

## CURRICULUM VITAE



**Dr. S.SUGUNA**

**Assistant Professor,**

**PG Department of Chemistry,**

**Shrimathi Devkunvar Nanalal Bhatt College for Women,**

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### **CAREER OBJECTIVES**

To undertake a challenging research position and to be a part of a progressive educational institution that gives scope to effectively apply my skills to the organization and to enhance my capabilities, technical, organizational, and accept the responsibility in a well spirited team to work with dedication and hard work.

### **RESEARCH INTEREST**

- ✓ Crystal growth and nonlinear optical (NLO) materials
- ✓ Synthesis of new organic and inorganic compounds
- ✓ Synthesis of Bimetallic and trimetallic oxides Nanocomposites by Co-precipitation method.

### **WORKING EXPERIENCE:**

Four years of Teaching experience in

**(i) Dr.MGR EDUCATIONAL AND RESEARCH INSTITUTE: 1year (2008-2009)**

(ASSISTANT PROFESSOR IN CHEMISTRY)

**(ii) MEENAKSHI COLLEGE OF ENGINEERING:**

**1year (2009-2010)**

(ASSISTANT PROFESSOR IN CHEMISTRY)

**Subjects handled:** Engineering Chemistry and Environmental Science.

**(iii)SDNB VAISHNAV COLLEGE FOR WOMEN**

**3years (From2016)**

**(ASSISTANT PROFESSOR IN CHEMISTRY)**

**Subjects handled: Physical, Organic, Nano,Electro and Inorganic Chemistry.**

### **ACADEMIC QUALIFICATION**

<b>Education</b>	<b>Institution</b>	<b>University</b>	<b>% of Marks</b>	<b>Grade</b>	<b>Year</b>
<b>Ph.D.</b> ( Crystal Growth)	Loyola College.	Madras University	-	-	2017
<b>M.Phil., Chemistry</b>	Bharathidasan University	Bharathidasan University	76%	Distinction	2007
<b>M. Sc., Chemistry</b>	Queen Mary's College, Chennai	Madras University	68.7%	First Class	2005
<b>B. Sc., Chemistry</b>	Bharathi Womens College, Chennai	Madras University	71.2%	First Class	2001

### **PUBLICATION AND AWARD**

#### **PUBLISHED IN INTERNATIONAL PEER REVIEWED JOURNALS**

**S. Suguna**, D. Anbuselvi, D. Jayaraman, K.S. Nagaraja, B. Jeyaraj, “Synthesis, Growth, structural and optical studies of organic nonlinear optical material- Piperazine-1,4-dium bis 2,4,6-trinitrophenolate”, Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy Journal molecular structure, Vol. 132, pp.330-338,2014  
(**Impact Factor – 1.985**)

**S. Suguna**, , D. Jayaraman, K.S. Nagaraja, B. Jeyaraj, “Synthesis, Growth, structural and optical studies of organic nonlinear optical material- Piperazine-1,4-dium bis dihydrogen phosphate” International Journal of Scientific research 4(2015),49-51  
(**Impact Factor – 1.85**),

**S. Suguna**, , D. Jayaraman, K.S. Nagaraja, B. Jeyaraj, “Synthesis, Growth, structural and optical studies of organic nonlinear optical material- T-butyl ammonium Maleate monohydrate” International Journal of Chemtech research 8(2015)127-130.  
(Impact Factor – 1.45),

Received “**Best paper presenter award**” in “DAE-BRNS 5th Interdisciplinary symposium on Materials Chemistry (ISMC 2014)”, **BARC, Mumbai**, December, 9-13, 2014.

### **MEMBERSHIP**

**Life time member - Society for Materials Chemistry (SMC)**, (Reg.No:Maharastra, Mumbai/F38063/2009), c/o Chemistry Division, Baba Atomic research Centre , Mumbai 400 085.

### **SPECIAL ACHIEVEMENT**

- Six new crystalline compounds and crystallography data were deposited in “**The Cambridge Crystallographic Data Centre (CCDC)**”.
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- One novel crystal received **PubMed- ID- 24878440** (piperazine 1,4 diium bis 2,4,6 trinitrophenolate).

