

Name and Qualification

Name : Dr.S.Mullainathan, PhD;
Designation : Asst Professor
Department : Physics
Subject Interest : Condensed matter physics,
Computational, theoretical physics& Radiation Physics
Specialization :
For more Information :



DETAILS OF PROFESSIONAL AND RESEARCH EXPERIENCE (SPECIFYING PERIOD)

Lecturer in Physics

Institute : Selvamm Arts and Science College, Nammakal .
Period : 2005-2007
Teaching Areas : General Physics

Associate Professor and Head in Physics

Institute : A.V.C.College of Engineering
Period : 2007-2015
Teaching Areas : General Physics

Asst Professor/Research Guide

Institute : Govt Arts College for Men, Krishnagiri.
Period : 2015-2016
Teaching Areas : UG, PG Physics
Research Areas : Ultrasonics, Spectroscopy, Applied Physics,
Environmental Chemistry,
Research Areas :

ACADEMIC PROFILE

Ph.D.,

University : Annamalai University
Date and Place : Sep. 2005
Research Supervisor : Prof. Dr. V.Ramasamy, PhD,

Title of Thesis : Mineral Characterization and Radiological Hazards in
Palaru River Sediments Tamilnadu, India.

M.Phil.,

University : Annamalai University,
Main Subject : Physics
Year : 2002
Class : I
Supervisor : Prof.R.Palanivel,
Title of Dissertation : Ultrasonic Studies on Some Binary Liquids

M.Sc.,

University : Bharathidasan University,
College : TBML College, Porayar
Main Subject : Physics
Year :1999
Class : I

B.Sc.,

University :Bharathidasan University,
College : TBML College, Porayar.
Main Subject : Physics
Year : 1997
Class : II

H.Sc.,

Board : STATE Board
Main Subject : MPC
Year : 1994

S.S.L.C

Board : STATE Board
Main Subject : General
Year : 1992

RESEARCH PROJECTS

Completed

Funding Agency :
File Number :
Year :
Amount Received :
Title :

Ongoing

Funding Agency :
File Number :
Amount Received :
Title :

Accepted

Funding Agency :
File Number :
Year :
Amount Received :
Title :

Funding Agency :
File Number :
Year :
Amount Received :
Title :

WORKSHOPS ORGANIZED

1. Funding Agency :
Date :
Amount Received :
Place :
2. Funding Agency :
Date :
Amount Received :
Place :
3. Funding Agency :
Date :
Amount Received :
Place :
4. Funding Agency :
Date :
Amount Received :

	Place	:
5.	Funding Agency	:
	Date	:
	Amount Received	:
	Place	:

RESEARCH GUIDANCE

M.Phil.,

Number of M.Phil., Scholars	: 04
Degree Awarded	: 04

Ph.D.,

Number of PhD Scholars	: 04
Degree Awarded	: 04
Thesis Submitted	:
Synopsis Submitted	:

AWARDS AND DISTINCTION

1.

PUBLICATIONS - ARTICLES PUBLISHED IN JOURNALS

48

Environmental radioactivity, magnetic measurements and mineral analysis of major South Indian river sediments

S Murugesan, S Mullainathan, V Ramasamy, V Meenakshisundaram *J. Mater. Environ. Sci.* 7 (7) 2375-2388, 2016

Molecular interactions in binary mixtures of methyl formate with 1-butanol, 1-pentanol, and 1-hexanol by using ultrasonic data at 303 K

S Elangovan, S Mullainathan

Russian Journal of Physical Chemistry A 90 (5), 1006-1010, 2016

FTIR spectroscopic studies of rock sediments in Namakkal, Tamil Nadu, South India, for vegetations

S Mullainathan, S Nithiyantham

Environmental Earth Sciences 75 (8), 1-8, 2016

Physico-mechanical investigations on mineralogical clay-based ceramic bodies with rock residue
R Vijayaragavan, S Mullainathan, P Ambalavanan, S Nithiyantham

