

Pratap Vishnoi, Ph. D.
Assistant Professor

New Chemistry Unit & International Centre for Materials Science
Jawaharlal Nehru Centre for Advanced Scientific Research, Jakkur P. O., Bangalore-560 064, India

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EDUCATION

Ph. D. , Chemistry, 2014	IIT Bombay, Mumbai	<i>Advisor:</i> Prof. R. Murugavel
M. Sc. , Chemistry, 2008	Rajasthan University, Jaipur	
B. Sc. , 2006	Maharaja Ganga Singh University	

ACADEMIC APPOINTMENTS

June 2023 onwards	Assistant Professor	JNCASR, Bangalore (India)
April 2021 – June 2023	Ramanujan Fellow	JNCASR, Bangalore (India)
July 2019 – February 2021	Postdoctoral Fellow	UC Santa Barbara, CA (USA)
Jan 2019 – July 2019	Research Associate	JNCASR, Bangalore (India)
Jan 2016 – Jan 2019	DST Postdoctoral Fellow	JNCASR, Bangalore (India)
Aug 2014 – Jan 2016	Research Associate	IIT Bombay, Mumbai (India)

RESEARCH INTERESTS

- Hybrid (organic-inorganic) materials
- Magnetic halide perovskites
- Semiconducting halide perovskites
- Phase-transition materials
- Hybrid polar crystals
- Layered nanomaterials

SELECTED AWARDS, RECOGNITIONS & FELLOWSHIPS

1. Emerging Investigator, Royal Society of Chemistry (UK) - 2022
2. Ramanujan Faculty Fellowship, Dept of Science & technology, Govt. of India - 2021
3. DST Postdoc Fellow (Overseas) in Nano Science & Technology - 2019
4. DST Postdoc Fellow (National) in Nano Science & Technology - 2016
5. Senior Research Fellow, CSIR, Govt. of India - 2010 - 2013
6. Junior Research Fellow, CSIR, Govt. of India - 2008 – 2010
7. Graduate Aptitude Test for Engineering (GATE-2008), All India Rank 131

INVITED TALKS

1. Advances in Chemical and Applied Sciences for Sustainable Development, March 29-30, JECRC University, Jaipur
2. Frontiers in Materials Sciences: Challenges and Opportunities, March 07-08, 2024, Tezpur University (online mode)

3. 15th International Workshop on Advanced Materials (IWAM), RAK CAM, Feb 18-21, 2024, UAE
4. 3rd International Conference on Main-group Molecules to Materials (MMM III), IITH and HCU, 09-11 Dec 2023.
5. Department of Applied Science, REVA University, Bangalore, 2023
6. Kaleidoscope 2023: A Discussion Meeting in Chemistry, Udaipur
7. In-House SAMat Meeting 2023, JNCASR Bangalore
8. Two Days National Workshop on Strategy for CSIR-NET, GATE & SET 2023, Govt. Girls College, Jaipur (online mode)
9. Crystal Engineering: From Molecule to Crystal (CE:FMC2022), at Pahalgam, organized by Kashmir University & IISER Kolkata
10. Organic-Inorganic Hybrid Materials 2021 (OIHM 2021), Sardar Vallabhbhai National Institute of Technology (SVNIT), Surat (online mode)
11. New Chemistry Unit Day 2021, JNCASR Bangalore
12. Department seminar, Department of Chemistry, IIT Bombay 2019
13. National Webinar 2020 on *Two Dimensional Materials for Diverse Applications* hosted by Cambridge Institute of Technology, Bangalore. Attended by ~ 800 faculty and student participants, registered participants ~ 1500 (online mode)
14. International Winter School 2022, JNCASR Bangalore
15. Anthony K Cheetham 75 Mini-symposium, Nankai University, China (online mode)
16. Annual Faculty Meeting and In-House Symposium 2021, JNCASR Bangalore

PROFESSIONAL MEMBERSHIPS

1. Life member of Materials Research Society of India, India
2. Life member of Chemical Research Society of India, India
3. Affiliate of Member of Royal Society of Chemistry, UK
4. Member of Materials Research Society, USA
5. Member of American Chemical Society, USA
6. Life member of IIT Bombay Alumni Association

SCIENCE OUTREACH

I have been participating as a resource person in science outreach programs for school and college students and teachers with aims to introduce chemistry with simple experiments and models. I have given 10 plus outreach programs at different schools at Karnataka and Uttarakhand.

