



CURRICULAM VITAE

Name : **DR. K. THAMIZHARASAN**

Qualification : M.Sc., M. Phil., B.Ed., Ph.D.,

Date of Birth : 24. 02. 1965

Age : 48 Years

Sex : Male

Nationality : Indian

Present Position & Institution : Associate Professor and Head
Department of Physics
Sir Theagaraya College
Chennai – 600 021.

Teaching Experience : 1991 to Till Date

Mailing Address : No. 15/49, Kumaran Nagar 5th Street
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ACADEMIC TRAINING:

Degree	Name of the Institution	University	Year	Subject	Class
Ph. D.	Loyola College Chennai.	Madras University	2002	Physics	Highly Commended
M. Phil.	Loyola College Chennai.	Madras University	1995	Physics	First
B. Ed.	Annamalai University	Annamalai University	1990	Physics	First
M.Sc.	Annamalai University	Annamalai University	1989	Physics	High Second

DETAILS OF RESEARCH WORK:

a).TITLE OF THE THESIS / DISSERTATION :

Sl.No.	Degree	Title of Dissertation / Thesis
1	Ph. D.	Studies on the Growth and Characterization of single crystals of pure and doped Potassium pentaborate (KB5).
2	M. Phil.	Spectroscopic Investigation and molecular dynamics of $\text{UO}_2(\text{Cl}_4)^{2-}$ and $\text{UO}_2(\text{F}_5)^{3-}$ Ions.
3	M. Sc.	PMR Studies of Molecular Interaction of Hydrogen Bonding.

b). RESEARCH EXPERIENCE: Twenty Two Years

c). AREA OF RESEARCH INTEREST: Crystal Growth (Solid State Physics) – Nonlinear optical materials (**NLO**) – Spectroscopy.

d). RESEARCH GUIDANCE:

No. of Students - Guided : M. Phil. – 24 Ph.D. - 01
Guiding : Ph. D. - 07

PUBLICATIONS : **International / National: 28**

EXTRA CURRICULUM ACTIVITIES:

- ❖ Programme officer, National service scheme – 3 Years (2002 – 2005).
- ❖ Organized Special Camps in adopted villages.
- ❖ Organized Blood Donation Camps in the college campus.
- ❖ Dean, Student affairs, for the Year 2003 -2004.

Membership in Professional Bodies:

- ☞ Life Member of Indian Association of Crystal Growth.
- ☞ Member Indian Association for Physics Teacher.

Yours faithfully,

(K. THAMIZHARASAN)

LIST OF PUBLICATIONS
INTERNATIONAL / INDIAN JOURNALS

1. Growth, thermal and micro hardness studies of single crystals of potassium penta borate (KB5)
K. Thamizharasan, S. Xavier Jesu Raja, Francis, P .Xavier and P.Sagayaraj.
Journal of Crystal Growth 218 (2000)323.
2. Each pit study of pure and doped potassium penta borate (KB5) single crystals.
K. Thamizharasan, S. Xavier Jesu Raja, Francis, P. Xavier, A. Ramanand and P. Sagayaraj .
Convergence Vol.2, No.1 – 4. pp 24-29 (2000)
3. Experimental determination of induction period and interfacial energy of pure doped potassium penta borate (KB5) single crystals.
K. Thamizharasan, S. Xavier Jesu Raja, Joe G.M. Jesudurai, R. Mohan Kumar and P. Sagayaraj.
Convergence Vol.2, No.1 – 4, pp 45 – 51 (2000)
4. Phonon dispersion curve on MnO by modified three body force shell model.
K. Thamizharasan, A. Joseph Arul Pragasam, D.P. Sankaran, and P. Sagayaraj.
Convergence Vol.2, No.1 – 4, pp 30 – 34 (2000)
5. Spectroscopic Investigation and Molecular Dynamics of $\text{UO}_2 (\text{Cl}_4)^{2-}$ and $\text{UO}_2(\text{F}_5)^{3-}$ ions.
K. Thamizharasan, S. Gunasekaran, K. Srinivasan, and S. Xavier Jesu Raja.
Asian Journal of Chemistry Vol.7, No.4, pp 781 – 790 (1995)

6. Growth and characterization of pure and doped potassium borate (KB5) single crystals.

S.A. Rajasekar **K. Thamizharasan**, , A. Joseph Arul Pragasam, J.Packiam Julius and P.Sagayaraj.

Journal of Crystal Growth Vol.247, pp 199 (2003)

7. The role of metallic dopants on the optical and photoconductivity properties of pure and doped potassium penta borate (KB5) single crystals.

S. Abraham Rajasekar, **K. Thamizharasan**, Joe G.M. Jesudurai, D.Premanand and P. Sagayaraj.

Materials Chemistry and Physics Vol.84, pp 157 – 161 (2004)

8. Growth and optical characterization of Cu and Mg substituted L- Arginine diphosphate single crystals.

A. Joseph Arul Pragasam, S. Selvakumar, **K. Thamizharasan**, D. Prem Anand and P. Sagayaraj.

Journal of Crystal Growth, 280(2005) 271 – 278.

9. Thermal, dielectric and photoconductivity studies of pure, Mg^{2+} and Zn^{2+} doped BTCC single crystals.

S. Selvakumar, S.A Rajasekar, **K. Thamizharasan**, S. Sivanesan, A.Ramanand and P. Sagayaraj.

Materials Chemistry and Physics 93 (2005) 356 – 350.

