

PROFILE



1. Name : Dr. T. K. Thirumalaisamy

2. Date of Birth : 31/07/1967
(Thirty First July Nineteen Sixty Seven)

3. Educational qualifications :

Name of Degree	Institution	University	Class Obtained	Year of Passing
B. Sc.	Hajee Karutha Rowther Howdia College, Uthamapalayam	Madurai Kamaraj University, Madurai	First with Distinction	1987
M. Sc.	Ayya Nadar Janaki Ammal College, Sivakasi	Madurai Kamaraj University, Madurai	First with Distinction GOLD MEDALIST	1989
M. Phil.	Ayya Nadar Janaki Ammal College, Sivakasi	Madurai Kamaraj University, Madurai	First with Distinction GOLD MEDALIST	1990
Ph. D.	The Madura College, Madurai	Madurai Kamaraj University, Madurai		2018

4. Date of appointment : 28.6.1991

5. Designation : Associate professor

6. Official Address : PG Department of Physics
Hajee Karutha Rowther Howdia College
(Autonomous)
Uthamapalayam- 625533
Theni (DT.)

7. Permanent Address : 176/11A First Street
Ezhil Nagar
Chinnamanur - 625515
Theni (DT.)
Email: tktsamy67@gmail.com

8. Years of service : 30 Years 2 Months

9. Awards received : **"EMINENT PROFESSOR AWARD"** from **Mr. U. SAHAYAM I.A.S.**
(Dhinnai Human Resource Development Trust, Theni.)



10. Position held in International/National/Conference/Seminar if any

Position held	International/National/Conference/Seminar	Date	Institution
Judge	18th National Children's Science Congress - 2020	12 Nov. 2010	Tamilnadu Science Forum & Hajee Karutha Rowther Howdia College, Uthamapalayam
Chair Person	International Conference	18-20 December, 2019	Kalasalingam Academy of Research and Education, Krishnankoil

11. Position held in BOS/AC/SENATE/EXAMINATION:

Position held	BOS/AC/SENATE/ Forum	Period	Institution
Chief Examiner	TNPSC	22.08.2019	Tamilnadu Public Service Commission, Tamilnadu
Coordinator	Youth Red Cross	2009 - 2014	Hajee Karutha Rowther Howdia College, Uthamapalayam.
Coordinator	Parent Teacher Association	2014 - Till date	Hajee Karutha Rowther Howdia College, Uthamapalayam.
Member Secretary	Academic Council	2013 to Till date	Hajee Karutha Rowther Howdia College, Uthamapalayam.
Member	Board of Studies - PG Physics	2014 - 2016	Madurai Kamaraj University, Madurai.
Member	Board of Studies - PG Physics	Jan. 2017 – Jun 2017	Madurai Kamaraj University, Madurai.
Member	Board of Studies – UG & PG Physics	2013 to Till date	Hajee Karutha Rowther Howdia College, Uthamapalayam.
Member	Board of Studies – UG Physics	2017 - 2019	GTN Arts College, Dindigul.

12. Orientation and Refresher Courses attended:

Course	Subject	University	Sponsoring agency	Date
OC	Multi-disciplinary	Jawaharlal Nehru University, New Delhi	UGC	24.11.1997 19.12.1997
RC	Physics	Madurai Kamaraj University, Madurai	UGC	05.04.1999 26.04.1999
RC	Physics	Gandhigram Deemed University, Gandhigram	UGC	03.12.2001 23.12.2001
RC	Value Education	Madurai Kamaraj University, Madurai	UGC	20.02.2008 11.03.2008

13. No of International/National/Webinars/FDP attended : 104

14. Conferences/seminars/workshops organized:

Programme	Position held	University/college	Date
National seminar	Convener	Hajee Karutha Rowther Howdia College, Uthamapalayam.	12.02.2016
International seminar	Organizing Secretary	Hajee Karutha Rowther Howdia College, Uthamapalayam.	16 th & 17 th .02. 2016
State level Workshop	Organizing Secretary	Hajee Karutha Rowther Howdia College, Uthamapalayam.	10.01.2018
State level Seminar	Organizing Secretary	Hajee Karutha Rowther Howdia College, Uthamapalayam.	09.12.2020