Journal of King Saud University-Engineering Sciences , 2016
Variation of naturally occurring radionuclides, dose rate and mineral characteristics with particle size and altitude in bottom sediments of a river originating from Anamalai hills in the Western Ghats of India
N Krishnamoorthy, S Mullainathan, R Mehra
Environmental Earth Sciences 74 (4), 3467-3483, 2015
Growth and Characterization (Structural and Chemical) of Urea Crystal
P Vinupritha, S Mullainathan, S Nithiyantham
Advanced Chemistry Letters 2 (1), 55-57, 2015
Magnetic, chemical and radionuclide studies of river sediments and their variation with different physiographic regions of Bharathapuzha River, southwestern India
MAE Chaparro, N Krishnamoorthy, MAE Chaparro, KL Lecomte, ...
Studia Geophysica et Geodaetica 59 (3), 438-460, 2015
Ultrasonic Studies in Binary Mixtures of N-Propyl Formate with 1-Alcohols At 303 K
S Elangovan, S Mullainathan
Asian Journal of Chemistry 27 (7), 2508, 2015
Natural radioactivity and hazardous index of major South Indian river sediments
S Murugesan, S Mullainathan, V Ramasamy
International Journal of Low Radiation 10 (1), 14-33, 2015
Intermolecular interactions in mixtures of ethyl formate with methanol, ethanol, and 1-propanol on density, viscosity, and ultrasonic data
S Elangovan, S Mullainathan
Russian Journal of Physical Chemistry A 88 (12), 2108-2113, 2014
Intermolecular interactions in methyl formate-ethanol mixtures at 303–313 K according to ultrasonic data
S Elangovan, S Mullainathan
Russian Journal of Physical Chemistry A 88 (4), 601-606, 2014
Radiation impact assessment of naturally occurring radionuclides and magnetic mineral studies of Bharathapuzha river sediments, South India
N Krishnamoorthy, S Mullainathan, R Mehra, MAE Chaparro, ...
Environmental earth sciences 71 (8), 3593-3604, 2014
Intermolecular Interaction Studies in Binary Mixture of Methyl formate with Methanol at Various Temperatures
S Elangovan, S Mullainathan
Asian Journal of Chemistry 26 (1), 137, 2014
Evaluation of natural radioactivity and its associated health hazard indices of a south Indian river
N Krishnamoorthy, S Mullainathan, R Mehra, MAE Chaparro, ...
Radiation protection dosimetry, nct288, 2013
Elemental Analysis of Some Rock Samples from Namakkal, Tamil Nadu, India
S Mullainathan, S Nithiyantham
Journal of Advanced Physics 2 (4), 254-259, 2013
Physio Chemical Studies on the Ternary Mixture of Chlorobenzene+ Chloroform+ Cyclohexane Liquid Mixtures at 303.15, 308.15 and 313.15 K
V Vanathi, S Mullainathan, S Nithiyantham
Journal of Computational and Theoretical Nanoscience 10 (9), 1952-1955, 2013
Estimation of Sound Velocity in the Ternary Liquid System at 303.15, 308.15 and 313.15 K
V Vanathi, S Nithiyantham, S Mullainathan
Journal of Advanced Physics 2 (3), 185-189, 2013
Ultrasonic studies of intermolecular interaction in binary mixture of n-methyl formate with 1-propanol at various temperatures
S Elangovan, S Mullainathan

