

## Research Publications

TOTAL Citations: 680

h-Index: 16

2010 Onwards:

Published/Accepted/In-press:

11	Subrahmanya Ishwar Bhat, Uttam Kumar Das and <b>Dr. Darshak R. Trivedi</b> *	An efficient three component, one-pot synthesis of quinazolines under solvent-free and catalyst-free condition	<i>J. Heterocycl. Chem.</i> 2014, Accepted Manuscript, In press
10	Madhuprasad and <b>Dr. Darshak R. Trivedi</b> *	A New receptor with Active Methylene Group as Binding Site for Extraction of Fluoride Ions from Sea Water	<i>ChemPlusChem</i> , 2014, 79, 1001-1008; <b>Wiley-VCH Publications</b>
09	Madhuprasad and <b>Dr. Darshak R. Trivedi</b> *	A New Colorimetric Receptor for Selective Detection of Maleate vs. Fumarate and Ratiometric Detection of F <sup>-</sup> Ions	<i>Anal. Methods</i> , 2014, 6 (11), 3817 - 3825 <b>RSC Publications</b>
08	Madhuprasad, N. Swathi, J. R. Manjunatha, Uttam Kumar Das, Prof. A. Nityananda Shetty and <b>Dr. Darshak R. Trivedi</b> *	Dual Colorimetric Receptor with Logic Gate Operations: Anion Induced Solvatochromism	<i>New Journal of Chemistry</i> , 2014, 38, 1484-1492; <b>RSC Publications</b>
07	Madhuprasad and <b>Dr. Darshak R. Trivedi</b> *	Naked-eye" Detection of Inorganic Fluoride Ion in Aqueous Media Using Base Labile Proton: A Different Approach	<i>Journal of Fluorine Chemistry</i> , 2014, 160, 1-7; <b>Elsevier Publications</b>
06	Madhavi Oruganti and <b>Dr. Darshak R. Trivedi</b> *	4-Nitrobenzoic acid-sulfathiazole	<i>Acta Cryst.</i> , 2014, E70, o85-o86
05	Subrahmanya Ishwar Bhat, and <b>Dr. Darshak R. Trivedi</b> *	A highly efficient and green cascade synthesis of 3-methyl-substituted-4-hydroxy-1-methyl-quinolin-2(1H)-ones under solvent- and catalyst-free conditions	<i>RSC Advances</i> , 2014, 4, 11300-11304 <b>RSC Publications</b>
04	Subrahmanya Ishwar Bhat, and <b>Dr. Darshak R. Trivedi</b> *	Regioselective synthesis of polyfunctionalized pyrroles via solvent- and catalyst-free one pot three component protocol	<i>Tetrahedron Lett.</i> , 2013, 54, 5577-5582 <b>Elsevier Publications</b>
03	Subrahmanya Ishwar Bhat, and <b>Dr. Darshak R. Trivedi</b> *	A Facile, Solvent and Catalyst-Free Synthesis of N-Substituted - Aminobutyric Acids By Aza-Michael Addition	<i>Environ. Chem. Lett.</i> 2013, 11, 91-97
02	Subrahmanya Ishwar Bhat, Dr. Angshuman Roy Choudhury and <b>Dr. Darshak R. Trivedi</b> *	Condensation of malononitrile with salicylaldehydes and o-aminobenzaldehydes revisited: Solvent and catalyst free synthesis of 4H-chromenes and quinolines	<i>RSC Advances</i> 2012, 2, 10556-10563 <b>RSC Publications</b>
01	Madhuprasad, Prof. A.	'Colorimetric receptors for naked	<i>RSC Advances</i> , 2012, 2,

	Nityananda Shetty and <b>Dr. Darshak R. Trivedi</b> *	eye detection of inorganic fluoride ion in aqueous media using ICT mechanism'	10499–10504 <b>Publications</b>	<b>RSC</b>
--	---	---	------------------------------------	------------

