

**Dr. S. Arunavathi**

*Assistant Professor (T)*

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### **Academic Qualifications**

<b>Course</b>	<b>Year</b>	<b>Institution studied</b>
ASLC	1995	Holy Cross Anglo Indian Hr. Sec. School, Tuticorin.
HSC	1997	Holy Cross Anglo Indian Hr. Sec. School, Tuticorin.
B.Sc (Physics)	2001	Sivanthi Adithanar College, Pillayarapuram.
M.Sc(Physics)	2004	Manonmaniam Sundaranar University, Tirunelveli.
M.Phil (Physics)	2006	Manonmaniam Sundaranar University, Tirunelveli DDCE.
Ph.D	2015	Manonmaniam Sundaranar University, Tirunelveli.

**Research Title: Physico-chemical Studies and Application of the eco-friendly Biomaterials from Plant based Resources**

## Teaching Experience 10years 3months

Positions	Name and Address of the Organization	Period	Total Experiences in years
Temporary Lecturer	Department of Physics Manonmaniam Sundaranar University Tirunelveli	(from 22 -01- 2007 to 30 – 04 -2007 and from 2 - 07 -2007 to 26 - 09 – 2007, from 31- 07-2009 to 30-4- 2010)	1 year 3 months
Temporary Lecturer ( Hourly basis)	Department of Renewable Energy Science Manonmaniam Sundaranar University Tirunelveli	November 2014 to 21-07-2015	8 months
Temporary Assistant Professor	Department of Renewable Energy Science Manonmaniam Sundaranar University Tirunelveli	22- 7 -2015 to 20 -11-2015	3 months
Assistant Professor ( FDP Substitute)	The Standard Fireworks Rajarathnam College for Women Sivakasi	From 25-11- 2015 to 24.11.2017	2 years
Assistant Professor	Kamaraj College Tuticorin	06-12-2017 to 17 -8 - 2018	7 months
Temporary Assistant Professor	Department of Physics Manonmaniam Sundaranar University Tirunelveli	17-07-2018 to 15.05-2019, 16-07- 2019 to 14.05- 2020, 09-09-2020 to 15-05-2021 01-09-2021 to 21.05.2022 25-07-2022 to 15.05.2023 21.07.2023 to 15.05.2024 15.07.2024 till present	5years 6month

**Project Guided : M.Sc Project (12 Student completed, 3 students Ongoing), M.Sc Integrated ( 9 students completed)**

**Research Assistant : One year**

Bioinformatics Centre in the Department of Physics funded by DBT under the scheme 'Establishment of Bioinformatics Infrastructure Facility (BIF) for the promotion of Biology Teaching through Bioinformatics (BTBI) under the BTIS net program

**Books Published:**

1. Integrated M.Sc. Physics Laboratory Manual , Dr. S.Shailajha and **Dr.S.Arunavathi**

**E-Content :**

Study materials Prepared for ***OPEN AND DISTANCE LEARNING (ODL) PROGRAMME***

**Papers published in National / International Journals:**

1. A New Technology for extraction of Palm sap from Palmyrah tree for Bioethanol Production  
**Sivalingam Arunavathi**, Peramathi Palanivelu and Kasinadar Veluraja  
*Elixir Appl. Botany 48 (2012) 9612-9615*
2. Physical and Mechanical properties of Jute fiber reinforced paper bag with Tamarind seed gum as a binder – An eco- friendly material  
**S.Arunavathi**, RD Eithiraj, K. Veluraja  
American Institute of Physics Conference Series 1832, 040026 (2017).

**Papers presented in Symposia/ Conferences: 10**

1. **Cluster radioactivities from nuclei with Z = 50 to120**  
G. Shunmugam, **S.Arunavathi**, J. Babitha, G.Kanthimathi, K.Lakshmi Nallathai, M. Lavanya, M.Sylvia and K.Subashini  
“DAE \_ BRNS symposium on nuclear physics” held at Manonmaniam Sundaranar University , Tirunelveli-12, December 26 – 30, 2002.
2. **From Palmyrah Tree to Palm juice- Technological Importance as Biofuel**  
Veluraja. K, **Arunavathi. S**, Palanivelu. P  
XXX Indian Social Science Congress Alagappa University, Karaikudi,

Tamilnadu, December 27-31, 2006

3. **Palmyrah Tree Palm Juice – Biofuel**

Veluraja. K and **Arunavathi. S**

Vice- chancellors of T.N State Universities meet to discuss National Knowledge Commission – Implication Vs Implementation of Recommendations, Manonmaniam Sundaranar University Souvenir, August 10, 2007.

