




University Faculty Details Page on DU Web-site

Title	Dr.	First Name	PANDIAN	Last Name	SENTHIL KUMAR	Photograph
Designation	ASSISTANT PROFESSOR					
Department	DEPARTMENT OF PHYSICS & ASTROPHYSICS					
Address (Campus)	DEPARTMENT OF PHYSICS & ASTROPHYSICS, DELHI UNIVERSITY, DELHI 110007					
(Residence)	A-6, TEACHERS' RESIDENTIAL COMPLEX, TYPE II, MUKHERJEE NAGAR, DELHI 110009					
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Email	pskumar@physics.du.ac.in					
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Education						
Subject	Institution		Year	Details		
PHYSICS	UNIVERSITY OF HYDERABAD		2003	Thesis topic: IONIC AND MESOSCOPIC ASPECTS OF CATION DOPED SILVER IODIDE		
				Subjects:		
				Subjects:		
Career Profile						
Organisation / Institution		Designation	Duration	Role		
Delhi University		Assistant Professor	May 2008 – Present date	Teaching and Research		
Universidade de Vigo, Spain		Postdoctoral Fellow	2006 – 2008	Research in Nanotechnology		
Chung Yuan Christian University, Taiwan		Postdoctoral Fellow	2005	Research in Biomedical Engineering		
National Chemical Laboratory, Pune, INDIA		Research Associate	2003 - 2005	Research in Nanotechnology		
Research Interests / Specialization						
NANOTECHNOLOGY - METAL AND SEMICONDUCTOR NANOCRYSTALS, CORRELATED OPTICAL, STRUCTURAL AND MICROSCOPIC ASPECTS						
Teaching Experience (Subjects/Courses Taught)						
2015-16	Advanced Solid State Theory II					
2015-16	Solid State Physics Laboratory (Previous)					
2014-15	Laser & Spectroscopy II (Theory)					
2014-15	Solid State Physics Laboratory (Previous)					
2013-14	Laser & Spectroscopy II (Theory)					
2013-14	Solid State Physics Laboratory (Previous)					

2013-14	Quantum Mechanics I		
2012-13	Quantum Mechanics I		
2012-13	Solid State Physics Laboratory (Previous)		
2011-12	Quantum Mechanics I		
2011-12	Solid State Physics Laboratory (Previous)		
2010-11	Quantum Mechanics I		
2010-11	Waves & Optics Laboratory (Previous)		
2009-10	General Physics (MTech Nanotechnology)		
2009-10	Waves & Optics Laboratory		
2008-09	Electromagnetic Theory		
2008-09	Electronics Laboratory (Final)		
Honors & Awards			
Spanish Government Nanotechnology Fellowship		(2006 - 2007)	
Taiwan National Science Council Postdoctoral Fellowship		(2005)	
Council of Scientific and Industrial Research Associate Fellowship		(2003 – 2004)	
Young Research Award at V-IUMRS Conference, Bangalore, INDIA		(1998)	
Council of Scientific and Industrial Research Fellowship		(1996 – 2001)	
Publications (LAST FIVE YEARS)			
Books / Monographs			
<u>Year of Publication</u>	<u>Title</u>	<u>Publisher</u>	<u>Co-Author</u>
NONE			
In Indexed/ Peer Reviewed Journals			
<u>Year of Publication</u>	<u>Title</u>	<u>Journal</u>	<u>Co-Authors</u>
2015	<i>Tweaking Anisotropic Gold Nanostars: Covariant control of Polymer-solvent mixture complex</i>	<i>RSC Adv. 5 (2015)</i> 5205-5212	Abhitosh Kedia, Harsh Kumar
2014	<i>A simple one pot synthesis of cubic Cu₅FeS₄</i>	<i>RSC Adv. 4 (2014)</i> 52633-52636	Prashant Kumar, Meenakshi Gusain, Sitaraman Uma and Rajamani Nagarajan
2014	<i>Halide ion induced Tuning and Self-organization of Gold Nanostars</i>	<i>RSC Adv. 4 (2014)</i> 4784-4790	Abhitosh Kedia

