita Christobel and **C. K. Mahadevan**
Int. J. TechnoChem Res. (IJOTR) (2016) **2(3)**, 217-223
213. Effect of solvent on the optical and electrical properties of poly(vinyl alcohol) films
V. Ramasubbu, **C. K. Mahadevan** and X. Sahaya Shajan
Int.J.Innov.Res.Sci.Eng.Technol.(IJIRSET) (2017) **6(1)**, 42-50
214. Synthesis at room temperature and characterization of pure and Mn^{2+} doped CuS nanocrystals
M. Annie Freeda and **C. K. Mahadevan**
J. Alloys and Compounds (2017) **726**, 1-10
215. Growth and physicochemical properties of pure and urea doped sodium pentaborate dihydrate single crystals
S. Benita Jeba Silviya, **C.K. Mahadevan**, T. Balu, A. Moses Ezhil Raj and S. Balakumar
Int. J. ChemTech Res. (2017) **10(7)**, 553-562
216. Effect of urea as an impurity on the structural, optical and electrical properties of potassium pentaborate dihydrate single crystals
S. Benita Jeba Silviya, **C.K. Mahadevan**, T. Balu, A. Moses Ezhil Raj and S. Balakumar
Int. J. Adv. Eng. Res. Technol. (IJAERT) (2017) **5(8)**, 625-636
217. Large size crystal growth and structural, thermal, optical and electrical properties of $KCl_{1-x}Br_x$ mixed crystals
Li Guo, Weizhao Jin, Zekun Chen, Jinghe Liu, Priya Murugasen, Fanming Zeng and **C. K. Mahadevan**
J. Cryst. Growth (2017) **480**, 154-163
218. Growth by free evaporation method and physicochemical properties of calcium succinate single crystals
D. S. Christy, **C. K. Mahadevan** and X. Sahaya Shajan
Optik-International J. Light and Electrooptics (2017) **145**, 418-427
219. Urea doped crystals formed with potassium-sodium pentaborate ($K_{0.5}Na_{0.5}B_5$)
S. Benita Jeba Silviya, **C. K. Mahadevan**, T. Balu, A. Moses Ezhil Raj, S. Balakumar and S. G. Jebastin Andrews
Surfaces and Interfaces (2018) **11**, 14-21
220. Growth and characterization of metal doped and quasi mixed crystals based on $ZnCd(SCN)_4$

- C. Latha, **C. K. Mahadevan**, Li Guo and Jinghe Liu
J. Cryst. Growth (2018) **486**, 148-154
221. Growth at room temperature and physicochemical properties of new semi-organic $\text{Ba}_x\text{Ca}_{1-x}\text{C}_4\text{H}_4\text{O}_4$ ($x = 0.2, 0.4, 0.5, 0.6$ and 0.8) crystals
 D. S. Christy, **C. K. Mahadevan** and X. Sahaya Shajan
Cryst. Res. Technol. (2018) **53**, 1700109 (16 pages)
222. Growth and characterization of pure and Ca^{2+} doped $\text{MnHg}(\text{SCN})_4$ single crystals
 C. Latha, **C. K. Mahadevan**, Li Guo and Jinghe Liu
J. Cryst. Growth (2018) **490**, 46-50
223. Nanocrystalline composites based on CdCO_3 and Mn_3O_4 : Synthesis and properties
 G. Deepa and **C. K. Mahadevan**
J. Alloys and Compounds (2018) **763**, 935-950
224. Doping effect of urea on growth, spectral, thermal, mechanical, electrical, nonlinear and optical studies of $\text{Sr}(\text{HCOO})_2 \cdot 2\text{H}_2\text{O}$ crystal: enhanced third-order NLO properties with a high laser-induced damage threshold
 S. Muthupoongodi, S. Theodore David Manickam, J. Angel Mary Greena, **C. K. Mahadevan** and X. Sahaya Shajan
J. Mater. Sci.: Mater. Electron. (2018) **29**, 12513-12525
225. Morphological, structural and optical studies on 8 MeV electron beam irradiated pure and doped strontium formate dihydrate crystals
 S. Muthupoongodi, S. Theodore David Manickam, **C. K. Mahadevan**, J. Angel Mary Greena, S. Balakumar, X. Sahaya Shajan and P. V. Ananthapadmanabhan
Mater. Sci. - Poland (**In press**)
226. Growth and characterization of $\text{CaCd}(\text{SCN})_4$ single crystals
 C. Latha and **C. K. Mahadevan**
Mater. Sci. – Poland (**In press**)

(C) Original research papers in international proceedings published from India

1. Lattice variation and thermal parameters of thiourea added KDP single crystals
 M. Priya and **C. Mahadevan**
 Proc. Intl. Workshop Prep. & Charact. Tech. Imp. Single Crystals (2001), 188-192
2. Dielectric measurements on ADP added KDP single crystals
 T. H. Freeda and **C. Mahadevan**
 Proc. Intl. Workshop Prep. & Charact. Tech. Imp. Single Crystals (2001), 350-353
3. Dielectric measurements on urea and thiourea added $\text{NiSO}_4 \cdot 7\text{H}_2\text{O}$ single crystals
 J. V. Libija and **C. Mahadevan**
Inorganic Materials : Recent Advances (2004) (Narosa Publishing House, New Delhi) p.98- 101.
4. In-vitro studies on the growth of brushite (urinary stone) crystals
 T. Asaithambi, Thresiamma Chacko and **C. Mahadevan**
Inorganic Materials : Recent Advances (2004) (Narosa Publishing House, New Delhi) p.543 - 546.
5. Effect of some drugs on the growth of whewellite (urinary stone) crystals
 Thresiamma Chacko and **C. Mahadevan**

