

# Dr. R. Arulnangai, Assistant Professor

### **Personal Details:**

Address	:	P.G & Research Department of Chemistry, Jamal Mohamed Collège (Autonomous), Tiruchirapalli – 620 020, Tamil Nadu, India.
<b>Contact Number</b>	:	9566875057
Date of birth	:	12 <sup>th</sup> March 1978
E-mail	:	suganthidhaya78@gmail.com

## Academic Qualifications:M.Sc./M.Phil./B.Ed./SET./Ph.D./

- 2001-2003Master of Science (M.Sc.,) Bio Chemistry EGS Pillai Arts and Science College, Nagappattinam
- 2010-2012Master of Science (M.Sc.,) Chemistry Annamalai University, Chidambaram
- 2005-2006Master of Philosophy (M.Phil.) Biochemistry, Sengamala Thayar Educational Trust Women's College, Mannargudi
- ✤ 2006 B.Ed Indragandhi national open university, Delhi
- ✤ 2017SET (Chemistry) Mother Teresa University, Kodaikaanal
- ✤ 2019Ph.D. in Chemistry at Jamal Mohamed College, Tiruchirappalli

## **Teaching Experience:**

- 2013-2016 Assistant professor Dept. of Biochemistry, Paventhar Bharathidasan arts and Science College, Tiruchirappalli.
- 2016-Till date Assistant Professor Dept. of Chemistry at Jamal Mohamed College, Tiruchirappalli

#### **Additional Responsibilities**

- NSS PROGRAMME OFFICER Unit VI and VII, Jamal Mohamed College (Autonomous), Tiruchirappalli, India, from 2018 to till date.
- Acted as Internal and External Examiner for Bharathidasan University Practical Examinations in various College
- Acted as Evaluator for Central Valuation for Bharathidasan University, Tiruchirappalli conducted in Jamal Mohamed College from 2015-2019.
- Acted as Tutor in charge for UG and PG students in Biochemistry Department, Paventhar Bharathidasan Arts and Science College and Jamal Mohamed College, Tiruchirappalli, India.
- Member Incharge for General Time Table at Paventhar Bharathidasan arts and Science College, Tiruchirappalli from 2013 to 2016
- > Organising committee member of symphoria since 2017

#### Area of Research:

- Environmental science
- > Aqua culture
- Corrosion studies
- Nano studies
- Green Studies

Guided Project For Students							
Program of Student		Complete	Ongoing				
Research	Ph.D`	-	-				
	M.Phil`	-	-				
Project	PG	14	3				
	UG/Others	-	-				

## **Orientation Programme**

- Attended the NSS Orientation Course conducted by Empanelled Training Institution Madras School of Social Work from 17 - 7 - 2019 to 23- 7-2019
- 2. Participated in the orientation programme on Effective Implementation of Part-V Extension Activities for The Club Advisors organised by the Jamal Mohamed College on 8-12-2020

## **Resource Person And Lecture**

- 1. Acted as a **Judge** for wealth of waste competition organized Rotaract club, Jamal Mohamed College (Autonomous), Tiruchirappalli.
- 2. Acted as a **Resource Person** for National Science Festival, Young Scientists Colloquium 2021organized by Rabiammal Ahamed Maiden College for Women, Tiruvarur 27.02.2021
- 3. **Presented a lecture** on water pollution and remedial measures in the webinar organized by PG & Research Department of Biochemistry Rabianmal Ahamed Maideen College For Women, Tiruvarur on 15.05.2021

## **Details about the online certificate courses**

- Industrial inorganic chemistry (Sep.2021)
- Online Refresher Course in Chemistry for Higher Education ARPIT (Oct. 2021)

## **Details of chapter**

S. No	Title of the Book	Chapters Written	Publisher and Place	Month & year of publica tion	ISBN / ISSN
1.	Sustainable Nano materials for Biosystems Engineering Trends in Renewable Energy, Environment, and Agriculture	Role of Nano materials in The Treatment of Polluted Cauvery River Water in Tiruchirappalli District (TamilNadu)	AAP, CRC Press (Taylor & Francis Group)	2021	9781774912010

### **Details of Publications**

- 1. Inventory of Total and Fecal Coliform Bacteria in Ground Water in and around Ariyalur District Tamilnadu, India Annals of R.S.C.B., 25, (5), 426-434, 2021.
- 2. Physico chemical parameter and water qualityindex of groundwater polluted in Ariyalur District, TamilNadu, India. Malaya Journal of Matematik, 8(2), 2031-2036, 2020.
- 3. Interpretation of groundwater quality using piper diagram in and around Ariyalur District Tamilnadu, India, Journal of Natural Remedies. 8(1), 193 198, 2020.