2013	<i>Local Electron Beam Excitation and Substrate Effect on the Plasmonic Response of Single Gold Nanostars</i>	<i>Nanotech. 24 (2013)</i> 405704 (9 pp.)	Pabitra Das, Abhitosh Kedia, Nicolas Large and Tapas Kumar Chini
2012	<i>Controlled Reshaping and Plasmon Tuning Mechanism of Gold Nanostars</i>	<i>J. Mat. Chem. C 1 (2013)</i> 4540-4549	Abhitosh Kedia
2012	<i>Solvent-Adaptable poly(vinylpyrrolidone) Binding Induced Anisotropic Shape Control of Gold Nanostructures</i>	<i>J. Phys. Chem. C 116 (2012)</i> 23721-23728	Abhitosh Kedia
2012	<i>Precursor-Driven Nucleation and Growth of Gold Nanostars</i>	<i>J. Phys. Chem. C 116 (2012)</i> 1679-1686	Abhitosh Kedia
2010	<i>Room temperature optical absorption and intrinsic photoluminescence in KZnF₃</i>	<i>Chemical Physics Letters, 494 (2010)</i> 284-286	Neetu Tyagi and R. Nagarajan
2008	<i>High yield synthesis and optical response of gold nanostars</i>	<i>Nanotechnology, 19 (2008)</i> 015606 (6pp)	Isabel Pastoriza Santos, Benito Rodríguez González, F. Javier García de Abajo and Luis M. Liz Marzán
2006	<i>High temperature XRD studies of nanoscale AgI-CuI solid solutions</i>	<i>Journal of Physics and Chemistry of Solids, 67 (2006)</i> 1809 - 1816	A.K. Tyagi and C.S. Sunandana
2006	<i>Search for a novel zero thermal expansion material: dilatometry of the AgI-CuI system</i>	<i>Journal of Materials Science, 41 (2006)</i> 3861 - 3865	N.S. Kini, A.M. Umarji and C.S. Sunandana
2005	<i>Synthesis of CdS and alloyed CdMnS nanocrystals using aqueous foams</i>	<i>Journal of Nanoscience and Nanotechnology, 5 (2005)</i> 2144 - 2154	Manasi Kasture, Usha Raghavan, Renu Pasricha and Murali Sastry
2004	<i>Free standing gold nanoparticle membrane by the spontaneous reduction of aqueous chloroaurate ions by oxyethylene linkage bearing diamine at a liquid liquid interface</i>	<i>Advanced Materials, 16 (2004)</i> 966 - 971	PR. Selvakannan, Arvind S. More, Rahul D. Shingte, Prakash P. Wadgaonkar and Murali Sastry
2004	<i>Highly versatile free standing nanogold membranes as</i>	<i>Chemistry of</i>	Debabrata Rautaray,

	<i>scaffolds for the growth of calcium carbonate crystals</i>	<i>Materials</i> , 16 (2004) 988 - 993	Prakash P. Wadgaonkar and Murali Sastry
2004	<i>One pot, spontaneous and simultaneous synthesis of gold nanoparticles in aqueous and nonpolar organic solvents using a diamine containing oxyethylene linkage</i>	<i>Langmuir</i> , 20 (2004) 295 – 298	PR. Selvakannan, Arvind S. More, Rahul D. Shingte, Prakash P. Wadgaonkar and Murali Sastry
2004	<i>Theoretical approaches to superionic conductivity</i>	<i>Bulletin of Materials Science</i> , 27 (2004) 1 - 17	C.S. Sunandana

Articles

Conference Proceedings

Manoj Verma, Abhitosh Kedia & **P. Senthil Kumar**, 2016 Gold-Copper alloy “nano-dumplings” with tunable compositions and plasmonic properties. **AIP Conf. Proc.** 1728: 020325.

Kamalesh Nehra, Manoj Verma & **P. Senthil Kumar**, 2016 Gold Nucleation engineered growth/formation of core-shell and hollow metal nanostructures. **AIP Conf. Proc.** 1728: 020328.

