**Curriculum Vitae of Dr. R. Saravanan, Associate Professor & Head, Research Centre and P.G. Dept of Physics, The Madura College, Madurai – 625 011, Tamil Nadu, India.**

**Email;** [**saragow@gmail.com**](mailto:saragow@gmail.com)**;**

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| --- | --- | --- | --- | --- | --- |
| **Name** | | | Dr. R. Saravanan | | |
| **Father’s name** | | | Late Mr. P. Ramachandran | | |
| **Sex** | | | Male | | |
| **Marital Status** | | | Married | | |
| **Permanent Address** | | | Dr. R. Saravanan, M.Sc., M.Phil., Ph.D.  2/111, South II Street  Kalvi Nagar  Near MKU Quarters  Madurai – 625 021 | | |
| **Address for communication** | | | Dr. R. Saravanan, M.Sc., M.Phil., Ph.D.  Associate Professor  Research Centre and P.G. Dept of Physics, The Madura College, Madurai – 625 011, Tamil Nadu, India  Cell No.: 94430 69852  Email: [saragow@gmail.com](mailto:saragow@gmail.com) | | |
| **Date of birth**  **Place of birth**  **District and State** | | | 28/05/1964  Kadayanallur  Tirunelveli, Tamil Nadu | | |
| **Nationality & Religion** | | | Indian, Hindu | | |
| **Particulars of Educational Qualifications** | | | | | | |
| **Examination passed** | **Subjects/**  **Subjects with specialization** | **Year of Passing** | | **Class** | **Name of the College and University** | |
| Ph.D. (1988- 1993) | Physics  (Condensed Matter Physics) | 1993 | | Highly Commended | School of Physics, Madurai Kamaraj University, Madurai-21 | |
| M.Phil. (1986-1987) | Physics  (X-ray Crystallography) | 1987 | | I | School of Physics, Madurai Kamaraj University, Madurai-21 | |
| M.Sc. (1984-1986) | Physics | 1986 | | I | Dept. of Physics,  The Madura College, Madurai-11 | |
| B.Sc. (1981-1984)  (2 Majors) | Physics  Chemistry | 1984  1984 | | I  I | Dept. of Physics,  The Madura College, Madurai-11 | |

**Teaching Experience**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No.** | **Institution** | **Position** | **Duration** | | **Total years of service** |
| **From** | **To** |
| 1 | Dept. of Physics,  The Madura College,  Madurai-11 | Lecturer | 19/06/2000 | 18/06/2004 | 4 |
| 2 | Research Centre & PG Dept. of Physics,  The Madura College,  Madurai-11 | Asst. Prof. (S.S.) | 19/06/2004 | 18/06/2009 | 5 |
| 3 | Research Centre & PG Dept. of Physics,  The Madura College,  Madurai-11 | Asst. Prof. (S.G.) | 19/06/2009 | 18/06/2012 | 3 |
| 4 | Research Centre & PG Dept. of Physics,  The Madura College,  Madurai-11 | Associate Professor | 19/06/2012 | May, 2015 | - |
| 5 | Research Centre & PG Dept. of Physics,  The Madura College,  Madurai-11 | Associate Professor & Head | June, 2015 | ~ April, 2022 | - |
| 6 | Research Centre & PG Dept. of Physics,  The Madura College,  Madurai-11 | Associate Professor | 2022 | Till date |  |

**Employment details:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name of the Institution where employed** | **Date of joining** | **Date of leaving** | **Designation** | **Nature of work** |
| Institute of Materials Research **(IMR)**, Tohoku University, Sendai, Japan | 01/01/1998 | 31/03/1998 | Research  Associate | Research |
| Centre for Interdisciplinary Research **(CIR)**, Tohoku University, Sendai, Japan | 01/04/1998 | 31/03/1999 | Lecturer | Research |
| Centre for Interdisciplinary Research **(CIR)**, Tohoku University, Sendai, Japan | 01/04/1999 | 31/03/2000 | Visiting Researcher | Research |
| The Madura College, Madurai-11 | 19/06/2000 | 18/06/2004 | Lecturer | Teaching |
| The Madura College, Madurai-11 | 19/06/2004 | 18/06/2009 | Lecturer (S.S.) | Teaching |
| The Madura College, Madurai-11 | 19/06/2009 | 18/06/2012 | Lecturer (S.G.) | Teaching |
| The Madura College, Madurai-11 | 19/06/2012 | Till date | Associate Prof. | Teaching |

**Experience in extension service :**

1. Dr. R. Saravanan is one of the reviewers in some Journals

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| --- | --- | --- | --- |
| Title of the Journal | ISSN No. | International/  National/State | Impact factor/ h-index |
| [**Materials Letters (Elsevier)**](https://www.journals.elsevier.com/materials-letters/) | ISSN: 0167-577X | International | 2.437/99 |
| [**Physics and Chemistry of Solids (Elsevier)**](https://www.journals.elsevier.com/journal-of-alloys-and-compounds/) | ISSN: 0022-3697 | International | 2.048/83 |
| [**Journal of Alloys and Compounds**](https://www.journals.elsevier.com/journal-of-alloys-and-compounds/) **(Elsevier)** | ISSN: 0925-8388 | International | 3.014/122 |
| [**Materials Science in Semiconductor Processing**](https://www.journals.elsevier.com/materials-science-in-semiconductor-processing) **(Elsevier)** | ISSN: 1369-8001 | International | 2.593/45 |
| [**Materials Science and Engineering B**](https://www.journals.elsevier.com/materials-science-and-engineering-b)**-Solid-State Materials for Advanced Technology (Elsevier)** | ISSN: 0921-5107 | International | 3.316/97 |
| [**Crystal Research and Technology**](https://onlinelibrary.wiley.com/journal/15214079) **(Wiley)**  **(Previously)**  **(Online)** | ISSN: 0232-1300  ISSN: 1521-4079 | International | 1.0/57 |
| [**Solid State Communication**](https://www.journals.elsevier.com/solid-state-communications) **(Elsevier)** | ISSN: 0038-1098 | International | 1.549/116 |
| [**Scientific Reports**](https://www.nature.com/srep/) **- Nature Publishing Group** | ISSN:2045-2322 | International | 5.47/122 |
| [**Intermetallics**](https://www.journals.elsevier.com/intermetallics) **(Elsevier)** | ISSN: 0966-9795 | International | 3.42/94 |
| **Review records available at** <https://publons.com/a/935117> | | | |

He has written many DOS as well as window based software (GUI) programs highly useful to the students, researchers in the fields of Crystallography, Materials Science and Engineering. Softwares developed

**Software Programs Written By Dr. R. Saravanan**

**DOWNLOAD SOFTWARE**

[Software Programs](https://secureservercdn.net/160.153.138.71/p1f.39e.myftpupload.com/wp-content/uploads/2021/03/Softwares_RSN.zip)

[DATA For Processing](https://secureservercdn.net/160.153.138.71/p1f.39e.myftpupload.com/wp-content/uploads/2021/03/DATA-for-processing.zip)

[Manual](https://secureservercdn.net/160.153.138.71/p1f.39e.myftpupload.com/wp-content/uploads/2021/03/Manual.zip)

Many Softwares Including GUI Programs Have Been Written By The PI In Visual FORTRAN And Accepted In The Sincris Software Data Base Of The IUCr (International Union Of Crystallography, [Www.Iucr.Org](http://www.iucr.org/)). These Programs Are Highly Useful To The Beginners As Well As Experienced Researchers In The Fields Of Crystallography And Materials Science. The Details Of The Software Programs Have Been Given As Follows.

**Computer Programs Developed By Dr. R. Saravanan For Research Purposes (Available At The Sincris Software Data Base Of The International Union Of Crystallography**[**Www.Iucr.Org**](http://www.iucr.org/)**).**

All These Executables Have Been Developed Using Fortran77 And Visual Fortran Compilers By Dr. R. Saravanan - (IUCr ID: IUCr3611) [Http://Www.Iucr.Org/Iucr-Top/Wdc/](http://www.iucr.org/iucr-top/wdc/). **GUI Versions Of Many Of These Programs Are Also Available.**Most Of These Programs Are Available At The SINCRIS Software Database Of The IUCr (International Union Of Crystallography) In Their Website ([Http://Www.Iucr.Org/](http://www.iucr.org/)).

**Program 1**[**(Sfac331)**](https://secureservercdn.net/160.153.138.71/p1f.39e.myftpupload.com/wp-content/uploads/2018/02/SFAC334.zip)**(GUI Available)** - For The Generation And Calculation Of The X-Ray Structure Factors And The Real And Imaginary Parts Of The Structure Factors Of Any Crystalline System.

IUCr Reference; [Https://Www.Iucr.Org/Resources/Other-Directories/Software/Sfac331](https://www.iucr.org/resources/other-directories/software/sfac331)

**Program 2**[**(Asf88)**](https://secureservercdn.net/160.153.138.71/p1f.39e.myftpupload.com/wp-content/uploads/2018/02/ASF88.zip)**(GUI Available)** - For The Generation And Calculation Of The X-Ray Structure Factors And The Real And Imaginary Parts Of The Structure Factors Of Any Crystalline System.

IUCr Reference; [Https://Www.Iucr.Org/Resources/Other-Directories/Software/Asf89](https://www.iucr.org/resources/other-directories/software/asf89)

**Program 3**[**(Sara11)**](https://secureservercdn.net/160.153.138.71/p1f.39e.myftpupload.com/wp-content/uploads/2018/02/SARAAA.zip)- Program For The Refinement Of Various Parameters Of III-V And II-VI Semiconductors (ZnS And Elemental (Diamond) Semiconductors. To Refine Parameters In The Harmonic, Anharmonic And Charge Transfer Approximations. Refines Individual Thermal, Scale, Extinction Parameters And The Charge Transfer From One Atom To The Other In ZnS Type Structures. Calculates The Real And Imaginary Phase Parts FA And FB Of The Structure Factors. Includes Bijvoet Differences In The Analysis. Averages The Bijvoet Equivalent Reflections, Etc., Etc.

IUCr Reference; [Https://Www.Iucr.Org/Resources/Other-Directories/Software/Sara12](https://www.iucr.org/resources/other-directories/software/sara12)

**Program 4**[**(Caf2\_ha)**](https://secureservercdn.net/160.153.138.71/p1f.39e.myftpupload.com/wp-content/uploads/2018/03/CAF2_HA.zip)- For CaF2 Structures Program To Refine Parameters In The Harmonic Approximation. Refines Individual Thermal, Scale, Extinction Parameters In CaF2 Type Structures.

IUCr Reference; [Https://Www.Iucr.Org/Resources/Other-Directories/Software/Caf2\_ha4](https://www.iucr.org/resources/other-directories/software/caf2_ha4)

**Program 5**[**(Caf2\_an)**](https://secureservercdn.net/160.153.138.71/p1f.39e.myftpupload.com/wp-content/uploads/2018/03/CAF2_AN.zip)- For CaF2 Structures Program To Refine Parameters In The Anharmonic Approximation. Refines Individual Thermal, Scale, Extinction Parameters In CaF2 Type Structures.