15. Papers presented in Conferences/Seminars/Workshops/Symposia etc:

Programme	Title	Institution	Date
National Conference	X-ray and charge density distribution studies on Antimony trioxide	AAGA College, Namakkal	20 & 21 July 2017
National Conference	Electron density distribution studies on Cr:Al ₂ O ₃	Govt. Arts College, Thiruvannamalai	25 & 26 July 2017
National Conference	Structural and bonding behavior of TiO ₂ in rutile phase	Kalasalingam Academy of Research and Education, Krishnankoil	5 & 6 April, 2019
National Conference	Structural analysis and bonding behavior of BaZrO ₃	Kalasalingam Academy of Research and Education, Krishnankoil	5 & 6 April, 2019
International Conference	Structural, Phase Transition, Morphological, Optical and Dielectric Properties of Lead Free (1-x) (Na _{0.99} K _{0.01})(Nb _{0.95} S _{0.05})O ₃ -xBaTiO ₃ Solid Solutions	Kalasalingam Academy of Research and Education, Krishnankoil	18-20 December, 2019
International Conference	Investigation on Structural and Bonding Behavior of Sm ³⁺ doped SrWO ₄ Materials through Electron Density Distribution Analysis	Kalasalingam Academy of Research and Education, Krishnankoil	18-20 December, 2019
Virtual International Conference on Innovation in Interdisciplinary Research 2020	Structural Analysis and Bonding Behavior of CaWO ₄	Kalasalingam Academy of Research and Education, Krishnankoil	23 & 24 June, 2020

16. Guest Lectures delivered:

Institution	Date
Shanthi Niketan College of Education, Uthamapalayam.	28.02.2012
Hajee Karutha Rowther Howdia College, Uthamapalayam.	26.07.2012
Science Exhibition Uthamapalayam Educational District, Uthamapalayam.	23.08.2012
Hajee Karutha Rowther Howdia College, Uthamapalayam.	27.07.2016
Anna University, University College of Engineering, Dindigul.	01.09.2016
Mannar Thirumalai Naicker College, Madurai.	22.09.2016
Sri Adi Chunchanagiri Women's College, Cumbum.	31.03.2016
District Employment Exchange, Theni.	28.02.2017
Ayya Nadar Janaki Ammal College, Sivakasi	12.10.2017
Sri Adi Chunchanagiri Women's College, Cumbum.	30.11.2017
Oriental Arabic Hr. Sec. School, Akkur. Nagai (Dist.)	24.02.2018
Govt. Kallar Hr. Sec. School, Markkayankottai.	12.07.2018
Kalaimagal Hr. Sec. School, S. Ramachandrapuram. Virudhunagar (Dist.)	23.07.2018
Govt. Hr. Sec. School, Pudupatti	14.11.2018
V. V. V. College, Virudhunagar	04.02.2019
Sakundala Primary School, Kuchanur	23.03.2019
Hajee Karutha Rowther Howdia College, Uthamapalayam.	05.09.2019
Yadava College, Madurai.	15.10.2019
AlHikmah Mat. Hr. Sec. school, Uthamapalayam.	09.11.2019
SCOPE Science Exhibition Theni	28.11.2019
Rotary Club of Theni	13.01.2020
Anns Mat. Hr. Sec. School, Cumbum	25.01.2020
Sri Vikasa Vidyalaya Mat. Hr. Sec. School, Uthamapalayam	28.02.2020 FN
Goodsam Mat. Hr. Sec. School, Sukkangalpatty	28.02.2020 AN
Muslim Middle School, Chinnamanur	29.02.2020 FN
Sri Vikasa Vidyalaya Public (CBSE) School, Uthamapalayam	29.02.2020 AN
Hajee Karutha Rowther Howdia College, Uthamapalayam.	05.03.2020

17. List of research articles Published in Reputed Journals:

- Effect of energy dependent effective mass on ionized-impurity-scattering-limited mobility in GaAs,
T.K. Thirumalaisamy and D. Chandramohan,
Phys. Rev. B 44 (12), pp. 6158-6160, (1991).
 (Impact Factor: 3.76; ISSN: 1098-0121; SCOPUS)
<https://doi.org/10.1103/PhysRevB.44.6158>
- Local structural analysis of Al₂O₃, Cr:Al₂O₃ and V: Al₂O₃ using Powder XRD,
T.K. Thirumalaisamy, K. J. Lakshmi Sri and R.Saravanan,
Materials Science Forum, 671, pp. 131-152, (2011).
 (Impact Factor: 0.35; ISSN: 1662-9752; SCOPUS)
<https://doi.org/10.4028/www.scientific.net/MSF.671.131>