Manoj Verma, Abhitosh Kedia & **P. Senthil Kumar**, 2014 Bromide Ion Induced Formation of PVP-Capped Anisotropic Gold Nanoplates/Nanotriangles. **AIP Conf. Proc.** 1591: 549-551.

M. Boazbou Newmai, Abhitosh Kedia & **P. Senthil Kumar**, 2014 NVP Encapsulated Gold Nanoclusters by In Situ Polymerization of Monomer. **AIP Conf. Proc.** 1591: 600-602.

Abhitosh Kedia & **P. Senthil Kumar**, 2013 Gold Nanostars: Reshaping and Plasmon Tuning Mechanism. **AIP Conf. Proc.** 1512: 232-233.

Abhitosh Kedia & **P. Senthil Kumar**, 2011 Solvent Induced Kinetic Growth of Shape Controlled Gold Nanostructures. **AIP Conf. Proc.** 1349: 321-322.

Invited Talks

P. Senthil Kumar, *Science at the Nanoscale – Invited talk* at the Orientation program on Nanoscience held at Swami Shradhaanand College, University of Delhi, INDIA, March 25, 2014.

P. Senthil Kumar, *Plasmonic Nanostructures – Invited talk* at the One day Seminar on Nanoscience and Nanotechnology, held at University of Delhi, INDIA, March 14, 2014.

P. Senthil Kumar, *Plasmonics - The Nanoscale Optics – Invited talk* at the Visitor's Programme, held at University

of Delhi, INDIA, March 12 - 13, 2014.

P. Senthil Kumar, *Plasmonic Characterization of Metal Nanostructures – Invited talk* at Frontiers in Physics (**FIP-2013**), held at University of Hyderabad, INDIA, September 20 - 22, 2013.

P. Senthil Kumar, *Electron microscopy of complex size/shape controlled plasmonic nanoparticles – Invited talk* at International Conference on Electron Microscopy and XXXIV Annual Meeting of the Electron Microscope Society of India (**EMSI**), held at Kolkata, INDIA July 3 - 5, 2013.

P. Senthil Kumar, *Size and Shape Controlled Gold Nanostructures – Invited talk* at the National Conference on Condensed Matter Physics (**NCCMP-2012**), held at BITS, Pilani, INDIA, February 24-25, 2012.

P. Senthil Kumar *Metal Nanostructures for Plasmonics and Nanophotonics Applications- Invited talk* at the International conference on Current Developments in Atomic, Molecular, Optical and Nanophysics (**CDMOAP -2011**), Delhi University, Delhi between 14-16th December 2011.

Conference Presentations

M. Boazbou Newmai and **P. Senthil Kumar**, Charge Transfer Interactions in Oligomer coated Gold Nanoclusters – **Poster** presented at 60th DAE Solid State Physics Symposium (**DAE-SSPS-2015**) at Amity University UP, Noida, Uttar Pradesh during December 21-25, 2015.

Manoj Verma, Kamallesh Nehra and **P. Senthil Kumar**, Plasmonic Oligomers: The Role of Polymer-Solvent Interactions – **Oral** presented at 8th National Conference on Thermophysical Properties (**NCTP – 2015**) at MNIT, Jaipur, during 14-16 December 2015.

Manoj Verma, Abhitosh Kedia and **P. Senthil Kumar**, Gold-Copper Alloy “Nano-Dumplings” with Tunable Compositions and Plasmonic properties - **Poster** presented at International Conference on Condensed Matter & Applied Physics (**ICC-2015**) at Govt. Engineering College Bikaner, Rajasthan, during October 30-31, 2015.

Kamallesh Nehra, Manoj Verma and **P. Senthil Kumar**, Nucleation Engineered Growth / Formation of Core-Shell and Hollow metal nanostructures - **Poster** presented at International Conference on Condensed Matter & Applied Physics (**ICC-2015**) at Govt. Engineering College Bikaner, Rajasthan, during October 30-31, 2015.