IUCr Reference; [Https://Www.Iucr.Org/Resources/Other-Directories/Software/Caf2\_an](https://www.iucr.org/resources/other-directories/software/caf2_an)

**Program 6**[**(Nacl)**](https://secureservercdn.net/160.153.138.71/p1f.39e.myftpupload.com/wp-content/uploads/2018/02/KCl.zip)- For NaCl Structures Program To Refine Parameters In The Harmonic Approximation. Refines Individual Thermal, Scale, Extinction Parameters In NaCl Type Structures.

IUCr Reference; [Https://Www.Iucr.Org/Resources/Other-Directories/Software/Nacl](https://www.iucr.org/resources/other-directories/software/nacl)

**Program 7**[**(Dremablp)**](https://secureservercdn.net/160.153.138.71/p1f.39e.myftpupload.com/wp-content/uploads/2018/02/DremAbLp.zip)**(GUI Available)** - For The Data Reduction. Single Crystal Data Reduction Program. Corrects Lp, And Absorption. Applicable To Any System. To Single Crystal Spheres. Converts The Uncorrected Structure Factors Into Lp And Absorption Corrected Structure Factors.

IUCr Reference;  [Https://Www.Iucr.Org/Resources/Other-Directories/Software/Dremablp2](https://www.iucr.org/resources/other-directories/software/dremablp2)

**Program 8**[**(Scat771)**](https://secureservercdn.net/160.153.138.71/p1f.39e.myftpupload.com/wp-content/uploads/2018/02/SCAT771.zip)**(GUI Available)** If You Have A Set Of H K L Values And Powder Intensities, You Would Like To Apply Lp And Multiplicity Corrections For Any Point Group, And Convert The Intensity Data Into Corresponding Structure Factors. You May Want To Calculate The Structure Factors For The Supplied Set Of H K L Values. You May Want To Correct The Structure Factors For Anomalous Dispersion Effects For 10 Different Wavelengths. You May Want To Calculate The Real And Imaginary Parts Of The Structure Factors. You May Want To Calculate The Sin(Theta)/Lambda Values And The Atomic Scattering Factors Of All The Atoms That You Specify In Your Structure. You Can Do All These Tasks With This Program. Any Number Atoms (From 212 Different Kinds Of Atoms/Ions) Can Be Handled In Your Structures. The Program Can Be Wisely Used For Multiple Tasks. There Are Options To Suppress The Application Of Multiplicity Correction And Absorption Correction Individually Or In Combination. Also, Simulation Of Structure Factors For A Given Set Of H K L Values Can Be Done. No Need To Supply Analytical Coefficients, Dispersion Corrections – All Data Are Pre-Connected. Atom Names And Some Preliminary Info Enough.

IUCr Reference; [Https://Www.Iucr.Org/Resources/Other-Directories/Software/Scatt771win](https://www.iucr.org/resources/other-directories/software/scatt771win)

**Program 9**[**(Cubindex)**](https://secureservercdn.net/160.153.138.71/p1f.39e.myftpupload.com/wp-content/uploads/2018/02/Cubeindex.zip)

Applicable To Cubic Systems Only (!). Many Indexing Programs For A General Crystallographic System Are Freely Available Nowadays. Many Of Them Do The Indexation Only. This Program (At Present Only For Cubic Systems), Does Many Useful Additional Tasks. It Does The Following; Indexes Cubic Reflections. Finds The D Values If Not Given. Finds The Cell Constant. Fits It To A Straight Line (No Graph) Using Nelson-Riley Function. Gives Least-Squares Results Of N-R Analysis. Applies Multiplicity And Polarization Corrections To Observed Powder Intensities. Converts Them Into Structure Factors. Calculates Atomic Scattering Factors Of Each Element In The System. Calculates The Corresponding Structure Factors. Calculates The Real And Imaginary Parts Of The Structure Factor Of Each Reflection. Does A Wilson-Plot Analysis Using Fobs And Fcal. Gives The Least Squares Results Of Wilson Plot. Efficient Use Can Result In Several Information Of Your System. IUCr Refere nce; [Https://Www.Iucr.Org/Resources/Other-Directories/Software/Cubindex2](https://www.iucr.org/resources/other-directories/software/cubindex2)

**Program 10**[**(Datared)**](https://secureservercdn.net/160.153.138.71/p1f.39e.myftpupload.com/wp-content/uploads/2018/03/DATARED.zip)(GUI Available) - Similar To The Program Dremablp (Program 7). If The Input Is In The Form Of - Left Background Intensity - Peak Intensity - Right Background Intensity, You Can Use This Program For The Data Reduction. Single Crystal Data Reduction Program. Corrects Lp, Absorption And Background Intensities. Applicable To Any System. To Single Crystal Spheres. Converts The Uncorrected Structure Factors Into Lp, Absorption And Background Corrected Structure Factors.

IUCr Reference; [Https://Www.Iucr.Org/Resources/Other-Directories/Software/Datared2](https://www.iucr.org/resources/other-directories/software/datared2)

**Program 11**[**(Reduce)**](https://secureservercdn.net/160.153.138.71/p1f.39e.myftpupload.com/wp-content/uploads/2018/03/Reducewin.zip)(GUI Available) Program Reduce - (Similar To The Program Datared (Program 10). If The Input Is In CAD-4 Format, U Can Use This Program. Single Crystal Data Reduction Program. Corrects Lp, Absorption And Background Intensities. Applicable To Any System. To Single Crystal Spheres. Converts The Uncorrected Structure Factors Into Lp, Absorption And Background Corrected Structure Factors. These Programs Can Be Downloaded And Used Without Any Charges And Warranties. If You Use Any Of These Programs, Just Give Me A Mail (**Saragow@Gmail.Com)** Informing Me Which Program You Are Using.

IUCr Reference; [Https://Www.Iucr.Org/Resources/Other-Directories/Software/Reduce2](https://www.iucr.org/resources/other-directories/software/reduce2)

**Other GUI (Windows Based) Software Programs Written By Dr. R. Saravanan Are;**

[Asf88win](https://www.iucr.org/resources/other-directories/software/asf88win)    [(Other Info)](https://secureservercdn.net/160.153.138.71/p1f.39e.myftpupload.com/wp-content/uploads/2018/02/ASF88.zip)

IUCr Reference;  [Https://Www.Iucr.Org/Resources/Other-Directories/Software/Asf88win](https://www.iucr.org/resources/other-directories/software/asf88win)

[Dataredwin](https://secureservercdn.net/160.153.138.71/p1f.39e.myftpupload.com/wp-content/uploads/2018/03/DATARED.zip)

IUCr Reference; [Https://Www.Iucr.Org/Resources/Other-Directories/Software/Dataredwin](https://www.iucr.org/resources/other-directories/software/dataredwin)

[Dremablpwin](https://secureservercdn.net/160.153.138.71/p1f.39e.myftpupload.com/wp-content/uploads/2018/02/DremAbLp.zip)

IUCr Reference; [Https://Www.Iucr.Org/Resources/Other-Directories/Software/Dremablpwin](https://www.iucr.org/resources/other-directories/software/dremablpwin)

[Reducewin](https://secureservercdn.net/160.153.138.71/p1f.39e.myftpupload.com/wp-content/uploads/2018/03/Reducewin.zip)

IUCr Reference [Https://Www.Iucr.Org/Resources/Other-Directories/Software/Reducewin](https://www.iucr.org/resources/other-directories/software/reducewin)

[Scat771win](https://secureservercdn.net/160.153.138.71/p1f.39e.myftpupload.com/wp-content/uploads/2018/02/SCAT771.zip)

IUCr Reference; [Https://Www.Iucr.Org/Resources/Other-Directories/Software/Scatt771win](https://www.iucr.org/resources/other-directories/software/scatt771win)

[Sfac331win](https://secureservercdn.net/160.153.138.71/p1f.39e.myftpupload.com/wp-content/uploads/2018/03/SFAC331_win.zip)

IUCr Reference;  [Https://Www.Iucr.Org/Resources/Other-Directories/Software/Sfac331](https://www.iucr.org/resources/other-directories/software/sfac331)

[Sfac332](https://secureservercdn.net/160.153.138.71/p1f.39e.myftpupload.com/wp-content/uploads/2018/03/SFAC332.zip)

IUCr Reference; [Https://Www.Iucr.Org/Resources/Other-Directories/Software/Sfac332](https://www.iucr.org/resources/other-directories/software/sfac332)

[Sfac333](https://secureservercdn.net/160.153.138.71/p1f.39e.myftpupload.com/wp-content/uploads/2018/03/SFAC333.zip)

IUCr Reference; [Https://Www.Iucr.Org/Resources/Other-Directories/Software/Sfac333](https://www.iucr.org/resources/other-directories/software/sfac333)

[Sfac334](https://secureservercdn.net/160.153.138.71/p1f.39e.myftpupload.com/wp-content/uploads/2018/02/SFAC334.zip)

IUCr Reference; [Https://Www.Iucr.Org/Resources/Other-Directories/Software/Sfac335](https://www.iucr.org/resources/other-directories/software/sfac335)

[*Grain*](https://secureservercdn.net/160.153.138.71/p1f.39e.myftpupload.com/wp-content/uploads/2018/02/Grain.zip)

IUCr Reference; [*Https://Www.Iucr.Org/Resources/Other-Directories/Software/Grain*](https://www.iucr.org/resources/other-directories/software/grain)

[Pri1d\_3\_win](https://secureservercdn.net/160.153.138.71/p1f.39e.myftpupload.com/wp-content/uploads/2018/03/pri1d_3_WIN.zip)

[FCC](https://secureservercdn.net/160.153.138.71/p1f.39e.myftpupload.com/wp-content/uploads/2018/02/FCC.zip)

IUCr Reference; [Https://Www.Iucr.Org/Resources/Other-Directories/Software/Fcc](https://www.iucr.org/resources/other-directories/software/fcc)

[BCC](https://secureservercdn.net/160.153.138.71/p1f.39e.myftpupload.com/wp-content/uploads/2018/03/BCC.zip) [(Similar To FCC)](https://secureservercdn.net/160.153.138.71/p1f.39e.myftpupload.com/wp-content/uploads/2018/03/KCl.zip)

IUCr Reference; [Https://Www.Iucr.Org/Resources/Other-Directories/Software/Bcc](https://www.iucr.org/resources/other-directories/software/bcc)

[KCl](https://secureservercdn.net/160.153.138.71/p1f.39e.myftpupload.com/wp-content/uploads/2018/03/KCl.zip) ([(Similar To NaCl)](https://secureservercdn.net/160.153.138.71/p1f.39e.myftpupload.com/wp-content/uploads/2018/03/KCl.zip)

IUCr Reference; [Https://Www.Iucr.Org/Resources/Other-Directories/Software/Kcl](https://www.iucr.org/resources/other-directories/software/kcl)

[Diamond](https://secureservercdn.net/160.153.138.71/p1f.39e.myftpupload.com/wp-content/uploads/2018/03/Diamond.zip) (For Diamond Structures)

IUCr Reference; [Https://Www.Iucr.Org/Resources/Other-Directories/Software/Diamond2](https://www.iucr.org/resources/other-directories/software/diamond2)

He Has Contributed To The Teaching Community By Delivering A Software Program For The Consolidation And Maintenance Of The Marks Obtained By The Students Of A Class In Various Assessment Components Like, Written Test, Seminar, Assignment, Quiz. A Highly Useful Window Based Software For Teachers.