- Local structure determination of the nonlinear optical material LiNbO_3 using XRD, R. Saravanan, **T.K. Thirumalaisamy** and T. Kajitani, *Physica Status Solidi A*, 208(11), pp. 2643–2650 (2011). (Impact Factor: 1.759; ISSN: 1862-6300; SCOPUS) <https://doi.org/10.1002/pssa.201127184>
- Charge density in MoO_4 tetrahedron and PbO_8 octahedron in PbMoO_4 , **T.K. Thirumalaisamy** and R. Saravanan, *J. Mater Sci: Mater Electron*, 22(11), pp. 1637–1648 (2011). (Impact Factor: 2.195; ISSN: 0957-4522; SCOPUS; WOS) <https://doi.org/10.1007/s10854-011-0339-4>
- The redistribution of charge density in $\text{CaF}_2:\text{Yb}_3$, **T.K. Thirumalaisamy**, R. Saravanan and S. Saravanakumar, *J. Mater Sci: Mater Electron*, Springer Publication, 26(9), pp. 6683–6691, (2015). (Impact Factor: 2.195; ISSN: 0957-4522; SCOPUS; WOS) <https://doi.org/10.1007/s10854-015-3270-2>
- Structure and charge density of Ce doped gadolinium gallium garnet (GGG), **T.K. Thirumalaisamy**, S. Saravanakumar, Skirmante Butkute, Aivaras Kareiva and R. Saravanan, *J. Mater Sci: Mater Electron*, Springer Publication, 27(2), pp. 1920–1928, (2015). (Impact Factor: 2.22; ISSN: 0957-4522 SCOPUS; WOS) <https://doi.org/10.1007/s10854-015-3974-3>
- Electronic Charge Density Distribution in Sb_2O_3 , **T. K. Thirumalaisamy**, S. Saravanakumar and R. Saravanan, *Materials Research Forum*, 2, pp. 93 -107 (2016). (Impact Factor: 0.91; ISSN: 2471:8904; AAP) <http://dx.doi.org/10.21741/9781945291036-8>
- Charge Density Distribution and bonding in Calcite, **T. K. Thirumalaisamy**, S. Saravanakumar and R. Saravanan, *Materials Research Forum*, 2, pp. 128-146 (2016). (Impact Factor: 0.91; ISSN: 2471:8904; AAP) <http://dx.doi.org/10.21741/9781945291036-10>
- Structural, Phase Transition, Morphological, Optical and Dielectric Properties of Lead Free $(1-x)(\text{Na}_{0.99}\text{K}_{0.01})(\text{Nb}_{0.95}\text{Sb}_{0.05})\text{O}_{3-x}\text{BaTiO}_3$ Solid Solutions S. Sasikumar, S. Saravanakumar, S. Asath Bahadur, **T.K. Thirumalaisamy**, *International Journal of Recent Technology and Engineering*, 8(4S2), pp. 879-882, (2019). (Impact Factor: 1.0; ISSN: 2277:3878; Scopus & Enlisted Journal No 49239 in UGC) <https://doi.org/10.35940/ijrte.D1167.1284S219>

- Surfactants-assisted synthesis of ZnWO₄ nanostructures: A view on photo catalysis, photoluminescence and electron density distribution analysis, D. Sivaganesh, S. Saravanakumar, V. Sivakumar, R. Rajajeyaganthan, M. Arunpandian, J. Nandha Gopal, **T.K. Thirumalaisamy**, *Materials Characterization*, 159, pp. 110035-110049 (2020). (Impact Factor: 3.562; ISSN: 1044-5803; WOS) <http://doi.org/10.1016/j.matchar.2019.110035>
- Effect of Neodymium doping in BaTiO₃ ceramics on structural and ferroelectric Properties Sasikumar S, **Thirumalaisamy T.K**, Saravanakumar S, Sivaganesh D, Shameem Banu I.B, *J. Mater Sci: Mater Electron*, 31(2), pp. 1535-1546 (2020). (Impact Factor: 2.22; ISSN: 0957-4522; WOS) <https://doi.org/10.1007/s10854-019-02670-6>
- Investigations on structural and electrical properties of conventional and microwave sintered BaTiO₃ and Ba_{0.98}Nd_{0.02}TiO₃ ceramics S. Sasikumar, **T.K. Thirumalaisamy**, S. Saravanakumar, S. Asath Bahadur & D. Sivaganesh, *Ferroelectrics*, 572, pp. 147–157, (2021). (Impact Factor: 0.669; ISSN: 0015-0193; WOS) <https://doi.org/10.1080/00150193.2020.1868879>
- Effect of BaSnO₃ on structural and Electrical properties of lead free Na_{0.5}Bi_{0.5}TiO₃ ceramic solid solution S. Sasikumar, Huiqing Fan, Weijia Wang, **T.K. Thirumalaisamy**, S. Saravanakumar, P. Diana, D. Sivaganesh *Physica Scripta*, 96(12), **125805-125816**, (2021). (Impact Factor: 2.487; ISSN: 1402-4896; & Journal No 19767 in UGC) <https://doi.org/10.1088/1402-4896/ac1471>
- Red emitting Eu³⁺ induced SrWO₄ materials: Synthesis, Structural, Morphological and Photoluminescence Analysis S Saravanakumar, D Sivaganesh, V Sivakumar, S Sasikumar, **T K Thirumalaisamy**, M A Sayed and Atif Mossad Ali *Physica Scripta*, 96(12), **125817**, (2021). (Impact Factor: 2.487; ISSN: 1402-4896; UGC)

