Faculty Details Page on DU Web-site

Title	**Professor**	First Name	**Sitharaman**	Last Name	**Uma**	Photograph
Designation		**Professor**				
Department		**Chemistry**				
Address (Campus)		**Department of Chemistry University of Delhi Delhi 110 007**				
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Education

Subject	Institution	Year	Details
Ph. D in Solid State Chemistry	**Indian Institute of Science, Bangalore**	**1995**	

Career Profile

Organization / Institution	Designation	Duration	Role
Kansas State University, USA	**Research Associate**	**2001-2005**	**Research**
Oregon State University, USA	**Research Associate**	**1999-2001**	**Research**
Iowa State University, USA	**Research Associate**	**1996-1998**	**Research**
Indian Institute of Science, Bangalore	**Research Associate**	**1995-1996**	**Research**

Research Interests / Specialization

Materials, Solid State Chemistry / Synthesis of new materials (mesoporous, microporous, and nanoscale), crystal structure evaluation, structure-property relationship, Oxide-ion conductors and Development of Photocatalysts for environmental remediation

Teaching Experience (Subjects/Courses Taught)

Inorganic and Solid State Chemistry
Courses taken for M.Sc Chemistry
1. Inorganic Supra Molecular Chemistry 2. Chemistry of d and f block Elements 3. Inorganic Materials 4. Bio Inorganic Chemistry and Catalysis

Courses taken for M.Tech
1. Solid State Chemistry for M.Tech in NanoScience and Nanotechnology

Courses taken for Ph. D
1. Advanced Materials Chemistry

Honors & Awards

K.P. Abraham Gold Medal and cash award for the Best Thesis in Materials Chemistry, 1995-1996, Indian Institute of Science, Bangalore, India.
Awarded Maya Devi Juneja Gold Medal in the ISCA-2015 for contribution in the area of Solid State Chemistry and Allied Areas

Publications (LAST FIVE YEARS)

Books / Monographs

Year of Publication	Title	Publisher	Co-Author
	Nil		

In Indexed/ Peer Reviewed Journals

Year of Publication	Title	Journal	Co-Author
2015	Interesting cationic ($Li^{+}/Fe^{3+}/Te^{6+}$) variations in new rocksalt ordered structures	Journal of Chemical Sciences, 127, 225	Akanksha Gupta
2014	Optical and Magnetic Properties of (Er, F) co-doped SnO_2 Nanocrystals	Turkish Journal of Physics, 1-13	R. Nagarajan, and Vinod Kumar
2014	Evidence of cationic mixing and ordering in the honeycomb layer of Li_4MSbO_6 (M (III) = Cr, Mn, Al, Ga) (S.G. C2/c) oxides	Dalton Transaction, 2014, 43, 12050-12057	Neha Bhardwaj, and Akanksha Gupta
2013	Formation of honeycomb ordered monoclinic $Li_2M_2TeO_6$ (M = Cu, Ni) and disordered orthorhombic $Li_2Ni_2TeO_6$ oxides	Dalton Transactions, 2013, 42, 14992-14998.	Vinod Kumar and Akanksha Gupta
2013	Precursor driven one pot synthesis of Wurtzite and Chalcopyrite CuFeS2	Chem. Coomun. 2013, 49, 7316-7318.	Prashant Kumar and Rajamani Nagarajan
2013	Single step hydrothermal based synthesis of $M(II)Sb_2O_6$ (M = Cd, and Zn) type antimonates and their photocatalytic properties	Bull. Mater. Sci. 2013, 35, 287-291.	Jyoti Singh and Neha Bhardwaj
2012	Novel Lithium-Containing Honeycomb Structures	Inorganic Chemistry, 2012, 51. 10471-10473	Vinod Kumar, Neha Bhardwaj, Nobel Tomar, Vaishali Thakral
2012	Synthesis and Structural Investigation of a Unique Columnar Phase in the Bi_2O_3-TeO_2-V_2O_5 system	Inorganic Chemistry, 2012, 51, 1462-1470	Vaishali Thakral, Neha Bharadwaj
	Investigation of Cation (Sn^{2+}) and Anion	J. Hazardous Materials,	Vinod Kumar,

