

Curriculum vitae

Personal Profile :

Name : Dr. R. Shanmuga Selvan Rajagopal

Address : 118/101B67,MADASAMYKOVIL ST, ARIVOZINAGAR,
RAJAPALAYAM,VIRUDHUNAGAR DIST,
TAMILNADU.PIN-626117

Contact No. : *Mobile- +91 7598094651*

E-Mail : *shanmugaselvan@yahoo.in*

Date of Birth : *30th June1986*

Community/ Religion *BC-Kammalar/Hindu*

Birth Place : *Rajapalayam, Virudhunaga Dist.,Tamilnadu*

Expected Salary : *To be discussed personally at the time of interview.*

PROJECT GUIDED *M.Sc 22 M.Phil 1(ONE)*

EDUCATIONAL QUALIFICATIONS :

Ph.D. (Chemistry) completed on 23th february 2017 from **PRIST University, THANJAVUR, Tamilnadu**

M.Sc. (Chemistry) passed with 80% in 2011 from the **PRIST University, THANJAVUR, Tamilnadu**

B.Sc. (Chemistry.) passed with 60. % in 2008 from the **Madurai kamarajar University, Tamilnadu**

HSC passed with 60. % in 2003 from the **PACM Hr Sec School, Rajapalayam.**

10th passed with 60. % in 2003 from the **PACM Hr Sec School, Rajapalayam.**

PROFESSIONAL :

- **Diploma in Profitable Small Sale Preparation (based on chemistry)** passed with 1st Class from **M.K.University** on September to December 2005
- **Diploma in Computer Hardware &Network** passed with 1st Class from **BSS (INDIAN AUTHORITY)** . June to December 2009

WORKING EXPERIENCE

EXPERIENCES

Assistant professor Pg ang Research Department of Chemistry G. T. N. Arts College autonomous Dindigul, Tamilnadu	2021-Till Now
Assistant professor Department of Chemistry SAKTHI College of Arts and Science for women Oddanchatram, Tamilnadu.	2019-2021
Assistant professor Department of Chemistry Peraringar Anna Science College. Sivagri, Tamilnadu	2017-2019
Research scientist INTEIN CHEMBIO SOLUTIONS Research Lab, Thanjavur, Tamilnadu.	2016-2017
Training Lecturer Department of Chemistry PRIST University, Thanjavur, Tamilnadu.	2014-2016

PATENT PUBLICATION

1. **Indian Patent IPR# :** C11D0009380000 05/2022 Dated 04/02/2022 202241004388
A METHOD OF MANUFACTURING NATURAL SOAP COMPOSITION
PROCESS .
2. **Indian Patent IPR #:** CBR number: 203495 Application number 367265-001
SOLAR EMPOWERED AGRICULTURE ROBOT. Applied date :05/07/2022.
3. **Indian Patent IPR #:** CBR number: 204612 Application number 368893-001
PORTABLE FACE MASK DETECTING DEVICE INTEGRATED WITH
TOUCH FREE SANITIZER DISPENSER. Applied date :06/08/2022.
4. **Indian Patent IPR #:** CBR number: 204618 Application number 368895-001
NANOTECHNOLOGY BASED OIL REMOVING ROBOT FROM WATER.
Applied date :06/08/2022.
5. **Indian Patent IPR #:** CBR number: 207824 Application number 373302-001
AUTOMATED MANUFACTURING PRODUCT QUALITY CONTROL
CHECK SYSTEM. Applied date :31/10/2022.
6. **Indian Patent IPR #:** CBR number: 207936 Application number 373516-001
SOLAR STEEL HELMET. Applied date :03/11/2022.