18. Papers presented in International/National Conferences/Seminars/Workshops:

- X-ray and charge density distribution studies on Antimony trioxide, **T.K. Thirumalaisamy**, S. Saravanakumar, National Conference on Nanomaterials (NCN), AAGA College, Namakkal, 20 & 21, July 2017.

- Electron density distribution studies on Cr:Al₂O₃,
T.K. Thirumalaisamy, S. Saravanakumar,
National Conference on Recent Advancements in Materials Science (NCRAMS),
Government Arts College, Thiruvannamalai, 25 & 26, July 2017.

- Structural and bonding behavior of TiO₂ in rutile phase,
D. Sivaganesh, S. Saravanakumar, V. Sivakumar¹, K.S. Syed Ali, P. Meenakshi,
S. Meera, S. Monisha, **T. K. Thirumalaisamy**,
5th National Conference on Technologically Important Crystalline and Amorphous
Solids (TICAS), Sponsored by DST, DAE, CSIR, ICMR, INSA
Kalasalingam Academy of Research and Education, Krishnankoil, pp. 149-151, 5 & 6
April, 2019.

- Structural analysis and bonding behavior of BaZrO₃,
D. Sivaganesh, T. C. Shamli, S. Saravanakumar¹, V. Sivakumar, S. Sasikumar, K.S. Syed
Ali, **T. K. Thirumalaisamy**,
5th National Conference on Technologically Important Crystalline and Amorphous
Solids (TICAS), Sponsored by DST, DAE, CSIR, ICMR, INSA
Kalasalingam Academy of Research and Education, Krishnankoil, pp. 152-154, 5 & 6
April, 2019.

- Structural, Phase Transition, Morphological, Optical and Dielectric Properties of
Lead Free (1-x)(Na_{0.99}K_{0.01})(Nb_{0.95}Sb_{0.05})O_{3-x}BaTiO₃ Solid Solutions,
S. Sasikumar, S. Saravanakumar, S. Asath Bahadur, **T.K. Thirumalaisamy**,
International Conference on Sustainable Development, Kalasalingam Academy of
Research and Education, Krishnankoil, pp.192, 18-20 December, 2019.

- Investigation on Structural and Bonding Behavior of Sm³⁺ doped SrWO₄ Materials
through Electron Density Distribution Analysis,
D. Sivaganesh, P. Diana, S. Saravanakumar, **T.K. Thirumalaisamy**,
International Conference on Sustainable Development, Kalasalingam Academy of
Research and Education, Krishnankoil, pp.232, 18-20 December, 2019.

- Structural Analysis and Bonding Behavior of CaWO₄,
T.K. Thirumalaisamy, S. Saravanakumar, D. Sivaganesh, P. Diana
Virtual International Conference on Innovation in Interdisciplinary Research 2020,
Kalasalingam Academy of Research and Education, Krishnankoil, pp. 321, 23-24
June, 2020.

19. Other information relevant to academic matters and institutions (if any specify):

- Appointed as Chief Examiner by Tamilnadu Public Service Commission so many number of times
- Appointed as an Additional Examiner by Madurai Kamaraj University for central valuation since 1996.
- Motivated and Trained the Students to Participate in Academic Programme, Inter collegiate Cultural Competitions, Seminars, Workshops and Conferences etc.