[*CMTM7*](https://secureservercdn.net/160.153.138.71/p1f.39e.myftpupload.com/wp-content/uploads/2018/03/CMTM7.zip)  (CMTM7 Is An Educational Software – Program For Consolidating Marks Obtained By The Students In A Class  In Various Assessment Components).

[UV-Vis](https://secureservercdn.net/160.153.138.71/p1f.39e.myftpupload.com/wp-content/uploads/2018/02/UVVIS_Band-gap.zip) (Band Gap Of Materials From Absorption Data Using Tauc Plot)

Source Files (Written In Visual Fortran Code) For Most Of The Softwares Are Available [Here](https://secureservercdn.net/160.153.138.71/p1f.39e.myftpupload.com/wp-content/uploads/2018/03/Source-files_Visual-Fortran.zip).

Manual  (Write Up) Is Available For Most Of The Programs [Here](https://secureservercdn.net/160.153.138.71/p1f.39e.myftpupload.com/wp-content/uploads/2018/03/Manual.zip).

**Courses attended:**

**a) Refresher: 2**

1. UGC-Academic Staff College, Bharathiar University, Coimbatore–641046 (from 06/09/2006 to 26/09/2006)

2. UGC-Academic Staff College, Madurai Kamaraj University, Madurai–625021, (from 15/11/2007 to 05/12/2007)

**b) Orientation:**

1. UGC-Academic Staff College, Bharathiar University, Coimbatore–641046 (from 01/06/2002 to 28/06/2002)

**Membership in Professional Bodies:**

1. Life Member – Indian Association of Physics teachers (IAPT)
2. Member WDC (World Directory of Crystallographers) of International Union of Crystallography (ID: IUCr 3611, website: [wdc.iucr.org](http://www.iucr.org))

**Academic and Research committee membership**

|  |  |  |  |
| --- | --- | --- | --- |
| **No.** | **Institute** | **Nature of academic duty** | **Year** |
| **1** | Dept. of Physics, Kalasalingam University, Krishnankovil | Member, Interview Committee, Selection of Research Scholars | 08/07/2008 |
| **2** | Dept of Physics, Jeyaraj Annapackiam College, Periyakulum | Member, Board of Studies. | 06/03/2008 |
| **3** | Dept. of Physics, Kalasalingam University, Krishnankovil | Member, Interview Committee, Staff Selection | 02/01/2007 |
| **4** | Dept. of Physics, Kalasalingam University, Krishnankovil | Member, Interview Committee, Selection of Research Scholars | 03/08/2007 |
| **5** | Dept of Physics, Jeyaraj Annapackiam College, Periyakulum | Member, Board of Studies. | 03/032007 |
| **6** | Dept. of Physics, SFR College for Women, Sivakasi | Member, Board of Studies. | 10/05/2007 to 09/05/2009 |
| **7** | Dept. of Physics, NMSSVN College, Madurai | Member, Board of Studies. | 15/06/2007 to 14/06/2009 |
| **8** | Dept. of Physics, Saraswathi Narayanan College, Madurai | Member, Board of Studies. | 20/06/2007 to 19/06/2009 |
| **9** | Dept. of Physics, Yadava College, Madurai | Member, Peer Group Team (NAAC) | 12/03/2003 |
| **10** | Dept. of Physics, Yadava College, Madurai | Member, Peer Group Team (NAAC) | 15/10/2003 |
| **11** | Board of Studies, Dept. of Physics, Thiagarajar College, Madurai | Member, Board of Studies. |  |
| **12** | Dept. of Physics, Yadava Womens College, Madurai | Member, Board of Studies. |  |

**Invited Talks:**

The applicant has motivated the young students and researchers for higher learning and advanced research by delivering lectures at various Institutions. The invited lectures given by him have been given as

**Invited Talks**.

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Institute** | **Title Of The Lecture** | **Type** |
| **29/01/2015** | Sri Meenakshi Govt. Arts College For Women (A), Madurai-2 | Materials And Their Characterization | Invited Talk - In PG Association Meeting |
| **13/03/2009** | [Dept. Of Physics, Thiagarajar College, Madurai – 625 009](http://www.tcarts.in/) | Smarter Materials | Key Note Address At The State Level Inter Collegiate Student Seminar On Physics Of Smart Materials |
| **27/09/2007** | [J. College Of Arts And Science, Pudukkottai- 622 404](http://www.collegesintamilnadu.com/Arts_Science/J.J_arts.htm) | Materials And Technological  Developments | Special Invited Lecture |
| **26/03/2007** | [Dept. Of Physics, HKRH College, Uthamapalayam - 625 533](http://www.collegesintamilnadu.com/) | X-Ray Characterization Of Crystalline Systems | Special Keynote Address |
| **22/03/2007** | [Dept. Of Physics, APA College Of Arts And Culture, Palani – 624 601](http://palani.org/college/) | Materials And Their Characterization | Special Lecture(Intercollegiate Seminar On Current Trends In Physics) |
| **21/02/2007** | [Dept. Of Physics, SN College, Perungudi Madurai – 625 022](http://wikimapia.org/210281/) | Materials And Their Characteristics | Keynote Address (Einstein’s Day Cum Intercollegiate Meet) |
| **12/02/2007** | [Dept. Of Physics, Yadava College (Men), Tiruppalai , Madurai – 625 014](http://www.yadavacollege.com/) | Avenues In Physics Research | Inaugural Address (State Level Intercollegiate Meet YEARN 2007) |
| **24/08/2006** | [Dept. Of Physics, SVN College, Madurai – 625 019](http://www.nmssvnc.org/) | Technological Materials And Their X-Ray Characterization | Invited Lecture |
| **22/02/2006** | [Dept. Of Physics, Yadava College (Men), Tiruppalai , Madurai – 625 014](http://www.yadavacollege.com/) | X-Ray Diffraction Studies On Materials | Invited Lecture (Regional Seminar On Condensed Matter Physics) |
| **08/10/2004** | Dept. Of Physics, Arul Anandar College, Karumathur – 625 514 .Madurai Dt | X-Ray Diffraction Studies On Materials | Guest Lecture |
| **24/07/2004** | [Dept. Of Physics, Devanga Arts College, Aruppukkottai – 626 101](http://www.indianetzone.com/4/aruppukkottai.htm) | X-Ray Diffraction | Guest Lecture |
| **21/03/2003** | [Dept. Of Electronics And Instrumentation Engineering, Faculty Of Engineering And Technology, Annamalai University, Annamalainagar–608 002](http://annamalaiuniversity.ac.in/genesis.htm) | Valedictory Address | Valedictory Address For The Engineers (Technical Symposium “STROBE 2K3”) |

**Title of M.Phil. dissertation and Ph.D. Thesis**

|  |  |
| --- | --- |
| **Degree** | **Subject** |
| M.Phil. | **Studies on Crystalline Perfection of Solar Silicon Ribbons** |
| Ph.D. | **Studies on the Imperfections of Real Crystals** |

**Research Experience**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No. | Year | Organization | Position | Nature of Job |
| **1** | Mar.1994-  Aug.1997 | CSIR-SRF, School of Physics,  Madurai Kamaraj University, Madurai | Research  Associate | Research &  Teaching |
| **2** | Jan.1998-  Mar.1998 | Institute of Materials Research **(IMR)**, Tohoku University, Sendai, Japan | Research  Associate | Research |
| **3** | Apr.1998-  Mar.1999 | Centre for Interdisciplinary Research **(CIR)**, Tohoku University, Sendai, Japan | Lecturer | Research |
| **4** | Nov.1999-  Mar.2000 | Centre for Interdisciplinary Research, **(CIR)**, Tohoku University, Sendai, Japan | Visiting  Researcher | Research |
| **5** | June 2000-Till date | Dept. of Physics, The Madura College, Madurai | Lecturer, Lecturer (S.S.), Lecturer (S.G.), Associate Prof., Head | Teaching and Research |

**Number of candidates supervised/under supervision for research:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Degree** | **Awarded** | **Submitted** | **Under Supervision** |
| M.Phil. | 50 | - | - |
| Ph.D. | 13 | 2 | 3 |