4. **Extraction of ethanol from palm juice of Palmyrah tree for Biofuel**

**S. Arunavathi** and K.Veluraja

Third National Seminar on Advances in Materials Science NSAMS –2009, Manonmaniam Sundaranar University Tirunelveli, March 16 – 17, 2009

5. **பணைமரத்தில் கிடைக்கும் பதனீரில் இருந்து பயோ எரிபொருள்**

**சி.அருணாவதி** மற்றும் கா.வேலுராஜா

தமிழக அறிவியல் பேரவை பத்தாவது கருத்தரங்கம் மே 21-23 2010 மனோன்மணியம் சுந்தரனார் பல்கலைக்கழகம், திருநெல்வேலி, தமிழ்நாடு-627 012

6. **பணைமரத்தில் கிடைக்கும் பதனீர், சீனிக்கிழங்கு மற்றும் வாழைப்பழத்தோலிலிருந்து பயோ எரிபொருள்**

**சி.அருணாவதி** மற்றும் கா.வேலுராஜா

அறிவியல் தமிழ் - தேசியக் கருத்தரங்கம் அக்டோபர் 07 - 08, 2010 தமிழ் நாடு அரசு அறிவியல் தமிழ் மன்றம் மனோன்மணியம் சுந்தரனார் பல்கலைக்கழகம், திருநெல்வேலி, தமிழ்நாடு.

7. **Composite of Fibre reinforced paper bag – An eco- friendly material alternative to Plastic bags**

**S. Arunavathi** and K.Veluraja

National Seminar on Advances in Physics -2011

Manonmaniam Sundaranar University, Tirunelveli -627 012 Tamilnadu, India, March 10<sup>th</sup> and 11<sup>th</sup> 2011

8. **Physico- chemical properties of Palmyrah Fibre**

C. Babitha Lekshmi, **S. Arunavathi** and K. Veluraja

National Seminar on Advances in Physics -2011

Manonmaniam Sundaranar University, Tirunelveli -627 012 Tamilnadu, India, March 10<sup>th</sup> and 11<sup>th</sup> 2011

9. **Bioethanol Extraction from various Agro Resources**

**S.Arunavathi** and K.Veluraja

National Seminar on Advances in Material Science -2012

Manonmaniam Sundaranar University, Tirunelveli -627 012 Tamilnadu India, January 23 and 24<sup>th</sup> 2012

10. Biocomposites of Azadirachtca Indica Neem Morinda Tinctoria Manjanathi with Tamarind seed gum and cement Preparation, properties and Applications

S.Arunavathi, K.Veluraja

One Day Virtual International conference on Applications in Computational Engineering and Sciences ( IConACES2021) organized by the School of Mechanical Engineering ( SMEC), Vellore Institute of Technology Chennai on 20<sup>th</sup> October 2021

**Workshops/ Conferences/ Seminars attended: 27**

1. Participated in the “ **Indo-Japan workshop on crystal growth and applications of advanced materials for opto electronics**” held at crystal growth center Anna University, Chennai, December 7-10, 2004.
2. Participated in the the tenth **National seminar on Crystal growth** held in Kongu Engineering College, Perundurai Erode during January 27- 29, 2005.
3. Participated in the **International Workshop** on “ **Advances in Material Science and Technology**” held at Sri Sivasubramaniya Nadar College Of Engineering, Kalavakkam, Chennai, January 31,2005.
4. Participated in the symposium of “**Nonlinear optical crystals and modelling in crystal growth**” held at department of physics Anna University, Chennai, February 28 – March 1, 2005.
5. Participated in the “**National Seminar on Advances In Material Science**” held at Manonmaniam Sundaranar University, Tirunelveli, March 27-28, 2006.
6. Participated in the “**One day Seminar on Advances in Physics**” held at the Department of Physics, Manonmaniam Sundaranar University, Tirunelveli, January 25,2007.
7. Participated in the “**Intra – University Workshop on Advances in Physics**” held at the Department of Physics, Manonmaniam Sundaranar University, Tirunelveli, January 24, 2008.

8. Participated in the **“National Seminar on Modern Trends in Pharmaceutical Chemistry”** held at the Department of Pharmaceutical Chemistry, Manonmaniam Sundaranar University, Tirunelveli, January 30, 2008.
9. Participated in the **One Day Workshop on Patent Awareness Programme** held at Manonmaniam Sundaranar U niversity, Tirunelveli, Tamilnadu, India on December 18<sup>th</sup> 2009
10. Participated in the **National Seminar on Structural Bioinformatics – NSSB 2009”** held Manonmaniam Sundaranar U niversity, Tirunelveli, Tamilnadu, India on January 29 & 30, 2009
11. Participated in the **National Seminar on Structural Bioinformatics – NSSB 2010”** held Manonmaniam Sundaranar University, Tirunelveli on February 26, 2010
12. Participated in the **One Day In – House Seminar on Physics in Honour of Prof. Dr. N.Arunachalam** held Manonmaniam Sundaranar U niversity, Tirunelveli on September 30, 2010
13. Participated in the **Workshop on Advances in Physics-2010** held at Manonmaniam Sundaranar U niversity, Tirunelveli, Tamilnadu, India on March 5, 2010
14. Participated in the **National Seminar on Structural Bioinformatics – NSSB 2011”** held at Manonmaniam Sundaranar U niversity, Tirunelveli on March 4, 2011
15. Participated in the **National Seminar on Structural Bioinformatics - 2012** held at Manonmaniam Sundaranar U niversity, Tirunelveli on March 2, 2012
16. Participated in the **National Symposium on Newer Horizons in Chemistry ( NSNHC-2012)** held at Manonmaniam Sundaranar U niversity, Tirunelveli on March 9, 2012
17. Participated in the **Career Guidance & Empowerment of Differently Abled Persons ( CGEDAP-2012)** held at Manonmaniam Sundaranar U niversity, Tirunelveli on March 30, 2012
18. Participated in the **National Symposium on Newer Horizons in Chemistry ( NSNHC-2012)** held at Manonmaniam Sundaranar U niversity, Tirunelveli on March 9, 2012