- Inorganic Materials : Recent Advances (2004) (Narosa Publishing House, New Delhi) p.547- 550.
6. Effect of some commonly consumed drugs on the growth of struvite and brushite crystals
M. Christal Amutha, P. Padmanaban, R. Ramesh, A. C. Sajikumar, D. P. Sam Rajesh, T. Asaithambi and **C. Mahadevan**
Inorganic Materials : Recent Advances (2004) (Narosa Publishing House, New Delhi) p.551- 554.
 7. Effect of impurities having no common ion on the dielectric properties of KDP single crystals
C. K. Mahadevan, M. Priya and T. H. Freeda
Advances in Technologically Important Crystals (2007) (Macmillan Publishers, New Dehli) p. 146-156
 8. Studies on alkali halide crystals added with ZnO
M. Priya and **C. K. Mahadevan**
Advances in Technologically Important Crystals (2007) (Macmillan Publishers, New Dehli) p. 186-192
 9. Electrical measurements on L-arginine acetate single crystals
M. Meena and **C. K. Mahadevan**
Advances in Technologically Important Crystals (2007) (Macmillan Publishers, New Dehli) p. 300-307
 10. Effect of NaOH as the capping agent on the preparation of ZnS, ZnO, CdS and CdO nanocrystals
M. S. Gajanand, M. Priya and **C. K. Mahadevan**
Prof. 2nd Intl. Conf. Emerging Adaptive Systems and Technologies (2007), 143-147
 11. Novel synthesis of PbS nanocrystals
M. Meena, M. Priya and **C. K. Mahadevan**
Proc. 2nd Intl. Conf. Emerging Adaptive Systems and Technologies (2007), 157-161
 12. Simple method to grow large size single crystals
N. Joseph John, **C. K. Mahadevan** and P. Selvarajan
Proc. Intl. Conf. Mater. Sci. Res. Nanotech. (2008), 347-349
 13. Preparation and electrical properties of CdS_xSe_{1-x} nanocrystals
K. Usha and **C. K. Mahadevan**
Proc.Intl.Conf.Nanosci.Nanotech. (February 24-26, 2010), 269-270
 14. Studies on oxide added NaCl, KCl crystals
M. Priya and **C. K. Mahadevan**
Recent Research in Sci.& Technol. (2010) **2(12)**, 26-40
 15. Preparation by a simple method and properties of II-VI compound quantum dots
C. K. Mahadevan
Proc. Intl. Conf. Advanced Materials (2012), lxxxi-lxxxvi
 16. Synthesis and characterization of nanoparticle doped PDLC
M. Meena, I. Ganesh Murali and **C. K. Mahadevan**
Proc. Intl. Conf. Advanced Materials (2012), 7-11

17. Investigation on the preparation of copper oxide nanoparticles by solvothermal method
M. R. Reeeju, K. U. Madhu and **C. K. Mahadevan**
Proc. Intl. Conf. Advanced Materials (2012) , 12-17
18. Preparation by a simple method and characterization of α -Fe₂O₃ nanocrystals
S. I. Srikrishna Ramya and **C. K. Mahadevan**
Proc. Intl. Conf. Advanced Materials (2012), 24-28
19. Magnetic properties of MnS₂ and urea doped MnS₂ nanocrystals
R. Sunitha and **C. K. Mahadevan**
Proc. Intl. Conf. Advanced Materials (2012), 29-33
20. Electrical studies on alloyed Zn_(1-x)Cd_xS nanocrystals
R. Sakthi Sudar Saravanan, M. Meena and **C. K. Mahadevan**
Proc. Intl. Conf. Advanced Materials (2012), 34-38
21. Thermal and optical studies on (Mn₃O₄)_x(Ni(OH)₂)_{1-x} nanocrystals
K. Usha and **C. K. Mahadevan**
Proc. Intl. Conf. Advanced Materials (2012), 39-44
22. Optical and magnetic studies on Co₃O₄ nanopowders synthesized through microwave assisted solvothermal method
S. Goma and **C. K. Mahadevan**
Proc. Intl. Conf. Advanced Materials (2012), 45-50
23. Electrical properties of PbO nanoparticles
N. Saraswathi, N. Neelakanda Pillai and **C. K. Mahadevan**
Proc. Intl. Conf. Advanced Materials (2012), 51-55
24. Preparation and characterization of nickel sulphide nanoparticles by a simple method
S. Nagaveena, T. H. Freeda and **C. K. Mahadevan**
Proc. Intl. Conf. Advanced Materials (2012), 63-66
25. Growth and characterization of pure and urea added epsomite single crystals
M. Vaitheeswari and **C. K. Mahadevan**
Proc. Intl. Conf. Advanced Materials (2012), 183-188
26. Structural, thermal, optical and electrical studies on MMTC and ZCTC single crystals
C. Latha, **C. K. Mahadevan** and M. Sankaranarayana Pillai
Proc. Intl. Conf. Advanced Materials (2012), 193-198
27. Luminescence properties of ZnS-ZnO nanocomposites synthesized by solvothermal method
G. Janita Christobel and **C. K. Mahadevan**
Proc. Intl. Conf. Adv. Nanomater. & Emerging Eng. Technol.(2013), 339-342
28. Optical and mechanical properties of glycine added epsomite single crystals
J. M. Kavitha and **C. K. Mahadevan**
Proc. of the KAAS (2013)[KAAS, Nagercoil] p. Physics 5-7
29. Nonlinear optical properties of bis(thiourea)cadmium chloride – bis(thiourea)cadmium iodide mixed crystals
I. S. Prameela Kumari and **C. K. Mahadevan**
Proc. of the KAAS (2013) [KAAS, Nagercoil] p. Physics 8-13