**2007-2009:**

04	<b>Darshak R. Trivedi</b> , Yuzo Fujiki, Norifumi Fujita*, Seiji Shinkai, and Kazuki Sada*	Crystal Engineering Approach to Design Colorimetric Array to Discriminate Isomers of Aromatic Organic Molecule	<i>Chem. Asian. J.</i> <b>2009</b> , <b>4</b> , 254-261. <b>Wiley-VCH Publications</b>
03	Uttam Kumar Das, <b>Darshak R Trivedi</b> , N. N. Adarsh and Parthasarathi Dastidar*	Supramolecular Synthons in Noncovalent Synthesis of a Class of Gelators Derived from Simple Organic Salts: Instant Gelation of Organic Fluids at Room Temperature via in Situ Synthesis of the Gelators	<i>J.Org. Chem.</i> <b>2009</b> , <b>74</b> , <b>18</b> , 7111-7121. <b>ACS Publications</b>
02	<b>Darshak R. Trivedi</b> , Yuzo Fujiki, Yuta Goto, Norifumi Fujita*, Seiji Shinkai, and Kazuki Sada*	A Naked-Eye Colorimetric Indicator to Discriminate Aromatic Compounds by Solid-state Charge-transfer Complexation	<i>Chem. Lett.</i> <b>2008</b> <b>37</b> , 550-551 <b>CSJ Publications</b>
01	Pathik Sahoo, D. Krishna Kumar, <b>Darshak R. Trivedi</b> , Parthasarathi Dastidar *	An easy access to an organometallic low molecular weight gelator: a crystal engineering approach	<i>Tetrahedron Letters</i> <b>2008</b> <b>49</b> , 3052–3055 <b>Elsevier Publications</b>

**2002 - 2006:**

14	<b>Darshak R Trivedi</b> , Parthasarathi Dastidar*	Cation Induced Supramolecular Isomerism in the Hydrogen-bonded Network of Secondary Ammonium Monocarboxylate Salts: A New Class of Organo Gelator and Their Structures	<i>Crystal Growth &amp; Des.</i> <b>2006</b> <b>6</b> , 2114-2121
13	Amar Ballabh, <b>Darshak R Trivedi</b> , Parthasarathi Dastidar*	New Series of Organogelators Derived from a Combinatorial Library of Primaryammonium Monocarboxylate Salts	<i>Chem. Mater.</i> <b>2006</b> , <b>18</b> , 3795-3800
12	Amar Ballabh, <b>Darshak R Trivedi</b> , Parthasarathi Dastidar*, P. K. Ghosh, Amitava Pramanik, V. G. Kumar	A practical approach to produce near spherical common salt crystals with better flow characteristics	<i>Cryst. Growth Des.</i> <b>2006</b> , <b>6</b> , 1591-1594.
11.	<b>Darshak R. Trivedi</b> and Parthasarathi Dastidar*	Supramolecular Hydrogen-bond Isomerism in Organic Salts: A Transition from 0D to 1D	<i>Cryst. Growth &amp; Des.</i> <b>2006</b> , <b>6</b> , 1022-1026
10	Amar Ballabh, <b>Darshak R. Trivedi</b> and Parthasarathi Dastidar*	From Nonfunctional Lamellae to Functional Nanotubes	<i>Org. Lett.</i> <b>2006</b> , <b>7</b> , 1271-1274

9	<b>Darshak R. Trivedi</b> and Parthasarathi Dastidar*	Instant Gelation of Organic Fluids Including Petrol at Room Temperature by a New Class of Supramolecular Gelators	<i>Chem. Mater.</i> <b>2006</b> , <i>18</i> , 1470-1478
8	<b>Darshak R. Trivedi</b> and Parthasarathi Dastidar*	Non-covalent Syntheses of Supramolecular Organo Gelators	<i>Cryst. Growth &amp; Des.</i> <b>2006</b> , <i>6</i> , 763-768
7	<b>Darshak R. Trivedi</b> , Amar Ballabh and Parthasarathi Dastidar*	Facile preparation and Structure-property Correlation of Low Molecular Mass Organic Gelators Derived from Simple Organic Salts	<i>J. Mater. Chem.</i> , <b>2005</b> , <i>15</i> , 2606 - 2614
6.	Amar Ballabh, <b>Darshak R. Trivedi</b> , Parthasarathi. Dastidar*	Ascertaining 1D Hydrogen-bonded Network in Organic Ionic Solids	<i>Cryst. Growth &amp; Des.</i> <b>2005</b> , <i>5</i> , 1545-1553
5	<b>Darshak R. Trivedi</b> , Amar Ballabh, Parthasarathi Dastidar* and Bishwajit Ganguly	Structure-Property Correlation of A New Family of Organogelators Based on Organic Salts and Their Selective Gelation of Oil from Oil/Water Mixtures	<i>Chem. Eur. J.</i> , <b>2004</b> , <i>10</i> , 5311-5322.
4	<b>Darshak R. Trivedi</b> , Amar Ballabh and Parthasarathi Dastidar*	Supramolecular Assemblies in Salts and Cocrystals of Imidazoles with Dicarboxylic Acids	<i>Cryst. Eng. Comm.</i> , <b>2003</b> , <i>5</i> , 358-367.
3	<b>Darshak R. Trivedi</b> , Amar Ballabh and Parthasarathi Dastidar*	An easy to prepare organic salt as low molecular mass organic gelator capable of selective gelation of oil from oil/water mixtures	<i>Chem. Mater.</i> , <b>2003</b> , <i>15</i> , 3971-3973 (communication).
2	Amar Ballabh, <b>Darshak R. Trivedi</b> and Parthasarathi Dastidar*	Structural Studies of a New Low Molecular Mass Organic Gelator for Organic Liquids Based on Simple Salt	<i>Chem. Mater.</i> <b>2003</b> , <i>15</i> , 2136-2140
1	Amar Ballabh, <b>Darshak R. Trivedi</b> , Parthasarathi Dastidar* and Eringathodi Suresh	Hydrogen bonded supramolecular network in organic salts: crystal structures of acid-base salts of dicarboxylic acids and amines	<i>Cryst. Eng. Comm</i> , <b>2002</b> , <i>4(24)</i> , 135-142