TEACHING

JNC-315 Recent Trends in Inorganic and Nanomaterials, JNCASR Bangalore, 2021 onwards

INSTITUTE / DEPARTMENTAL ADMINISTRATIVE TASKS

- Member, National Science Day 2024 Organizing Committee, JNCASR
- Member, Dinning Hall Committee, JNCASR Bangalore, July 2023 onwards
- Convener, New Chemistry Unit Day, JNCASR Bangalore, 2023
- Co-convener, New Chemistry Unit Day, JNCASR Bangalore, 2022
- Seminar Coordinator (JCQ 209), New Chemistry Unit, JNCASR Bangalore, August 2023 onwards

PUBLICATIONS

Publications in SCI (Science Citation Index) journals = 55

Citations ~ 1300 & h-index 22

Chapters in reference books = 2

Full list of publications attached and can be found at my official website,

<https://www.jncasr.ac.in/faculty/pvishnoi>

SPONSORED RESEARCH PROJECTS IMPLEMENTED

Title	Budget (in Lakhs)	Start Date	End Date	Role as PI/Co-PI	Funding Agency
Ramanujan Fellowship	119	April 5, 2021	April 4, 2026 (Fellowship availed until June 13, 2023)	PI	Science and Engineering Research Board, Govt. of India
Compositionally and Structurally Tuneable Multifunctional Transition Metal Halide Perovskites	92	Dec 27, 2022	Dec 26, 2025	PI	Science and Engineering Research Board, Govt. of India

ISI journal publications: 55

Book chapters: 2

Citations: ~ 1300

h-index: 22

55. *Tailorable Magnetic Exchange and Optical Absorption in 1-D Halide Double Perovskites (CH₃NH₃)₂NaMoCl_(6-x)Br_x*
D. C. Binwal, K. Anand, M. Sharma, K. V. Saurav, S. K. Pati, **P. Vishnoi***, *submitted*
54. *0-D and 1-D Perovskite-like Hybrid Bismuth(III) Iodides*
A. Saraswat, **P. Vishnoi***, *Chem.- An Asian J. (invited)*, **2024**. Just Accepted
<https://doi.org/10.1002/asia.202400048>
53. *[NH₃(CH₂)₄NH₃]SnX₄ (X = Br, I): Dion-Jacobson type 2-D Perovskites with Short Interlayer Spacing*
N. S. Vishwajith, M. K. Sharma, I. Jain, **P. Vishnoi***, *Dalton Trans. (invited)*, **2024**, **53**, 2465-2470. <https://doi.org/10.1039/D3DT03772J>
52. *Conformational Studies of β-Azapeptoid Foldamers: A New Class of Peptidomimetics with Confined Dihedrals*
Anshulata, **P. Vishnoi**, B. K. Sarma*, *Chem – Eur. J.*, **2024**, **30**, e202303330.
DOI: <https://doi.org/10.1002/chem.202303330>
51. *Temperature and Pressure Induced Structural Transitions of Lead Iodide Perovskites*
P. Vishnoi*, C. N. R. Rao*, *J. Mater. Chem. A*, **2024**, **12**, 19-37.
DOI: <https://doi.org/10.1039/D3TA05315F>
50. *Hybrid Iodide Perovskites of Divalent Alkaline Earth and Lanthanide Elements*
G. T. Kent, E. Zhuang, K. R. Albanese, A. Zohar, E. Morgan, A. Kallistova, L. Kautzsch, A. A. Mikhailovsky, **P. Vishnoi**, R. Seshadri* A. K. Cheetham*, *J. Am. Chem. Soc.*, **2023**, **145**, 27850–27856. <https://doi.org/10.1021/jacs.3c11494>
49. *Elusive Double Perovskite Iodides: Structural, Optical, and Magnetic Properties*
G. T. Kent, E. Morgan, K. R. Albanese, A. Kallistova, A. Brumberg, L. Kautzsch, G. Wu, **P. Vishnoi**, R. Seshadri* A. K. Cheetham*, *Angew. Chem. Int. Ed.*, **2023**, **60**, e202306000.
DOI: <https://doi.org/10.1002/ange.202306000>
48. *Synergistic n → π* and n_N → π*_{Ar} interactions in C-terminal modified prolines: effect on Xaa–Pro cis/trans equilibrium*
J. K. Rai Deka, D. Borah, P. Das, B. Sahariah, , **P. Vishnoi**, B. K. Sarma*, *Chem. Comm.*, **2023**, **59**, 6080-6083. DOI: <https://doi.org/10.1039/D3CC01494K>