(D) Articles in Other Journals/Proceedings

1. Crystal Growth in Gel Media
C. Mahadevan
Bull. Indian Assoc. Phys. Teachers (1988) **5**, 243-245
2. "Crystal Growth" in "Science for All" (in Tamil language) - Published (1989)
by S.T. Hindu College, Nagercoil.
3. Crystal Science
C. Mahadevan
Souvenir – National Science Day (28.02.1990) – Brought out by
Government Polytechnical Institute, Nagercoil
4. Measurement of Molecular Refraction of Solids as an Undergraduate
Experiment
C. Mahadevan
Bull. Indian Assoc. Phys. Teachers (1991) **8**, 303-304
5. Report on South Indian Physics Teachers Convention
C. Mahadevan
Bull. Indian Assoc. Phys. Teachers (1992) **9**, 180
6. Physics Curriculum and Distant Education
C. Mahadevan
Bull. Indian Assoc. Phys. Teachers (1992) **9**, 269-270
7. A suggestive plan for the Tamilnadu Open University
C. Mahadevan
Proceedings of the South Indian Physics Teachers Convention (1992) (S.T. Hindu
College, Nagercoil) p.4-26
8. Crystal growth activity in the Physics Department of S.T. Hindu College
C. Mahadevan
Proceedings of the V Natl. Sem. Cryst. Growth
(1993) (Anna University, Chennai) p. 107 - 109
9. Studies on $K_3Fe(CN)_6$ doped KDP single crystals
T. Chithambarathanu and **C. Mahadevan**
Proceedings of the V Natl. Sem. Cryst. Growth
(1993) (Anna University, Chennai) p. 275 – 276
10. X-ray diffraction and optical studies on $Mg_xZn_{1-x}SO_4 \cdot 7H_2O$ mixed crystals
K. Jayakumari and **C. Mahadevan**
Proceedings of the V Natl. Sem. Cryst. Growth
(1993) (Anna University, Chennai) p. 277 – 281
11. Studies on K_2CrO_4 doped KDP single crystals
T. Josephine Rani and **C. Mahadevan**
Proceedings of the V Natl. Sem. Cryst. Growth
(1993) (Anna University, Chennai) p.282 - 284
12. Physics in Tirukkural
C. Mahadevan
Bull. Indian Assoc. Phys. Teachers (1995) **12**, 117
13. A (New) Method for the Ultrasonic Velocity Measurements on Solids
C. Mahadevan
Bull. Indian Assoc. Phys. Teachers (1996) **13**, 273-274

14. Effect of solvent and solute purifications on the nucleation parameters of ADP single crystals
T.H. Freeda, N.P. Rajesh and **C. Mahadevan**
Recent Trends in Crystal Growth (1997) (Alagappa University, Karaikudi) p.68-72
15. Nucleation and growth kinetics of KDP crystals in aqueous solutions doped with KBr
G. Janiland Angel, **C. Mahadevan** and V. Umayorubhagan
Recent Trends in Crystal Growth (1997) (Alagappa University, Karaikudi) p.73-77
16. Growth and characterization of KDP single crystals added with $(\text{NH}_4)_2\text{CO}_3$
T. H. Freeda and **C. Mahadevan**
Proceedings of the Mano Research Forum (2000) (M.S. University, Tirunelveli) p. A1-A8
17. Effect of ammonium compound impurities on lattice parameters and densities of KDP single crystals
T. H. Freeda and **C. Mahadevan**
Proceedings of the Mano Research Forum (2000) (M.S. University, Tirunelveli) p. A9-A11
18. An investigation into the growth of ternary mixed crystals of alkali halides
K. Jayakumari and **C. Mahadevan**
Proceedings of the Mano Research Forum (2000) (M.S. University, Tirunelveli) p. A12-A13
19. Studies on ADP single crystals added with some sodium compounds
C. Mahadevan, N. P. Rajesh, N. P. Bindhu, S. Jenitta Janaki and T. M. Maheswari
Proceedings of the Mano Research Forum (2000) (M.S. University, Tirunelveli) p. A14-A20
20. Microhardness studies on pure and doped thiourea single crystals
A. Angel Mary Greena and **C. Mahadevan**
Proceedings of the Mano Research Forum (2000) (M.S. University, Tirunelveli) p. A21-A24
21. On the application of sharpened Fourier synthesis in crystal structure analysis
N. Neelakanda Pillai and **C. Mahadevan**
Proceedings of the Mano Research Forum (2000) (M.S. University, Tirunelveli) p. A25-A28
22. Growth of single crystals of $(\text{KCl})_x(\text{KBr})_{y-x}(\text{KI})_{1-y}$
S. Perumal and **C. Mahadevan**
Recent Trends in Crystal Growth (2000) (Anna University, Chennai) p.142-144
23. Growth of $(\text{NaCl})_x(\text{KCl})_{y-x}(\text{KBr})_{1-y}$ single crystals
K. Jayakumari and **C. Mahadevan**
Recent Trends in Crystal Growth (2000) (Anna University, Chennai) p.145-148
24. Growth of potassium nitrate single crystals in gel media
S. Gabriel Jelesin and **C. Mahadevan**

