STAFF PROFILE

1) Name: Dr.N.Arunkumar

2) Designation: Assistant Professor

3) Department: Chemistry

4) Qualifications:

Academic: M.Sc., Ph.D

Additional:

5) Experience (in years): Teaching: 8 years Research: 8 years

6) Area of Specialization: Materials Chemistry

7) Contact: E-mail: arun.snc.mdu@gmail.com Mobile Number: 8015322446

8) Grants Received (Conference/Workshop/Seminar/any other): Nil

Event Title	Agency	Fund Received	Date

9) Project Completed: Nil

Project Title	Agency	Fund Received	Duration

10) Project ongoing: Nil

Project Title	Agency	Fund Received	Duration

11) Research Guidance:

Programme	No. of Scholars	
	Completed	Pursuing
Ph. D.		
M. Phil.		

12) Research Publications:

	International	National
Total Number of Publications	5	1

5

List of International Publications:

Facile synthesis of nanostructured trirutile antimonates M(II)Sb₂O₆ (M = Co, Cu, Ni, Fe) and its visible photocatalytic studies Nagarajan Arunkumar and Saraschadra Narginti Inorganic and Nano-Metal Chemistry Volume 52, 2022 - Issue 1.



- 2. Facile synthesis of N-MgSb₂O₆ trirutile antimonate and its enhanced photocatalytic performance Nagarajan Arunkumar and Saraschandra Naraginti International Journal of Environmental Analytical Chemistry Volume 102, 2022 Issue 19.
- 3. Facile solid solution of trirutile and columbite structured oxides $Zn_{1-x}Li_xNb_{2-x}Mo_xO_6$ and $Zn_{1-x}Li_xNb_{2-x}W_xO_6$ (x=0.0-1.0): synthesis and photocatalytic studies International Journal of Environmental Analytical Chemistry Volume 103, 2023 Issue 10.
- 4. Band gap engineering and photocatalytic activity of new trirutile structure $Zn_{1-x}Mg_xSb_2O_6$ (0< x<1) solid solution Indian Journal of Chemistry Vol. 60A, February 2021, pp. 220-227
- 5. Enhanced Photocatalytic activity of Nanocrystalline N doped ZnSb₂O₆: role of N doping, cation ordering, particle size and crystallinity, Nagarajan Arunkumar and Rajagopalan Vijayaraghavan, RSC Advance 2014,4, 65223-65231.

List of National Publications:

- 1. Band gap engineering and photocatalytic activity of new trirutile structure $Zn_{1-x}MgxSb_2O_6$ (0< x<1) solid solution Indian Journal of Chemistry Vol. 60A, February 2021, pp. 220-227.
- 13) Chapters in Books: Nil
- 14) Other Publications (Proceedings):
- 15) Books Published: Nil
- 16) Presentation in Seminar / Conference:

International: 9

- 1. Enhanced Photocatalytic activity of Nanocrystalline N-doped ZnSb₂O₆: role of N doping, cation ordering, particle size and crystallinity, Arun Kumar N and R.Vijayaraghavan, Nano India 2015 (29-30th Jan 2015) Organized by SASTRA University, Thanjavur, India
- 2. Synthesis and Optical band gap modulation of MgSb₂O₆ trirutile solid solution, ArunKumar N and R.Vijayaraghavan, Indo-US Workshop on Engineered Electrodes for Electrochemical Energy Storage (3rd 4th April 2014) Organized by CECRI MadrasUnit, Tharamani, Chennai, India.
- 3. Synthesis and Optical band gap modulation of $Mg_{1-x}Co_xSb_2O_6$ (x=0.0 1.0) trirutile solid solution, Arun Kumar N and R.Vijayaraghavan, International Union of Materials Research Society International Conferences In Asia (IUMRSI –ICA 16 to 21^{st} 2013) Organized by Indian Institute Of Sciences, Bangalore, India.