BOOK PUBLISHED

1. **Dr. R. Shanmuga Selvan**, Preparation and Characterization of Magnetic Nanoparticles, Lambert Academic Publishing, Republic of Moldova, ISBN-978-620-4-95347
2. **Dr. R. Shanmuga Selvan**, A Text Book of Modern Physical Chemistry Concepts, Ryan Publishers, Tamil Nadu, India, ISBN : 978-93-93253-62-0
eISBN : 978-93-93253-63-7
3. **Dr. R. Shanmuga Selvan**, The Book of Short Review on Green Chemistry, Lambert Academic Publishing, Republic of Moldova, ISBN-13,978-620-4-75177-1, ISBN-10:6204751778, EAN: 9786204751771
4. **Dr. R. Shanmuga Selvan**, Physical Methods in Chemistry Iterative International Publishers, Pushpagiri Complex Beside SBI Housing Board Chikkamagaluru Karnataka, ISBN-13,978-620-4-75177-1.
5. **Dr. R. Shanmuga Selvan**, Organic Chemistry, BLUEROSE PUBLISHERS, 4233/1, First Floor, Main, Ansari Rd, near Allahabad Bank, Daryaganj, Delhi, 110002 ISBN-978-93-5668-586-4.
6. **Dr. R. Shanmuga Selvan**, CHROMATOGRAPHIC TECHNIQUES, Ryan Publishers, Tamil Nadu, India, ISBN : 978-93-93253-53-8, EISBN: 978-93-93253-54-5.

Awards Granted

1. Dr. SARVEPALLI RADHAKRISHNAN EDUCATION EXCELLENCE AWARD on Indian Teachers Day from Namaste India foundation on 5th September 2022
2. ADMIRABLE PROFESSOR AWARD on International Teachers Day from MALAYSIA BHARATI CREATIVE CHANNEL, PATANI MALAYSIA , on 05th October 2022

PUBLICATIONS

1. Dr. R. **Shanmuga Selvan** ,Preparation and Characterization of Ti Doped γ -Fe₂O₃ Prepared by Self-Propagation Method. International Journal of Chemistry and Applications. Vol.9 (3): 291-297.
2. Dr. R. **Shanmuga Selvan** ,Preparation and Characterization of Mg Doped γ -Fe₂O₃ Prepared by Self-Propagation Method. International Journal of ChemTech Research. Vol.6 (3):2129-2131
3. Dr. R. **Shanmuga Selvan** ,Preparation Characterization and Comparative Study of Nano MnO₂ Using Various capping Agent. Research Journal of Chemical and Environmental. Vol-2 [5] October 2014, pp- 55-58.
4. Dr. R. **Shanmuga Selvan** ,Effect of Doping in Magnetic Character in γ -Fe₂O₃ Nano Particle. Elixir Applied Chemistry, 103 (2017) pp-45526-45528.

5. Dr. R. **Shanmuga Selvan**, Effect of Doping on Magnetic Nature of Tin Oxide Nanoparticles, Indian Journal of Natural Sciences, Vol.12 / Issue 67 / August / 2021.
6. Dr. R. **Shanmuga Selvan**, Hydro Chemistry and Quality of Ground Water from Paraipatti Pond Area at Dindigul District, Indian Journal of Natural Sciences, Vol.12 / Issue 67 / August / 2021.
7. Dr. R. **Shanmuga Selvan**, Effect of Al, Mg Doping on Magnetic Nature of Zinc Oxide Nanoparticles Studied By Computational Method, Rasayan J. Chem.,(in review)
8. Dr. R. **Shanmuga Selvan**, Effect of Aluminium, Magnesium Doping on Magnetic Nature of Zinc Oxide Nanoparticles Studied by X-Ray Diffraction Method, Oriental Journal of Chemistry, Vol. 38, June 2022, pp-1-13.
9. S. Philip Arockiaraj, **R.Shanmugaselvan**, A. Pandiarajan, S.S. Syed Abuthahir, M. Pandeewaran, Effect of Doping in Copper Oxide Nanoparticles Studied By X-Ray Diffraction, Bulletin Of Environment, Pharmacology and Life Sciences, Vol 11 [SPL 1] 2022.
10. **Dr. R. Shanmuga Selvan**, K. Gokulakrishnan*, A. Pandiarajan and Pandeewaran, Magnetic Nano Particle in Phenolic Waste Water Treatment, Indian Journal of Natural Sciences, Vol.13 / Issue 71 / April / 2022.