- Recent Trends in Crystal Growth (2000) (Anna University, Chennai) p.191-198
25. National conference on crystal growth and characterization – Report
C. Mahadevan
Bull. Indian Assoc. Phys. Teachers (2001) **18**, 281
 26. Crystal growth research at S.T. Hindu College, Nagercoil
C. Mahadevan
IACG Newsletter (February 2004)
 27. Effect of anti-diabetic drugs on the formation of urinary stone crystals
Thresiamma Chacko and **C. Mahadevan**
Research Papers : First All India Conference of KAAS – Part III – Sciences (2004) (KAAS, Nagercoil) p. 7-14
 28. Growth and characterization of pure and impurity added calcium tartrate tetrahydrate single crystals
X. Sahaya Shajan and **C. Mahadevan**
Research Papers : First All India Conference of KAAS – Part – III – Sciences (2004) (KAAS, Nagercoil) p.15 – 26
 29. Studies on KDP single crystals added with some ammonium compounds
T. H. Freeda and **C. Mahadevan**
Research Papers : First All India Conference of KAAS– Part – III – Sciences (2004) (KAAS, Nagercoil) p. 27 – 36
 30. Preparation and properties of $(\text{NaCl})_x(\text{KBr})_{y-x}(\text{KI})_{1-y}$ solid solutions
G. Selvarajan and **C. Mahadevan**
Research Papers : First All India Conference of KAAS – Part – III – Sciences (2004) (KAAS, Nagercoil) p. 37 (1) to 37 (19)
 31. In-vitro investigations on the growth of calcium oxalate monohydrate single crystals
S. Felshia Burnes, J. Isaac Gnanasingh, Thresiamma Chacko and
C. Mahadevan
Proceedings of the First Multidisciplinary Natl. Sem. of Scott Research Forum Vol. II – Sciences (2004) (Scott Christian College, Nagercoil) p.1 – 3
 32. Growth of whewellite crystals added with some head-ache killing drugs
R. Sarjila, J. Isaac Gnanasingh, Thresiamma Chacko and
C. Mahadevan
Proceedings of the First Multidisciplinary Natl. Sem. of Scott Research Forum Vol. II – Sciences (2004) (Scott Christian College, Nagercoil) p.4 – 7
 33. Effect of some fever killing drugs on the formation of whewellite crystals
M. Nidya, J. Isaac Gnanasingh, Thresiamma Chacko and
C. Mahadevan
Proceedings of the First Multidisciplinary Natl. Sem. of Scott Research Forum Vol. II – Sciences (2004) (Scott Christian College, Nagercoil) p.18 – 20
 34. Growth and dielectric properties of TGS crystals with NaCl as an impurity additive
N. Theresita Shanthi, P. Selvarajan and **C. Mahadevan**
Proceeding of NSGCSM – 2004 (Nagpur University, Nagpur) p.20 – 23
 35. Spectral studies on ZTS crystals added with some impurities
V. N. Praveen, R. Sakthi Sudar Saravanan and **C. K. Mahadevan**

- Proceedings of Fourth DAE-BRNS National Laser Symposium (Allied Publishers Pvt. Limited, Mumbai) p.384 – 385
36. Electrical conductivity measurements on TGS crystals added with NaCl as impurity
N. Theresita Shanthi, P. Selvarajan and **C. K. Mahadevan**
Proceedings of Fourth DAE – BRNS National Laser Symposium (Allied Publishers Pvt. Limited, Mumbai) p.518 – 519
 37. Growth and characterization of multiphased single crystals of $(\text{NaCl})_x(\text{KCl}_{1-x}(\text{KBr})_{1-y})$
K. Jayakumari and **C. Mahadevan**
Research Papers : Second All India Conference of KAAS, Part-III-Sciences (KAAS, Nagercoil) Pages 75 – 84
 38. Growth and characterization of $(\text{NaCl})_x(\text{KCl})_{y-x}(\text{KI})_{1-y}$ crystals
M. Priya and **C. K. Mahadevan**
Research Papers : Second All India Conference of KAAS, Part-III-Sciences (KAAS, Nagercoil) Pages 108 – 124
 39. National Conference on Preparation and Characterization of Crystalline Materials
C. K. Mahadevan
University News (2006) **44** (06), 24-25
 40. Synthesis and characterization of CuS (Covellite) nanocrystals at room temperature
M. Annie Freeda, **C. K. Mahadevan** and S.Ramalingam
Proc. Natl. Workshop on Quantum Confined Systems and Nanoscale Devices (2009), 36-41
 41. Preparation and optical properties of $\text{CdS}_x\text{Se}_{1-x}$ nanocrystals
K. Usha and **C. K. Mahadevan**
Proc. Natl. Workshop on Quantum Confined Systems and Nanoscale Devices (2009), 50-55
 42. Studies on pure and manganese chloride doped disodium hydrogen orthophosphate (DSHP) single crystals
N. Joseph John, P. Selvarajan and **C. K. Mahadevan**
Research Papers: Fifth All India Conf. of KAAS (2009) Vol.III (Sciences) [KAAS, Nagercoil], Physics 12-17
 43. Studies on TGS single crystals doped with halide compounds
N. Theresita shanthi, **C. K. Mahadevan** and P. Selvarajan
Research Papers: Fifth All India Conf. of KAAS (2009) Vol.III (Sciences) [KAAS, Nagercoil], Physics 18-28
 44. Electrical conductivity measurements on pure and urea added DSHP single crystals
N. Joseph John, P. Selvarajan and **C. K. Mahadevan**
Proc.XIV Natl.Scm.Cryst.Growth (2010) [VIT University, Vellore], 290-294
 45. Studies on triglycine sulfate (TGS) single crystals doped with nickel sulphate
N. Theresita Shanthi, P. Selvarajan and **C. K. Mahadevan**
Proc.XIV Natl.Scm.Cryst.Growth (2010) [VIT University, Vellore], 464-473
 46. Growth, optical, thermal, electrical and mechanical properties of 4-nitrobenzaldehyde single crystal using nano translation by modified vertical Bridgeman technique

