

Curriculum Vitae (09/2016)

Dr. Sujit Kumar Ghosh

Associate Professor, Department of Chemistry
Indian Institute of Science Education and Research (IISER)
Pune,

Dr. Homi Bhabha Road, , Pune- 411008, India

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E-mail: sgosh@iiserpune.ac.in/sgoshchem@gmail.com

Webpage: <http://www.iiserpune.ac.in/~sgosh/>



Academic and Professional Backgrounds:

2015 – Associate Professor

2009 – 2015 Assistant Professor, IISER Pune, India

2006 - 2009; JSPS and CREST Postdoctoral Research Fellow, Kyoto University, Japan. (PI : Prof. Susumu Kitagawa)

2006: Ph. D. in Chemistry, 2006, Indian Institute of Technology (IIT) Kanpur, India. (Thesis supervisor: Prof. Parimal K. Bharadwaj)

2001: M. Sc. in Chemistry (Inorganic Chemistry), Banaras Hindu University (BHU), Varanasi, India.

1999: B. Sc. (Honors) in Chemistry with Mathematics/Physics, Burdwan University, W.B., India.

Major Research Areas:

- Development and functional studies of advanced crystalline microporous materials.
- Materials based on Metal-organic frameworks (MOFs)/Porous coordination polymers (PCPs), hydrogen-bonded organic frameworks (HOFs), covalent organic frameworks (COFs) and related compounds.
- Functional studies like chemical storage and separation, ion conductivity, sensing etc.

- Advanced microporous materials for chemical industry, energy and environmental applications

Awards/Fellowships/Honors:

2015 - Editorial Board Member, [Scientific Reports](#), a journal of NPG.

2015: IUPAC Travel Award: Busan, Korea, IUPAC-2015.

2014: New Talent: Asia-Pacific by Dalton Transactions (RSC).

2013: [INSA Young Scientist Award](#).

2013: Alkyl Amines-ICT Foundation Day Young Scientist Award.

2012: NASI-Young Scientist Platinum Jubilee Award.

2012-15: Young Associate of the Indian Academy of Sciences.

2011: DAE Research award for Young Scientists.

2009: Newton International Fellowship (UK), (Offer declined).

2007-09: JSPS Post Doctoral Research Fellowship (Japan).

2006 - 07: CREST Post Doctoral Research Fellowship (Japan).

2001 - 06: Junior and Senior Research Fellowship by CSIR, India.

Courses taught to BS-MS, Int. PhD and Ph.D students:

Transition Metal Chemistry

Main Group Chemistry

Inorganic Chemistry (Basic)

Chemistry Lab II (Inorganic Chemistry)

Advanced Inorganic Chemistry Lab

Research group:

Seven Ph.D students, three Int. Ph.D, and one undergraduate students. One SERB young scientist.

Ph. D Completed: Three

Publications summary:

Citation Data (09/2016)

Total number of papers published: 88
From IISER Pune: 66

Sum of the Times Cited: > 3650
Average Citations per Article: ~45
h-index: 29

Number of Articles with citations > 300 (01), > 150 (07), > 100(12), > 50(23).

List of Publications (Sujit K. Ghosh)

A. Selected Publications

B. Full list of Publications

A. Selected publications:

26. Hydrogen-Bonded Organic Frameworks: A New Class of Porous Crystalline Proton Conducting Materials

A. Karmakar, R. Illathvalappil, B. Anothumakkool, A. Sen, P. Samanta, A. V. Desai, S. Kurungot and S. K. Ghosh

Angew. Chem. Int. Ed. **2016**, DOI: [10.1002/anie.201604534R1](https://doi.org/10.1002/anie.201604534R1)

25. Water Stable Cationic Metal-Organic Framework as Dual Adsorbent of Oxo-Anion Pollutants

Aamod V. Desai, Biplab Manna, Avishek Karmakar, Amit Sahu and Sujit K. Ghosh

Angew. Chem. Int. Ed. **2016**, 55, 7811-7815.

(Highlighted in Atlas of Science)

24. An Ultrahydrophobic Fluorous Metal-organic Framework As A Promising Platform To Tackle Marine Oil Spills

S. Mukherjee, A.M. Kansara, D. Saha, R. Gonnade, D. Mullangi, B. Manna, A. V. Desai, S. H. Thorat, P. S. Singh, A. Mukherjee, and S. K. Ghosh
Chem. Eur. J. **2016**, 22, 22, 10937–10943.