2011	(N^{3-}) Substitution in favor of Visible Light Photocatalytic Activity in the Layered Perovskite $K_2La_2Ti_3O_{10}$	2011, 189, 502-508.	and Govind
2010	Investigation of visible light photocatalytic behavior of $Bi_4V_2O_{11-\delta}$ and BIMEVOX (ME = Al, Ga) oxides	Materials Research Bulletin, 2010, 45, 1250-1254.	Vaishali Thakral
2010	Comments on "Visible-Light-induced photo catalyst based on Nickel Titanate Nanoparticles""	Industrial & Engineering Chemistry Research, 2010, 49, 1995-1996.	Nagarajan, Rajamani, and Mamta Kharkwal
2010	Use of a chelating agent for the synthesis of high surface area pyrophanite $MnTiO_3$ powders	Materials Letters, 2010, 64, 692-694.	Mamta Kharkwal, and R. Nagarajan

Articles

Nil

Conference Presentations

1. Synthesis and Characterization of $BiOI/CaBi_2O_2(CO_3)_2$ Composite as Photocatalyst Utilizing UV/Visible Light Irradiation, Vidhu Malik, Meenakshi Pokhriyal and Sitharaman Uma, Poster presented on 9th National Conference on Solid State Chemistry and Allied Areas, ISCAS-2015, May 8-10, 2015, University of Delhi

2. Investigations of the various cationic distributions in new lithium based rocksalt ordered structures, Invited talk in 9th National Conference on Solid State Chemistry and Allied Areas, ISCAS-2015, May 8-10,

2015, University of Delhi

3. Synthesis and structural characterization of new phosphosilicate apatites and investigation of photoluminescence by Eu^{3+} doping, Akanksha Gupta, Meenakshi Pokhriyal and Sitharaman Uma, Poster presented in the 5th DAE-BRNS International Symposium on Materials Chemistry, December 09-13, 2014, Mumbai, India

4. Precursor driven one pot synthesis of Wurtzite and Chalcopyrite CuFeS2, Prashant Kumar, Sitharaman Uma, Rajamani Nagarajan, Poster presented in International Union of Materials Research Societies– International Conference in Asia 2012 (IUMRS-ICA 2013), December 16 – 20, 2013, Indian Institute of Science, Banglore, INDIA

5. Lithium Containing Layered Mixed Metal Oxides With Honeycomb Ordered Structures, Akanksha Gupta, Neha Bhardwaj, Vinod Kumar and Sitharaman Uma, Poster presented in MTIC-XV, December 13-16, 201, IIT Roorkee,

6. Interesting Cationic ($Li^{+}/Fe^{3+}/Te^{6+}$) variations in new rocksalt ordered structures, S. Uma, Short Invited Lecture in MTIC-XV, December 13-16, 2013, IIT Roorkee

7. A simple unconventional approach for composition control in copper-iron-sulfur system, Prashant Kumar, Sitharaman Uma, and Rajamani Nagarajan, Poster presented in IUMRS-ICA 2012, Busan, S. Korea.

8. Novel Lithium Containing Mixed Metal Oxides Honeycomb Structures, Neha Bhardwaj, Vinod Kumar, Vaishali Thakral and S. Uma, 4th DAE-BRNS International Symposium on Materials Chemistry, December 11-15, 2012, Mumbai, India

9. Ion exchange synthesis and characterization of new pyrochlore copper(1) antimony oxide, Jyoti Singh and **S. Uma**, Poster Presented at International Conference on Materials for Advanced Technologies, Suntec, Singapore (June 2011).

10. Optical and photocatalytic properties of heavily doped SnO_2 nanocrystals by a novel single source precursor approach, Vinod Kumar, **S. Uma**, R. Nagarajan, Presented at International Conference on Materials for Advanced Technologies, Suntec, Singapore (June 2011).

11. Investigation of the synthesis, structure and photocatalytic applications of anion incorporated layered oxides, Vaishali Thakral, Vinod Kumar, **S. Uma**, Poster Presented at International Symposium on Materials Chemistry 2010, Bhabha Atomic Research Centre, Mumbai (December 2010)).

12. Synthesis and Investigation of Structural and Photocatalytic Properties of Mixed Metal Oxides, S. Uma, Jyoti Singh, Mamta Kharkwal, and Vaishali Thakral, Poster Presented in 2nd DAE-BRNS International Symposium on Materials Chemistry, December 2-6, 2008, Mumbai, India

Total Publication Profile optional

Books

Nil

In Indexed/ Peer Reviewed Journals

Articles

Nil

Public Service / University Service / Consulting Activity

Nil

Professional Societies Memberships
Editorial Board Member(2015), Scientific Reports **Materials Research Society of India, and Society for Materials Chemistry, India**
Projects (Major Grants / Collaborations)
Ongoing DST funded project titled, Systematic synthetic exploration based on cation and anion variations for the identification and characterization of new solid state materials
Other Details