

**Name** : Dr.S.PAUL MARY DEBORRAH  
**Designation** : Associate Professor  
**Department** : Physics  
**Date of Joining** : 01.10.1993  
**Phone No** : 0452 – 2530070 Ext: 369  
**Email** : spmdeborrah@gmail.com



**Educational Qualification:**

Degree	Subject	College / University & Place	Year Completed
M.Sc.	Physics	Madura College ,Madurai	1986
Ph.D	Physics	School of Energy Science M.K.University, Madurai	1993

**Specialisation in Teaching:**

- Spectroscopy
- Nuclear Physics
- Energy Physics
- Optics

**Specialisation in Research:**

Ph.D-Environmental Physics, Spectroscopy

**Research Interests:**

- Energy Sciences
- Crystal Growth
- Thin Films

**Administrative /Academic Position/s (held / currently holding):**

Positions held / currently holding	Year - From (month/year) To month/year)
Director, Department of Applied Science & Jeevan Jothi	2006 - 2010
Secretary, The American College Student's co-operative Store Ltd, Madurai	2008-2011
President, forum for American College Working women	2010
Faculty Secretary, The American college, Madurai	2008-2010
Coordinator, Department of Physics(SF)	2013 – Till date

### **Membership in Professional Bodies:**

- Board of studies member for three years in the Sri Meenakshi Government Arts College, Madurai from 2006 to 2008

### **Publications:**

#### **Books:**

#### **Articles Published in International Journals:**

- 1) Application of Cellular automata approach for cloud simulation and rendering, CHOAS 24, 013125(2014).
- 2) Cellular Automata with chaotic rule formation and its characteristics, Asia Pacific Journal of Research, July 2013, Volume:1 Issue:7.

#### **Articles published in National Journals:**

- 1) Design consideration of a 32m optical path multiple reflection cell pollution studies Indian J.Environment protection, Vol 9, No. 2 Feb 1989, p 144-146.
- 2) Estimation of some metal concentration in SPM, collected in Madurai city Indian J.Environment protection, Vol 9, No. 2 Feb 1989, p 144-146.
- 3) Air borne lead in the environment of Madurai South India, Indian J.Environment protection, Vol 9, No. 2 Feb 1989, p 144-146.
- 4) SO<sub>2</sub> pollution level in the central part of Madurai city –India. Proceeding of international Association for impact Assessment 90, Lausanne, (Swiss) p159-p162.
- 5) Long path infrared spectrometer for Air pollution study Proceeding of international Association for impact Assessment 92, Washinton DC, USA p49.
- 6) Estimation CO<sub>2</sub> levels in Madurai, India Using a FTIR spectrometer Proceedings of Proceeding of work shop on global warming issues in Asia, Asian Institute of Technology, Bangkok, Thailand 93.
- 7) A receptor model for predicting SO<sub>2</sub> concentration in Madurai city, South India Proceeding of international Association for Impact Assessment 98, Shanghai, China, p 80.
- 8) Experimental Investigations on the Thermal Characteristics of Solar Pond, Proceeding of national conference on Renewable energy for rural applications, Department of physics, Govt Arts College, Melur, Madurai District p 94-97.

### **Doctoral Students**

**Ongoing:**

<b>Name of the student</b>	<b>Title of the thesis</b>
W.Christopher Immanuel	Atmosphere Physics
G.UmaMaheswari	Thin Film
N.Sangeetha	Crystal Growth
D.Nithyaa Sree	Solar Thin film
M.Ananda Jothi	Polymer Electrolyte

**UGC Sponsored Minor Project**

<b>Title</b>	<b>Year of Award</b>	<b>Amount Awarded</b>	<b>Status of the project- Completed/Ongoing</b>	<b>Co-investigator, if any</b>
<b>Investigation of Gaseous Pollutants in Madurai Urban Atmospheric Environment and its Validation to Gaussian Dispersion Model</b>	2015 - 2017	3,85,000	Ongoing	Nil