23. Bimodal functionality in a porous covalent triazine framework by rational integration of electron rich and deficient pore surface
Avishek Karmakar, Amrit Kumar, Abhijeet K. Chaudhari, Partha Samanta, Aamod V. Desai, Rajamani Krishna and Sujit K. Ghosh
Chem. Eur. J. **2016**, 22, 4931-4937

22. A Post-synthetically Modified MOF for Selective and Sensitive Aqueous Phase Detection of Highly Toxic Cyanide ion
Avishek Karmakar, Naveen Kumar, Partha Samanta, Aamod V. Desai and Sujit K. Ghosh
Chem. Eur. J. **2016**, 22, 864-868.
Highlighted in the page of HOT TOPICS by Wiley VCH.

21. High Hydroxide Conductivity in a Chemically Stable Crystalline Metal-Organic Framework Containing Water-Hydroxide Supramolecular Chain
Sanjog S. Nagarkar, Bihag Anothumakkool, Aamod V. Desai, Mandar M. Shirolkar, Sreekumar Kurungotb, and Sujit K. Ghosh
Chemical Commun. **2016**, 52, 8459-8462.

20. Harnessing Lewis Acidic Open Metal Sites of Metal-organic Frameworks: Foremost Route to Achieve Highly Selective Benzene Sorption over Cyclohexane
Soumya Mukherjee, Biplab Manna, Aamod V. Desai, Yuefeng Yin, Rajamani Krishna, Ravichandar Babarao, and Sujit K. Ghosh
Chem. Commun. **2016**, 52, 8215-8218.
(Highlighted in the Back Cover)

19. A π -electron Deficient Diaminotriazine Functionalized MOF for Selective Sorption of Benzene over Cyclohexane
Biplab Manna, Soumya Mukherjee, Aamod V. Desai, Shivani Sharma, Rajamani Krishna, and Sujit K. Ghosh
Chem. Commun. **2015**, 51, 15386-15389

18. Nitro (-NO₂) Functionalized Metal-Organic Framework as a Reaction based Fluorescence Turn-On Probe for Rapid and Selective H₂S Detection
Sanjog S. Nagarkar, Aamod V. Desai, and Sujit K. Ghosh
Chem. Eur. J. **2015**, 21, 9994-9997.
(Highlighted in Atlas of Science)

17. Amide Functionalized Dynamic Metal-Organic Framework Exhibiting Visual Colorimetric Anion Exchange and Selective uptake of Benzene over Cyclohexane
Avishek Karmakar, Aamod V. Desai, Biplab Manna, Biplab Joarder and Sujit K. Ghosh
Chem. Eur. J. **2015**, 21, 7071-7076.

16. Selective and Sensitive Aqueous Phase Detection of TNP (2,4,6- trinitro phenol) by an Amine Functionalized Metal-organic Framework

Biplab Joarder, Aamod V. Desai, Partha Samanta, Soumya Mukherjee and Sujit K. Ghosh
Chem. Eur. J. **2015**, *21*, 965 -969.

15. Aqueous Phase Nitric Oxide Detection by an Amine Decorated Metal-Organic Framework

Aamod V. Desai, Partha Samanta, Biplab Manna and Sujit K. Ghosh
Chem. Commun. **2015**, *51*, 6111-6114.
[\(Highlighted in Atlas of Science\)](#)

14. Selective and Sensitive Aqueous Phase Detection of TNP (2,4,6- trinitro phenol) by an Amine Functionalized Metal-organic Framework

Biplab Joarder, Aamod V. Desai, Partha Samanta, Soumya Mukherjee and Sujit K. Ghosh
Chem. Eur. J. **2015**, *21*, 965 – 969.