- T. Suthan, N. P. Rajesh and **C. K. Mahadevan**
Proc. II Natl. Conf. Advanced Mater. Process. Charact. Appl. (2010) [Excel India Publishers, New Delhi] p.33-36
47. Growth and characterization of K_2SO_4 added KH_2PO_4 single crystals
K. U. Madhu, T. H. Freeda and **C. K. Mahadevan**
Proc. of the KAAS (2010) [KAAS, Nagercoil] p. Physics 11-15
48. Effect of mathumaga chooranam tablet with thribala chooranam tablet and neem leaf juice on the growth of some urinary stone crystals
T. H. Freeda, T. Udayamarthandam and **C. K. Mahadevan**
Proc. of the KAAS (2010) [KAAS, Nagercoil] p. Physics 16-19
49. Growth and thermal properties of potassium lead bromide and sodium lead bromide
C. Kaladevi and **C. K. Mahadevan**
Proc. of the KAAS (2010) [KAAS, Nagercoil] p. Physics 20-22
50. Synthesis and studies on manganese doped cadmium hydroxide nanoparticles
G. Deepa and **C. K. Mahadevan**
Proc. of the KAAS (2010) [KAAS, Nagercoil] p. Physics 23-25
51. Preparation and characterization of $MnS_xO_{1-x}:Zn^{2+}$ nanoparticles
D. Shiney Manoj and **C. K. Mahadevan**
Proc. of the KAAS (2010) [KAAS, Nagercoil] p. Physics 26-28
52. Effect of urea addition on the nonlinear optical properties of BTCC single crystals
I. S. Prameela Kumari and **C. K. Mahadevan**
Proc. of the KAAS (2010) [KAAS, Nagercoil] p. Physics 29-31
53. Preparation and characterization of $Mn_{0.5}Cd_{0.5}S$ nanocomposite
R. Sunitha and **C. K. Mahadevan**
Proc. of the KAAS (2010) [KAAS, Nagercoil] p. Physics 32-33
54. Structure, morphology and AC electrical properties of $Ni(OH)_2$ nanocrystals
K. Usha and **C. K. Mahadevan**
Proc. of the KAAS (2010) [KAAS, Nagercoil] p. Physics 34-36
55. Growth and micro-hardness studies of some hydrogen phosphate single crystals
N. Joseph John, P. Selvarajan and **C. K. Mahadevan**
Proc. of the KAAS (2010) [KAAS, Nagercoil] p. Physics 42-45
56. Growth and FTIR characterization of diglycine based ferroelectric single crystals
M. R. Meera, K. Jayakumari and **C. K. Mahadevan**
Proc. of the KAAS (2010) [KAAS, Nagercoil] p. Physics 49-52
57. Temperature and concentration dependence of CuS nanocrystals on structure and Electrical conductivity
M. Annie Freeda, **C. K. Mahadevan** and S. Ramalingom
Proc. of the KAAS (2011) [KAAS, Nagercoil] p. Physics 3-5
58. Structure and dielectric properties of urea added BTCC single crystals
I. S. Prameela Kumari and **C. K. Mahadevan**
Proc. of the KAAS (2011) [KAAS, Nagercoil] p. Physics 6-11
59. Chemical and structural characterization of pure and doped p-MHB single crystals
J. V. Libija, T. H. Freeda and **C. K. Mahadevan**
Proc. of the KAAS (2011) [KAAS, Nagercoil] p. Physics 12-15
60. Effect of thiourea on the structural properties of Epsomite single crystals