- 4. Influence of physico chemical parameters on potability of ground water in Ariyalur area of Tamil Nadu, India, Science Direct, Materials today Proceedings, (36), 923–928, 2021
- Assessment of Ground water pollution in and around Lalgudi Taluk, Tiruchirappalli District, Tamil Nadu, India, Aegaeum Journal, 8(7), 1012 – 1026, 2020
- 6. Water Quality index ofGround Water Polluted in and Around Tiruchirappalli District, TamilNadu, IndiaTathapi, 19(8) 811-822, 2020
- 7. Study of Ground Water Quality with GIS Application for Ariyalur Dist. Infokara Research, 8(12), 87-97, 2020
- 8. Studies onHeavy metal pollution of ground water analysis in and around Udayarpalayam Taluk at Ariyalur District Tamil Nadu. International Journal of Pharmacy and Biological Science, 9(2), 14-19,2019
- 9. Heavy metal analysis of ground water pollution in and around Sendurai Taluk at Ariyalur District Tamil Nadu, Journal for Advanced Research in Applied Sciences, 5(3),45-50, 2018
- 10. Physico-chemical analysis of ground water samples in and around Ariyalur District Tamilnadu. European Journal of Bio-medical & Pharmaceutical sciences, 5(2), 946-948, 2018
- 11. Physico-chemical parameters of ground water pollution in and around Udayarpalayam Taluk at Ariyalur District Tamil Nadu, International Journal of Current Research, 10(1), 63782-63785, 2018
- 12. Ground water quality using Physico-chemical analysis in and around Sendurai Taluk at Ariyalur District Tamil Nadu, International Journal of Advanced Scientific and Technical Research,7(3), 159-170, 2017
- 13. Physico-chemical characteristics of ground water in and around Ariyalur District Tamilnadu, World Journal of Pharmacy and Pharmaceutical science, 6(5), 826-837,2017

## **Publication in Conference Proceedings**

- Mohamed Sihabudeen, Sirajudeen & Arulnangai, Seasonal Variation of Heavy metal of analysis of ground water in and Sendurai Taluk in Ariyalur District International Conference on Chemical and Environmental Research (ICCER-2017) ISSN 2454-3225
- 2. Mohamed Sihabudeen, Sirajudeen & Arulnangai, A Study on Physicochemical Parameters of ground water quality Sendurai Taluk Ariyalur District International Conference on Chemical and Environmental Research (ICCER-2015)ISSN 2395-7018

## **Details of Papers Presented in Conference**

- 1. Presented a research paper entitled 'A study on physico chemical parameter of ground water quality Senthurai Taluk in Ariyalur District Tamilnadu' in the International Conference on Chemical and Environmental Research (ICCER-2015) held at PG & Research Department of Chemistry, Jamal Mohamed College, Tiruchirappalli on 17.12.2015
- 2. Presented a research paper entitled 'seasonal variation of heavy metal analysis of ground water in and around Senthurai Taluk in Ariyalur District Tamilnadu' in the International Conference on Chemical and Environmental Research (ICCER-2017)held at PG & Research Department of Chemistry, Jamal Mohamed College, Tiruchirappalli on 07.01.2017
- 3. Presented a research paper entitled 'Physico chemical parameters of ground water samples in and around Ariyalur District Tamilnadu' in the International Conference on Newer Engineering Concepts and Technologies 2K17 held at K Ramakrisnan College of Technology Tiruchirappalli 28.03.2017to 29.03.2017.
- 4. Presented a research paper entitled 'Physico chemical analysis of ground water samples in and around Ariyalur District -Tamilnadu' in the national Conference on Recent Developmentsin Chemistry (NCRDC-2018) held at PG & Research Department of Chemistry, Jamal Mohamed College, Tiruchirappalli on 20.01.2018