13. Two-in-one: Inherent Anhydrous and Water-assisted High Proton Conduction in a 3D Metal-organic Framework

Sanjog S. Nagarkar, Sreekuttan M. Unni, Amitosh Sharma, Sreekumar Kurungot, and Sujit K. Ghosh
Angew. Chem. Int. Ed. **2014**, *53*, 2683-2642. **(Times cited: > 50)**

12. Guest-Responsive Function of a Dynamic Metal-Organic Framework with π Lewis Acidic Pore Surface

Biplab Joarder, Soumya Mukherjee, Abhijeet K. Chaudhari, Aamod V. Desai, Biplab Manna, and Sujit K. Ghosh
Chem. Eur. J. **2014**, *20*, 15303–15308.

11. Anion-Responsive Tunable Bulk Phase Homochirality and Luminescence of a Cationic Framework

Biplab Manna, Biplab Joarder, Aamod V. Desai, Avishek Karmakar and Sujit K. Ghosh
Chem. Eur. J. **2014**, *20*, 12399 – 12404.

10. Framework-Flexibility Driven Selective Sorption of *p*-Xylene over Other Isomers by a Dynamic Metal-Organic Framework

Soumya Mukherjee, Biplab Joarder, Biplab Manna, Aamod V. Desai, Abhijeet K. Chaudhari and Sujit K. Ghosh
Sci. Rep. **2014**, *4*, doi:10. 1038/srep05761.

9. Fluorescent metal-organic framework for highly selective detection of nitroexplosive in aqueous phase

Sanjog S. Nagarkar, Aamod V. Desai, and Sujit K. Ghosh
Chem. Commun. **2014**, *50*, 8915-8918. **(Times cited: > 60)**

(Based on this paper listed in the top 10% of highly cited authors in RSC general chemistry portfolio of journals for articles published between 2013 and 2014)

8. Metal-organic framework based highly selective fluorescence *turn-on* probe for hydrogen sulphide

Sanjog S. Nagarkar, Tanmoy Saha, Aamod V. Desai, Pinaki Talukdar and Sujit K. Ghosh
Sci. Rep. **2014**, *4*, doi:10.1038/srep07053.

(Highlighted in Atlas of Science)

7. Highly Selective Detection of Nitro-Explosive by a Luminescent Metal-Organic Framework.

Sanjog S. Nagarkar, Biplab Joarder, Abhijeet K. Chaudhari, Soumya Mukherjee and Sujit K. Ghosh

Angew. Chem. Int. Ed. **2013**, *52*, 2881-2885. **(Times cited: >250)**

(Highlighted in the most cited papers page in *Angew. Chem. Int. Ed.* journal's website [http://onlinelibrary.wiley.com/journal/10.1002/\(ISSN\)1521-3773/homepage/2002_mostcited.html](http://onlinelibrary.wiley.com/journal/10.1002/(ISSN)1521-3773/homepage/2002_mostcited.html) (among all published papers in 2013 or 2014; only communications: 2nd rank and all types of articles: 10th rank).

6. Amino Acid Based Dynamic Metal-Biomolecule Framework

Biplab Joarder, Abhijeet K. Chaudhari, Sanjog S. Nagarkar, Biplab Manna, and Sujit K. Ghosh

Chem. Eur. J. **2013**, *19*, 11178-11183.

Highlighted in the page of HOT TOPICs by Wiley VCH.

5. Dynamic Structural Behavior and Anion-Responsive Tunable Luminescence of a Flexible Cationic Metal-Organic Framework

Biplab Manna, Abhijeet K. Chaudhari, Biplab Joarder, Avishek Karmakar and Sujit K. Ghosh

Angew. Chem. Int. Ed. **2013**, *52*, 998-1002. **(Times cited: > 70)**

(Highlighted: Advances in Engineering)

4. Porous Coordination Polymer having Bond Switching Mechanism Showing Reversible Structural and Functional Transformations

Sujit K. Ghosh, Wakako Kaneko, Daisuke Kiriya, Masaaki Ohba, Susumu Kitagawa

Angew. Chem. Int. Ed. **2008**, *47*, 8843-8847.

(Selected as a Hot Paper by the Editors)

3. A Dynamic, Isocyanurate-Functionalized Porous Coordination Polymer

Sujit K. Ghosh, Sareeya Bureekaew, Susumu Kitagawa

Angew. Chem. Int. Ed. **2008**, *47*, 3403-3406.

