

Faculty Details proforma

Title	Professor	First	Mahendra	Last Name	Nath	Photograph	
		Name					
Designation		Professor					
Address		Department of Chemistry,					
		University of Delhi (North Campus),					
		Delhi-110 007					
Phone No (Office)		091-11-27667794 Extn. 186					
Residence		Warden Residence, International Student's House,					
		University of Delhi, Mall Road, Delhi-110 007					
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Educational Qualifications							
Degree		Institution			Year		
Ph.D.		Central Drug Research Institute, Lucknow/ Avadh			1996		
		University, Faizabad, UP, India.					
PG (M.Sc)		University of Lucknow, Lucknow, India.				1991	
UG (B.Sc.)		University of Lucknow, Lucknow, India.			1989		
Caree	Career Profile						

1996-1997: Research Associate (CSIR), Central Drug Research Institute, Lucknow, India.

1997-1998: Post-doctoral Fellow, University of Alberta, Edmonton, Canada.

1999-2001: Scientist (R&D), Lupin Laboratories Ltd., India.

2001-2004: NIH Post-doctoral Researcher, Indiana University, Bloomington, USA.

2005-2008: Reader (Organic Chemistry), University of Delhi, India.

2008-2011: Associate Professor (Organic Chemistry), University of Delhi, India.

2011-Present: Professor (Organic Chemistry), University of Delhi, India.

Administrative Assignments

- **Deputy Superintendent**, Ph. D. Chemistry Course Work Examinations, Department of Chemistry, University of Delhi (April-May 2018)
- Warden, International Student's House, University of Delhi (Since 9th March 2016)
- **Resident Tutor**, International Student's House, University of Delhi (25th June 2005-8th March 2016)
- Co-ordinator, Central Evaluation Centre, Department of Chemistry, University of Delhi (May-June 2016)
- Member, NAAC Peer Team-2016, University of Delhi, Delhi, India
- Convener, Organic Section, Department of Chemistry, University of Delhi (February 2013-May 2014)
- **Deputy Superintendent**, M. Sc. Chemistry Practical Examinations, Department of Chemistry, University of Delhi (November-December 2013)

- **Deputy Superintendent**, M. Sc. Chemistry Theory Examinations, Department of Chemistry, University of Delhi (November-December 2011)
- **Deputy Co-ordinator**, Central Evaluation Centre, Department of Chemistry, University of Delhi (May-June 2010)

Areas of Interest / Specialization

Organic Synthesis, Catalysis, Medicinal Chemistry and Porphyrin Chemistry

Subjects Taught

<u>M.Sc.</u>: Organic Stereochemistry, Study of Reactive Intermediates, Methods in Organic Synthesis, Medicinal Chemistry, Advanced Organic Synthesis, Supramolecular Chemistry & Carbocyclic Rings

M.Sc. (ACPM): Synthetic Organic Chemistry.

M.Phil/Ph.D : Organic Synthesis-II (Unit-33) and Medicinal Chemistry (Unit-XXV)

M.Tech. (CSPT): Medicinal Chemistry (Module-18).

Research Guidance

Supervision of Awarded Doctoral Thesis

Vats, Ishwar Dutt 2010. Designing, synthesis and biological activity of endogenously occurring opiate peptides. University of Delhi, India.

Bhatt, Ranjan Kumar 2011. Synthesis of novel porphyrin analogues through peripheral functionalization of *meso*-tetraphenylporphyrins. University of Delhi, India.

Sharma, Satyasheel 2012. Peripheral functionalization of *meso*-tetraphenylporphyrins for the synthesis of novel benzazolo-, quinoxalino- and dihydro-1,3-oxazinoporphyrins. University of Delhi, India.

Mathew, Bijoy P 2012. Synthesis and antimicrobial evaluation of dihydro[1,3]oxazine derivatives. University of Delhi, India.

Prasad, Davinder 2012. Synthesis and antibacterial evaluation of 4-thiazolidinones, azoles and azolo-azine conjugates. University of Delhi, India.