- M. Vaitheeswari and **C. K. Mahadevan**
Proc. of the KAAS (2011) [KAAS, Nagercoil] p.Physics 16-18
61. Growth, structural, thermal and mechanical characterization of GSS single crystals
A. Karolin, K. Jayakumari and **C. K. Mahadevan**
Proc. of the KAAS (2011) [KAAS, Nagercoil] p.Physics 19-21
62. On the preparation of CuO nanocrystals
J. M. Kavitha, T. H. Freeda and **C. K. Mahadevan**
Proc. of the KAAS (2011) [KAAS, Nagercoil] p.Physics 22-24
63. Structural and electrical properties of pure and sulphur doped cadmium carbonate nanocrystals
G. Deepa and **C. K. Mahadevan**
Proc. of the KAAS (2011) [KAAS, Nagercoil] p.Physics 25-27
64. Preparation by microwave assisted solvothermal method and structural investigation of pure and manganese doped α Fe₂O₃ nanocrystals
S. I. Srikrishna Ramya and **C. K. Mahadevan**
Proc. of the KAAS (2011) [KAAS, Nagercoil] p.Physics 28-31
65. Some studies on Mn_{0.5} Cd_{0.5}S nanocomposites
R. Sunitha and **C. K. Mahadevan**
Proc. of the KAAS (2011) [KAAS, Nagercoil] p.Physics 32-34
66. Nucleation studies on supersaturated aqueous solutions of MgSO₄.7H₂O added with KBr
Thresiamma Chacko and **C. K. Mahadevan**
Proc. of the KAAS (2011) [KAAS, Nagercoil] p.Physics 35-36
67. DC electrical properties of pure and S²⁻ added Ni(OH)₂ nanocrystals
K. Usha and **C. K. Mahadevan**
Proc. of the KAAS (2011) [KAAS, Nagercoil] p.Physics 39-42
68. Synthesis by a novel method and characterization of MnS_xO_{1-x}:Zn²⁺ nano composites
D. Shiney Manoj and **C. K. Mahadevan**
Proc. of the KAAS (2011) [KAAS, Nagercoil] p.Physics 48-55
69. Optical studies on potassium lead bromide crystals grown from aqueous solutions
C. Kaladevi and **C. K. Mahadevan**
Proc. of the KAAS (2011) [KAAS, Nagercoil] p.Physics 62-64
70. Structural, thermal and optical studies on CMTC single crystals
C. Latha, **C. K. Mahadevan** and M. Sankaranarayana Pillai
Proc. of the KAAS (2011) [KAAS, Nagercoil] p.Chemistry 26-28
71. Effect of annealing temperature on Co₃O₄ nanoparticles and their structural characterization
S. Goma and **C. K. Mahadevan**
Proc. Natl. Sem. Recent Advancements in Materials Research (2011)[Scott Christian College, Nagercoil] p.74-76
72. FT-IR and optical studies on Co₃O₄ nanopowders synthesized through microwave assisted solvothermal method
S.Goma and **C.K. Mahadevan**

- Proc. VIII All India Conf. Scott Res. Forum (2011)(Vol.II) [Scott Christian College, Nagercoil] p.85-89
73. Synthesis and properties of manganese carbonate nanocrystals
K. U. Madhu and **C. K. Mahadevan**
Proc. Natl. Sem. Physical and Bio-medical Applications in Nano Technology (2011) [S.N.College, Kollam] p.80-87
 74. Vibrational and optical spectral studies on some bimetallic thiocyanates
C. Latha, **C. K. Mahadevan** and M. Sankaranarayana Pillai
Proc. Natl. Conf. Exploring the Frontiers of Vibrational Spectroscopy (2011) [Women's Christian College, Nagercoil] p.65-69
 75. Growth and characterization of Mg^{2+} doped zinc cadmium thiocyanate single crystals
C. Latha, **C. K. Mahadevan** and M. Sankaranarayana Pillai
Proc. DAE-BRNS Natl. Laser Symposium (2012), 561-564
 76. Dielectric studies of manganese carbonate nanocrystals
K. U. Madhu and **C. K. Mahadevan**
Proc.First Natl.Sem.New Materials Research and Nanotechnology (2012) [Government Arts College, Ooty] p.41-45
 77. Formation and properties of $NiS_{1.03}$ nanoparticles
S. Nagaveena and **C. K. Mahadevan**
Proc.First Natl.Sem.New Materials Research and Nanotechnology (2012) [Government Arts College, Ooty] p.117-120
 78. Mechanical studies on gel grown KDP-ADP mixed crystals
S. M. R. Joseph Ramesh, T. H. Freeda and **C. K. Mahadevan**
Proc.First Natl.Sem.New Materials Research and Nanotechnology (2012) [Government Arts College, Ooty] p.193-196
 79. Structural and electrical studies on nanoparticle doped ammonium dihydrogen phosphate
J. Anitha Hudson, **C. K. Mahadevan** and C. M. Padma
Proc. First Natl. Sem. New Materials Research and Nanotechnology (2012) [Government Arts College, Ooty] p.249-254
 80. Structural and electrical studies of CdS nanoparticle doped KH_2PO_4 single crystals
O. V. Mary Sheeja and **C. K. Mahadevan**
Proc.First Natl.Sem.New Materials Research and Nanotechnology (2012) [Government Arts College, Ooty] p.255-259
 81. Structural aspects of pure and doped hematite nanocrystals
S. I. Srikrishna Ramya and **C. K. Mahadevan**
Proc.First Natl.Sem.New Materials Research and Nanotechnology (2012) [Government Arts College, Ooty] p.264-268
 82. Effect of NaOH on the structural and electrical properties of $\alpha-Fe_2O_3$ nanoparticles
R. Sakthi Sudar Saravanan, M. Meena and **C. K. Mahadevan**
Proc. First Natl. Sem. New Materials Research and Nanotechnology (2012) [Government Arts College, Ooty] p.356-360