19. Participated in the **Workshop on ‘Impedance Spectroscopy and its Application’** held at The Standard Fireworks Rajaratnam College for Women, Sivakasi on 02.03.2016.
20. Participated in the **National conference on Materials for Energy Devices** held at The Standard Fireworks Rajaratnam College for Women, Sivakasi on November 23 & 24, 2016.
21. Participated in the **National conference on Advanced Materials and its Applications** held at The Standard Fireworks Rajaratnam College for Women, Sivakasi on July 6 & 7th , 2017.
22. Participated in the **Refresher course on Physics – RCP -2018** held on 29<sup>th</sup> & 30<sup>th</sup> January 2018 at Department of Physics, Manonmaniam Sundaranar University Tirunelveli.
23. Participated in the International Webinar Series on Emerging Trends in Energy & Healthcare.organized by Department of Chemistry, Annai Hajira Womens College Melapalayam Tirunelveli from 25.06.2020 to 27.06.2020
24. Participated in the National Level Faculty development Webinar on India : Next Knowledge Super Power organized by The Standard Fireworks Rajaratnam College for Women, Sivakasi on 26.06.2020.
25. Participated in the National Level Webinar on Space Applications to Common Man organized by The Standard Fireworks Rajaratnam College for Women, Sivakasi on 04.07.2020.
26. Participated in the one week workshop on Materials Technology Advancement in current Scenario – MTACS2020 organized by Department of Physics, Sathyabama institute of Science and Technology, Chennai from 04th to 10th July 2020
27. Participate in the Faculty development Programme held by Manonmaniam Sundaranar University Tirunelveli, from 10th July to 14th July 2020

#### **Conference/Seminar/ Workshop Organising committee Member**

1. Organising Committee member in the **Workshop on ‘Impedance Spectroscopy and Application’** held at The Standard Fireworks Rajaratnam College for Women, Sivakasi on 02.03.2016.
2. Organising Committee member in **National conference on Materials for Energy Devices** held at The Standard Fireworks Rajaratnam College for Women, Sivakasi on November 23 & 24, 2016

3. Organising Committee member in the **National conference on Advanced Materials and its Applications** held at The Standard Fireworks Rajaratnam College for Women, Sivakasi on July 6 & 7th, 2017.
4. Organising Committee member in the **One day orientation programme on Preparation of Research Articles** on 10th March 2018, Kamaraj College Tuticorin.
5. Organising Committee member in the International E-Conference on Advances in Materials science organized by the Department of Physics, Manonmaniam Sundaranar University Tirunelveli during March 24<sup>th</sup> to 26<sup>th</sup>, 2021

#### Invited Talk

1. Physico – chemical Studies and Applications of the eco- friendly Biomaterials from plant based Resources.  
S.Arunavathi  
National Conference on ‘Nuances Of Environmental Sustainability and Development’ held on March 23, 2023, at Sri Sarada College for Women, Ariyakulam, Tirunelveli - 627011

#### OTHERS

1. Attended the Guest Lecture on Recent Trends in Nanotechnology under the Cluster of Colleges meeting in Physics at Saiva Bhanu Kshatriya College, Aruppukottai
2. Attended the Aptitude Training Programme under the Cluster of Colleges Joint Faculty Programme in Physics at Devanga Arts College on 20.08.2016.
3. **Editorial board member** in the Department magazine RHYTHM in SFR College for Women Sivakasi.
4. Research Co-ordinator in School of Sciences, Kamaraj College, Tuticorin.

#### Other experiences

##### 1. Instrument Handling:

**XRD, UV, Tensile strength Machine, FTIR, Pulveriser, Hydraulic press**

Positions	Name and Address of the Organization	Period	Total Experiences in years
<b>XRD Operator ( PANalytic X-ray diffractometer)</b>	Department of Physics Manonmaniam Sundaranar University Tirunelveli	2012 to April 2014	2 years
<b>Matron</b>	Womens Hostel Manonmaniam Sundaranar University Tirunelveli	March 2013 to June 2014 August 2018 to May 2019	3 years