**Publications: Books**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No.** | **Authors/Editor** | **Title of the Book/Book chapter** | **Year** | **ISBN. No.** | **Publisher** |
| 1 | N. Hazeen  K. S. Syed Ali  M. Prema Rani  Dr. R. Saravanan  (Book chapter) | Diffusion in Metals—An Annual Retrospective - X | 2008 | ISBN-10: 3-908451-58-2  ISBN-13:978-3-908451-58-7 | Defects and Diffusion Forum  (Trans Tech Publications – (TTP) <http://www.ttp.net>/ |
| 2 | Dr. R. Saravanan  (Monograph) | Experimental Charge Density - Semiconductors, oxides and fluorides | 2010 | ISBN-13: 978-3-8383-8816-8  ISBN-10: 3-8383-8816-X | Lambert Academic Publishing (LAP) AG & Co. KG, Saarbrücken, Germany, 2010 (204 pages), <https://www.lap-publishing.com/> |
| 3 | Dr. R. Saravanan  (Monograph) | Experimental Electron Density - Dilute Magnetic Semiconducting materials | 2010 | ISBN-13: 978-3-8383-9666-8  ISBN-10: 3-8383-9666-9 | Lambert Academic Publishing (LAP) AG & Co. KG, Saarbrücken, Germany, 2010 (204 pages), <https://www.lap-publishing.com/> |
| 4 | Dr.R. Saravanan  (Editor and contributor) | Characterization of Technological materials | Vol. 671, 2011 | ISBN: 978-3-03785-012-1 | TTP, Trans Tech Pub., Stafa-Zurich, Switzerland, *http://*[*www.scientific.net*](http://www.scientific.net) |
| 5 | Dr.R. Saravanan  (Editor and contributor) | Characterization of advanced materials | Vol. 699, 2012 | ISBN: 978-3-03785-254-5 | TTP, Trans Tech Pub., Stafa-Zurich, Switzerland, *http://*[*www.scientific.net*](http://www.scientific.net) |
| 6 | R. Saravanan and  M. Prema Rani  (Monograph) | Metal and Alloy Bonding - An Experimental Analysis | 2012 | ISBN 978-1-4471-2203-6 | Springer  <http://www.springer.com/>  <http://www.springer.com/materials/special+types/book/978-1-4471-2203-6> |
| 7 | R. Saravanan  (Monograph) | Charge density and structural characterization of thermoelectric materials | 2016 | Print ISBN 978-1-945291-00-5 eBook ISBN 978-1-945291-01-2  DOI: http://dx.doi.org/10.21741/9781945291012 | MRF (Materials Research Foundations), USA  www.mrforum.com/mrfoundations/ |
| 8 | R. Saravanan  (Monograph) | **Nano Semiconducting Materials** | 2016 | Print ISBN 978-1-945291-04-3 ePDF ISBN 978-1-945291-05-0  DOI: http://dx.doi.org/10.21741/9781945291050 | MRF (Materials Research Foundations), USA  www.mrforum.com/mrfoundations/ |
| 9 | R. Saravanan  (Editor and contributor) | Novel Ceramic Materials | 2016 | Print ISBN 978-1-945291-02-9 ePDF ISBN 978-1-945291-03-6  DOI: http://dx.doi.org/10.21741/9781945291036 | MRF (Materials Research Foundations), USA  www.mrforum.com/mrfoundations/ |
| 10 | R. Saravanan  (Editor and contributor) | **Contemporary Dielectric Materials** | 2017 | Materials Research Foundations Volume 28  ISBN: Print ISBN 978-1-945291-12-8  EPDF ISBN 978-1-945291-13-5  DOI: 10.21741/9781945291135  Publisher: MRF (Materials Research Foundations), USA  Www.Mrforum.Com/Mrfoundations/  Year: 2017 | MRF (Materials Research Foundations), USA  www.mrforum.com/mrfoundations/ |
| 11 | R. Saravanan  (Monograph) | Ferrite Materials For Memory Applications | 2017 | Materials Research Foundations Volume 18  Publication Date 2017, 172 Pages  Print ISBN 978-1-945291-38-8 (Release Date November 11th, 2017)  EPDF ISBN 978-1-945291-39-5  DOI: 10.21741/9781945291395  Year: 2017 | MRF (Materials Research Foundations), USA  www.mrforum.com/mrfoundations/ |
| 12 | R. Saravanan  (Monograph) | Non-Linear Optical Materials | 2018 | Materials Research Foundations Volume 28  Publication Date 2018, 195 Pages  Print ISBN 978-1-945291-60-9 (Release Date April 1st, 2018)  EPDF ISBN 978-1-945291-61-6  DOI: 10.21741/9781945291616  Year: 2018 | MRF (Materials Research Foundations), USA  www.mrforum.com/mrfoundations/ |
| 13 | R. Saravanan  (Monograph) | Solid Oxide Fuel Cell (SOFC) Materials | 2018 | Materials Research Foundations Volume 23  Publication Date 2018, 182 Pages  Print ISBN 978-1-945291-50-0 (Release Date January 15th, 2018)  EPDF ISBN 978-1-945291-51-7  DOI: 10.21741/9781945291517  Year: 2018 | MRF (Materials Research Foundations), USA  www.mrforum.com/mrfoundations/ |
| 14 | R. Saravanan  (Monograph) | Titanate Based Ceramic Dielectric Materials | 2018 | Materials Research Foundations Volume 25  Publication Date 2018, 168 Pages  Print ISBN 978-1-945291-54-8 (Release Date February 25th, 2018)  EPDF ISBN 978-1-945291-55-5  DOI: 10.21741/9781945291555  Year: 2018 | MRF (Materials Research Foundations), USA  www.mrforum.com/mrfoundations/ |
| 15 | R. Saravanan  (Monograph) | Dilute Magnetic Semiconducting (DMS) Materials | 2018 | Materials Research Foundations Volume 35  Publication Date 2018, 206 Pages  Print ISBN  9781945291760 (Release Date August 25th, 2018)  EPDF ISBN 9781945291777  DOI: 10.21741/9781945291777  Year: 2018 | MRF (Materials Research Foundations), USA  www.mrforum.com/mrfoundations/ |
| 16 | R. Saravanan  (Monograph) | Lead-Free Piezo-Ceramic Solid Solutions | 2018 | Materials Research Foundations Vol. 41  Publication Date 2018, 176 Pages  Print ISBN [978-1-945291-94-4](https://www.mrforum.com/product/9781945291944) (Release Date November 25th, 2018)  EPDF ISBN [978-1-945291-95-1](https://www.mrforum.com/product/9781945291951)  DOI: 10.21741/9781945291951  Year: 2018 | MRF (Materials Research Foundations), USA  www.mrforum.com/mrfoundations/ |
| 17 | R. Saravanan  (Monograph)  Materials Research Forum Vol. 136  Publication Date 2022, 139 Pages  Print ISBN 978-1-64490-218-9  ePDF ISBN 978-1-64490-219-6  DOI: https://doi.org/10.21741/9781644902196  Year: **2022** | **Characterization of Ceramic-Ferrite**  **Magneto-Electric Composite** | 2022 | Materials Research Foundations Vol. 136  Publication Date 2022, 139 Pages  Print ISBN 978-1-64490-218-9  ePDF ISBN 978-1-64490-219-6  DOI: https://doi.org/10.21741/9781644902196  Year: 2022 | MRF (Materials Research Foundations), USA  www.mrforum.com/mrfoundations/ |
| 18 | R. Saravanan  (Monograph)  Materials Research Forum Vol. 140  Publication Date 2023, 194 Pages  Print ISBN 978-1-64490-226-4  ePDF ISBN 978-1-64490-227-1  https://doi.org/10.21741/9781644902271  Year: **2023** | **Multiferroic Materials** | 2023 | Materials Research Foundations Vol. 140  Publication Date 2023, 194 Pages  Print ISBN 978-1-64490-226-4  ePDF ISBN 978-1-64490-227-1  https://doi.org/10.21741/9781644902271  Year: **2023** | MRF (Materials Research Foundations), USA  www.mrforum.com/mrfoundations/ |
| 19 | R. Saravanan  (Monograph)  Materials Research Forum Vol. 139  Publication Date 2023, 116 Pages  Print ISBN 978-1-64490-224-0  ePDF ISBN 978-1-64490-225-7  https://doi.org/10.21741/9781644902257  Year: **2023** | **Transition Metal Doped**  **Spintronics Materials** | 2023 | Materials Research Foundations Vol. 139  Publication Date 2023, 116 Pages  Print ISBN 978-1-64490-224-0  ePDF ISBN 978-1-64490-225-7  https://doi.org/10.21741/9781644902257 | MRF (Materials Research Foundations), USA  www.mrforum.com/mrfoundations/ |

**Research Projects undertaken:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No** | **Title of the project** | **Amount Sanctioned** | **Agency** | **Period of the Project** | **Year of Completion** |
| 1 | Preparation, characterization and local structure of new lead free piezo ceramics | **Rs. 20,27,300** | **NRB (DRDO)**  **DNRD/05/4003/NRB/NRB-269/MAT/12-13** Dt.15/04/2013 | 3 years  June,22, 2013 – June 2016 | **June,**  **2016** |
| 2 | Oxide based dilute magnetic materials – Synthesis and local structural characterization  **Role: CI** | **Rs. 6,98,800/-** | **UGC**  **(39-497/2010**  **(SR))** | **3 years**  (Feb. 2011 – Jan. 2014) | **January, 2014** |
| 3 | Bulk growth and X-ray characterization of local structure in silicon and germanium based Dilute Magnetic semiconductors  **Role: PI** | **Rs. 9,32,000** | **CSIR**  **(03(1138)/09/EMR-II)** | **3 Years**  (Mar. 2009 – Mar. 2012) | **30/03/2012**  **Publications:6**  **International** |
| 4 | Thermal motion of core and valence electrons, charge transfer and MEM [Maximum Entropy Method] electron density distributions in technologically important semiconductors.  **Role: PI** | **Rs. 2,02,000** | **CSIR**  **(03(0949)/02/EMR–II)** | **3 Years**  ( Oct. 2001 – Nov. 2004) | **30/11/2004**  **Publications: 12**  **International: 8**  **Indian: 4** |

**DST-FIST**: Funding to the tune of **Rs. 21.6 lakhs** was obtained from DST. The interview was attended at New Delhi, by **Dr. R. Saravanan** along with the Principal, The Madura College, Madurai. The proposal for this funding was by and large prepared by the applicant.

