

CURRICULUM VITAE

J RANJITH RAJASEKAR
ASSISTANT PROFESSOR
DEPARTMENT OF PHYSICS
ST.JOSEPH'S COLLEGE
TIRUCHIRAPALLI
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Areas of Research Interest:

Thin films solar cell devices, Nanomaterial synthesis and characterization, Arduino projects

Personal:

- Name: J.Ranjith Rajasekar
- Date of Birth: June 10, 1987
- Nationality: Indian
- Sex: Male
- Marital Status: Single

Education:

- PhD(pursuing) in Government arts college(Autonomous),Kumbakonam from Jan 2015
- M.Phil. Physics from St.Joseph's college(Autonomous), Tiruchirapalli.
- M.sc. Physics from St.Joseph's college(Autonomous), Tiruchirapalli
- B.Sc. Physics from St.Joseph's college(Autonomous), Tiruchirapalli.

Employment Record:

- Assistant Professor: St.Joseph's college(Autonomous) from June 2012 onwards :
Department of Physics.
- Teacher: Campion Anglo-Indian higher secondary school from June 2011 to May 2012 :
Department of Physics and Mathematics.

Administrative Experience:

- Faculty In-Charge for I UG students from June 2018 to till date.
- Faculty In-Charge for Allied computer Science students from June 2012 to May 2013
- Faculty In-Charge for Allied Mathematics students from June 2013 to May 2014
- Faculty In-Charge for Allied computer Science students from June 2014 to May 2015
- Faculty In-Charge for Allied Electronics students from June 2015 to May 2016
- Faculty In-Charge for Allied Computer science students from June 2016 to May 2018
- Member of departmental curriculum redesign committee for M.Sc Physics and B.Sc Physics
- Assistant Director for [New Hostel](#) from June 2012 to May 2015
- Member of [Campus ministry](#) from June 2012 till date

Publications:

Journal Publications:

- Ranjith Rajasekar J , Ramachandra Raja C and Senthil Kumar .,(2017) , Synthesis of CZTS solar cell absorber material by chemical spray pyrolysis technique, International journal of Research, vol.4, pp. 11.
- Ranjith Rajasekar J , Sathya seelan G and Senthil Kumar .,(2017) „Preparation and characterization of spray coated pure and copper doped tin oxide thin films ‘ , International journal of scientific research and technology, vol.3, pp. 11.

Conference Publications:

- Ranjith Rajasekar J , Sathya seelan G and Senthil Kumar .,(2017) „Preparation and characterization of spray coated pure and copper doped tin oxide thin films ‘ , International journal of scientific research and technology, vol.3, pp. 11.

Courses Taught:

- Statistical mechanics
- Classical mechanics
- Spectroscopy and lasers
- Methods of Spectroscopy and lasers
- Microprocessor and Microcontroller
- Digital photography
- Modern photography
- Nanoscience and Nanotechnology
- C Programming for Physics
- Digital Electronics and microprocessor
- Mechanics and properties of matter
- Sound, Thermal and Statistical physics

- Communication systems
- Allied Physics for chemistry and maths-I & II
- Allied Physics for electronics-I & II
- Allied Applied physics for Computer Science- I & II
- Allied Physics practicals for all allied courses
- UG Practical For I,II and III year
- PG Practical For I and II year

Students:

M.S c Project Guided:

- S.Jackulin Roopa, "Preparation and characterization of Indium doped tin oxide thin films by spray pyrolysis technique"
- S.Lingeshwari, "Preparation and characterization of Copper doped tin oxide thin films by spray pyrolysis technique"
- M.Kulandairaj, Preparation and characterization of Zinc oxide thin films by spray pyrolysis technique
- Arun,"Preparation and characterization of Aluminium doped tin oxide thin films by spin coating technique"
- Mary Sungantha, "Preparation and characterization of tin oxide thin films by sol gel spin coating technique"
- Antoniammal, "Comparitive study of titanium oxide thin film and powder prepared by sol gel spin coating technique"
- Surya., "Preparation and characterization of Fluorine doped titanium oxide thin films "
- Sathya, "Preparation and characterization of Copper doped tin oxide thin films by spray pyrolysis technique"
- Soja, "Preparation and characterization of pure and zinc doped tin oxide thin films by spray pyrolysis technique"
- Karthicka, "Preparation and characterization of Copper doped tin oxide thin films by spray pyrolysis technique"
- Jeganath," Preparation and characterization of CZTS thin films by spray pyrolysis technique.
- Johny Abraham D'soza, "Electrical and optical properties of CZTS thin films by spray pyrolysis technique"
- Ethaic Robin, "Preparation and characterization of spray coated CZTS thin films"
- Sathyaseelan, "Determination of structural and oprtical characteristics of CZTS thinfilms"

Professional Contribution:

- Member of [Programme committee](#), INDEP-2013
- Member of [Registration committee](#), INDEP from 2014 to 2019
- Team manager for Sports in department level for annual sports meet from 2014 to 2018
- Team manager for INDEP in department level for INDEP from 2014 to 2015 and 2017 to 2018
- Team manager for Christmas Celebrations in department level from 2015 till date
- Team manager for Pongal Celebrations in department level in the year 2018 and 2019
- Member of [PWD Committee](#) from June 2017 to May 2018
- Member, Executive Committee, International Conference on Advanced materials (ICAM-2017)

Membership of Board of Studies:

- Member of Board of Studies (BOS), Faculty of Department of Physics, St. Joseph's College (Autonomous)-Tiruchirapalli, Tamil nadu.

Workshops:

Workshops Attended:

- Indo-us workshop on Nanosonics and Ultrasonics (IUWONU-2011) & International conference on nanoscience & ultrasound (ICNU-2011), Dec-01, 2011.
- Workshop on total solar eclipse-2009 sponsored by TNSCST, Chennai & NCSTC, New Delhi and Department of Physics, National College (Autonomous), Tiruchirapalli, Aug-31, 2009.
- National workshop on application of radiation and radio isotopes, Department of Physics, St. Joseph's College (Autonomous) & IANCUS, IGCAR, Kalpakkam (INUP), Feb-15, 2008.
- Workshop on Advanced Physics Experiments for College Teachers, Department of Physics, St. Joseph's College (Autonomous), Tiruchirapalli, Dec-18, 2015.

Conferences:

Conference Attended:

- National conference on advanced materials (NCAM-2014), School of Physical Sciences, St. Joseph's College (Autonomous), Feb-24, 2014
- National conference on advanced materials (NCAM-2015), School of Physical Sciences, St. Joseph's College (Autonomous), Feb-06, 2015
- National conference on advanced materials (NCAM-2016), School of Physical Sciences, St. Joseph's College (Autonomous), Oct-07, 2016
- International conference on advanced materials (ICAM-2017), School of Physical Sciences, St. Joseph's College (Autonomous), Dec-14, 2017
- India-UK Second International conference on advanced nanomaterials for energy, environment and healthcare Applications (ANEH-2019), PG & Research Department of Physics, Bishop Heber College & Swansea University, United Kingdom, Feb-4 to 6, 2019