### Total number of paper presented in conferences:

#### Last 5 years:

Sr. No	Name of Authors	Title of Paper Presented	Name of the conference, Place & Date
08	Madhavi O. and <b>Dr. Darshak R. Trivedi*</b>	The Hydrogen bonding preferences of 2-Aminothiazole.	<i>National Symposium on Recent Trends in Chemistry</i> organized by Department of Chemistry, Pondicherry

			University, Puducherry (March 22-23, 2013)
07	Madhuprasad and <b>Dr. Darshak R. Trivedi*</b>	ICT based Colorimetric Receptor for F <sup>-</sup> ion and Cu <sup>2+</sup> ion with Molecular Logic Operations and Solvatochromism	<i>International conference on Frontiers in Energy, Environment, Health &amp; Materials Research” EEMR-2013</i> held at CSIR-Institute of Minerals & Materials Technology, Bhubaneswar, Odisha (August 12-13, 2013)
06	Madhuprasad and <b>Dr. Darshak R. Trivedi*</b>	Colorimetric receptors for naked eye detection of inorganic fluoride ion in aqueous media	<i>International conference on emerging trends in Chemical Sciences-13”</i> organised by School of Chemical Sciences, Central University of Gujarat, Gandhinagar, Gujarat (March 14-15, 2013)
05	Madhuprasad and <b>Dr. Darshak R. Trivedi*</b>	Colorimetric receptors for the detection of F <sup>-</sup> ions and its solvatochromic effect	<i>International conference on New Age Science and Technology for Sustainable Development &amp; 3<sup>rd</sup> Annual Conference of Indian JSPS Alumni Association</i> at NEERI, Nagpur. (August 06&07, 2012)
04	Subrahmanya I. Bhat and <b>Dr. Darshak R. Trivedi*</b>	Microwave Assisted Knoevenagel Condensation Under Solvent and Catalyst Free Conditions.	<i>International Conference on Futuristic Science and Technology in Frontier areas &amp; 2<sup>nd</sup> Annual Conference of Indian JSPS Alumni Association</i> at SCTIMST, Trivandrum, Kerala (August 5 &6 2011)
03	Madhavi O. and <b>Dr. Darshak R. Trivedi*</b>	Sulfanilamide Cocrystals with Carboxylic Acids	<i>International Conference on Futuristic Science and Technology in Frontier areas &amp; 2<sup>nd</sup> Annual Conference of Indian JSPS Alumni Association</i> at SCTIMST, Trivandrum, Kerala (August 5 &6 2011)
02	Madhuprasad and <b>Dr. Darshak R. Trivedi*</b>	Simple Amides as a Colorimetric Sensors for Rapid Detection of Fluoride Ion	<i>International Conference on Futuristic Science and Technology in Frontier areas &amp; 2<sup>nd</sup> Annual Conference of</i>

			<i>Indian JSPS Alumni Association at SCTIMST, Trivandrum, Kerala (August 5 &amp; 6 2011)</i>
01	<b><u>Darshak R. Trivedi*</u></b>	Occurrence of Unusual Supramolecular Synthons in the Pharmaceutical Cocrystals of Polymorphic Active Pharmaceutical Ingredient Pyrazinamide	<i>XX International conference on chemistry of Organic solid state 26-30 June 2011 IISc, Bangalore India</i>

