

❖ **List of Papers Published**

1. Charge-transfer complexes of imidazo[1,2-*a*]pyridines with dimethyl acetylenedicarboxylate: Experimental and theoretical results, **Pooja Maheshwari**, R. Gupta, R. K. Bansal, S. Das, S. Pal *Chem. Phys.* (Communicated).
2. Fluxional behaviour of tricyclo[2.2.1.0^{2,6}]heptaphosphide trisanion: A DFT investigation, M. Bhargava, **Pooja Maheshwari**, M. Kour, R. K. Bansal *Z. Naturforsch.* DOI: 10.1515/znb-2015-0101 (In Press).
3. Effect of CR1R2/P+R1R2 exchange on the degenerate cope rearrangement of barbaralane, M. Ojha, **Pooja Maheshwari**, A. Gurjar, R. K. Bansal *Phosphorus, Sulphur, Silicon and Related Elements* (In Press).
4. Reinvestigation of the aromaticity of mono- and polyphosphacyclopentadienide ions at the DFT level, R. Gupta, **Pooja Maheshwari**, M. Kour, *Comp. Theo. Chem.* **2015**, 1060, 10-16.
5. Effect of CH/P exchange on the fluxional behaviour of bullvalene, semibullvalene and barbaralane: a DFT investigation, D. Sharma, M. Ojha, **Pooja Maheshwari**, A. Gurjar, R. K. Bansal, *Phosphorus, Sulphur, Silicon and Related Elements* **2015**, 190, 1-10.
6. Review: 2-Phosphaindolizines, **Pooja Maheshwari**, N. Sogani, R. K. Bansal, *Phosphorus, Sulphur, Silicon and Related Elements* **2014**, 189, 1-19.
7. Mini review: Diels-Alder reaction with the >C=P- functionality of annelated 1,3-azaphospholes, **Pooja Maheshwari**, R. K. Bansal, *J. Indian Chem. Soc.* **2014**, 91, 1591-1599.
8. Tuning of the dienophilic reactivity of imidazo[1,2-*a*]pyridine: A comparison of DFT and Dispersion-corrected DFT calculations, **Pooja Maheshwari**, R. Gupta, M. von Hopffgarten, R. K. Bansal, *Bull. Chem. Soc. Jpn.* **2013**, 86(1), 57-66.
9. A comparative study of direct and water-mediated thione-thiol tautomerisation processes in 4-amino-1,2,4-triazoles-5-thiones, M. Patni, **Pooja Maheshwari**, R. Gupta, N. Gupta and R. K. Bansal, *Int. J. Chem.* **2012**, 1(4), 495-503.

❖ List of Papers presented in Conferences/ Symposium/ Workshops

- *Reaction of Imidazo[1,2-a]pyridines with DMAD: Competition between [8+2] Cycloaddition and Michael Addition*; National Conference on “Frontiers at the Chemistry-Allied Sciences Interface”, Organized by University of Rajasthan, Jaipur on 13-14 March, **2015**.
- *Experimental and Theoretical Investigations of The Charge Transfer Complexes of Imidazo[1,2-a]pyridines with DMAD*; “17th CRSI National Symposium in Chemistry”, Organized by CRSI-NCL, Pune on 06-08 February, **2015**.
- *Charge Transfer Complexation of Imidazo[1,2-a]pyridines with DMAD: Experimental Investigations*; National Conference on “Emerging Areas in Chemical Education & Research and National Convention of Chemistry Teachers”, Organized by Association of Chemistry Teachers, Mumbai on 16-18 October, **2014**.
- *The effect of CH/P Exchange on Aromatic Character of Cyclopentadienyl Anion: A DFT Investigation*; National Conference on “Emerging Areas in Chemical Education & Research and National Convention of Chemistry Teachers”, Organized by Association of Chemistry Teacher, Mumbai on 16-18 October, **2014**.
- *Mechanism of [8+2] Cycloaddition of Indolizine and Imidazo[1,2-a]pyridine with Acetylenic Compounds : A DFT Investigation*; International Conference on “New Emerging Trends in Chemistry: 3rd Satellite Indo-German conference” on 03-04 March, **2013**.
- *Medicrime Convention- A Possible Solution to the Problem of Counterfeit & Falsified drugs and Other Medical Products, A global concern*; National Conference on “Intellectual Property Rights : Current and Future Prospects”, Organized by The IIS University, Jaipur on 12-13 October, **2012**.

- *Save our Sky: Ozone Friendly Planet Our Target*; Workshop on “International Day for Preservation of Ozone Layer”, Organized by The IIS University, Jaipur on 15 September, **2012**.
- *Tuning of Dienophilic Reactivity in Imidazo[1,2-a]pyridine: A DFT Investigation*; “48th Annual Convention of Chemists”, Organized by Indian Chemical Society, Kolkata on 03-07 December, **2011**.
- *[2+4] Cycloaddition of Imidazo[1,2-a]pyridine: A DFT Investigation*; National Conference on “Chemistry: Education and Research Frontiers”, Organized by IGNOU, Delhi on 13-14 October, **2011**.

❖ **Participated and submitted Papers in Conferences/ Seminars/ Workshops**

- *Theoretical Investigation of The Effect of CH/P Exchange on the Aromatic Character of Cyclopentadienyl Anion*; “17th CRSI National Symposium in Chemistry”, Organized by NCL, Pune on 06-08 February, **2015**.
- *Effect of CH/P Exchange on the Fluxional Behaviour of Bullvalene, Semibullvalene and Barbaralane: A DFT Investigation*; National Conference on “Emerging Areas in Chemical Education & Research and National Convention of Chemistry Teachers”, Organized by Association of Chemistry Teacher, Mumbai on 16-18 October, **2014**.
- *DFT Investigation of the Homoaromaticity and Valence Tautomerism in Aza- and Phospha analogues of Cyclohepta-1,3,5-triene*; National Conference on “Emerging Areas in Chemical Education & Research and National Convention of Chemistry Teachers”, Organized by Association of Chemistry Teacher, Mumbai on 16-18 October, **2014**.
- *A Facile Microwave Assisted Solvent Free Synthesis of Imidazo[1,2-a]isoquinolines*; International Conference on “New Emerging Trends in Chemistry: 3rd Satellite Indo-German conference” on 03-04 March, **2013**.

❖ Awards & Recognition

- Awarded **Significant Achievement in Research** at Annual Function of The IIS University, Jaipur on 20 March 2015.
- Awarded **First Prize** in Oral Presentation in the National Conference on “Emerging Areas in Chemical Education & Research and National Convention of Chemistry Teachers” by Association of Chemistry Teachers, Mumbai on 16-18 Oct. 2014.
- Awarded **Researcher of the Year** at Annual Function of The IIS University, Jaipur on 09 March 2013.
- Awarded **Second Prize** in Oral Presentation in the International conference on “New Emerging Trends in Chemistry: 3rd Satellite Indo-German conference”, Jaipur on 03-04 March 2013.

❖ Other Contribution in the Field of Research

- **Student Coordinator** in Biannual Magazine “*Science Spectrum*”, Publication of Faculty of Science, The IIS University, Jaipur.