**Papers presented in National/International seminars, Symposia, Conferences and Work Shops:**

1. X-ray Studies on the Crystalline Texture in Solar Grade Silicon Ribbons S. K. Mohanlal and ***R. Saravanan,***XIX National Seminar on Crystallography, ***Changanacheery, Kerala, December, 1987.***
2. Presented a paper in the seminar entitled “X-ray Diffraction and its Recent Trends” at the Madurai Kamaraj University, ***Madurai-21, R. Saravanan,*** ***February, 1988.***
3. Bonding Charges, Thermal Factors and Dispersion Effects in the Compound III-V Semiconductors. ***R. Saravanan***, S. K. Mohanlal and K. S. Chandrasekaran XXI National Seminar on Crystallography, ***BARC, Bombay, G21, December, 1989.***
4. Anharmonicity and Polarity effects in the X-ray Diffraction of Compound Semiconductors. K. S. Chandrasekaran, ***R. Saravanan*** and S. K. Mohanlal, National Science Congress, ***Cochin***, ***February 1990.***
5. Characterization of Epitaxic layers and Crystal Substrate by Buerger Precession technique. ***R. Saravanan***, and S. K. Mohanlal, XXII National Seminar on Crystallography, ***Calcutta, December, 1990.***
6. Anomalous Dispersion Correction Terms f” for Ga and In: An Experimental Investigation ***R. Saravanan***, and S. K. Mohanlal  XXII National Seminar on Crystallography, ***Calcutta, December, 1990.***
7. Topographic Attachment to Weissenberg Camera for Crystal Defect Studies. ***R. Saravanan*** and S. K. Mohanlal. National Symposium on Instrumentation, (NSI-16), ***Cochin, November, 1991***
8. Experimental determination of f” for indium by X-ray diffraction ***R. Saravanan***, and S. K. Mohanlal Proc. Sol.State.Phy.Sym. (DAE), (India), ***Vol.33c, 382, (1991)***
9. Effective Charge Transfer in GaAs and InSb: An Experimental Investigation. ***R.Saravanan,*** S. K. Mohanlal and K. S. Chandrasekaran, XXIII National Seminar on Crystallography, ***Jaipur, March, 1992.***
10. Quasi-forbidden Reflections of GaP and InP: Measurement and analysis. ***R.Saravanan***, S. K. Mohanlal and K. S. Chandrasekaran XXIII National Seminar on Crystallography, ***Jaipur, March, 1992.***
11. Defect Characterization of HgxK1-xCl and HgxNa1-xCl XXVI, S. K. Mohanlal, ***R. Saravanan*** and M. Sekar National Seminar on Crystallography, ***Mysore, January, 1995.***
12. Temperature Dependence of Thermal Vibration and Thermal Expansion in Aluminium. J. Jeyakanthan, ***R. Saravanan***, S. K. Mohanlal and S. Natarajan, XXVI National Seminar on Crystallography, ***Mysore, January, 1995.***
13. Effect of Temperature on the Thermal Vibrations in Silicon, S. K. Mohanlal, ***R. Saravanan***, and J. Jeyakanthan, XXVI National Seminar on Crystallography, ***Mysore, January, 1995.***
14. Debye-Waller Factors in NaxC60, S. Israel, ***R. Saravanan***, N. Srinivasan and S. K. Mohanlal, XXVI National Seminar on Crystallography, ***Mysore, January, 1995.***
15. Core-Valence Splitting of Thermal Vibrations in Germanium: Temperature Dependence. ***R. Saravanan***, S. K. Mohanlal and J. Jeyakanthan, XXVI National Seminar on Crystallography, ***Mysore, January, 1995.***
16. Participated and presented a paper in the **7th International ISSP (Institute of Solid State Physics) International Symposium,** ***R. Saravanan,******Tokyo, Japan, Nov.24-27, 1998.***
17. MEM Electron Density Distribution of GaAs And CdTe at RT and 200 K. ***R. Saravanan*** I National Conference on Recent Advances in Materials Science, DRDO & BRNS, ***Tiruchy , 2000.***
18. Participated and presented a pare in the IVth Meeting of the **Asian Crystallographic Association**, ***R. Saravanan,******Bangalore, 2001.***
19. H+ Implantation Effects On Lo Phonon-Plasmon Coupled Modes In N-Gaas – Raman Study P. Murugan, R. Kesavamoorthy, S. Amirthapandian, ***R.Saravanan***, K. Ramachandran and N.Krishnamoorthy. Proc. 44th SSP Symposium (DAE), ***44, 285-286, Bombay, 2001.***
20. Thermal Conductivity of GaP by Photoacoustics and Simulation. M. Prema Rani, ***R. Saravanan*** and K. Ramachandran II National Conference on Recent Advances in Materials Science – NCMS-2002, ***CSIR & DRDO, Tiruchy, Dec. 11-12, P28, p149-15, 2002.***
21. Bonding in vanadium Metal ***R. Saravanan***, S. Israel, N. Srinivasan, B. Nagarajan, H. Shameem Banu and G. Chanthini Begum, II National Conference on Recent Advances in Materials Science – NCMS-2002, CSIR & DRDO, ***Tiruchy, Dec. 11-12, 2002.***
22. Entropy Maximization Applied to the Electron Density in Sodium Metal, ***R. Saravanan***, S. Israel, N. Srinivasan, H. Shameem Banu, B. Nagarajan and G. Chanthini Begum, II National Conference on Recent Advances in Materials Science – NCMS-2002, CSIR & DRDO, ***Tiruchy, Dec. 11-12, 2002.***
23. Attended the Seminar on “Computer Simulation in Physics” (SCSP – 2002) at the School of Physics, Madurai Kamaraj University, ***Madurai***–21, ***R.Saravanan***, ***February, 2002.***
24. Resolution of MEM (Maximum Entropy Method) Electron Density Maps: Case Study on KCl, ***R. Saravanan***, N. Srinivasan, S. Israel and R. K. Rajaram Proc. 45th SSP Symposium (DAE), 45, ***Chandighar,*** ***2002***.
25. MEM Bonding in NaCl at 78°K, 200°K and Room Temperature N. Srinivasan, R. Saravanan, S. Israel and R. K. Rajaram Proc. 45th SSP Symposium (DAE), 45, ***Chandighar, 2002.***
26. Photoacoustic measurements in Sn1-xGexTe M. Sivabharathy, N. Sankar, ***R. Saravanan***, and K. Ramachandran Proc. 45th SSP Symposium (DAE), 45, **Chandighar**, ***2002.***
27. An Investigation on the Bonding In SrCl2 At 300k And 80K, N. Srinivasan, S. Israel and R. Saravanan, National Seminar on Crystallography, Oct, 24-26, ***Jammu***, E-6, ***2002.***
28. Oxygen Binding in BaO, CaO, MgO and SrO, ***R. Saravanan***, S. Israel and N. Srinivasan, National Seminar on Crystallography, Oct, 24-26, ***Jammu***, E-3, ***2002.***
29. Charge Density Distribution Mapping of Copper, Chromium, Iron and Aluminium by Maximum Entropy Method (MEM). S. Israel, ***R. Saravanan***, N. Srinivasan and R.K. Rajaram, National Seminar on Crystallography, Oct, 24-26, ***Jammu***, E-1, ***2002***.
30. MEM Charge Distribution in MnHg R. Kalidoss, S. Swaminathan, M. Muruganantham and ***R. Saravanan,*** National Seminar on Crystallography, ***Jammu,*** ***2002.***
31. The Structure and Electron Density Distribution of FeSi S. Swaminathan, R. Kalidoss, M. Muruganantham and ***R. Saravanan,*** National Seminar on Crystallography, Oct, 24-26, ***Jammu***, D-7, ***2002.***
32. Growth and X-Ray Characterization of Carbonates of Barium, Strontium and Calcium in Gel Medium N. Ajeetha, K.S. Syed Ali, ***R. Saravanan***, National Seminar on Crystallography, Oct, 24-26, ***Jammu***, I-26, ***2002***.
33. X-Ray Characterization of Gel Grown Ferro Electric Single Crystals of SrHPO4 And PbHPO4 K.S. Syed Ali, N. Ajeetha, ***R. Saravanan,*** National Seminar on Crystallography, Oct, 24-26, ***Jammu,*** I-1, ***2002.***
34. Graphical Analysis of Charge Transfer in GaAs And CdTe at Different Temperatures, P. Manimaran, K. Balamurugan, S. Mariyappan, K. Asharamani, ***R. Saravanan and*** N. Srinivasan, National Seminar on Crystallography, Oct, 24-26, ***Jammu***, D-6, ***2002.***
35. Charge Transfer in Compound Semiconductors at Different Temperatures, K. Asharamani, K. Balamurugan, P. Manimaran, S. Mariyappan, ***R. Saravanan*** and N. Srinivasan, National Seminar on Crystallography, Oct, 24-26, ***Jammu***, D-1, ***2002.***
36. Anomalous Dispersion Corrections of Telluride in II-VI Compound Semiconductors at Different Temperatures, D. Arthi, G. Rajasudha , K. VimalaDevi, S. Prasanna Subramanian, ***R. Saravanan*** and N. Srinivasan, National Seminar on Crystallography, Oct, 24-26, ***Jammu***, E-4, ***2002.***
37. Computational Analysis of X-Ray Intensities and Refinement of Anamolous Dispersion Corrections For GaAs At 170K, 200K, 250K, 300K S. Prasanna Subramanian, D. Arthi, G. Rajasudha , K. Vimala Devi, ***R. Saravanan*** and N. Srinivasan, National Seminar on Crystallography, Oct, 24-26, ***Jammu***, A-5, ***2002.***
38. Local Structure GaAs and Ge using pair distribution function. K.S. Syed Ali and ***R. Saravanan***, National Conference on Current Trends in Condensed Matter Research, September 20-22, Abstract No. 11. ***Warangal***, Pp16, ***2004.***
39. Electronic Structure of ZnTe at RT, 200 K, 100 K. S. Israel and R. Saravanan National Conference on Current Trends in Condensed Matter Research, September 20-22, Abstract No. 10. ***Warangal***, Pp15, ***2004.***
40. Bonding in fluorite compound CaF2 usnin MEM. ***R. Saravanan*** and S. Israel, National Conference *on* Current Trends in Condensed Matter Research, September 20-22, ***Warangal***, Pp15, ***2004***.
41. Imaging of Electron Density Distributions of SrCl2 by Maximum Entropy Method. N. Srinivasan, S. Israel and ***R. Saravanan***, National Seminar on Crystallography, Novemeber, NCL, ***Pune.*** Abtract No. 120AB, ***2004***.
42. Study of Electronic Charge Densities by MEM for NaCl at RT, 200 K and 78 K. N. Srinivasan, A. Aarthy, A. Anitha, P. Nagapushpavalli, S. Israel and ***R. Saravanan,*** National Seminar on Crystallography, Novemeber, 2004, NCL, ***Pune***. Abtract No. 120A, ***2004***.

**Awards and Fellowships obtained**

|  |
| --- |
| 1. Awarded [Senior Research Fellowship](http://www.csir.res.in/) by CSIR New Delhi, during Mar.1991- Feb.1993 - Availed  2. Awarded [Research Associateship](http://www.csir.res.in/) by CSIR New Delhi, during Mar. 1994 – Aug. 1997 (In CSIR research Project)- Availed  3. Invited by [**Georg-August-Universität Göttingen (Germany)**](http://www.uni-goettingen.de/)to work as a guest scientist in the Mineralogisch-Kristallographisches Institut during 1995 -1997– Not availed by the candidate  4. Awarded [Research Associateship](http://www.csir.res.in/) by CSIR , New Delhi, during Oct.1997-Apr.1998 – Availed on Leave  5. Awarded [**the Matsumae International Foundation**](http://www.mars.dti.ne.jp/~mif) **Fellowship -1998** (Japan) for doing research at a Japanese Research Institute – Not availed by the candidate.  6. Awarded **a** [**Research fellowship at the Institute of Materials Research, Tohoku University, Sendai, Japan**](http://www.imr.tohoku.ac.jp/eng)  January 1998 – March 1998 – Availed  7. Awarded a Lecturership position at the [**Centre for Interdisciplinary Research, Tohoku University**](http://www.cir.tohoku.ac.jp/e)**, Sendai, Japan** – April 1998 – March 1999 – Availed  8. Awarded a Lecturership position (as visiting Scientist) at the[**Centre for Interdisciplinary Research, Tohoku University, Sendai, Japan**](http://www.cir.tohoku.ac.jp/e)  November 1999 – March 2000 – Availed |

**Ph.D. Completed**

[Currently Doing](http://phymat.in/currently-doing/)

[Thesis Submitted](http://phymat.in/thesis-submitted/)

[Completed](http://phymat.in/ph-d-completed-theses/)

**15.**

**(Dr.) T. AKILAN, M.Sc., M.Phil.**

(Now working at Abu Thabi, UAE)  
**Project Fellow-UGC Major Research Project**  
**PG and Research Department of Physics**  
**Thiagarajar College of Arts and science**  
**Teppakulam, Madurai-625 009**  
**Mobile: 94898 65653**  
**Email: akilan28@gmail.com**

**Dr.N.Srinivasan (Supervisor)**

**PG and Research Department of Physics**

**Thiagarajar College of Arts and science**

**Teppakulam, Madurai-625 009**

Ph.D. Topic:

**SYNTHESIS AND LOCAL STRUCTURAL CHARACTERIZATION OF OXIDE BASED DILUTE MAGNETIC MATERIALS**

**Date of Registration :  03/10/2011**

**Registration no. : F8754**

**Date of Submission of Thesis: 23/12/2022**

**Date of viva voce examination :**

14.