(Selected as a Hot Paper by the Editors)

2. Reversible Topochemical Transformation of a Soft Crystal of a Coordination Polymer

Sujit K. Ghosh, Jie-Peng Zhang, Susumu Kitagawa

Angew. Chem. Int. Ed. **2007**, *46*, 7965-7968.

1. A Novel Dodecameric Water Cluster Built Around a Cyclic Quasi-Planar Hexameric Core in an Organic Supramolecular Complex of Cryptand

Sujit K. Ghosh and Parimal K. Bharadwaj

Angew. Chem. Int. Ed. **2004**, *43*, 3577-3580.

(Book Chapters and Reviews):

6. Ionic metal-organic frameworks (iMOFs): Design principles and applications
Avishek Karmakar, Aamod V. Desai, and Sujit K. Ghosh
Coord. Chem. Rev. **2016**, *15*, 313-343.
(Most Downloaded Coordination Chemistry Reviews Articles between 10/2015-01/2016)
5. Neutral N-donor ligand based flexible metal-organic frameworks
Biplab Manna, Aamod V. Desai, and Sujit K. Ghosh
Dalton Trans. **2016**, *45*, 4060-4072.
4. Engineering metal-organic frameworks for aqueous phase 2,4,6-trinitrophenol (TNP) sensing
Sanjog S. Nagarkar, Aamod V. Desai, and Sujit K. Ghosh
CrystEngComm. (Highlight) **2016**, *18*, 2994-3007.
3. Book Chapter: Cadmium Based Catalysts in *Sustainable Catalysis* (ed M. North)
Soumya Mukherjee and Sujit K. Ghosh
Royal Society of Chemistry, 2015 ISSN: 1757-7039
2. Focus Review: Stimulus Responsive Metal-Organic Frameworks
Sanjog S. Nagarkar, Aamod V. Desai, and Sujit K. Ghosh
Chem. Asian J. **2014**, *9*, 2358-2376
1. Book Chapter: Surface Pore Engineering of Porous Coordination Polymers in *Metal-Organic Frameworks: Design and Application* (ed L. R. MacGillivray)
Sujit K. Ghosh and Susumu Kitagawa
John Wiley & Sons, 2010. doi: 10.1002/9780470606858.ch5.

B. Full list of publications:

(Work from IISER Pune)

2016

88. Hydrogen-Bonded Organic Frameworks: A New Class of Porous Crystalline Proton Conducting Materials
A. Karmakar, R. Illathvalappil, B. Anothumakkool, A. Sen, P. Samanta, A. V. Desai, S. Kurungot and S. K. Ghosh
Angew. Chem. Int. Ed. **2016**, *55*, 10667–10671.