Laboratory ExperimentsHandled

Organic chemistry

1. Single and double stage organic compound preparation.
2. Organic compound separation and organic qualitative analysis
3. Determination of phase diagram for two component system

Inorganic chemistry

1. Inorganic semi-micro analysis
2. Inorganic metal complex preparation
3. Determination of molecular weight by using TT apparatus

Physical chemistry

1. Potentiometric titration
2. Colorimetric titration
3. Determination of acid strength using potentiometric titration

Techniques Known

1. Chromatography
2. spectroscopy
3. chemical preparation
4. Chemical precipitation
5. calorimetry
6. crystallography
7. water parameter analysis

Instruments Handled

1. HPLC
2. X-ray diffraction (Rigaku Mini Flex-500 and ADX-2500)
3. SEM (JEOI-SEM 6360)
4. FTIR
5. UV-Vis spectrum

Seminars & Workshop conducted

1. Lecturer-cum-workshop on interpretation of spectral, chromatographic, crystallographic and computational data of chemical system. 28-30th Jan-2016, PRIST University and IICPT Thanjavur.
2. Application of NMR Spectroscopy and Charomatography in Chemistry.25th November 2021, G.T.N. Arts College, Dindigul

Faculty Development Program Attended

1. Teaching Techniques conducted by ICT Academy on 11-12th May 2017, on Selvam College of Technology.
2. Importance of Teaching Ethics & Blended Learning Techniques for Modern Class Room Settings. by CDC of Selvam College of Technology of on 16-20th May 2017, on Selvam College of Technology.
3. High impact teaching skills & outcome based education preparation of SAR for NBA accreditation. by CDC of Selvam College of Technology of on 15-17th June 2017, on Selvam College of Technology.
4. International level FDP cum Workshop on Intellectual Property Rights. 14-18th June 2021, The New College, Chennai.
5. National level FDP on ICT tools for effective teaching and learning, 08-10th June 2021. .
6. International level one week FDP on research methodology. 2nd -7th May 2022, Kamla Nehru Mahavidyalaya Sakkardara Square, Nagpur-440024, India.

Attended Seminars & Workshop

1. National seminar on Combating Ozone Layer Depletion(COLD-2010) Techniques. 16th September 2010 on PRIST University Thanjavur.
2. National seminar on Recent Trends in LC Techniques. 29th September 2010 on PRIST University Thanjavur.
3. International workshop on the art of journal and thesis writing. On 5th Jan (2012) PRIST University Thanjavur.
4. Seventh Indo-US Workshop on Mathematical Chemistry. On 4-6 Dec 2012 in PRIST University Thanjavur.
5. National Conference on Chemistry Solutions (NCCS-2013), 21-22 Feb. SRM University, Chennai.
6. XRD & SEM Analyzes & Report Making 2 Days Training. On 25-26 Sep 2013 in CARE Group of institutions.
7. International workshop on "Frontier Areas in Chemical Technologies -2014". On 21-22 Feb 2014 Alagappa University Karaikudi.
8. International Conference on Materials and Characterization Techniques.-2014 10-12 Mar-2014, VIT University Vellore.
9. Lecturer-cum-workshop on interpretation of spectral, chromatographic, crystallographic and computational data of chemical system. 28-30th Jan-2016, PRIST University and IICPT Thanjavur.
10. International conference on phytomedicine. 29-31th August-2018, on BHARATHIAR UNIVERSITY Coimbatore.
11. National seminar titled on Advanced Materials for Energy Environment and Medical Applications, 11-12th July 2019, on NGM College Pollachi.
12. National level workshop on Modern Trends in Research and Statistics., 11th June 2021, GTN Arts college, Dindugil.

13. International seminar on Network Security and Cryptography, 26th June 2021, SRM Institute of Science and Technology, Chennai.

Papers presented in conferences

1. Magnetic property of Fe₂O₃ doped with Ti studied by using VSM (Vibrating sample magnetometer). NCCS-2013. 21-22 Feb 2013, SRM University, Chennai.
2. Preparation and Characterization of Mg Doped γ -Fe₂O₃ Prepared by Self-Propagation Method. ICMCT-2014. 10-12 Mar-2014, VIT University, Vellore.
3. Preparation and Characterization of MnO₂ Prepared by Self-Propagation Method for biofilm treatment, International conference on phytomedicine. 29-31th August-2018, on BHARATHIAR UNIVERSITY Coimbatore.
4. The Advancement of Magnetic Nanoparticle in Cancer Treatment A Review, National seminar titled on Advanced Materials for Energy Environment and Medical Applications, 11-12th July 2019, on NGM College Pollachi.