47. *Sidechain-Backbone Tetrel Bonding Interactions Provide a General Mechanism for trans-Peptoid Stabilization*
K. Baruah, D. Kalita, B. Sahariah, J. K. Rai Deka, **P. Vishnoi**, B. K. Sarma*, *Chem. – Eur. J.*, **2023**, 29, e202300178. DOI: <https://doi.org/10.1002/chem.202300178>
46. *Molybdenum Chloride Double Perovskites: Dimensionality Control of Optical and Magnetic Properties*
D. C. Binwal, P. P. Mudoi, D. P. Panda, **P. Vishnoi***, *Chemical Science*, **2023**, **14**, 3982 – 3989.
DOI: <https://doi.org/10.1039/D3SC00132F>
(This article is part of the themed collections: (i)2023 Chemical Science HOT Article Collection
(ii) 2023 ChemSci Pick of the Week Collection)
45. *Chemically Functionalized Phosphorenes and their Use in the Water Splitting Reaction*
P. Vishnoi*, A. Saraswat, C. N. R. Rao,* *J. Mater. Chem. A*, **2022**, **10**, 19534-19551.
DOI: <https://doi.org/10.1039/D2TA01932A>
(Invited perspective in the special issue of Emerging Investigator – 2022)
44. *Hybrid Layered Double Perovskite Halides of Transition Metals*
P. Vishnoi, J. L. Zuo, X. Li, D. C. Binwal, K. E. Wyckoff, L. Mao, L. Kautzsch, G. Wu, S. D. Wilson, M. G. Kanatzidis, R. Seshadri,* A. K. Cheetham*, *J. Am. Chem. Soc.*, **2022**, **144**, 6661 – 6666. DOI: [10.1021/jacs.1c12760](https://doi.org/10.1021/jacs.1c12760)
43. *The Renaissance of Functional Hybrid Transition Metal Halides*
L. Mao,* J. Chen, **P. Vishnoi**, A. K. Cheetham*, *Acc. Mater. Res.*, **2022**, **3**, 439 – 448.
DOI: [10.1021/accountsmr.1c00270](https://doi.org/10.1021/accountsmr.1c00270)
42. *Ligand Control of Structural Diversity in Luminescent Hybrid Copper (I) Iodides*
S. Wang, E. E. Morgan, S. Panuganti, L. Mao, **P. Vishnoi**, G. Wu, Q. Liu, M. G. Kanatzidis, R. D. Schaller, R. Seshadri*, *Chem. Mater.* **2022**, **34**, 3206 – 3216.
DOI: [10.1021/acs.chemmater.1c04408](https://doi.org/10.1021/acs.chemmater.1c04408)
41. *Why are Double Perovskite Iodides so Rare?*
P. Vishnoi, R. Seshadri,* and A. K. Cheetham,* *J. Phys. Chem. C*, **2021**, **125**, 11756-11764.
DOI: [10.1021/acs.jpcc.1c02870](https://doi.org/10.1021/acs.jpcc.1c02870)
(Invited article in the special issue, "D. D. Sarma Festschrift")
40. *Chemical Control of Spin-Orbit Coupling and Charge Transfer in Vacancy-Ordered Ru(IV) Halide Perovskites*
P. Vishnoi, J. L. Zuo, J. A. Cooley, L. Kautzsch, A. Gómez-Torres, J. Murillo, S. Fortier, S. D. Wilson, R. Seshadri*, A. K. Cheetham*, *Angew. Chem. Int. Ed.*, **2021**, **60**, 5184–5188.
DOI: [10.1002/anie.202013383](https://doi.org/10.1002/anie.202013383)
39. *Structural Diversity and Magnetic Properties of Hybrid Ruthenium Halide Perovskites and Related Compounds*
P. Vishnoi, J. L. Zuo, T. A. Strom, G. Wu, S. D. Wilson, R. Seshadri*, A. K. Cheetham*, *Angew. Chem. Int. Ed.*, **2020**, **59**, 8974-8981. DOI: [10.1002/anie.202003095](https://doi.org/10.1002/anie.202003095)
(Hot paper highlight, frontispiece highlight, ChemistryViews highlight)