87. Water Stable Cationic Metal-Organic Framework as Dual Adsorbent of Oxo-Anion Pollutants
Aamod V. Desai, Biplab Manna, Avishek Karmakar, Amit Sahu and Sujit K. Ghosh
[Angew. Chem. Int. Ed. 2016, 55, 7811-7815.](#)
[\(Highlighted in Atlas of Science\)](#)
86. An Ultrahydrophobic Fluorous Metal-organic Framework As A Promising Platform To Tackle Marine Oil Spills
S. Mukherjee, A.M. Kansara, D. Saha, R. Gonnade, D. Mullangi, B. Manna, A. V. Desai, S. H. Thorat, P. S. Singh, A. Mukherjee, and S. K. Ghosh
[Chem. Eur. J. 2016, 22, 22, 10937–10943.](#)
85. Bimodal functionality in a porous covalent triazine framework by rational integration of electron rich and deficient pore surface
Avishek Karmakar, Amrit Kumar, Abhijeet K. Chaudhari, Partha Samanta, Aamod V. Desai, Rajamani Krishna and Sujit K. Ghosh
[Chem. Eur. J. 2016, 22, 4931-4937](#)
84. A Post-synthetically Modified MOF for Selective and Sensitive Aqueous Phase Detection of Highly Toxic Cyanide ion
Avishek Karmakar, Naveen Kumar, Partha Samanta, Aamod V. Desai and Sujit K. Ghosh
[Chem. Eur. J. 2016, 22, 864-868.](#)
[Highlighted in the page of HOT TOPICs by Wiley VCH.](#)
83. High Hydroxide Conductivity in a Chemically Stable Crystalline Metal-Organic Framework Containing Water-Hydroxide Supramolecular Chain
Sanjog S. Nagarkar, Bihag Anothumakkool, Aamod V. Desai, Mandar M. Shirolkar, Sreekumar Kurungotb, and Sujit K. Ghosh
[Chemical Commun, 2016, 52, 8459-8462.](#)
82. Harnessing Lewis Acidic Open Metal Sites of Metal-organic Frameworks: Foremost Route to Achieve Highly Selective Benzene Sorption over Cyclohexane
Soumya Mukherjee, Biplab Manna, Aamod V. Desai, Yuefeng Yin, Rajamani Krishna, Ravichandar Babarao, and Sujit K. Ghosh
[Chem. Commun. 2016, 52, 8215-8218.](#)
81. A Bifunctional Metal-organic Framework: Striking CO₂ Selective Sorption Features with Guest-Induced Luminescence Tuning Behaviour
Soumya Mukherjee, Aamod V. Desai, Yogeshwar D. More and Sujit K. Ghosh
[ChemPlusChem 2016, DOI: 10.1002/cplu.201600138](#)
80. Hydroxy-functionalized hyper-cross-linked ultra-microporous organic polymers for selective CO₂ capture at room temperature
Partha Samanta, Priyanshu Chandra, Sujit K. Ghosh
[Beilstein Journal of Organic Chemistry 2016, 12, 1981-1986](#)
79. Engineering Metal-Organic Frameworks For Aqueous Phase 2,4,6-Trinitrophenol (TNP) Sensing
Sanjog S. Nagarkar, Aamod V. Desai, and Sujit K. Ghosh
[CrystEngComm. \(Highlight\) 2016, 18, 2994-3007.](#)

78. Increase in Electrical Conductivity of MOF to Billion-Fold upon Filling the Nanochannels with Conducting Polymer
Barun Dhara, Sanjog S. Nagarkar, Jitender Kumar, Vikash Kumar, Plawan Kumar Jha, Sujit K. Ghosh, Sunil Nair, and Nirmalya Ballav
[J. Phys. Chem. Lett., 2016, 7, 2945–2950.](#)
77. OFET based explosive sensors using diketopyrrolopyrrole and metal organic framework composite active channel material
Sandeep G. Surya, Sanjog S. Nagarkar, Sujit K. Ghosh, Prashant Sonar, V. Ramgopal Rao
[Sensors and Actuators B: Chemical 2016, 223, 114-122](#)
76. Neutral N-donor ligand based flexible metal-organic frameworks
Biplab Manna, Aamod V. Desai, and Sujit K. Ghosh
[Dalton Trans. 2016, 2016, 45, 4060-4072 \(Perspective\)](#)
[\(Highlighted in Atlas of Science; Highlighted in ChemInform; Listed among Dalton Transaction's 2016 HOT articles.\)](#)
75. Ionic metal-organic frameworks (iMOFs): Design principles and applications
Avishek Karmakar, Aamod V. Desai, and Sujit K. Ghosh
[Coord. Chem. Rev. 2016, 307, 313-341](#)
[\(Most Downloaded Coordination Chemistry Reviews Articles between 10/2015-01/2016\)](#)

2015

74. A π -electron Deficient Diaminotriazine Functionalized MOF For Selective Sorption of Benzene Over Cyclohexane
Biplab Manna, Soumya Mukherjee, Aamod V. Desai, Shivani Sharma, Rajamani Krishna, and Sujit K. Ghosh
[Chem. Commun. 2015, 51, 15386-15389](#)
73. Cadmium Based Catalysts in *Sustainable Catalysis* (Book Chapter, Editor: Prof. Michael North)
Book Title: Sustainable Catalysis: With Non-endangered Metals, Part 2
Chapter 17
Soumya Mukherjee and Sujit K. Ghosh
[Royal Society of Chemistry, 2015 ISSN: 1757-7039](#)
72. Selective Detection of 2,4,6-Trinitrophenol (TNP) by a π -Stacked Organic Crystalline Solid in Water
Soumya Mukherjee, Aamod V. Desai, Arif I. Inamdar, Biplab Manna, and Sujit K. Ghosh.
[Cryst. Growth Des., 2015, 15, 3493-3497.](#)
71. Nitro (-NO₂) Functionalized Metal-Organic Framework as a Reaction based Fluorescence Turn-On Probe for Rapid and Selective H₂S Detection
Sanjog S. Nagarkar, Aamod V. Desai, and Sujit K. Ghosh
[Chem. Eur. J. 2015, 21, 9994-9997.](#)
[\(Highlighted in Atlas of Science\)](#)