Dr. S. V. Meenakshi, Assistant Professor  
Department of Physics, Sri Meenakshi Govt. Arts College for Women (Autonomous)  
Madurai 625 002,  
Mobile: 90801 49901,  
Email: svmeenu74@yahoo.in

Ph.D. topic:

Synthesis and structural, dielectric, magnetic characterization of ceramic-ferrite magneto-electric composites

Date of Registration : 21/11/2014

Registration no. : P3734

Date of Submission of Thesis : 23/02/2022

Date of viva voce examination : 15/02/2024

**Degree Awarded**

13.

Name: Dr. G. Gowri, M.Sc., M.Phil., Ph.D.

Assistant Professor, Research Centre and PG Department of Physics,

The Madura College, Madurai- 625 011

Mobile: 99445 68916,  Email: gowrikanna01@gmail.com

Ph.D. topic: Synthesis, characterization and charge density of multiferroic materials

Date of Registration : 19/12/2015

Registration no. : P4287

Journal Publications: International: 5; National: Nil

Conference/Seminar : 5

Status:  Viva-Voce Examination Completed On 09/01/2023

Date of Colloquium Presentation : 13/05/2021

Date of Thesis submission : 01/07/2021

Date of viva voce examination : 09/01/2023

12.

Name: Dr. S. Sasikumar, M.Sc., M.Phil., Ph.D.

NRB-DRDO Project-Project Fellow, Research Scholar, Dept. Of Physics, The Madura College, Madurai – 625 011, TN, India

Title Of The Ph.D.:  Synthesis And Characterization Of BaTiO3 Based Lead Free Piezoelectric Materials

Registration No.: F9436, Dt. (24/11/14)(MKU)

Journal Publications: International: 5; National: Nil

Conference/Seminar : 5

Status:  Viva-Voce Examination Completed On 14/12/2018

11.

Name: Dr. R.A.J.R.Sheeba, M.Sc., M.Phil., Ph.D.

SRF-CSIR Project, Research Scholar, Dept. Of Physics, The Madura College, Madurai – 625 011, TN, India

Title Of The Ph.D.:  Characterization Of Si And Ge Based DMS Materials

Registration No.: F8372, Dt. 09/04/2010 (MKU)

Journal Publications: International: 5; National: Nil

Conference/Seminar : 3

Status: Viva-Voce Examination Completed On 11/12/2018

10.

Name:  Dr. Y. B. Kannan, M.Sc., M.Phil., Ph.D.

Assistant Prof., Dept. Of Physics, Arumugam Pillai Seethai Ammal College, Tiruppattur – 630 211, Sivagangai Dt.

(As Co-Guide) Title Of The Ph.D.:  Synthesis And Characterization Of Ferrite Materials

Registration No.: P9315, Dt. 12/03/2011 (MKU)

Journal Publications: International: 7; National: Nil

Conference/Seminar : 3

Status:  Ph.D. Degree Applied. (Viva-Voce Comleted On 28/09/2018).

9.

Name: Dr. J. Mangaiyarkkarasi, M.Sc., M.Phil., Ph.D.

Associate Prof., Dept. Of Physics, NMSS Vellaichamy Nadar College, Nagamalai, Madurai – 625019, (FDP Scholar – 2015-17)

Title Of The Ph.D.:  Preparation And Structural Characterization Of  Dielectrics And Ceramic Materials

Registration No.: P8545, Dt. 18/09/2009 (MKU)

Journal Publications: International: 7; National: Nil

Conference/Seminar : 3

Status: Degree Applied. (Viva Voce Completed On 06/07/2018)

8.

Name: Dr. N. Thenmozhi, M.Sc., M.Phil., Ph.D.

Associate Prof., Dept. Of Physics, NMSS Vellaichamy Nadar College, Nagamalai, Madurai – 625019, (FDP Scholar – 2015-17)

Title Of The Ph.D.:  Growth, Physical And X-Ray Characterization Of Manganite Structures

Registration No.: P8479; Dt. 16/07/2009 (MKU)

Journal Publications: International: 8; National: Nil

Conference/Seminar : 3

Status: Degree Applied (Viva Voce Completed On 13/04/2018)

7.

Name: Dr. T.K.Thirumalaisamy, M.Sc., M.Phil., Ph.D.

Associate Prof., Dept. Of Physics, H.K.R.H. College, Uthamapalayam - 625 533, TN, India

Title Of The Ph.D.:  XRD Characterization Of Non Linear Optical Materials

Registration No.: P8419, Dt. 4/6/2009, MKU

Journal Publications: International: 8; National: -

Conference/Seminar : 3

Status: Degree Applied (Viva Voce Completed On 10/04/2018)

6.

Name: Dr. S. Saravanakumar, M.Sc., M.Phil., Ph.D.

Asst. Prof., Dept. Of Physics, Kalasalingam University, Krishnan Kovil, Srivilli Putthur, TN, India

Title Of The Ph.D.:  Synthesis And Characterization Of Nano Semiconductors

Registration No.: P9292, Dt. 28/02/2011, MKU

Journal Publications: International: 10; National: 1

Conference/Seminar : 5

Status: Degree Awarded (Viva Voce 27/08/2015)

5.

Name: Dr. S. Francis, M.Sc., M.Phil., Ph.D.

Dept. Of Physics, Yadava College, Madurai – 625016, TN, India

Title Of The Ph.D.: Growth, Crystallographic, Structural, Physical, Magnetic Characterization Of Oxide Based Dilute Magnetic Semiconductors (DMS)

Registration No.: 3530, Dt. 28/12/2005 (MKU)

Journal Publications: International: 5; National: Nil

Conference/Seminar : 3

Status: Degree Awarded (Viva Voce  04/08/2014)

4.

Name: Dr. Charles Robert, M.Sc., M.Phil., Ph.D.

Associate Prof., Dept. Of Physics, HKRH College, Uthamapalayam – 625533,TN,India

Title Of The Ph.D.: Structural And Physical Characterization Of Thermoelectric Materials

Registration No.: 3521, Dt. 15/12/2005 (MKU)

Journal Publications: International: 5 National: 1

Conference/Seminar : 2

Status: Degree Awarded (Viva Voce  08/08/2014)

3.

Name: Dr. M. Prema Rani, M.Sc., M.Phil., Ph.D.

Associate Prof., Dept. Of Physics, The Madura College, Madurai – 625011, TN, India (FDP Scholar – 2010-12)

Title Of The Ph.D.: Analysis Of Average And Local Structure And Characterization Of Important Metals And Semiconductor Materials Using Single Crystal And Powder X-Ray Diffraction

Registration No.: 3416; Dt.05/04/2005 (MKU)

Journal Publications: International: 5; National: 1

Conference/Seminar : Nil

Status: Degree Awarded (Viva Voce  05/03/2012)

2.

Name: Dr. K. S. Syed Ali, M.Sc., M.Phil., Ph.D.

(Now At USA)

Title Of The Ph.D.: Growth, Structural And Electronic  Characterization Of Some Diluted Magnetic Materials

Registration No.: 3464; Dt.19/08/2005 (MKU)

Journal Publications: International: 5 National: 3

Conference/Seminar : Nil

Status: Degree Awarded (Viva Voce  23/06/2011)

1.

Name: Dr. S. Israel, M.Sc., M.Phil., Ph.D.

Lecturer (S.G.), M.Sc., M.Phil., Ph.D., Dept. Of Physics, American College, Madurai – 625002, TN, India

Title Of The Ph.D.: X-Ray Studies Of The Electronic Properties Of Some Technologically Important Semiconducting Systems

Registration No.: 0635 Dt. 03/10/2001 (MKU)

Journal Publications: International: 12; National: 1

Conference/Seminar : Nil

Status: Degree Awarded (Viva Voce  11/07/2007)