- 4. Synthesis, Characterization and Optical band gap of Trirutile type antimonates M(ll)Sb₂O₆ (M = Zn, Mg) Arun Kumar N and R.Vijayaraghavan, International conferences on Emerging Trends In Chemical Sciences (IETC Dec 5 to 7 th 2013) Organized by VIT University Vellore, India.
- 5. Al-doped delafossite oxide CuCrO2: Synthesis and Characterization, Arun Kumar N and R.Vijayaraghavan. Theme Meeting on Recent Trend in Materials Chemistry (RTMC July 25-27 th 2013) Conducted by VIT University, Vellore, India.
- 6. p-Type transparent conducting oxide $CuCr_{1-X}Al_XO_2$: synthesis and characterization Arun Kumar N and R.Vijayaraghavan. 24th Annual General Meeting (2013) Materials Research Society of India (MRSI) Organized by IGCAR, Kalppakam, India.
- 7. p-Type transparent conducting oxide CuCrO₂: synthesis and characterization Arun Kumar N and R.Vijayaraghavan. 4th International conferences on Advanced Nanomaterials (ANM 2012) Organized by IIT Madras, Chennai, India.
- 8. Participated in International Conference on Recent Trends in Advanced Materials (IC RAM -2012) organised by VIT University, Vellore during Feb. 20 22, 2012.
- 9. Synthesis and Fluorination of Hydroxyapatite Using Sodium Boro Fluoride by molten salt method, N. Arun Kumar, G.Buvaneswari, International Conference on sol- gel processing and advance Ceramics. Conducted by IGCAR, Kalppakam. India.

National: 2

- Electrophoretic deposition of ZnO film and its optical property, Arun Kumar N and R.Vijayaraghavan. National conference on Recent Advance in Inorganic chemistry (RAIC – March 23-25 2012). Conducted by Bharathidasan University, Tiruchirappalli, India.
- 2. p-Type transparent conducting oxide CuCr1-xAlxO2: synthesis and characterization Arun Kumar N and R.Vijayaraghavan. 24th Annual General Meeting (2013) Materials Research Society of India (MRSI) Organized by IGCAR, Kalppakam, India.
- 17) Participation in Conference: Nil
- 18) Participation in Seminar: Nil

19) Participation in Workshop: 3

- 1. Indo-US Workshop on Engineered Electrodes for Electrochemical Energy Storage 3rd 4th April 2014 Organized by CECRI Madras Unit, Tharamani, Chennai, India.
- 2. National Workshop on Advanced Materials Characterization Techniques Organized by Department of Physics, S.V University, Tirupati, India.
- 3. National Workshop on Advanced Instruments for Characterization Organized by Department of Nanosciences and Technology, Bharathiar University, Coimbatore, India.

- 20) Participation in Orientation Programme/ Induction Programme/ Short term Courses: 1
 - 1. Participated in the 28 days Orientation programme conducted by conducted by Ramanujan College, University of Delhi from 20-01-2022 to 19-02-2022
- 21) Participation in Faculty Development Programme: 2
 - Participated in the two week online faculty development programme on managing online class and co-creating MOOCS 3.0 conducted by Ramanujan College, University of Delhi from 25-07-2020 to 10-08-2020
 - 2. Participated in the 14 days Refresher Course in Chemistry, conducted by Ramanujan College, University of Delhi from 30 June 2023 to 14 July, 2023
- 22) Conference/ Seminar/ Workshop Organized: Nil
- 23) Invited Speaker/ Session Chair Conference/ Seminar/ Workshop: Nil
- 24) Other Co-curricular / Administrative Responsibilities: Nil
- 25) Member in Board of Studies: Nil
- 26) Editorial/Review Board Member: Nil
- 27) Membership in Professional Bodies: Nil
- 28) Awards received: Nil
- 29) Consultancy: Nil
- 30) Patents: Nil
- 31) Any other information: Nil

* Note: Please provide the total Numbers and details for each metrics