70. Coherent Fusion of Water Array and Protonated Amine in a Metal-Sulphate Based Coordination Polymer for Proton Conduction
Biplab Manna, Bihag Anothumakkool, Aamod V. Desai, Partha Samanta, Sreekumar Kurungot, Sujit K. Ghosh
[Inorg. Chem. 2015, 54, 5366-5371.](#)
69. Exploitation of Guest Accessible Aliphatic Amine Functionality of a Metal–Organic Framework for Selective Detection of 2,4,6-Trinitrophenol (TNP) in Water
Soumya Mukherjee, Aamod V. Desai, Biplab Manna, Arif I. Inamdar and Sujit K. Ghosh
[Cryst. Growth Des. 2015, 15, 4627-4634](#)
67. Amide Functionalized Dynamic Metal–Organic Framework Exhibiting Visual Colorimetric Anion Exchange and Selective uptake of Benzene over Cyclohexane
Avishek Karmakar, Aamod V. Desai, Biplab Manna, Biplab Joarder and Sujit K. Ghosh
[Chem. Eur. J. 2015, 21, 7071-7076.](#)
66. Exploiting Framework Flexibility of a Metal–Organic Framework for Selective Adsorption of Styrene over Ethylbenzene
Soumya Mukherjee, Biplab Joarder, Aamod V. Desai, Biplab Manna, Rajamani Krishna, and Sujit K. Ghosh
[Inorg. Chem. 2015, 54, 4403-4408](#)
65. Chiral Biomolecule Based Dodecanuclear Dysprosium(III)-Copper(II) Clusters: Structural Analyses and Magnetic Properties
Biplab Joarder, Soumya Mukherjee, Mahendra Patil, Shufang Xue, Jinkui Tang, and Sujit K. Ghosh
[Inorg. Chem. Front. 2015, 2, 854-859.](#)
65. Aqueous Phase Nitric Oxide Detection by an Amine Decorated Metal–Organic Framework
Aamod V. Desai, Partha Samanta, Biplab Manna and Sujit K. Ghosh
[Chem. Commun. 2015, 51, 6111-6114](#)
[\(Highlighted in Atlas of Science\)](#)
64. Aqueous phase selective 2,4,6-trinitrophenol detection via fluorescent metal-organic framework with pendant recognition site
Sanjog S. Nagarkar, Aamod V. Desai, Partha Samanta, and Sujit K. Ghosh
[Dalton Trans. 2015, 44, 15175-15180.](#)
[\(Special issue: New Talent: Asia-Pacific; Highlighted in Atlas of Science\)](#)
63. Single-Crystal-to-Single-Crystal Transformation of an Anion Exchangeable Dynamic Metal–Organic Framework
Biplab Manna, Aamod V. Desai, Naveen Kumar, Avishek Karmakar and Sujit K. Ghosh
[CrystEngComm 2015, 17, 8796-8800.](#)
62. Recent Progress in the Realm of Homonuclear Ln₆ Single Molecule Magnets: Structural Overview and Synthetic Approaches (*Review Article*)

Soumya Mukherjee and Sujit K. Ghosh
Proc. Indian Natn. Sci. Acad. 2015, *81*, 357-379. (Invited Article)

61. Reversible structural transformations in a Co(II) based 2D dynamic metal-organic framework showing selective solvent uptake

Sanjog S. Nagarkar and Sujit K. Ghosh
J. Chem. Sci. 2015, *127*, 627-633. (Special issue).