38. *Li₅VF₄(SO₄)₂: A Prototype High Voltage Li-ion Cathode*
R. C. Vincent, **P. Vishnoi**, J.-X. Shen, M. B. Preefer, K. Persson, R. Seshadri*,
ACS Appl Mater. Interfaces, **2020**, *12*, 48662–48668. DOI: [10.1021/acsami.0c14781](https://doi.org/10.1021/acsami.0c14781)
37. *Tunable Luminescence in Hybrid Cu(I) and Ag(I) Iodides*
S. Wang, E. E. Morgan, **P. Vishnoi**, L. Mao, S. M. L. Teicher, G. Wu, Q. Liu, A. K. Cheetham,
R. Seshadri*, *Inorg. Chem.*, **2020**, *59*, 15487–15494. DOI: [10.1021/acs.inorgchem.0c02517](https://doi.org/10.1021/acs.inorgchem.0c02517)
36. *Superlattices of Covalently Cross-linked 2D Materials for the Hydrogen Evolution Reaction*
C. N. R. Rao*, K. Pramoda, A. Saraswat, R. Singh, **P. Vishnoi**, N. Sagar, A. Hezam, *APL Mater.*,
2020, *8*, 020902-11. DOI: [10.1063/1.5135340](https://doi.org/10.1063/1.5135340)
35. *Covalently Linked Heterostructures of Phosphorene with MoS₂/MoSe₂ and their HER Activity*
P. Vishnoi, K. Pramoda, U. Gupta, M. Chhetri, R. Geetha Balakrishna, C. N. R. Rao*,
ACS Appl. Mater. Interfaces, **2019**, *11*, 27780–27787. DOI: [10.1021/acsami.9b06910](https://doi.org/10.1021/acsami.9b06910)
34. *2D Elemental Nanomaterials beyond Graphene*
P. Vishnoi, K. Pramoda, C. N. R. Rao*, *ChemNanoMat*, **2019**, *5*, 1062–1091.
DOI: [10.1002/cnma.201900176](https://doi.org/10.1002/cnma.201900176). (Invited review article), also appears in "Hot Topic: Carbon, Graphite, and Graphene" of *Adv. Mater.*, Wiley-VCH. (cover feature highlight)
33. *Stable Functionalized Phosphorenes with Photocatalytic HER Activity*
P. Vishnoi, U. Gupta, R. Pandey, C. N. R. Rao*, *J. Mater. Chem. A*, **2019**, *7*, 6631–6637.
DOI: [10.1039/C8TA08497A](https://doi.org/10.1039/C8TA08497A) (inside back cover highlight)
32. *Photochemical HER Activity of Layered Metal Phospho-Sulfides and -Selenides*
M. Barua, M. M. Ayyub, **P. Vishnoi**, K. Pramoda, C.N.R. Rao*, *J. Mater. Chem. A*, **2019**, *7*,
22500–22506. DOI: [10.1039/C9TA06044H](https://doi.org/10.1039/C9TA06044H)
31. *Utility of Bis-4-pyridines as Supramolecular Linkers for 5-Sulfosalicylic Acid Centers: Structural and Optical Investigations*
A. A. Ganie, **P. Vishnoi**, A. A. Dar*, *Cryst. Growth Des.*, **2019**, *19*, 2289–2297.
DOI: [10.1021/acs.cgd.8b01914](https://doi.org/10.1021/acs.cgd.8b01914)
30. *Arsenene Nanosheets and Nanodots*
P. Vishnoi, M. Mazumder, S. K. Pati, C. N. R. Rao*, *New J. Chem.*, **2018**, *42*, 14091–14095.
DOI: [10.1039/C8NJ03186J](https://doi.org/10.1039/C8NJ03186J)
29. *Phosphorene Quantum Dots*
P. Vishnoi, M. Mazumder, M. Barua, S. K. Pati, C. N. R. Rao*, *Chem. Phys. Lett.*, **2018**, *699*,
223–228. DOI: [10.1016/j.cplett.2018.03.069](https://doi.org/10.1016/j.cplett.2018.03.069)
28. *Covalently Conjugated MoS₂/Fe₃O₄ Magnetic Nanocomposite for Efficient and Reusable Catalyst for H₂ Production*
M. K. Jaiswal*, U. Gupta, **P. Vishnoi**, *Dalton Trans.*, **2018**, *47*, 287–291.
DOI: [10.1039/C7DT04317A](https://doi.org/10.1039/C7DT04317A)