Manoj Verma and **P. Senthil Kumar**, Controlled Size Tuning of Au Nanotriangles for Sensing and Catalysis Applications - **Poster** presented at International Conference on Electron Microscopy And XXXV Annual Meeting of the Electron Microscope Society of India & Pre-Conference Workshops on Electron Microscopy at University of Delhi, Delhi, during July 07-11, 2014.

Abhitosh Kedia, Ranjan Singhal and **P. Senthil Kumar**, *Engineering the Plasmonic Response of Gold Nanostars with Halide ions* - **Oral** Presented at International Conference in Asia (**IUMRS-ICA 2013**), held at IISc, Bangalore, INDIA, between 16-20 December 2013.

Abhitosh Kedia, **P. Senthil Kumar**, *Self-assembled Colloidal Gold Nanoclusters and Nanoparticles via Monomer Reduction/Passivation* - **Poster** Presented at the 3rd Nano Today Conference, Biopolis, Singapore, during 8-11 December 2013.

M. Boazbou Newmai, Abhitosh Kedia, **P. Senthil Kumar**, *NVP Encapsulated Gold Nanoclusters by in situ polymerization of monomer* - **Poster** presented at the 58th DAE Solid State Physics Symposium at Thapar University, Patiala, during 17-21 December 2013.

Manoj Verma, Abhitosh Kedia, **P. Senthil Kumar**, *Bromide Ion Induced Formation of PVP-capped Anisotropic Gold Nanotriangles* - **Poster** presented at the 58th DAE Solid State Physics Symposium at Thapar University, Patiala, during 17-21 December 2013.

M. Boazbou Newmai, Abhitosh Kedia and **P. Senthil Kumar**, *Oligomer coated Gold Nanoclusters through Oxidative Monomer Polymerization* - **Poster** presented at the International Conference on Emerging Technologies: Micro to Nano 2013 (**ETMN-2013**) held at BITS, Goa campus, 23-24 February 2013.

Abhitosh Kedia, Manoj Verma and **P. Senthil Kumar**, *Bromine Ion Induced Tunable Plasmonic Response of Gold Nanostars* - **Poster** presented at the International Conference on Emerging Technologies: Micro to Nano 2013 (**ETMN-2013**) held at BITS, Goa campus, 23-24 February 2013.

Abhitosh Kedia and **P. Senthil Kumar**, *Gold Nanostars Reshaping and Plasmon Tuning Mechanism* - **Poster** presented at the 57th DAE-Solid State Physics Symposium, held at IIT, Bombay, 3-7 December, 2012.

Abhitosh Kedia and **P. Senthil Kumar**, *Random to Selective Self Organization of Anisotropic Gold Nanostructures* - **Poster** presented at the International Conference of Young Researchers on Advanced Materials (**ICYRAM 2012**), held at Singapore, 1-6 July 2012.

Abhitosh Kedia and **P. Senthil Kumar**, *Molecular Aspects of Small Plasmonic Gold Nanoparticle Chain Networks* - **Poster** presented at the International Conference of Young Researchers on Advanced Materials (**ICYRAM 2012**), held at Singapore, 1-6 July 2012 (**Best Poster award**).

Abhitosh Kedia and **P. Senthil Kumar**, *Halide ion Induced Tuning and Self organization of Gold Nanostars* – **Poster** presented at the National Conference on Condensed Matter Physics (**NCCMP-2012**), held at BITS, Pilani, INDIA, February 24-25, 2012.

Abhitosh Kedia and P. Senthil Kumar, *Plasmonic Coupling in Anisotropically Self-Organized Gold Nanostructures* - **Poster** presented at International conference on Current Developments in Atomic, Molecular, Optical and Nanophysics (**CDMOAP -2011**), Delhi University, Delhi between 14-16th December 2011.

Abhitosh Kedia, P. Senthil Kumar, *In-Situ Chemical Synthesis of Pyrrolidone Coated Gold Nanostructures* - **Poster** presented at International conference on Nanomaterials & Nanotechnology(**ICNANO -2011**), Delhi University, Delhi between 18-21 December 2011.