60. Selective Anion Exchange and Tunable Luminescent Behaviours of MOF based Supramolecular Isomers

Biplab Manna, Shweta Singh, Avishek Karmakar, Aamod V. Desai and Sujit K. Ghosh
Inorg. Chem. 2015, *54*, 110-116

59. Selective and Sensitive Aqueous Phase Detection of TNP (2,4,6- trinitro phenol) by an Amine Functionalized Metal-organic Framework

Biplab Joarder, Aamod V. Desai, Partha Samanta, Soumya Mukherjee and Sujit K. Ghosh
Chem. Eur. J. 2015, *21*, 965 -969

2014

58. Two-in-one: Inherent Anhydrous and Water-assisted High Proton Conduction in a 3D Metal-Organic Framework

Nagarkar, S. S.; Unni, S. M.; Sharma, A.; Kurungot, S.; Ghosh, S. K.
Angew. Chem. Int. Ed. 2014, *53*, 2638-2642.

57. Stimulus-Responsive Metal-Organic Frameworks

Nagarkar, S. S.; Desai, A. V.; Ghosh, S. K.
Chem. Asian J. 2014, *9*, 2358–2376. (Focus Review)

56. Metal-Organic Framework Based Highly Selective Fluorescence *Turn-on* Probe for Hydrogen Sulphide

Nagarkar, S. S.; Saha, T.; Desai, A. V.; Talukdar, P.; Ghosh, S. K.
Sci. Rep. 2014, *4*, doi:10.1038/srep07053.
(Highlighted in Atlas of Science)

55. Guest-Responsive Function of a Dynamic Metal-Organic Framework with π -Lewis Acidic Pore Surface

Joarder, B.; Mukherjee, S.; Chaudhari, A. K.; Desai, A. V.; Manna, B.; Ghosh, S. K.
Chem. Eur. J. 2014, *20*, 15303 – 15308.

54. Framework-Flexibility Driven Selective Sorption of *p*-Xylene over Other Isomers by a Dynamic Metal-Organic Framework

Mukherjee, S.; Joarder, B.; Manna, B.; Desai, A. V.; Chaudhari, A. K.; Ghosh, S. K.
Sci. Rep. 2014, DOI: 10.1038/srep05761.

53. Anion-Responsive Tunable Bulk Phase Homochirality and Luminescence of a Cationic Framework

Manna, B.; Joarder, B.; Desai, A. V.; Karmakar, A.; Ghosh, S. K.
Chem. Eur. J. 2014, *20*, 12399–12404.

52. Structures and Magnetic Properties of Two Analogous Dy₆ Wheels with Electron-Donation and -Withdrawal Effects

Joarder, B.; Mukherjee, S.; Xue, S.; Tang, J.; Ghosh, S. K.

Inorg. Chem. 2014, 53, 7554–7560.

51. Fluorescent Metal-Organic Framework for Highly Selective Detection of Nitro Explosive in Aqueous Phase

Nagarkar, S. S.; Desai, A. V.; Ghosh, S. K.

Chem. Commun. 2014, 50, 8915-8918.

(Based on this paper listed in the top 10% of highly cited authors in RSC general chemistry portfolio of journals for articles published between 2013 and 2014)

50. Dynamic Metal-Organic Framework with Anion-Triggered Luminescence Modulation Behavior

Karmakar, A.; Manna, B.; Desai, A. V.; Joarder, B.; Ghosh, S. K.

Inorg. Chem. 2014, 53, 12225–12227

49. Capsule Voided Nanospace Confinement in a π -Stacked Supramolecular Organic Solid

Chaudhari, A. K.; Sharma, A.; Mukherjee, S.; Joarder, B.; Ghosh, S. K.

CrystEngComm 2014, 16, 4691-4695. (Special issue)

48. Guest Driven Structural Transformation Studies of a Luminescent Metal-Organic Framework

Manna, B.; Singh, S.; Ghosh, S. K.

J. Chem. Sci. 126, 2014, 1417–1422

47. Slow Magnetic Relaxation in an Asymmetrically Coupled Heptanuclear Dysprosium(III)-Nickel(II) Architecture

Mukherjee, S.; Joarder, B.; Xue, S.; Tang, J.; Ghosh, S. K.

Proc. Natl. Acad. Sci., India, Sect. A Phys. Sci. 2014, 84, 151-156.

46. Gas Adsorption, Magnetism, and Single-Crystal to Single-Crystal Transformation Studies of a Three-Dimensional Mn(II) Porous Coordination Polymer

Agarwal, A.; Mukherjee, S.; Sañudo, E. C.; Ghosh, S. K.; Bharadwaj P. K.