27. *Covalently Functionalized Nanoparticles of Semiconducting Metal Chalcogenides and their Attributes*
P. Vishnoi, P. Fatahi, M. Barua, A. Bandyopadhyay, S. K. Pati, C. N. R. Rao*, *ChemNanoMat*, **2018**, 4, 41-45. DOI: [10.1002/cnma.201700252](https://doi.org/10.1002/cnma.201700252)
26. *Doping Phosphorene by Holes and Electrons through Molecular Charge Transfer*
P. Vishnoi, S. Rajesh, S. Manjunatha, A. Bandyopadhyay, M. Barua, S. K. Pati, C. N. R. Rao*, *ChemPhysChem*, **2017**, 18, 2985-2989. DOI: [10.1002/cphc.201700789](https://doi.org/10.1002/cphc.201700789)
25. *Reaction with Organic Halides as a General Method for the Covalent Functionalization of Nanosheets of 2D Chalcogenides and related Materials*
 S. Manjunatha, S. Rajesh, **P. Vishnoi**, C. N. R. Rao*, *J. Mater. Res.*, **2017**, 32, 2984-2992.
 DOI: [10.1557/jmr.2017.224](https://doi.org/10.1557/jmr.2017.224)
 (Invited article in the special issue, "2D Nanomaterials for Biosensors")
24. *Effects of Substitution of Aliovalent N^{3-} and Cl^- Ions in Place of O^{2-} in ZnO: Properties of $ZnO_{1-x-y}N_xCl_y$ ($x, y = 0.0-0.5$)*
 S. R. Lingampalli, S. Prasad, K. Manjunath, M. M. Ayyub, **P. Vishnoi**, U. V. Waghmare, C. N. R. Rao*, *Eur. J. Inorg. Chem.*, **2017**, 2017, 2377-2383. DOI: [10.1002/ejic.201700007](https://doi.org/10.1002/ejic.201700007)
23. *Covalent Functionalization of Nanosheets of MoS_2 and $MoSe_2$ by Substituted Benzenes and other Organic Molecules*
P. Vishnoi, A. Sampath, U. V. Waghmare, C. N. R. Rao*, *Chem. Eur. J.*, **2017**, 23, 886-895.
 DOI: [10.1002/chem.201604176](https://doi.org/10.1002/chem.201604176)
22. *Structure and Properties of $Cd_4P_2Cl_3$, an Analogue of CdS*
 A. Roy, U. S. Shenoy, K. Manjunath, **P. Vishnoi**, U. V. Waghmare, C. N. R. Rao*, *J. Phys. Chem. C*, **2016**, 120, 15063-15069. DOI: [10.1021/acs.jpcc.6b04058](https://doi.org/10.1021/acs.jpcc.6b04058)
21. *1,3,5-Triphenylbenzene: A Versatile Photoluminescent Chemo-sensor Platform and Supramolecular Building Block*
P. Vishnoi,* D. Kaleeswaran, R. Murugavel*, *RSC Advances*, **2018**, 8, 17535-17550.
 DOI: [10.1039/C8RA02658K](https://doi.org/10.1039/C8RA02658K)
 (Invited review in special issue: *Chemical Frontiers Goa, 2018*)
20. *Neutral Binuclear Ag(I) and Au(I) N-Heterocyclic Carbene Complexes of Axially Chiral and Racemic Scaffolds: Synthesis and Characterization*
 S. R. Mahule*, M. K Gangwar, **P. Vishnoi**, *ChemistrySelect*, **2018**, 3, 4023-4026.
 DOI: [10.1002/slct.201800189](https://doi.org/10.1002/slct.201800189)
19. *Ethoxysilane Appended M(II) Complexes and their SiO_2 /MCM-41 Supported forms as Catalysts for Efficient Oxidation of Secondary Alcohols*
 R. Antony, R. Marimuthu, **P. Vishnoi**, R. Murugavel*, *Inorg. Chim. Acta*, **2018**, 469, 173-182.
 DOI: [10.1016/j.ica.2017.09.024](https://doi.org/10.1016/j.ica.2017.09.024)