**M.Phil Guidance by Dr. R. Saravanan**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Name | Title of the Dissertation | College/  University | Year |
| **1** | Mr.S. S. Saravanakumar | Structural Refinement, Thermal Vibration and Electron Density Distribution of ZnTe using X-ray Data | Manonmanium Sundaranar University (MSU) | Aug.   2003 |
| **2** | Mr.T. Vivekanandan | Structure and Electronic Properties of III-V Compound Semiconductor GaP | Manonmanium      Sundaranar University (MSU) | Sep. 2003 |
| **3** | Mr.A. Mujiber Rahman | Structure and MEM (Maximum Entropy Method) Electron Density Distribution of the Fluorite Type Compound CaF2 using Single crystal X - ray Data | Bharathidasan University (BU) | Nov. 2003 |
| **4** | Mr.S. Francis | X – Ray Powder Data Analysis of Sulfides: SrS, PuS, PbS, CaS, BaS, MnS and HgS | Bharathidasan University (BU) | Dec. 2003 |
| **5** | Mrs. B. Revathi | X – Ray Anomalous Dispersion Studies in CdTe at 200 K and 300 K | Manonmanium Sundaranar University (MSU) | Sep. 2003 |
| **6** | Ms. K. Vijayalakshmi | Structure of Metal Alloys Nial and CoAl | Manonmanium Sundaranar University (MSU) | Sep. 2003 |
| **7** | Ms. J. Gayathri | Electronic Charge Distribution in Metals | Manonmanium Sundaranar University (MSU) | Feb. 2004 |
| **8** | Mr. K. S. Syed Ali | Average and Local Structure of Gallium Arsenide and Germanium: X – ray Data Analysis using Rietveld Structural Refinement and Pair Distribution Function | Bharathidasan University (BU) | Nov. 2004 |
| **9** | Ms. R. Ramya | Effect of Atomic Displacement on the Structural Properties of Copper: Powder X – ray Data Analysis | Bharathidasan University (BU) | Dec. 2004 |
| **10** | Mr. F. Winfred Shashikanth | Experimental Analysis on the Anomalous Dispersion Effects and Charge Transfer in InSb using Single Crystal X – ray Data | Bharathidasan University (BU) | Jan.  2005 |
| **11** | Mr. N. Sheenkumar | Structure  of NH4Cl and ND4I in terms of Physical Parameters, Thermal Vibrations and Electron Density Distribution | Bharathidasan University (BU) | Feb. 2005 |
| **12** | Mrs. A. Jeyagowri | X-ray Powder Data Analysis of the Structure of LiF, NaF and LiCl using Rietveld Refinement | Bharathidasan University (BU) | Aug. 2005 |
| **13** | Ms. V. Ramya | . Powder X-ray Study of Calcite and Dolomite and the ‘Derived’ Structure of Magnesite | Manonmanium Sundaranar University (MSU) | Nov. 2005 |
| **14** | Mr. A. Antony Michael Regan | Structural Studies of KH2PO4 and NH4H2PO4 using Powder X-ray Data Analysis: Models With and Without Hydrogen Atoms | Bharathidasan University (BU) | Dec. 2005 |
| **15** | Mr. B. Prakash | Core and Valence Thermal Vibrations in Cr, Na and V | Manonmanium Sundaranar University (MSU) | Dec. 2005 |
| **16** | Ms. J. Sambhavi | Structural Comparison of the Three Grades of Silicon using X- ray Powder Data | Manonmanium Sundaranar University (MSU) | Nov. 2005 |
| **17** | Mrs. N. Kavitha | Structure and Electron Density Distribution of Ba(NO3)2 and Sr(NO3)2 – using Rietveld Refinement | Manonmanium Sundaranar University (MSU) | Nov. 2005 |
| **18** | Mr. A. Ajmal Bhasha | Rietveld Structural Analysis of PbO and Fe5Sm using Powder X-ray Data | Bharathidasan University (BU) | Dec. 2005 |
| **19** | Mr. S. Baranitharan | Growth and Structural Characterization of Bi, Sb and Bi0.8Sb0.2 using Powder X - ray Data | Bharathidasan University (BU) | Dec. 2005 |
| **20** | Mrs. S. Vijayalakshmi | Analysis of Phase Transition in Ag0.05Na0.95Cl | Bharathidasan University (BU) | Dec. 2005 |
| **21** | Mr. K. Karthikeyan | Structural and Bonding Characterization of Boron Compounds BAs, BP, BN and BPu using Maximum Entropy Method (MEM) | Manonmanium Sundaranar University (MSU) | Jan.  2006 |
| **22** | Mr. A. M. Moorthy | Structural Characterization and Bonding in Fe0.67Ni0.33, Fe and Mg using Rietveld Refinement of Powder X-ray Data | Bharathidasan University (BU) | Apr.  2006 |
| **23** | Mr. M. Ramachandran | Pair Distribution analysis of Al, Ni and Fe using X-ray Data | Manonmanium Sundaranar University (MSU) | Oct.  2006 |
| **24** | Mr. M. Mohammed Hussain | Growth and Characterization of Dilute magnetic Semiconductors Ge1-xMnx (x=0.03, 0.05, 0.07) | Madurai Kamaraj University (MKU) | Apr. 2008 |
| **25** | Mr. K.Saravanakumar | Characterization of thermoelectric metal elements | Madurai Kamaraj University (MKU) | Dec. 2007 |
| **26** | Mr. S. Sampath Kumar | MEM analysis of Charge Distribution in Simple Metals Al, Cu and Zn using X—Ray Data | Madurai Kamaraj University (MKU) | Apr. 2008 |
| **27** | K. C. Anil | Electron Density and Local Structure in CsCl, CsBr and CsI | Manonmanium Sundaranar University (MSU) | July  2008 |
| **28** | Ms. S. Kanmani Chitra | Structural Analysis of Shape Memory Metals Ni and Ti | Madurai Kamaraj University (MKU) | May 2008 |
| **29** | Mrs. K. Selvarani | Structure, Electron Density and Charge Transfer in Zinc Selenide and Zinc Sulfide using Powder X—Ray Data | Bharathidasan University (BU) | Apr. 2008 |
| **30** | Mrs.C. Usha Rani | Structure of LiF using Single Crystal XRD and MEM (Maximum Entropy Method) | Bharathidasan University (BU) | Apr. 2008 |
| **31** | Mr. P. Saravanakumar | Structural Analysis of Semiconducting Systems CdSe and CdS by MEM (Maximum Entropy Method) using X– Ray Data | Bharathidasan University (BU) | Apr. 2008 |
| **32** | Mr. J. Antony Dasan | Defect Structural Analysis using Powder X– Ray Data and Electron Density of KCl with Cd++ impurity | Bharathidasan University (BU) | Apr. 2008 |
| **33** | M. Esra | Structural Analysis of ZnS by Maximum Entropy Method (MEM) | Alagappa University (AU) | Nov. 2008 |
| **34** | Mr. S. Jegan | Accurate determination of Fractional Atomic Coordinates of  atoms in       Y2O3 and Cr2O3 | Madurai Kamaraj University (MKU) | June 2009 |
| **35** | Mr. M. Kumarasamy | Electronic structure analysis of ZnO by MEM method | Alagappa University (AU) | January 2009 |
| **36** | Mr. N. Ramajayanthan | Powder XRD Characterization of In, Sn and their mechanical mixture | Dept. of Physics, The Madura College,   Madurai Kamaraj University (MKU) | June 2009 |
| **37** | Ms. B. Subha | Single crystal analysis of the structure of the thermoelectric materials InSb and PbTe | Dept. of Physics, The Madura College,   Madurai Kamaraj University (MKU) | June 2009 |
| **38** | K.J. Lakshmisri                2009 MLP 01 | Structural and Physical Characterization of Cr, Ti and V doped  Al2O3  powders | Dept. of Physics, The Madura College,   Madurai Kamaraj University (MKU) | 2009-10 |
| **39** | S.Lavanya                         2009 MLP 02 | Local structure of nano powders of Al2O3, Gd2O3 and Sm2O3 | Dept. of Physics, The Madura College,   Madurai Kamaraj University (MKU) | 2009-10 |
| **40** | S. Suganya Devi  2009 MLP07 | Single crystal analysis of the fluorite compounds BaF2, CaF2, and MgF2 | Dept. of Physics, The Madura College,   Madurai Kamaraj University (MKU) | 2009-10 |
| **41** | Ms. M. Jeyapriya | Nano particle growth and characterization of SnO2 and Sb-doped SnO2 | Dept. of Physics, The Madura College,   Madurai Kamaraj University (MKU) | March 2010 |
| **42** | Mr. S. Santhosh Kumar Jacob | Synthesis and characterization of nano semiconducting materials | Dept. of Physics, The Madura College,   Madurai Kamaraj University (MKU) | May 2011 |
| **43** | Ms. M. Ambika | X-ray studies on lead sulphide and gadolinium oxide (PbS and Gd2O3) | Dept. of Physics, The Madura College,   Madurai Kamaraj University (MKU) | May 2011 |
| **44** | Ms. A. Mythili | Preparation and characterization of Co and Mn double doped Zn1-2xCoxMnxO | Dept. of Physics, The Madura College,   Madurai Kamaraj University (MKU) | May 2012 |
| **45** | Ms. V. Devika | Characterization of Sr doped BaTiO3 (Ba1-xSrxTiO3) | Dept. of Physics, The Madura College,   Madurai Kamaraj University (MKU) | May 2013 |
| **46** | Mr.S.Sasikumar | Synthesis and characterization of multi ferroic compound Ga2-xFexO3 | Dept. of Physics, The Madura College,   Madurai Kamaraj University (MKU) | May 2013 |
| **47** | Mr. M. Balasubramani | Synthesis, Characterization and charge density analysis on lead free piezo electric ceramics Na1-xKxNbO3 | Dept. of Physics, The Madura College,   Madurai Kamaraj University (MKU) | May 2014 |
| **48** | Mr.E.Asokan | Synthesis and characterization of lead free piezo ceramics  (1-x)Na1-yKyNb1-zSbzO3-xBaTiO3 | Dept. of Physics, The Madura College,   Madurai Kamaraj University (MKU) | June 2015 |
| **49** | Mr.O.V. Saravanan | Electronic structure and bonding interaction in Ba1-xSrxZr0.1Ti0.9O3 ceramics | Dept. of Physics, The Madura College,   Madurai Kamaraj University (MKU) | May  2017 |
| **50** | Mr.S.Sonai | Electronic structure and chemical bonding in La1-xSrxMnO3 perovskite ceramics | Dept. of Physics, The Madura College,   Madurai Kamaraj University (MKU) | May  2017 |