- Indian Journal of Physics 87 (7), 659-664, 2013
Ultrasonic Studies of Brompheniramine with 1-Butanol at 303,308 and 313K
 S Elangovan, S Mullainathan, Elixir Ultrasonics 58A 15048-15052 2013
- Ultrasonic studies of mixtures of ethyl formate and n-alcohols in carbon tetrachloride**
 S Elangovan, S Mullainathan
 Indian Journal of Physics 87 (4), 373-378, 2013
- Physico-Chemical Studies on the Binary Mixture of Chloroform+ Cyclohexane Liquid Mixtures at 303.15, 308.15 and 313.15 K**
 V Vanathi, S Mullainathan, S Nithiyantham
 Asian Journal of Chemistry 25 (Supplementary Issue), S464, 2013
- Study of raw materials for making ceramic product and physico-mechanical properties of ceramic product made from rock residue powder** 1 2013
 R Vijayaragavan, S Mullainathan
 Asian Journal of Chemistry 25 (Supplementary Issue), S449
- Mineralogical characterization studies on unburnt ceramic product made from rock residue additives by FT-IR spectroscopic technique** 1 2013
 R Vijayaragavan, S Mullainathan, M Balachandramohan, ...
 International Journal of Modern Physics: Conference Series 22, 62-70
- Evaluation of natural radioactivity in rocks of Nilgiri hills and their radiation hazard to mankind** 2013
 N Krishnamoorthy, S Mullainathan, S Murugesan
 International Journal of Low Radiation 9 (1), 30-37
- Acoustical parameters of toluene+ chloroform+ cyclohexane mixtures at 303.15, 308.15, and 313.15 K** 2 2012
 V Vanathi, S Mullainathan, S Nithiyantham
 Russian Journal of Physical Chemistry A 86 (8), 1204-1207
- Ultrasonic study of intermolecular interaction in ternary mixture of ethyl formate+ 1-propanol+ benzene at 303 K** 13 2012
 S Elangovan, S Mullainathan
 Indian Journal of Physics 86 (8), 727-730
- Reassessment and comparison of natural radioactivity levels in relation to granulometric contents of recently excavated major river sediments** 3 2012
 V Ramasamy, G Suresh, P Rajkumar, S Murugesan, S Mullainathan, ...
 Journal of Radioanalytical and Nuclear Chemistry 292 (1), 381-393
- Dielectric Relaxation Studies of Ethyl Formate with Primary Alcohols using Time Domain Reflectometry** 2 2012
 S Elangovan, S Mullainathan
 Material Science Research India 9, 81
- Acoustical Studies on the Ternary Mixture of 1, 4-Dioxane+ Chloroform+ Cyclohexane liquid Mixtures At 303.15, 308.15 and 313.15 K** 2012
 V Vanathi, S Mullainathan, S Nithiyantham
 E-Journal of Chemistry 9 (1)
- Acoustical Studies on the Ternary Mixture of 1, 4-Dioxane** 2012
 V Vanathi, S Mullainathan, S Nithiyantham
 Journal of Chemistry 9 (1), 415-419
- Radioactivity and radiation hazard assesment of Cauvery River, Tamilnadu, India** 10 2011
 S Murugesan, S Mullainathan, V Ramasamy, V Meenakshisundaram
 Iran. J. Radiat. Res 8 (4), 211-222

Effect of sintering temperature on the properties and microstructure of a ceramic product	2	2011
R Vijayaragavan, S Mullainathan Mater. Sci. Res. India 8 (2), 321-325		
Natural radioactivity and assessment of radiological hazards in Nilgiri hills, Tamilnadu, India		2011
N Krishnamoorthy, S Murugesan, S Mullainathan, V Meenakshisundaram Proceedings of the conference on accelerator radiation safety: book of abstracts		
Ultrasonic study of molecular interactions in binary mixtures at 303 K	5	2010
S Mullainathan, S Nithiyantham Journal of Chemistry 7 (2), 353-356		
Molecular Interaction Study on Binary Mixture of Phenol in Dioxane, Methanol and Acetonitrile at 303 K		2009
S Mullainathan, S Nithiyantham, M Rajasekaran Asian Journal of Chemistry 21 (6), 4789		
Thermo acoustical studies on some electrolytic solvent mixtures at 303 K	6	2009
S Nithiyantham, S Mullainathan, R Jayalakshmi Oriental Journal of Chemistry 25 (3), 759		
Ultrasonic investigation of molecular interactions in binary mixtures at 303 K	30	2009
R Nithya, S Nithiyantham, S Mullainathan, M Rajasekaran Journal of Chemistry 6 (1), 138-140		
Magnetic measurements and pollutants of sediments from Cauvery and Palaru River, India	23	2008
MAE Chaparro, AM Sinito, V Ramasamy, C Marinelli, MAE Chaparro, ... Environmental geology 56 (2), 425-437		
Magnetic characterization of recently excavated sediments of Cauvery river, Tamilnadu, India	3	2006
V Ramasamy, S Murugesan, S Mullainathan, MAE Chaparro POLLUTION RESEARCH 25 (2), 357		
Natural activity concentration and radiological hazards of Palar river sediments, Tamilnadu, India	14	2006
V Ramasamy, S Murugesan, S Mullainathan The Indian Mineralogist 40 (1), 9-23		
Distribution of Primordial Radionuclides in Sediments of Cauvery River, Tamil Nadu, India		2005
VRS Murugesan, S Mullainathan Concepts of Biophysics, 276		
Effect of Annealing in Thermostimulated Luminescence of Granitic Quartz		2005
V Ramasamy, V Ponnusamy, M Dheenathayalu, S Mullainathan, ... Concepts of Biophysics, 28		
Fourier Transform Infrared Analysis of Some Sediments from Palaru River, Tamilnadu, India	4	2005
V Ramasamy, S Mullainathan, S Murugesan Concepts of Biophysics, 125		
Thermoluminescence-Glow Curve Characteristics of Quartz, Feldspar and Calcite	3	2005
V Ponnusamy, V Ramasamy, M Dheenathayalu, S Murugasan, ... Concepts of Biophysics, 10		