18. *Rare supramolecular Assemblies of a Dicopper(II)-tetracarboxylate Stabilized by (Methanol)₆, Dimethyl Sulfoxide and 4,4'-Azobipyridyl Bridges*
P. Vishnoi, D. Kaleeswaran, R. Murugavel*, *ChemistrySelect*, **2017**, 2, 12014-12018.
 DOI: [10.1002/slct.201702862](https://doi.org/10.1002/slct.201702862)

17. *An Efficient Synthetic Approach to Trans-(NHC)₂Pd(R)Br type Complexes and their use in Suzuki- Miyaura Cross-coupling Reactions*
 A. Kumar, A. P. Prakasham, M. K. Gangwar, **P. Vishnoi**, R. J. Butcher, P. Ghosh*,
Eur. J. Inorg. Chem., **2017**, 2017, 2144-2154. DOI: [10.1002/ejic.201700017](https://doi.org/10.1002/ejic.201700017)

16. *Triphenylbenzene Sensor for Selective Detection of Picric Acid*
 S. Nagendran, **P. Vishnoi**, R. Murugavel* *J. Fluores.*, **2017**, 27, 1299-1305.
 DOI: [10.1007%2Fs10895-017-2063-9](https://doi.org/10.1007%2Fs10895-017-2063-9)

15. *Synthesis, Characterization, DNA Binding and Cytotoxicity of Fluoro-dipyrin Based Areneruthenium(II) Complexes*
 R. P. Paitandi, R. S. Singh, S. Mukhopadhyay, G. Sharma, B. Koch, **P. Vishnoi**, D. S. Pandey*,
Inorg. Chim. Acta, **2017**, 454, 117-127. DOI: [10.1016/j.ica.2016.03.003](https://doi.org/10.1016/j.ica.2016.03.003)

14. *Zinc Dialkylhydroxybenzoates with Unusual Structures: First Example of a Discrete Three-Bade Paddle-Wheel and a Solvent Engulfed Coordination Polymer*
P. Vishnoi, S. K. Sharma, D. Kaleeswaran, R. Murugavel*, *ChemistrySelect*, **2016**, 1, 6658-6668.
 DOI: [10.1002/slct.201601853](https://doi.org/10.1002/slct.201601853)

13. *Dependence of SBU Length on the Size of Metal Ion in Alkaline Earth MOFs Derived from a Flexible C₃-symmetric Tricarboxylic Acid*
P. Vishnoi, D. Kaleeswaran, A. C. Kalita, R. Murugavel*, *CrystEngComm*, **2016**, 18, 9130-9138.
 DOI: [10.1039/C6CE01821A](https://doi.org/10.1039/C6CE01821A)

12. *Three Fold C₃-symmetric "off-on" Fluorescence Chemosensors for Fluoride*
P. Vishnoi*, S. Sen, G. N. Patwari*, R. Murugavel*, *J. Fluores.*, **2016**, 26, 997-1005.
 DOI: [10.1007%2Fs10895-016-1787-2](https://doi.org/10.1007%2Fs10895-016-1787-2)