83. Preparation by a simple method and characterization of pure and doped CuS nanoparticles
C. K. Mahadevan and M. Annie Freeda
Proc. First Natl. Sem. New Materials Research and Nanotechnology (2012)
[Government Arts College, Ooty] p.374-382
84. Effect of added nanoparticles on the properties of ADP-KDP mixed crystals
M. Meena, R. Sakthi Sudar Saravanan **and C. K. Mahadevan**
Proc. First Natl. Sem. New Materials Research and Nanotechnology (2012)
[Government Arts College, Ooty] p.383-387
85. Synthesis and optical properties of ZnS nanocrystals doped with Cu^{2+} and Ni^{2+}
R. Sakthi Sudar Saravanan, M. Meena, A. Sundar and **C. K. Mahadevan**
Proc. First Natl. Sem. New Materials Research and Nanotechnology (2012)
[Government Arts College, Ooty] p.388-392
86. Thermal studies on BTCC-BTCI mixed crystals
I. S. Prameela Kumari and **C. K. Mahadevan**
Proc. of the KAAS (2012) [KAAS, Nagercoil] p.Physics 5-8
87. Structural, morphological, electrical and magnetic properties of nanostructured α -NiS
S. Nagaveena and **C. K. Mahadevan**
Proc. of the KAAS (2012) [KAAS, Nagercoil] p.Physics 9-12
88. X-ray diffraction studies on the semiorganic NLO crystal zinc – magnesium tris-thiourea sulphate (ZMTS) single crystals
A. Darlin Mary, K. Jayakumari and **C. K. Mahadevan**
Proc. of the KAAS (2012) [KAAS, Nagercoil] p.Physics 13-22
89. Preparation by a simple solvothermal method and characterization of $(\text{MnS}_2)_x(\text{Mn}_3\text{O}_4)_{1-x}$ nanocomposites
D. Shiney Manoj and **C. K. Mahadevan**
Proc. of the KAAS (2012) [KAAS, Nagercoil] p.Physics 31-36
90. Influence of nanoparticles dopant on the growth and properties of ammonium dihydrogen phosphate crystals
J. Anitha Hudson, **C. K. Mahadevan** and C. M. Padma
Proc. of the KAAS (2012) [KAAS, Nagercoil] p.Physics 40-45
91. Structural and electrical studies on ZnS nanoparticles doped KH_2PO_4 single crystals
O. V. Mary Sheeja and **C. K. Mahadevan**
Proc. of the KAAS (2012) [KAAS, Nagercoil] p.Physics 46-51
92. Growth and characterization of HCl doped L-arginine acetate crystals
P. V. Radhika, K. Jayakumari and **C. K. Mahadevan**
Proc. of the KAAS (2012) [KAAS, Nagercoil] p.Physics 52-58
93. Dielectric properties of glycine sodium sulphate (GSS) and glycine potassium sulphate (GPS) single crystals
A. Karolin, K. Jayakumari and **C. K. Mahadevan**
Proc. of the KAAS (2012) [KAAS, Nagercoil] p.Physics 59-61
94. Growth and structural characterization of L-histidine hydrochloride-bromide single crystals
J. Suja Rani, K. Jayakumari and **C. K. Mahadevan**

- Proc. of the KAAS (2012) [KAAS, Nagercoil] p. Physics 62-68
95. Growth and UV-Visible spectral analysis of diglycine based ferroelectric single crystals
M. R. Meera, K. Jayakumari and **C. K. Mahadevan**
Proc. of the KAAS (2012) [KAAS, Nagercoil] p. Physics 69-72
 96. Growth and characterization of ZMTC single crystals
C. Latha, **C. K. Mahadevan** and M. Sankaranarayana Pillai
Proc. of the KAAS (2012) [KAAS, Nagercoil] p. Chemistry 15-18
 97. Preparation and characteristics of pure and O^{2-} doped CdS nanoparticles
R. Sunitha and **C. K. Mahadevan**
Proc. Natl. Conf. Adv. Mater. Sci. (2012) [Annamalai University, Chithambaram] p. 65 – 78
 98. Preparation and characterization of pure and S^{2-} doped $CdCO_3 - Mn_3O_4$ nanocomposite
G. Deepa and **C. K. Mahadevan**
Proc. Natl. Conf. Adv. Mater. Sci. (2012) [Annamalai University, Chithambaram] p. 131 – 143
 99. Effect of formic acid on the growth, structural and optical characterization of L-arginine acetate single crystals
C. K. Mahadevan, P. V. Radhika and K. Jayakumari
Advanced Materials – Processing, Characterization and Applications (2012) [Excel India Publishers, New Delhi] p. 203 – 210
 100. Low temperature magnetic transition in Co_3O_4 nanoparticles synthesized through microwave assisted polyol route
S. Goma, **C. K. Mahadevan** and A. Moses Ezhil Raj
Proc. Natl. Conf. on Innovative Trends in Mater. Sci. (2013) [Arignar Anna College, Aralvoimozhi] p. 19-21
 101. Thermal and mechanical characterization of L-histidine hydrochloride bromide single crystals
J. Suja Rani, K. Jayakumari and **C. K. Mahadevan**
Proc. Natl. Conf. on Innovative Trends in Mater. Sci. (2013) [Arignar Anna College, Aralvoimozhi] p. 110-114
 102. Growth and electrical studies of the semi-organic NLO crystal zinc-magnesium tris(thiourea) sulphate (ZMTS)
A. Darlin Mary, K. Jayakumari and **C. K. Mahadevan**
Proc. Natl. Conf. on Innovative Trends in Mater. Sci. (2013) [Arignar Anna College, Aralvoimozhi] p. 151-156
 103. Optical and thermal characterization of the semiorganic NLO crystal zinc-magnesium tris-thiourea sulphate (ZMTS)
A. Darlin Mary, K. Jayakumari and **C. K. Mahadevan**
Proc. Second Natl. Sem. New Materials Research and Nanotechnology (2013) [Government Arts College, Ooty] p. 37-46
 104. Thermal, optical and mechanical properties of HCl doped L-arginine acetate crystals
P. V. Radhika, K. Jayakumari and **C. K. Mahadevan**