Distribution and characterization of minerals in Cauvery river sediments by grain size analysis—A new approach by FTIR study V Ramasamy, S Murugesan, S Mullainathan Ind. Mineralogist 39 (2), 91-107	14	2005
Characterization of minerals and relative distribution of quartz in Cauvery river sediments from Tamilnadu, India-A FTIR study V Ramasamy, S Murugesan, S Mullainathan Bull. Pure Appl. Sci 23 (1-2), 1	15	2004
Gamma ray spectrometric analysis of primordial radionuclides in sediments of Cauvery river in Tamilnadu, India V Ramasamy, S Murugesan, S Mullainathan Ecologica 2 (83), e88	20	2004
Characterization of quartz and feldspars in white granites V Ramasamy, M Dheenathayalu, V Ponnusamy, S Murgesan, ... J. Curr. Sci 3 (1), 181-185	9	2003

RESEARCH PAPERS ACCEPTED FOR PUBLICATION AND UNDER REVIEW

1. 3

POSTERS AND PAPERS PRESENTED IN NATIONAL AND INTERNATIONAL LEVEL

1. 40

- Environmental and Technical Aspects in the utilization of rock residue as a raw material for ceramic product . R.Vijayaragavan and **S.Mullainathan**.,IEEE – International Conference on Research and Development prospects on Engineering and Technology (ICRDPET 2013), March 29-30., 2013
- Ultrasonic studies of prom-phenirmine with one butanol at 303,308 and 313k.S.Elangovan and **S.Mullainathan**. International Conference on Biological Inorganic Chemistry (ICBIC – 2013), Periyar University, Salem. February20-22., 2013.
- Physio Chemical Studies on the ternary mixture of benzene + chloroform + cyclohexane liquid mixtures at 303.15, 308.15 and 313.15.V.Vanathi, **S.Mullainathan** and S.Nithiyanantham. International Conference on Biological Inorganic Chemistry (ICBIC – 2013), Periyar University, Salem.February20-22., 2013.
- Study of Raw Materials for making ceramic Product and physio- mechanical properties of ceramic product and made from rock residue powder. R.Vijayaragavan and **S.Mullainathan**., International Conference on Nano Science

and Nanotechnology (ICONN – 2013), SRM University Chennai, March 18-20, 2013.