Abhitosh Kedia and **P. Senthil Kumar**, *Fine tuning of localized Surface Plasmon Resonance in Gold nanostars* - **Poster** presented at the International conference on Advances in Condensed and NanoMaterials (**ICACNM-2011**), held at Panjab University, Chandigarh, INDIA, February 23-26, 2011.

Abhitosh Kedia and **P. Senthil Kumar**, *Kinetic Growth and Stabilization of Gold nanostars* - **Poster** presented at the 3rd International Symposium on Materials Chemistry (**ISMC- 2010**), held at BARC, Mumbai, INDIA, December 7-11, 2010.

Abhitosh Kedia and **P. Senthil Kumar**, *Solvent Induced Kinetic Growth of Shape Controlled Gold Nanostructures* – **Oral/Poster** presented at 55th DAE-Solid State Physics Symposium, held at Manipal University, Manipal, Karnataka, INDIA, December 26-30, 2010.

P. Senthil Kumar, Isabel Pastoriza-Santos, Benito Rodríguez-González, F. Javier García de Abajo and Luis M. Liz-Marzán, *Novel one step synthesis of self-assembled flower like colloidal gold nanostructures* – **Poster** presented at the 21st Conference of the European Colloid and Interface Science (**ECIS-2007**) – held at Geneva, Switzerland, September 10 -14, 2007.

P. Senthil Kumar and Isabel Pastoriza-Santos, *High yield synthesis and optical response of gold nanostars* – **Oral** presented at the workshop on Materiales Jerarquizados para Nanofotónica (**MAJNAF-07**) held at Ciudad Real, Spain, January 24 – 26, 2007.

Total Publication Profile optional

Books/Chapters

P. Senthil Kumar and C.S. Sunandana, *Formation mechanism of metal halide thin films, Ion Conducting Materials: Theory and Applications*, A.R. Kulkarni and P. Gopalan (Eds.), Narosa Publishing House, New Delhi (2001) pp. 117 – 119.

P. Senthil Kumar, Ch. Sujatha and C.S. Sunandana, *Quantum size effects in I-VII semiconductor thin films*, Proceedings of International Workshop on Preparation & Characterization of Technologically important Single Crystals, S.K. Gupta, S.K. Halder and G. Bhagavannarayana (Eds.), (2001) pp. 483 – 487.

P. Senthil Kumar, N.S. Kini, A.M. Umarji and C.S. Sunandana, *Disorder, phonons and superionic conductivity in silver iodide*, Solid State Ionics: Materials and Devices, B.V.R. Chowdhari and W.J. Wang, (Eds.), World Scientific, Singapore (2000) pp. 121 - 124.

In Indexed/ Peer Reviewed Journals

P. Senthil Kumar, P. Balaya, P.S. Goyal and C.S. Sunandana, *Effect of Cu-substitution on the conductivity of Ag-rich AgI-CuI solid solutions*, **J. Phys. Chem. Solids** 64 (2003) 961 - 966.

R. Mukhopadhyay, S. Mitra, **P. Senthil Kumar**, I. Tsukushi and S. Ikeda, *Order-disorder transition in pyridinium iodide: QENS study*, **Appl. Phys. A** 74 (2002) [suppl1] s1311 – s1313.

P. Senthil Kumar and C.S. Sunandana, *Steady state photoluminescence characteristics of Sb-doped AgI thin films*, **Nano Letters**, 2 (2002) 975 - 978.

P. Senthil Kumar, Swati Ray and C.S. Sunandana, *Optical properties of Sb-doped AgI nanoparticles*, **Proc. SPIE** 4808 (2002) 193 - 200.

P. Senthil Kumar and C.S. Sunandana, *Interfacial controlled growth of AgI nanoparticles*, **Proc. SPIE** 4807 (2002) 241 - 252.

P. Senthil Kumar and C.S. Sunandana, *Strain-induced confinement of excitons in quasi-free AgI nanoparticles*, **Nano Letters**, 2 (2002) 431 – 434.