- Presented a research paper entitled a 'Heavy metal analysis of ground water samples in and around Ariyalur District Tamil Nadu' one day National Conference on Emerging trends in material sciences (NCETMS – 2018) organized by Erode Arts and Science College on 07-02- 2018.
- 6. Presented a research paper entitled Studies on 'Heavy metal pollution of ground water analysis in and around Udayarpalayam Taluk at Ariyalur District Tamilnadu' in the two day national Conference on New Vistas in Material Science held at J J College of Arts and Science -Pudukkottai 08.03.2018 to 09.03.2018.
- 7. Presented a research paper entitled'Physico chemical analysis of ground water samples in and around Udayarpalayam Taluk at Ariyalur District Tamilnadu' in the International Conference on Chemical and Environmental Research (ICCER-2018) held at PG & Research Department of Chemistry, Jamal Mohamed College, Tiruchirappalli on19.12.2018
- 8. Presented a research paper entitled 'Physico chemical analysis of ground water pollution in Ariyalur District Tamilnadu, India' in the one day International Conference on Novel Materials for Energy, Engineering and Biological Applications held at M KumarasamyCollege of Engineering Karur on 09.04.2019
- 9. Presented a research paper entitled 'Water quality index of ground water pollution in Ariyalur District Tamilnadu, India' in the one day International Conference on Emerging Trends in Chemical Sciences held at Arulmigu Palani Andavar Arts College for Women, Palani on 06.09.2019
- 10. Presented a research paper entitled 'Water quality index of ground water around Khajamalai near Ponmalai, Tiruchirappalli District' International Conference on Chemical and Environmental Research (ICCER-2020) held at PG & Research Department of Chemistry, Jamal Mohamed College, Tiruchirappalli on 08.01.2020
- 11. Presented a research paper entitled 'Assessment of water quality parameter in and around Ariyalur District Tamilnadu' in the one day national Conference on Recent Trends in material science held at Thiru.vi.ka. Govt Arts College Tiruvarur on 14.02.2020

- 12. Presented a research paper entitled 'Hydroanalysis of groundwater chemistry using Piper Diagram from Ariyalur District' in the one day International Conference on "Sustainable Management and Conservation of Natural Resources" held at EVR College (Autonomous) Tiruchirappalli on 15-02-2020
- 13. Presented a research paper entitled 'Interpretation of groundwater chemistry using piper diagram in and around Ariyalur District' in the International Conference on Chemical and Environmental Research (ICCER-2020) at Jamal Mohamed College (Autonomous), Tiruchirappalli on 12.11.2020.
- 14. Presented a research paper entitled 'Heavy Metal Contamination in River Cauvery A Case Study of Tiruchirappalli Districts, Tamil Nadu' a two day International Conference on contemporary approach on revolutionary techniques in science and engineering organized by Indra Ganesan College of Engineering Tiruchirappalli on 09.04.2021 to 10.04.2021
- 15. Presented a research paper entitled 'Heavy Metal Contamination in River Cauvery- A Case Study of Tiruchirappalli Districts, TamilNadu' International virtual conference on advances in chemistry and material(ICCM-2021)organized by Saveetha Engineering College Department Of Chemistry held on 21.07.2021 to 22.07.2021.
- 16. Presented a research paper entitled Role of nano materials in the treatment of Polluted Cauvery River water in Tiruchirappalli District (Tamil Nadu)" Indo-South Korea International e-Conference on Nano science and nanotechnology for energy, environment and Bio-medical applications, Vinayaka missions Kirupananda Variyar arts and science college, Gyeonsang national university, Republic of Korea held on07-10-2021 to 08-10-2021.
- 17. Presented a research paper entitled Heavy metal analysis of Cauvery river water pollution in and around Trichy District International Conference on Recent advances in Material Chemistry SRM institute of science and technology, Kattankulathur held on 17-02-2022 to 19-02-2022