- Physio Chemical Studies on the binary mixture of benzene + chloroform liquid mixtures at 303.15, 308.15 and 313.15, V.Vanathi, **S.Mullainathan** and S.Nithiyanantham. International Conference on Nano Science and Nanotechnology (ICONN – 2013), SRM University Chennai, March 18-20, 2013.
- Mineralogical Characterisation Studies on Un-burnt Ceramic Product made from rock residue additives by FT-IR spectroscopic Technique. R.Vijayaragavan and **S.Mullainathan**., International Conference on Ceramics (ICC -2012), Govt. College of Engg, Bikaner, Rajasthan, December 13-14 2012.
- Natural Radioactivity and Assessment of Radiological Hazards in Nilgiri Hills, Tamilnadu,India. N.Krishnamoorthy., **S.Mullainathan** and S.Murugesan **Conference on Accelerator Radiation Safety (CARS 2011), BARC, Mumbai, November 16 – 18 2011.**
- Workshop on Materials science for Energy Storage. **18 – 22, January 2010. Anna University, Chennai.**
- Acoustical studies of some binary solutions of meta amino phenol in dioxane, methanol and acetonitrile at 303 K. Ms. Vanathi, **S. Mullainathan**, and S. Nithiyanantham **National seminar on RAMS' 09, 21 & 22 August 2009 Department of Physics Sree Sevugan Annamalai College, Devakkottai.**
- Ultrasonic study on binary mixture of ortho amino phenol in dioxane, methanol, phenol and acetonitrile at 303K. **S.Mullainathan**, S.Nithiyanandam and R.Palnivel **National Conference on Advances in Materials Science. 22 & 23, December 2008. Department of Physics B.S. Abdur Rahman Crescent Engineering College, Chennai.**
- **Indian Science Congress. 4,5 & 6 , January 2007. Annamalai University.**
- Identification of minerals and distribution of quartz in recently formed sediments of Cauvery river – A FTIR study. S. Murugesan, V.Ramasamy, **S.Mullainathan** and V.Ponnusamy **National Conference on recent advances in molecular interactions. 26 & 27, March 2004. Department of Physics PSG College of Arts & Sciences, Coimbatore.**
- Mineral characterization of Carbonate group of minerals from various environment through FTIR
J. Hemalatha, V. Ramasamy, S. Murugesan, **S.Mullainathan** and P.Rajkumar **National Seminar on Emerging trends in Molecular Physics. 8&9 March 2004. Department of Physics, Annamalai University.**
- Behaviour of quartz in recently formed sediments excavated from Cauvery river near Pombuhur Estuary. S. Murugesan, V.Ramasamy, **S.Mullainathan** and V.Ponnusamy **National Conference on recent advances in molecular interactions. 26 & 27, March 2004. Department of Physics PSG College of Arts & Sciences, Coimbatore.**