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| **M.Sc. Guidance by Dr. R. Saravanan** | | | |
| No. | Name | Title of the report | Year |
| **31** | Mr. T. Jayapandi (2017PGP005)  Ms. S. Manimegalai (2017PGP011) &  Ms. S. Meenadevi (2017PGP013) | Structural, Optical Microstructural properties of lead free Piezoceramics (1-x)SrTiO3+ xNa0.5Bi0.5TiO3 | May 2019 |
| **30** | Ms. B. Saranya Devi (2016PGP012) &  Ms. K. Nithya (2016PGP019) | Synthesis and characterization of multi ferroic material on xNiFe2O4+(1-x)BaTiO3 | May 2018 |
| **29** | Ms. S. Umamaheswari (2015PGP26) &  Ms. V. Nivethini (2015PGP27) | Synthesis and characterization of lead-free piezoceramic (1-x)Ba(Zr0.2Ti0.8)O3 x(Ba0.7Ca0.3)TiO3 , x=0.4,0.5,0.6 | May 2017 |
| **28** | Mr. O.V. Saravanan  (2014PGP58) &  Mr. S. Sonai (2014PGP63) | Synthesis and Structural Characterizations of Na1-xKxNb0.95Sb0.05O3 | May 2016 |
| **27** | Ms. M.J. Viswanth (2014PGP018) &  Ms. M. Ayshia siddika (2014PGP002) | Synthesis and characterization of multiferroic material on (x)MgFe2O4+(1-x)BaTiO3 | May 2016 |
| **26** | MS. K. Dhivya (2013PGP002) &  Ms. B. Sathiyakala (2013PGP020) | Synthesis and characterization of Zr doped BaTiO3 (BaTi1-xZrxO3) ceramics | May 2015 |
| **25** | Mr. P. Alagupandi (2012PGP01),  Ms. G. Meenakshi (2012PGP13) &  Ms. G. Anipriyadevi (2012PGP25) | Synthesis and charge density analysis of BaTiO3 | May 2014 |
| **24** | Ms. T. Uma (2012PGP062),  Ms. S. Saranya (2012PGP073) &  Ms. C. Yazhini (2012PGP074) | Synthesis and characterization of multiferroic compound Ga2-xFexO3 | May 2014 |
| **23** | Ms. P. Suganya (2013PGP016 &  Ms. B. Vidya (2013PGP19) | Characterization of spin coated ZnO thin film | May 2013 |
| **22** | Ms. M. Balasubramani (2011PGP03) &  Mr. P. Rajiv Gandhi (2011PGP20) | Oxidation characterization of Magnesium and Zinc powders | June 2013 |
| **21** | Ms. B. Dhanalakshmi (2010PGP05) &  Mr. M. Murali (2010PGP11) | Characterization of Sm2O3 sintered at different temperatures | May 2012 |
| **20** | Mr. M. Subakaran (2009PGP14),  Ms. P. Devishree (2009PGP18) &  Ms. C. Saraswathi (2009PGP23) | Gel growth of single crystals PbI2 | May 2011 |
| **19** | Ms. P. Sathya Priya (2008 PGP 23) &  Ms. C. Suganya Gandhi (2008 PGP 24) | High Temperature Crystal Growth of Mixed Systems Ba1-xSrx(No3)2 | May 2010 |
| **18** | Ms. A. Lakshmi (2007 PGP 04)  Ms. S. Lavanya  (2007 PGP 05) &  Mr. K. Muniyandi (2007 PGP 11) | Preparation and powder XRD analysis of the nano powders of ZnS | May 2009 |
| **17** | Mr. M. Muthu Pandi (2006PGP04) &  Mr. M. Umamaheshwaran (2006PGP13) | Local Structure of Zn1-xMnxO (x=0.01 and x=0.04) using X-ray Data | May 2008 |
| **16** | Ms. M. Asha (2005PGP02)  Ms. A. Sharanyah Dhevi (2005PGP15) &  Ms. V. Sorna Meena (2005PGP17) | Analysis of Powder samples of Ba(NO3)2 and Sr(NO3)2 using XRD | May 2007 |
| **15** | Mr. S. Sampath Kumar (2004 PGP 06),  Ms. R. Aishwarya (2004 PGP 09) &  Mr. B. Karthikeyan (2004 PGP 01) | Crystal Growth and Characterization of KCl1-xBrx | May 2006 |
| **14** | Mr. V.S. Manoharan  Mr.V. Senthil Murugan &  Mr.G. Sivakumar | Structural Characterization of Metals Aluminium and Iron using Powder X-ray Intensities | May 2005 |
| **13** | Ms.R. Amutha Priya(2003 PGP02)  Ms.V. Parvatha Varthini 2003 PGP13) &  Ms.G. Shyamala Devi( 2003 PGP20) | Structural Analysis of Ionic Systems NaCl, KCl and KBr using X-ray Powder Data | May 2005 |
|  |  |  |  |
| **12** | Ms.I. Annal Sheeba (A2603751) &  Ms.A. Indumathy (A2603754) | Crystal Growth of SrSO4 and BaSO4 by Gel Method | April 2004 |
|  |  |  |  |
| **11** | Mr. S. Baranitharan  Mr. A. M. Moorhy  Mr. S. Senthil Krishnan &  Mr. J. Thirukumaran | Rietveld Structural Analysis of Powder Data of HgSe, PbSe, SrSe and ZnSe | May 2004 |
| **10** | Ms.R. Arathi  Ms.G Deepa &  Ms.S. Vijayalakshmi | Crystal Growth and Atomic Vibrations of Strontium and Barium Nitrate | May 2004 |
| **9** | Ms.R. Deepa  Ms.V. Revathy &  Ms.M. Revathy | X- ray Studies on InAs and PbTe and Crystal Growth Studies using Slow Evaporation Method and Gel Technique | May  2004 |
| **8** | Mr. K. Ramesh Kumar (2001PGP02)  Mr. V. Balamurugan (2001PGP01) &  Mr. J. R. Senthil MohanRam (2001PGP17) | Bonding in  Inert Gases - Neon, Argon, Krypton and Xenon | May 2003 |
| **7** | Ms.H. Shameem Banu,  Mr. B. Nagarajan &  Mrs. G. Chanthini Begum | Bonding in Sodium and Vanadium: Core and valence Electrons | June 2003 |
| **6** | Ms.N. Ajeetha (A0601250) | Crystal Growth and X-ray Characterization of Carbonates of Barium, Strontium and Calcium | June 2002 |
| **5** | Ms.J. Louri Vanitha Kalavathi (A0601254) &  Ms.R. Meribah Sugantha Kala (A0601255) | Atomic Vibrations and Electron Distribution in the Fluorite Structures CaF2 and SrCl2 | April  2002 |
| **4** | Mr. K. S. Syed Ali  (A0601271) | Growth and X-ray Characterization of Ferroelectric Single Crystals of SrHPO4 and PbHPO4 | June 2002 |
| **3** | Ms.S. Jeya Meena (2000 PGP 06)  Ms.G. Nithiya Kalyani (2000 PGP 07) &  Ms.R. Ramya (2000 PGP 10) | Crystal Growth and Atomic Vibrations of  NaCl  and  KCl | May 2002 |
| **2** | Mr.M. Muruganantham (2000 PGP 03)  Mr. R.Kalidoss (2000 PGP 22) &  Mr. S. Swaminathan (2000 PGP 23) | Structural Characterization of MnHg and FeSi Using X-ray Data | June 2002 |
| **1** | Ms.G. Soundaralakshmi (99 PGP 11) & Ms.K.V.R. Sridevi (99 PGP 12) | X-ray Characterization of Elemental Semiconductors Silicon and Germanium | April 2001 |

[**Research Publications**](https://scholar.google.co.in/citations?user=https://scholar.google.com/citations?hl=en&user=aI0FrcYAAAAJ)

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| **No.** | **Names** | **Title of Article** | **Journal** | **Volume, Page, Year** |
| **Publications – 2020-2023** | | | | |
| **154.**  **Characterization of Ceramic-Ferrite Magneto-Electric Composites**  **R. Saravanan**  [**Materials Research Foundations**](https://www.mrforum.com/mrfoundations/)**, USA, Vol. 136,(2023)**  Publication Date 2023, 138 Pages  Print ISBN [978-1-64490-218-9](https://www.mrforum.com/product/9781644902189)  ePDF ISBN [978-1-64490-219-6](https://www.mrforum.com/product/9781644902196)  <https://doi.org/10.21741/9781644902196>  153.  **Transition Metal Doped Spintronics Materials**  **R.Saravanan,**  **Materials Research Foundations, USA, Volume 139,(2023)**  Publication Date 2023, 116 Pages  ISSN 2471-8890 (Print), ISSN 2471-8904 (Online)  Print ISBN 978-1-64490-224-0:  ePDF ISBN 978-1-64490-225-7  <https://doi.org/10.21741/9781644902257>  152.  **Multiferroic Materials**  **R. Saravanan**  ***Materials Research Foundations, USA, Vol. 140,(2023)***  Publication Date 2023, 194 Pages  Print ISBN 978-1-64490-226-4  ePDF ISBN 978-1-64490-227-1  <https://doi.org/10.21741/9781644902271>  152.  **Effect of Ca2+ doping on the electronic charge density**  **and magnetic properties of ZnFe2O4 spinel ferrites**  M. Thavarani, M. Charles Robert, N. Pavithra, **R. Saravanan**, Y. B. Kannan, and  S. Balaji Prasath  ***Journal of Materials Science:Materials in Electronics,* Springer, I.F.: 4.220**  DOI: https://doi.org/10.1007/s10854-021-07605-8  **151.**  **Influence of Zn2+ doping on CaFe2O4 spinel ferrites: An analysis of experimental**  **charge density and magnetism**  M.Charles Robert1, M.Thavarani, N.Pavithra, S.Balaji Prasath, **R.Saravanan**,  Y.B.Kannan,  ***Journal of Superconductivity and Novel Magnetism* -** **I.F.: 1.506**  DOI: https://doi.org/10.1007/s10948-022-06176-x  **150.**  **Local structure and electron density distribution analysis of tin(II)**  **sulfide using pair distribution function and maximum entropy method**  Muthaian Charles Robert, Nagaraj Pavithra, **Ramachandran Saravanan**  and Subramanian Saravanakumar  **Z. Naturforsch - I.F.: 0.88**  https://doi.org/10.1515/zna-2022-0017  March 17, 2022  **149.**  **Room Temperature Magnetism and Experimental Electron Density**  **Analysis of Co2+ Doped ZnFe2O4 Spinel Nanoferrites**  M Thavarani, MC Robert, SB Prasath, N Pavithra, **R Saravanan**  **Journal of Electronic Materials,** 1-14, 17/03/2022  https://doi.org/10.1007/s11664-022-09553-3  **148.**  Correction to: [Charge Density Analysis, Structural, Electrical And Magnetic Studies Of](https://phymat.in/wp-content/uploads/2021/04/svmeenakshi.jpg" \t "_blank)  [(1-X)BaTiO3+NiFe2O4 Ceramic Composite](https://phymat.in/wp-content/uploads/2021/04/svmeenakshi.jpg" \t "_blank)  S.V. Meenakshi, **R. Saravanan,** N.Srinivasan, O.V. Saravanan, D.Dhayanithi, Nambi  Venkatesan Giridharan  [Journal of Electronic Materials (Springer US)***,***](https://www.springer.com/journal/11664) Vol. 50, Issue 1, 400-401, (**2021**).  (DOI: 10.1007/S11664-020-08481-4)(**2021**)  **(Impact Factor = 1.774)**  **147.**  Investigation On Interatomic Chemical Bonding And Charge-Related Optical, Multiferroic  Properties Of La1−XZnxFeO3 Bulk Ceramics.  G.Gowri, **R.Saravanan**, N.Srinivasan, O.V.Saravanan, S.Sonai  [*Materials Chemistry And Physics (Elsevier)*](https://www.journals.elsevier.com/Materials-Chemistry-And-Physics/), 267, 124652 (**2021**)  (https://doi.org/10.1016/j.matchemphys.2021.124652) (**2021**)  **(Impact Factor = 3.408)**  **146.**  Probing the effects of Al dopant over the structure and charge-related optical, magnetic,  and electrical properties of Al3+-doped LaFeO3 bulk multiferroic materials  G.Gowri, **R.Saravanan**, N.Srinivasan, K.Karunya, P.Jeyasheela, M.Uthra  [***Chemical******Papers***](https://www.springer.com/journal/11696) (Springer), 75(8), 4337–4353(**2021**)  <https://doi.org/10.1007/s11696-021-01672-1> (**2021**)  **(Impact Factor = 1.680)**  **145**.  [Exploration of (1 - x) BaTiO3 + x ZnFe2O4 magneto-electric ceramic composite on](https://secureservercdn.net/160.153.138.71/p1f.39e.myftpupload.com/wp-content/uploads/2021/08/SVM.jpg?time=1629517242" \t "_blank)  [charge density: Structure and its characterization](https://secureservercdn.net/160.153.138.71/p1f.39e.myftpupload.com/wp-content/uploads/2021/08/SVM.jpg?time=1629517242" \t "_blank)  S.V. Meenakshi, **R. Saravanan**, N. Srinivasan, D. Dhayanithi, N.V.Giridharan  [**Journal of Alloys and Compounds**](https://www.journals.elsevier.com/journal-of-alloys-and-compounds) (Elsevier), 888, 161491 (**2021**)  **(Impact Factor= 5.316**) | | | | |
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