P. Senthil Kumar, Y.L. Saraswathi and C.S. Sunandana, *Phase transitions in mechanochemically synthesized CuI nanocrystals*, **Mater. Phys. Mech.** 4 (2001) 71 - 75.

P. Senthil Kumar, Swati Ray and C.S. Sunandana, *Sb-assisted AgI nanoparticle growth in thin films*, **Mater. Phys. Mech.** 4 (2001) 39 - 41.

P. Senthil Kumar, P. Babu Dayal and C.S. Sunandana, *On the formation mechanism of γ -AgI thin films*, **Thin Solid films**, 357 (1999) 111-118.

C.S. Sunandana, Y.L. Saraswathi and **P. Senthil Kumar**, *Cuprous halides: old facts and new developments*, **Ind. J. Pure & Appl. Phys.**, 37 (1999) 325 – 330.

P. Senthil Kumar and C.S. Sunandana, *γ -AgI films by iodization at ambient temperature*, **Thin Solid films**, 323 (1998) 110 - 114.

Articles/Patents

Pandian Senthil Kumar, Periasamy Selva Kannan, Arvind More, Rahul Shingte, Prakash Wadgaonkar, Murali Sastry, *mixing 2-bis (4-aminophenoxy) diethyl ether with aqueous chloroaurate ions in solvents*,

then polymerizing the mixture to obtain gold nanoparticles encapsulated polymers and leaching the gold particles with iodine to obtain the hollow structures, having stability, used for separation and drug delivery, US Patent 7,182,894 (Publication date 2007/2/27)

PR. Selvakannan, P. Senthil Kumar, Arvind S. More, Rahul D. Shingte, Prakash P. Wadgaonkar and Murali Sastry, *A new process for the preparation of freestanding membranes*, US patent filed (**NF 387/03**).

Debabrata Rautaray, P. Senthil Kumar, Prakash P. Wadgaonkar and Murali Sastry, *A new process for the growth of mineral crystals by using surface modified biocompatible free standing gold nanoparticle membrane as scaffold*, US patent filed (**NCL 28-2003**).

Previous Conference Presentations

P. Senthil Kumar, *Synthesis and characterization of size/shape controlled metal nanostructures – Colloquium* at National Chemical Laboratory, Pune, India – December 19, 2007.

P. Senthil Kumar, Debabrata Rautaray, Renu Pasricha and Murali Sastry, *Aqueous foams as templates for the synthesis of CdS nanorods – Poster* presented at the International Conference on Nanoscience and Technology (**ICONSAT 2003**) – Kolkata, INDIA, December 17 – 20, 2003.

C.S. Sunandana, **P. Senthil Kumar** and Swati Ray, *Optical properties of Sb-doped AgI nanoparticles (#4808 – 44) – Poster* presented at the International Symposium on Optical Science and Technology - 47th Annual meeting of **SPIE** - Seattle, Washington, USA, July 7 – 11, 2002.

C.S. Sunandana and **P. Senthil Kumar**, *Interfacial controlled growth of AgI nanoparticles (#4807 – 46) – Poster* presented at the International Symposium on Optical Science and Technology - 47th Annual meeting of **SPIE** - Seattle, Washington, USA, July 7 – 11, 2002.

Swati Ray, **P. Senthil Kumar** and C.S. Sunandana, *Effect of Sb-substitution on the optical behavior of AgI thin films – Poster* presented at the **DAE Solid State Physics Symposium**, BARC, Mumbai, December 26 – 30, 2001.

P. Senthil Kumar and C.S. Sunandana, *Towards the halogenation of noble metal films – Poster* presented at the National Symposium on Vacuum Science and Technology (**NSVST 2001**), IISc, Bangalore, September 5 – 7, 2001.

P. Senthil Kumar, Swati Ray and C.S. Sunandana, *Sb-assisted AgI nanoparticle growth in thin films – Oral* presented at the International Conference on Materials for Advanced Technologies (**ICMAT 2001**), Singapore, July 1 - 6, 2001.