## **Details Of Seminars / Conferences / Workshops Participated**

#### **Seminars**

- 1. Participated a one day national Seminar on'Honour crimes in India Lessons and Cautions' Organized by Department of Women studies, BDU-Tiruchirappalli on 31.01.2015.
- 2. Participated a one day International Seminar on 'Emerging trends in biological research' organized by PG and Research Department of Biotechnology & Microbiology, Jamal Mohamed College (Autonomous), Tiruchirappalli on 03.03.2018.
- 3. Participated a one day Seminar on 'Recent advances in chemical sciences Organized by PG and Research' Department of Chemistry, Urumu Dhanalakshmi College Tiruchirappalli on 02.03.2020.
- 4. Participated a one day Seminar on Drug Delivery Organized by Department of chemistry, Jamal Mohamed College, Tiruchirappalli on 16-07-2021
- 5. Participated a one day Seminar on Iron Based MRI contrast Agents, Organized by Department of chemistry, Jamal Mohamed College, Tiruchirappalli on 17-07-2021
- 6. Participated a one day Seminar on Emerging Materials for Solar Hydrogen Production Organized by Department of chemistry, Jamal Mohamed College, Tiruchirappalli on 27-07-2021
- Participated a one day Seminar on Nano big miracles with small particles Organized by Department of chemistry, Jamal Mohamed College, Tiruchirappalli on 13.08.2021

#### Conferences

1. Participated a one day national Conference on 'Current perspective and challenges Biodiversity and its conservation (NACPCB-15)' organized by PG & Research Department of Bio Chemistry, Rajah Serfoji Govt College, Thanjavur on 06.03.2015 to 07.03.2015.

- Participated a one day National Conference on 'Emerging trends in chemical and biological sciences (ETCBS – 2019)' organized by D. K. M. College for women, on Vellore on 04.01.2019.
- 3. Participated a one day International Conference on 'Recent trends in chemistry (ICRTC– 2019)' organized by Dr. R. K. Shanmugam college of Arts and Science on 10.01.2019.
- 4. Participated a one day national conference on 'Chemistry and materials' organized by Department of chemistry, Saveetha Engineering College Chennai on 22.03.2019.
- 5. Participated an international e conference on 'Cyanobacterial and algal biotechnology' organized by NRMC F, Department of Microbiology, BDU Bharathidasan University Trichy, on 18.12.2020 to 20.12.2020.
- 6. Participated a one day International Conference on 'Global added burdens of diseases and food security' organized by PG & Research Department of N&D, Jamal Mohamed College, Tiruchirappalli on 05.01.2021
- 7. Participated a one day International Conference on 'Frontiers in Chemical Research' organized by PG & Research Department of Bishop Heber College, Tiruchirappalli on 03.02.2021 to 04.02.2021
- 8. Participated a one day International Conference on 'smart material chemistry' organized by PG & Research Department of chemistry St.Joseph's College, Tiruchirappalli on 29.07.2021 to 31.07.2021.
- Participated a one day International Conference on Smart Materials Chemistry (CHEMSMAT-21) organized by St. Joseph's College, Tiruchirappalli. 29-07-2021 to 31-07-2021.
- Participated a one day International Conference on Virtual International Conference On Mutlifunctional Advanced Materials (Vicmam-2021)'organized by Jnan Vikas Mandal's Degree College, Airoli, Navi Mumbai, Maharashtra9 -08-2021 to 10 -08-2021.

- 11. Participated a one day International Conference on Marine bioprospect in and its role in challengeable diseases -21(MBC-D21) organized by Department of Marine science Bharathidasan University- Tiruchirappalli RUSA 11-10-2021&12-10-2021.
- Participated a one day International Conference on modern zoology known and unknown organized by C. Abdull Hakeem college Vellur 28-10 2021 & 29-10 2021.
- 13. National conference on innovation on basic science for sustainable development, organized by Rajali arts and commerce college Pune 28-01-2022.