- Determination of orderedness and relative distribution of quartz and feldspar in recently excavated sediments of Palaru river. **S.Mullainathan**, V.Ramasamy, S. Murugesan and V.Ponnusamy **National Seminar on modern trends in Applied Spectroscopy. 25 & 26 March 2004. Faculty of Engineering and Technology, Annamalai University.**
- Thermoluminescence glow curve characteristics of natural quartz. V.Ponnusamy, V.Ramasamy, M.Dheenathayalu, S.Murugesan, and **S.Mullainathan National Seminar on modern trends in Applied Spectroscopy. 25 & 26 March 2004. Faculty of Engineering and Technology, Annamalai University.**
- Kinetic analysis of magnesian limestone through IR. J. Hemalatha, V.Ramasamy, S.Murugesan, and **S.Mullainathan National Seminar on modern trends in Applied Spectroscopy. 25 & 26 March 2004. Faculty of Engineering and Technology, Annamalai University.**
- Spurious and regenerated thermoluminescence from natural calcite. V.Ponnusamy, V.Ramasamy, J. Hemalatha, S.Murugesan, and **S.Mullainathan National Seminar on modern trends in Applied Spectroscopy. 25 & 26 March 2004. Faculty of Engineering and Technology, Annamalai University.**
- Behaviour of quartz in thermostimulated luminescence through annealing V.Ponnusamy , V.Ramasamy, **S.Mullainathan** and S. Murugesan **National Seminar on Emerging trends in Molecular Physics. 8&9 March 2004. Department of Physics, Annamalai University.**
- Thermoluminescence glow curve characteristics of feldspar and calcite V.Ponnusamy, V.Ramasamy, M. Dheenathayalu, S. Murugesan and **S.Mullainathan National Seminar on Emerging trends in Molecular Physics. 8&9 March 2004. Department of Physics, Annamalai University.**
- Mineral Characterisation of white granites using FTIR, XRD and thin section analysis. V.Ramasamy, V.Ponnusamy, S.Murugesan, **S.Mullainathan** and M.Dheenathayalu. **“National Seminar on Trends in Environmental Geochemistry” held between 21st & 22nd, March, 2003, at Department of Earth Sciences, Annamalai University**
- Characterisation of quartz using FTIR, V.Ramasamy, V.Ponnusamy, K.Anandalakshmi, R.Ravisankar, S.Murugesan, **S.Mullainathan** and M.Dheenathayalu. **“National Seminar on Chemical Physics (NSCP - 2003)” held between 10-11, March, 2003, at Department of Physics, Annamalai University**
- Determination of trapping parameters of thermoluminescent calcite crystals, V.Ramasamy, V.Ponnusamy, R.Ravisankar, S.Murugesan, **S.Mullainathan** and M.Dheenathayalu. **“National Seminar on Chemical Physics (NSCP - 2003)” held between 10-11, March, 2003, at Department of Physics, Annamalai University**
- Thermoluminescence and regenerated thermoluminescence from natural calcite crystals V.Ramasamy, V.Ponnusamy, R.Ravisankar, S.Murugesan, **S.Mullainathan** and M.Dheenathayalu. **“National Seminar on Chemical Physics (NSCP - 2003)” held between 10-11, March, 2003, at Department of Physics, Annamalai University**

- Thermal behaviour of limestone and coral reef using FTIR.
By V.Ramasamy, V.Ponnusamy, J.Hemalatha, R.Ravisankar, S.Murugesan, **S.Mullainathan** and M.Dheenathayalu. “**National Seminar on Chemical Physics (NSCP - 2003)**” held between 10-11, March, 2003, at Department of Physics, Annamalai University
- Thermoluminescence – effect of annealing treatment in quartz and feldspar of white granites.
V.Ramasamy, V.Ponnusamy, R.Ravisankar, S.Murugesan, **S.Mullainathan** and M.Dheenathayalu. “**National Seminar on Chemical Physics (NSCP - 2003)**” held between 10-11, March, 2003, at Department of Physics, Annamalai University

BOOKS PUBLISHED

1. nil

CITATION INDICES DETAILS (REFER GOOGLE SCHOLAR FROM 2007-2015)

Publications	: 63
In Journals	: 48
In Conferences	: 15
Citations	: 230
h-index	: 9
i10-index	: 9
Cumulative Impact factor	: 30

MEMBERSHIP IN BODIES ON EDUCATION AND NATIONAL DEVELOPMENT

1. LMISTE

POSITION HELD / LEADERSHIP ROLE PLAYED

1. Bridge course coordinator
2. ISO Co ordinator and Management Represetative(AVC CE)

INVITED GUEST LECTURES

TRAINING PROGRAMME

Orientation Course (UGC Sponsored)

Place :

Duration :

Refresher Course in Environmental science (UGC Sponsored)

Place :

Duration :

Refresher Course in Chemistry (UGC Sponsored)

Place :

Duration :

TEACHING EXPERIENCE FROM 1993 TO TILL DATE

Total Teaching Experience : 11 years

Under Graduate : 11 years

Post Graduate : 04 years

PERSONAL DETAILS

Name : S. Mullainathan

Gender : Male

Date of Birth : 17-05-1977

Age : 39

Place of Birth : Saliangalam

Marital Status : Married

Residential Address : No 2/200, North Street,
Kattuchery &post,
Ayappadi via, Tharangambadi Taluk,
Nagapattinam District - 609303

Official Address : Thiru. Vi. Ka. Govt Arts College, Thiruvarur

Email : s_mullai @rediffmail.com

Web :