P. Senthil Kumar, Y.L. Saraswathi and C.S. Sunandana, *Phase transitions in mechanochemically synthesized CuI nanocrystals – Poster* presented at the International Conference on Materials for Advanced

Technologies (**ICMAT 2001**), Singapore, July 1 - 6, 2001.

P. Senthil Kumar and C.S. Sunandana, *Formation mechanism of metal halide thin films* – **Poster** presented at the IV-National Conference on Solid State Ionics, IIT, Mumbai, March 3 - 6, 2000.

P. Senthil Kumar and C.S. Sunandana, *Commercial silver foils as halogen sensors: a basic physical investigation* – **Oral** presented at the VII-National Seminar on Physics and Technology of Sensors, University of Pune, Pune, February 14 - 16, 2000.

P. Babu Dayal, **P. Senthil Kumar** and C.S. Sunandana, *Cation stabilized γ -AgI thin films* – **Poster** presented at the DAE Solid State Physics Symposium, IGCAR, Kalpakkam, December 21 - 25, 1999.

P. Senthil Kumar, N.S. Kini, A.M. Umarji and C.S. Sunandana, *Negative thermal expansion of non-metallic solids* – **Poster** presented at the Symposium on Condensed Matter Physics (**SCMP-'99**), IACS, Calcutta, December 2 - 5, 1999.

P. Senthil Kumar and C.S. Sunandana, *Two-interface model for the formation mechanism of thin films of I-VII semiconductors* – **Oral** presented at the National Conference on Thermophysical Properties, Guwahati University, Guwahati, March 11-13, 1999.

P. Senthil Kumar and C.S. Sunandana, *Formation mechanism of AgI thin films* – **Oral** presented at the 6th Asian conference on Solid State Ionics, Suraj kund, New Delhi, November 29 – December 4, 1998.

P. Senthil Kumar, N.S. Kini, A.M. Umarji and C.S. Sunandana, *Thermal expansion of cuprous iodide* – **Poster** presented at the VI-Asian conference on Solid State Ionics, Suraj kund, New Delhi, November 29 – December 4, 1998.

P. Senthil Kumar and C.S. Sunandana, *A DSC and conductivity study of the phase transitions in copper iodide* – **Oral** presented at the **V-IUMRS** Conference in Asia, IISc, Bangalore, October 13-16, 1998.

P. Senthil Kumar, N.S. Kini, A.M. Umarji and C.S. Sunandana, *Cation induced thermal contraction of silver iodide* – **Poster** presented at the **V-IUMRS** Conference in Asia, IISc, Bangalore, October 13-16, 1998.

P. Senthil Kumar and C.S. Sunandana, *Characterization of silver iodide layers* - **Poster** presented at the National Symposium on the Physics of Materials, University of Hyderabad, March 27-29, 1997.

J.R.G. Patnaik, **P. Senthil Kumar** and C.S. Sunandana, *Studies on β -AgI films* - **Poster** presented at the National Conference on Science and Technology of Surfaces and Interfaces, IIT, Kharagpur, December 16 - 18, 1996.

Public Service / University Service / Consulting Activity
<p>Actively involved in setting up the MTech Nanoscience and Nanotechnology course/laboratory (2009)</p> <p>Referee for various international/national journals (2002 - Present)</p> <p>Refereed for Materials Physics and Mechanics (2001)</p> <p>Engaged in several conference proceedings (1999 – Present)</p>
Professional Societies Memberships
Included in Marquis Who's Who in the world 2014 (31st edition)
Projects (Major Grants / Collaborations)
Supported by the Scheme to Strengthen R & D Doctoral Research Program at the University of Delhi from 2009 onwards with an annual grant of Rs. 2.5 lakhs.
Other Details
<p>MRSI best paper award (2014)</p> <p>Best Poster award at ICYRAM 2012 Singapore</p> <p>Our Nanotechnology paper (2008) is one of the most cited/referenced papers</p> <p>Invited to review papers for various National/International Journals and conference proceedings.</p>