Cryst. Growth Des., 2014, 14, 5585–5592

2013

45. Structural Dynamism and Controlled Chemical Blocking/Unblocking of Active Coordination Space of a Soft Porous Crystal

Chaudhari, A. K.; Nagarkar, S. S.; Joarder, B.; Mukherjee, S.; Ghosh, S. K.

Inorg. Chem. 2013, 52, 12784-12789.

44. Highly Selective Detection of Nitro-Explosive by a Luminescent Metal-Organic Framework.

Nagarkar, S. S.; Joarder, B.; Chaudhari, A. K.; Mukherjee, S.; Ghosh, S. K.

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(Highlighted in the most cited papers page in Angew. Chem. Int. Ed. journal's website [http://onlinelibrary.wiley.com/journal/10.1002/\(ISSN\)1521-3773/homepage/2002_mostcited.html](http://onlinelibrary.wiley.com/journal/10.1002/(ISSN)1521-3773/homepage/2002_mostcited.html) (among all published papers in 2013 or 2014; only communications: 2nd rank and all types of articles: 10th rank).

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- Inter-IISER chemistry meet during Dec 11-13, 2015 held in IISER Thiruvananthapuram
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- Workshop on "Supramolecular Chemistry: Concepts and Perspectives", arranged by Indian Academy of Sciences, Bangalore during 4-5th April, 2014 in the Department of Chemistry, MMV, BHU, Varanasi.
- "Brainstorming Session on Chemical Coating for Detection of Explosives" *Sponsored by* Office of Principal Scientific Advisor, New Delhi Venue: Department of Electrical Engineering, IIT Bombay on May 21st, 2014.
- Pre-Conference of 4th International Conference on Metal-Organic Frameworks and Open Framework Compounds (MOF2014), 27th September and 1st October in Osaka and Kobe, Japan.
- FICS-2014 (Frontiers in Chemical Sciences), IIT Guwahati, India, during December 4-6, 2014.
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- Brainstorming Session on Chemical Coating for Detection of Explosives, Sponsored by Office of Principal Scientific Advisor, New Delhi, May 21st, 2014, Department of Electrical Engineering, IIT Bombay.
- Workshop on "Supramolecular Chemistry: Concepts and Perspectives", by Indian Academy of Sciences, Bangalore 4-5th April, 2014 Department of Chemistry, MMV, BHU, Varanasi.
- 79th Annual meeting of the Indian Academy of Sciences, at Chandigarh, IISER-Mohali, 8-10 November, 2013.
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- Alkyl Amines-ICT Foundation Day Young Scientist Award lecture, ICT Mumbai, 21st December, 2013.
- "Young Scientist Research Awardees Meet" (YSRAM) between December 26-27, 2012 at Bhabha Atomic Research Centre (BARC) Mumbai.
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- IISER Pune/Göttingen Cooperation meeting 9th -12th December 2010, Göttingen, Germany.
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- The Sixth International Conference on Inorganic Materials, 28-30 September, 2008, Dresden, Germany (Oral presentation).
- The Third International Symposium on Chemistry of Coordination Space (ISCCS) - 2007, December 9-12, 2007, Awaji Yumebutai International Conference Center, Awaji, Hyogo, Japan.
- 1st International Workshop on Protonics and Nano-Interface of Coordination Chemistry, 24th February, 2007, Kyoto, Japan. (Attended)
- 56th Japan Society of Coordination Chemistry Symposium, 17-19 September, 2006, Hiroshima University, Hiroshima, Japan.
- The Second International Symposium on Chemistry of Coordination Space (ISCCS) - 2006, 15-16 December, 2006, Fukuoka, Japan
- The Sixth National Symposium of the Chemical Research Society of India (CRSI). Feb. 6-8, 2004, Department of Chemistry, IIT Kanpur, India.
- 3rd Singapore-India Collaborative and Co-operative Chemistry Symposium. December 16-17, 2004, Department of Chemistry, IIT Kanpur, India (Attended)
- Modern Trends in Inorganic Chemistry (MTIC)-2003, 15-17 December, 2003 Department of Chemistry, IIT Bombay, Mumbai, India.