### From Postdoctoral & Doctoral Work:

6	<b><u>Darshak R. Trivedi</u></b> , Yuzo Fujiki, Seiji Shinkai, and Kazuki Sada  <b>Oral Presentation</b>	A Two-dimensional Array of Colorimetric Probes to Discriminate Isomers of Aromatic Organic Molecule	<i>88<sup>th</sup> Annual meeting (spring Meeting) of Chemical Society of JAPAN, (26-30<sup>th</sup> March, 2008) Rikkyo University, Tokyo. JAPAN</i>
5	<b><u>Darshak R. Trivedi</u></b> , Seiji Shinkai, and Kazuki Sada	Colorimetric Sensing Device via Formation of Solid-state Charge Transfer Complexation For Polyaromatic Hydrocarbons	<i>The post ISNA-12 (12<sup>th</sup> International symposium on novel Aromatic compounds) on Physical Organic Chemistry (30-31<sup>st</sup> July, 2007) at KYUSHU University, Maidashi Campus, Fukuoka JAPAN</i>
4	<b><u>Darshak R. Trivedi</u></b> , Seiji Shinkai, and Kazuki Sada	Design of Supramolecular colorimetric Sensing Device via Formation of Solid-state Charge Transfer Complexation For Toxic, environment Pollutant Organic molecules	<i>JAPAN Crystal Engineering Annual Meeting 2007 (6-7<sup>th</sup> September, 2007) at CHIBA University, Tokyo JAPAN</i>
3	<b><u>Darshak R. Trivedi</u></b> , Amar Ballabh, Parthasarathi Dastidar	Non-covalent Syntheses Of supramolecular Organo Gelators	<i>International Symposium on "Organic Chemistry – Today and Tomorrow" (4-7<sup>th</sup> January, 2006) Indian Institute of Science, Bangalore INDIA</i>
2	<b><u>Darshak R. Trivedi</u></b> , Amar Ballabh, Parthasarathi Dastidar	Structure-Property Correlation of New Low Molecular Mass Organic Gelators Based on Organic Salts	<i>National Seminar on Polymer, Surfactants and Gels, (11-13<sup>th</sup> Feb., 2005) at M. S. University of Baroda, Vadodara, Gujarat (INDIA)</i>
1	<b><u>Darshak R. Trivedi</u></b> , Amar Ballabh, Parthasarathi Dastidar	Studies of New Low Molecular Mass Organic Gelator Based On Organic Salts And Their Related Crystal Structure	<i>XXXIII NSC (8-10, January, 2004); N.C.L. Pune, India.</i>

## Special Publication

1	<b>“No-stick Salt” 33 Great Ideas From Around The World</b>	<i>Reader’s Digest</i> December 2007 issue Indian Addition.
2	<b>Nearly spherical common salt crystals</b>	<i>Newscrips</i> Steve Ritter <i>Chemical &amp; Engineering News</i> , 84(29), July 17, 2006
3	<b>Salt That Doesn’t Stick</b>	<i>The New York Times</i> By CLIVE THOMPSON Published: December 10, 2006

# Patents

## List of US Patent

Sr. No	Name of Authors	Title of Patent	Patent No
1	P. Dastidar, P. K. Ghosh, Amar Ballabh, <b>Darshak R. Trivedi</b> , Amitava Pramanik and V. G. Kumar	Process for Production of Glycine Micronutrient-enriched NaCl Crystals with Near Spherical Shape and Improved Flow Characteristics	<b>US Patent No: 7,220,435.</b> Grant date 22 May 2007 PCT Int. Appl. (2005), 18 pp. CODEN: PIXXD2, WO 2005066075 A1 20050721

## Sponsored Projects

### Ongoing

Sr.No	Name of Project	Funding Agency	Name of Investigator(s)	Period	Funding Amount (Rs)
01	Design & synthesis of colorimetric Chemosensors for Environment Pollutant Cations	DST, SERB, New Delhi	Dr. Darshak R. Trivedi	Jan-2014- Dec-2016	25.00 Lakhs
02	For procurement of Single Crystal X-ray Diffractometer	FIST Programme DST, New Delhi	Dr. Darshak R. Trivedi ( co-coordinator) with Prof. A.V. Adhikari	December 2010- December 2015	128.00 Lakhs

### Completed

Sr.No	Name of Project	Funding Agency	Name of Investigator(s)	Period	Funding Amount (Rs)
01	Nano Porous Polymer Membrane For Controlled Release of Fertilizer	DRDO, New Delhi	Dr. Darshak R. Trivedi as Co-Investigator with Dr. Arun Isloor	July-2010 to July-2014	16.90 Lakhs
02	Design of Pharmaceutical Co-crystals of polymorphic drug molecules by crystal engineering approach to alter its Physical Properties	NITK Surathkal Seed money grant	Dr. Darshak R. Trivedi	August 2009- August 2011	05.00 Lakhs