- Proc. Second Natl. Sem. New Materials Research and Nanotechnology (2013)
[Government Arts College, Ooty] p.86-91
105. Formation and properties of CuO nanoparticles dispersed PVA films
R. Divya, M. Meena, **C. K. Mahadevan** and C. M. Padma
Proc. Second Natl. Sem. New Materials Research and Nanotechnology (2013)
[Government Arts College, Ooty] p.96-98
106. Electrical conductivity measurements on pure and magnesium chloride added
DSHP single crystals
N. Joseph John, S. Mahalingam, **C. K. Mahadevan** and P. Selvarajan
Proc. Second Natl. Sem. New Materials Research and Nanotechnology (2013)
[Government Arts College, Ooty] p.289-294
107. Preparation by a novel method and characterization of pure and doped ZnO
nanocrystals
N. Saraswathi, N. Neelakanda Pillai and **C. K. Mahadevan**
Proc. Second Natl. Sem. New Materials Research and Nanotechnology (2013)
[Government Arts College, Ooty] p.350-354
108. Preparation and solubility of water-soluble ZnS and CdS nanocrystals
O. V. Mary Sheeja, J. Anitha Hudson, **C. K. Mahadevan** and C. M. Padma
Proc. Natl. Sem. on Emerging Trends in Theoretical and Experimental Physics
(2015) [Sree Ayyappa College for Women, Nagercoil] p.19-21
109. Crystals in my gallbladder
C. K. Mahadevan
IACG News Letter (March 2017/Issue 29) [Indian Association for Crystal
Growth] p. 20-21

(E) Book Chapter/Books (All single authored/edited)

(i) Book chapter

“Crystal Structure Analysis” in “Horizons of Physics – Vol. II’ Published (1996) New
Age International Publishers, New Delhi.

C. Mahadevan

(ii) Research book

“Tiruvalluvarum Tirukkuralum” (in Tamil) – 1995 – Gaju Publications, Nagercoil (101
pages)

(iii) Text books

1. “History of Science” - 1995 – Gaju Publications, Nagercoil (194 pages)
2. “Vignana Varalaru” – Translated version in Tamil language of the above book (1) – 1995
- Gaju Publications, Nagercoil (256 pages) [Has won the Tamilnadu State Government
Award]
3. “Research Methodology” – 2000 – Gaju Publications, Nagercoil (90 pages)
4. “Physics” – 2002 – NSV Publications, Coimbatore (201 pages)

(vi) Books edited

1. Proceedings of the South Indian Physics Teachers Convention (March
13-15, 1992)” – 1992 – S.T. Hindu College, Nagercoil
2. “Proceedings of the Mano Research Forum 2000” – 2000 –
Manonmaniam Sundaranar University, Tirunelveli

(v) Other books

1. “Panchamirdham” (in Tamil) – 1985) – Self (Hobby writings)
2. “Muppandhal Deviyin Aanmeecha Vazhikatti” (in Tamil) – 1988 – Self (Spiritual)
3. “Muppandhal Annai Bakthi Padalgal” (in Tamil) – 1988- Self (Spiritual)
4. “Educational Refeorm (for India)” – 1988 – Self (Educational planning)

(F) Papers Presented in Conferences

Not listed here as it is long.

30. Major Award Photographs



**Dr. C. K. Mahadevan receiving the Tamil Nadu State Government Award (year 1995)
for the book ‘Vignana Varalaru’ in January 1997**



**Dr. C. K. Mahadevan receiving the D.Sc. degree in Physics (2002)
from Madurai Kamaraj University**



**Dr. C. K. Mahadevan receiving the Prof. P. Ramasamy National Award for Crystal
Growth (for the year 2006) in December 2006**



Dr. C. K. Mahadevan receiving the Academic Achievement Award in the Sixth All India Conference of the Kanyakumari Academy of Arts and Sciences (2010)



Dr. C. K. Mahadevan receiving the Tamil Nadu Scientist Award (2008) and the Best Teacher Award (2008-2009) from the Tamil Nadu State Government



Dr. C. K. Mahadevan receiving the Life-Time Achiever Award (2012) from Scott Alumni Association