### Workshops

- 1. Participated in the Workshop on National workshop on 'Anti- diabetic Medical Herbs: Screening and Assessment' Department of Biochemistry and biotechnology, Annamalai university 27.03.2009 to 28.03.2009.
- 2. Participated in the Workshop on 'Bioprocess Technology' organized by the Department of Biotechnology, National College, Tiruchirappalli on 11.02.2015
- 3. Participated in 'The Role of a teacher in the present scenario' organized by the IQAC cell, Jamal Mohamed college, Tiruchirappalli on 10.12.2016.
- 4. Participated in the 'Improving teaching practices a strategic' approach organized by the IQAC cell, Jamal Mohamed College, Tiruchirappalli on 23.06.2018.
- 5. Participated in UGC CPE sponsored two day workshop on 'Professional Development for Academic Leadership in Curriculum Design' organized by Curriculum Development cell, Jamal Mohamed College, Tiruchirappalli on 18.01.2019 to 19.01.2019.
- Participated a one day national workshop on Application of open sources for statistical analysis in educational research (AOSSAER-2019) Organized by Department of Education - CDE, BDU-Tiruchirappalli on 29 -11- 2019.

- 7. Participated in the international workshop on 'Empowering youth for global goals' organized by state level NSS cell, Directorate of collegiate education and National College Tiruchirappalli on 14.02.2020.
- 8. Participated in the workshop on 'Export procedures & promotion NWEP' held on Department of Business Administration, Jamal Mohamed College, Tiruchirappalli on 21.02.2020.
- 9. Participated in the 3 Days International Online Workshop on 'The Role of Language and Researcher' organized by the Department of English, Immaculate College for Women, Viriyur, from 27.04.2020to 29.04.2020.
- 10. Participated in the online workshop on 'Enhancing Research Communication Skills through Science Direct and Mendeley' organized by Internal Quality Assurance Cell (IQAC) and School of Education (SOE),Faculty of Education, Dayalbagh Educational Institute, Dayalbagh Agra, held on 03.05.2020.
- 11. Participated in the 'Chemdraw Online Workshop for Skill Development & Career Advancement' organized by Genesin of Educational Impressions, Roorkee, Uttarakhand, India, on 05.05.2020.
- 12. Participated in the 2 Days International online workshop on 'Gis& Remote Sensing for Environment Assessment' organized by society for environment and sustainable development held on31.03.2021to 01.04.2021.
- 13. Participated in the State level work shop on production and formulation of Bioinoculants organized by P.G. and Research Department of microbiology, Jamal Mohamed College, Tiruchirappalli31.03.2022

### **Faculty Development Programme**

- 1. Participated in the three days 'NLP based Faculty Empowerment Programme' organized by the IQAC cell, Jamal Mohamed college, Tiruchirappalli on 17.06.2017, 19.06.2017 and 20.06.2017.
- 2. Participated in an online 'Faculty Development Programme' organized by Department of Chemistry, D.K.M. College for Women, Vellore, and Tamil Nadu in association with Spoken Tutorial Project, IIT Bombay,

MHRD, and Govt. of India from 04.05.2020 to 10.05.2020. The FDP included hands on exposure in 'Gchem Paint and Libre office Suite writer'.

- 3. Participated in the online Faculty Development Programme, 'Recent Trends in Computer Science' organized by Department of Computer Science and Computer Applications, Thiruvalluvar University Model Constituent College of Arts and Science, Cuddalore, held on 22.07.2020 to 28.07.2020.
- 4. Participated in the online Faculty Development Program, 'Spectroscopic Techniques', organized by PG and Research Development of Physics, Jamal Mohamed College (Autonomous), Trichy, held on 03.08.2020 to 05.08.2020.
- 5. Participated in the 6 Days Faculty Development Program, 'Recent Developments in Materials Science', organized by Department of Physics and Chemistry, Sree Saraswathi Thyagaraja College, Pollachi, Coimbatore held on 16.06.2021 to 22.06.2021.
- 6. Participated in the 4 days online Faculty Development Program, Effective teaching organized by Sri Balaji College of Engineering and Technology, Jaipur.20-12-2021to24-12-2021.
- 7. Participated in the Faculty Enrichment Programme IQAC, Jamal Mohamed College, Tiruchirappalli 21-06-2021 to 25-06-2021.
- 8. Participated in the online Faculty Development Program, Data Analysis organized by Ethyrai College for women, Chennai 07.02.2022 to 15.02.2022

Date: 08.04.2022

(Dr. R. Arulnangai)

**Place: Trichy**