11. *Alkyl-chain-separated Triphenylbenzene - Carbazole Conjugates and their Derived Polymers: Candidates for Sensory, Electrical and Optical Materials*
 D. Kaleeswaran, **P. Vishnoi**, S. Kumar, S. Chithiravel, M. G. Walawalkar, K. Krishnamoorthy,
 R. Murugavel* *ChemistrySelect*, **2016**, 1, 6649-6657. DOI: [10.1002/slct.201601428](https://doi.org/10.1002/slct.201601428)

10. *Anhydrous Manganese Hypophosphite Dense Framework Solid: Synthesis, Structure and Magnetic Studies*
 G. A. Bhat, **P. Vishnoi**, S. K. Gupta, R. Murugavel*, *Inorg. Chem. Commun.*, **2015**, 59, 84-87.
 DOI: [10.1016/j.inoche.2015.07.006](https://doi.org/10.1016/j.inoche.2015.07.006)

9. *[3 + 3] Imine and β-Ketoenamine Tethered Fluorescent Covalent-Organic Framework Materials for CO₂ Uptake and Nitroaromatic Sensing*
 D. Kaleeswaran[§], **P. Vishnoi**[§], R. Murugavel*, *J. Mater. Chem. C*, **2015**, 3, 7159-7171.
 DOI: [10.1039/C5TC00670H](https://doi.org/10.1039/C5TC00670H) (§ equal contribution)

8. *Charge Transfer Aided Selective Sensing and Capture of Picric Acid by Triphenylbenzenes*
P. Vishnoi, S. Sen, G. N. Patwari*, R. Murugavel*, *New J. Chem.*, **2015**, 39, 886-892.
DOI: [10.1039/C4NJ01093K](https://doi.org/10.1039/C4NJ01093K)
7. *Steric Group Enforced Aromatic Cyclic Trimer Conformer in Tripodal Molecules*
S. D. Sathiyashivan, B. Shankar, P. Rajakannu, P. Vishnoi, D. T. Masram, M. Sathiyendiran*,
RSC Advances, **2015**, 5, 74705-74711. DOI: [10.1039/C5RA05151G](https://doi.org/10.1039/C5RA05151G)
6. *Coordination Polymers Based on Copper Carboxylates and Angular 2,5-Bis(imidazol-1-yl)thiophene(thim₂) Ligand: Sequential Structural Transformations*
N. Singh, P. Vishnoi, G. Anantharaman*, *CrystEngComm*, **2015**, 17, 2153-2161.
DOI: [10.1039/C4CE02428A](https://doi.org/10.1039/C4CE02428A)
5. *Selective Fluorescence Sensing of Polynitroaromatic Compounds Using Triaminophenylbenzene Scaffolds*
P. Vishnoi, M. G. Walawalkar, S. Sen, A. Datta, G. N. Patwari, R. Murugavel*,
Phys. Chem. Chem. Phys., **2014**, 16, 10651-10658. DOI: [10.1039/C4CP00930D](https://doi.org/10.1039/C4CP00930D)
4. *Containment of Polynitroaromatic Compounds in a Hydrogen Bonded Triarylbenzene Host*
P. Vishnoi, M. G. Walawalkar, R. Murugavel*, *Cryst. Growth Des.*, **2014**, 14, 5668-5673.
DOI: [10.1021/cg500948h](https://doi.org/10.1021/cg500948h) (in special issue: *International Year of Crystallography 2014*)
3. *An Anionic Two-Dimensional Indium Carboxylate Framework Derived from a Pseudo C₃-Symmetric Semi-flexible Tricarboxylic Acid*
P. Vishnoi, A. C. Kalita, R. Murugavel*, *J. Chem. Sci.*, **2014**, 126, 1385-1391.
DOI: [10.1007/s12039-014-0676-y](https://doi.org/10.1007/s12039-014-0676-y)
(Special issue: *International Year of Crystallography 2014*, cover highlight)
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BOOK CHAPTERS

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