### **PAPERS PRESENTED IN INTERNATIONAL/NATIONAL CONFERENCES**

1. **S.Suguna**, S.Nagaraja, B.Jeyaraj, “Synthesis, Growth, structural and optical and antimicrobial studies of organic nonlinear optical material TBAP ” 5<sup>th</sup> Go Green Summit, Bioleagues, Singapore, October 18-19<sup>th</sup> 2019.
2. **S.Suguna**, S.Nagaraja, B.Jeyaraj “Synthesis, growth, structural and optical properties of DODAP” , Emerging materials for green environment (EMGE 2k19) Andhra Loyola college, March-5-2019.
3. **S.Suguna**, C.Haritha, V.Ramya “Synthesis, structural, optical properties of PNATA single crystal”, EMERGE-2019' Emerging trends in Science and Technology, DR.MGR Educational and Research Institute, Chennai, April 12 - 2019.
4. **S.Suguna**, C.Haritha, D. Poornima devi “Synthesis, structural, optical properties of PNASA single crystal” “EMERGE-2019' Emerging trends in Science and

Technology”DR.MGR Educational and Research Institute, Chennai, April 12 - 2019.

5. **S.Suguna**, D.Anbuselvi, D.Jeyaraman, K.S.Nagaraja, B.Jeyaraj “Synthesis, Growth, structural and optical and antimicrobial studies of organic nonlinear optical material- Piperazine-1,4-dium bis 2,4,6-trinitrophenolate” 5<sup>th</sup> DAE-BRNS Interdisciplinary Symposium on Materials Chemistry, Bhaba Atomic Research Centre, Trombay, Mumbai, December 9-13, 2014.
6. **S.Suguna**, D.Anbuselvi, D.Jeyaraman, K.S.Nagaraja, B.Jeyaraj “Synthesis, crystal growth and characterizations of t-butylammonium maleate monohydrate novel organic single crystals”, National conference on materials for modern world – NCMMW 2014, Department of Physics, Easwari Engineering college, Chennai, 10-11<sup>th</sup> September.
7. **S.Suguna**, D.Anbuselvi, D.Jeyaraman, K.S.Nagaraja, B.Jeyaraj “Nucleation kinetics and solubility studies of Piperazinium picrate Non-linear optical single crystal”, 3rd International Science Congress (ISC-2013), Karunya University, Coimbatore, December 8th and 9th, 2013.
8. **S.Suguna**, K.S. Nagaraja, B.Jeyaraj, “Synthesis and characterisation of Cobalt-Nickel Vanadate”, Fourth International Conference on Recent Advances in Composite Materials (ICRACM-2013), International centre, Goa, February 18-21, 2013.
9. **S.Suguna**, K.S.Nagaraja, B.Jeyaraj, “Synthesis of Hexammonium picrate single crystal and its XRD studies”, XVII National Seminar on Crystal Growth, Department of Physics, Anna University, Chennai, January 9-11, 2013.
10. **S.Suguna**, K.S.Nagaraja, B.Jeyaraj, “Multicomponent Vanadates used as a Gas sensors in an alternative fuels. (Hot disc in cement industry), National Conference on Technology for wealth from waste, LIFE and LICET, Loyola College, Chennai, January 8-9, 2013.
11. **S.Suguna**, K.S.Nagaraja, B.Jeyaraj “Synthesis and Characterisation of Copper-Zinc Vanadate Nanomaterial” National Conference on Nanomaterials, Karunya University, Coimbatore, December 3-4, 2012.

#### **WORKSHOP, SEMINARS AND CONFERENCES ATTENDED**

1. National seminar on Thrust areas in Chemistry (STAC-2012) UGC sponsored, Nandanam Government Arts and Science College, Chennai, 16th February 2012.
2. Workshop on Preparation, Characterization of Crystalline materials and their Applications (WPCCMA – 2012), organized by Department of Physics, Anna University, Chennai, July 16-17, 2012.

3. International Conference on Frontiers in Materials Science for energy and environment (ICFMS-2012), LIFE, Loyola College, Chennai, 11-13 February 2012.

### **INSTRUMENTS HANDLED**

- TG-DTA Instrument
- UV-Vis- Spectrophotometer
- Crystal Growth systems
- FT-IR Spectrophotometer
- High And Low Temperature Furnace Set Up

### **NATIONAL LABORATORIES VISITED FOR RESEARCH WORK**

- International center for Chemistry research, BITS Pilani, Goa,2013
- Crystal growth Centre SSN college of Engineering, Kalavakkam, , 2013.
- National Centre For Ultrafast Processes, Madras University, 2012
- National Polymer Lab and Instrumentation centre,CLRI, Adayar,2012and 2013.
- Crystal Research Laboratory and Crystal Growth Centre, Anna University, Chennai

### **CERTIFICATE COURSES**

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|--------------------------|--|
| 1. Name of the Institute | :SRM infotech                                |
| Nature of the Course     | : Computer –Cum- Internet Literacy Programme |
| Duration                 | : One year (2000 – 2001)                     |

### **DECLARATION**

I hereby declare that particulars and facts stated here in above are true, correct and complete to the best of my knowledge and belief.

Place: Chennai

Sincerely  
\_ (S.SUGUNA)