10. Growth and characterization of a novel organometallic NLO crystal: Bis(thiourea) cadmium formate.

S. Selvakumar, S.M. Ravi Kumar, K. Rajarajan, A. Joseph Arul Pragasam, S.A. Rajasekar, **K. Thamizharasan**, and P. Sagayaraj.

Crystal Growth & Design 2006, Vol. 6, No. 11 2607 – 2610.

11. Growth and characterization of an organometallic nonlinear optical crystal of manganese mercury thiocyanate (MMTC).
Ginson P. Joseph, J. Philip, K. Rajarajan, S.A. Rajasekar, A. Joseph Arul Pragasam, **K. Thamizharasan**, S.M. Ravikumar, P. Sagayaraj.
Journal of Crystal Growth 296 (2006) 51 – 57.
12. Growth and Characterization of a new nonlinear optical L-histidine acetate single crystals.
J. madhavan, S. Aruna, A. Anuradha, D. Premanand, I. Vetha Potheher, **K. Thamizharasan**, P. sagayaraj.
Optical Materials, 29 (2007) 1211 – 1216.
13. Growth and Characterization of semi organic nonlinear optical LHPCL crystal.
S. Aruna, M. Vimalan, Preema, C. Thomas, **K. Thamizharasan**, K. Ambujam, J. Madhavan and P. Sagayaraj.
Crystal Research and Technology 42, No. 2, 180 – 185 (2007).
14. Potassium Pentaborate single crystals for nonlinear optical applications.
M. Arul Thalapathi, B. Munirathnam, P. Gnanasekaran, V. Santhanam and **K. Thamizharasan**.
Archives of applied science research, 2011, 3(5) : 131 – 143.
15. Influence of rare earth metal dopant (Nd^{3+}) on the thermal, mechanical and optical properties of L. Arginine Acetate single crystals.
M. Arulthalapathi, P. Gnanasekaran, V. Santhanam and **K. Thamizharasan**.
Archives of applied Science Research, 2011 – 3(5) : 144 – 154.
16. Impact of TSunami of Tamilnadu Monsoon Rainfall.
G. Helen Ruth Joice and **K. Thamizharasan**.
ARP Journal of science and Technology, Vol.2, No.2 (2012)

17. Tamil nadu Rainfall Behaviour : Chaotic
G. Helen Ruth Joice and **K. Thamizharasan**
IOSR Journals of Applied physics (IOSR – JAP)
Vol.2, Issue 1, (2012) 34 – 35.
18. Growth and characterization of a Non – Linear optical crystal : thiouraea added L-Histidine crystals.
S. Nalini Jayanthi, A.R. Prabhakaran, D. Subashini, **K. Thamizharasan**.
International Journal of Advances in Engineering & Technology. Vol. 5 (2013) 85 – 92.
19. Growth of Semi Organic P- Nitro phenolate para nitro phenol dihydrate single crystal from aqueous solution and their characterization
V.J. Priyadarshini, G. Meenakshi, **K. Thamizharasan**.
J. Chem. and Pharmaceutical Research., 2012, 4(9) : 4381 – 4385.
20. Habit Modification of potassium Hydrogen Phthalate crystals doped with metal ions.
V.J. Priyadarshini, G. Meenakshi, **K. Thamizharasan**.
I O S R Journal of Applied Physics (IOSR - JAP) Vol.1, iss. 4 (2012) 13 – 16.
21. Optical, thermal and Mechanical studies on a novel non linear optical material : TLH crystals.
S. Nalini Jayanthi, A.R. Prabhakaran, D. Subashini, T. Pachanathan and **K. Thamizharasan**.
Archives of applied Science Research,2013, 5(1) : 241 – 246.
22. Studies on the growth aspects of semi-organic Ammonium Borodilactate : A promising New NLO crystal.
T.Pachanathan, S.NaliniJayanthi, P.Sagayaraj, and **K.Thamizharasan**.
International Journal of Advances in Engineering & Technology. Vol.6, iss. 1 (2013) 298 -303.

23. Spectral, thermal investigations and particle size determination of L-threonine single crystals.
D.Subashini , A.R.Prabhakaran, S.Nalini Jayanthi and **K.Thamizharasan**.
Advances in Applied Science Research, 2013,4(2):238-242.
24. A study on optical, thermal, mechanical properties and particle size determination of non-linear optical L-threonine single crystals.
D. Subashini, A.R. Prabhakaran, S. Nalini Jayanthi and **K. Thamizharasan**
Archives of Physics Research, Vol.4(2), pp 14-21 (2013).
25. Ground level ozone concentration predicted by decomposition analysis.
Sachithananthem C.P., Samuel Selvaraj R., and **K.Thamizharasan**
International Journal of Current Research Review, Vol.5, No.13,
pp 12-18 (2013).
26. Variation of total Ozone concentration and Rainfall by decomposition analysis.
Sachithananthem C.P., Samuel Selvaraj R., and **K.Thamizharasan**
International Journal of Scientific & Engineering Research,
Vol.4,Issue.8,pp 1463-1466 (2013).
27. Modeling and Predicting total Ozone column and Rainfall in Kodaikanal, Tamilnadu By Arima Process.
Sachithananthem C.P., Samuel Selvaraj R.,and **K.Thamizharasan**
International Journal Of Engineering And Computer Science, Vol.2,
Issue.8, Pp 2521- 2526 (2013).
28. Forecasting of Ground Level Ozone around Chennai by Artificial Neural Network. Sachithananthem C.P., Samuel Selvaraj R., and **K.Thamizharasan**
Universal Journal of Environmental Research and Technology, Vol.3,
Issue.2, Issue.2, pp281-292 (2013).