Garg, Ankur 2013. Synthesis and spectroscopic properties of novel β -functionalized 5,10,15,20-tetraarylporphyrins and diporphyrin analogues. University of Delhi, India.

Tandon, Rashmi 2014. Studies on the antimycobacterial action of 7-substituted-4-methylcoumarins and their dihydro-1,3-oxazine analogues. University of Delhi, India.

Singh, Dileep Kumar 2015. Synthesis and spectroscopic studies of pyrrolo[1,2-a]quinoxalinoporphyrins, coumarin and xanthone linked triazoloporphyrin analogues. University of Delhi, India.

Preetam, Amreeta 2016. *p*-Dodecylbenzenesulfonic acid catalyzed synthesis of arenes and heteroarenes. University of Delhi, India.

Batra, Neha 2018. Synthesis and antimalarial activity of sulfonamide based nitrogen and oxygen containing heterocycles. University of Delhi, India.

Tiwari, Raju 2018. Synthesis, characterization and study of electronic properties of β -functionalized 5,10,15,20-tetraarylporphyrins. University of Delhi, India.

Wadi, Ishan 2019. Biological evaluation of dual stage antiplasmodial potential of novel 4-amino-7-chloroquinoline appended [1,2,3]-triazoles. University of Delhi, India.

Supervision of Submitted Doctoral Thesis

Tekuri, Chandra Sekhar 2018. Synthesis and photophysical properties of β -modified *meso*-tetraarylporphyrins decorated with fused nitrogen and oxygen heteroaromatics. University of Delhi, India.

Supervision of Doctoral Thesis (Under Progress)

Ph.D. Students: Pargat Singh, Shalini, Ankit and Jagmeet Singh.

Supervision of M.Phil/Master Students

- M.Phil: 01
- M. Sc.(ACPM): 01
- M.Tech.(CSPT): 04

Publications Profile

Research Papers Published in Refereed/Peer Reviewed Journals

- 1. S. Agarwal, M. Kidwai, Mahendra Nath, 2019. A facile and green pathway for one-pot multicomponent synthesis of functionalized spiroxyindoles using caffeinium hydrogen sulfate as a catalyst. *ChemistrySelect*, *4*(7), 2135-2139.
- 2. Ishan Wadi, D. Prasad, N. Batra, K. Srivastava, A. R. Anvikar, N. Valecha, Mahendra Nath 2019. Targeting asexual and sexual blood stages of the human malaria parasite *P. falciparum* with 7-chloroquinoline-based 1,2,3-triazoles. *ChemMedChem*, 14(4), 484-493.
- 3. Neha Batra, V. Rajendran, D. Agarwal, I. Wadi, P. C. Ghosh, R. D. Gupta, Mahendra Nath 2018. Synthesis and antimalarial evaluation of [1,2,3]-triazole-tethered sulfonamide-berberine hybrids. *ChemistrySelect*, *3*(34), 9790-9793.
- 4. S. Agarwal, R. Poddar, M. Kidwai, Mahendra Nath, 2018. Caffeinium hydrogen sulfate: A green solid acid catalyst for selective one-pot domino Knoevenagel-Michael transformations. *ChemistrySelect*, *3*(39): 10909-10914.
- 5. Raju Tiwari and Mahendra Nath 2018. A divergent approach to β-pyrazine-fused *meso*-tetraphenyldiporphyrins. *SynOpen*, *2*, 133–137.
- 6. Raju Tiwari and Mahendra Nath 2018. Novel π -extended pyrrolo[1,2-a]pyrazinoporphyrins: Synthesis, photophysical properties and mercuric ion recognition. *Dyes and Pigments*, 152, 161-170.
- 7. Ishan Wadi, C. R. Pillai, A. R. Anvikar, Abhinav Sinha, Mahendra Nath and Neena Valecha 2018. Methylene blue induced morphological deformations in plasmodium falciparum gamatocytes: Implications for transmission blocking. *Malaria Journal*, 17, 11.
- 8. Bijoy P Mathew, Rashmi Tandon, Neha Batra, Drishti Agarwal, Mridula Bose, Rinkoo D Gupta and Mahendra Nath 2017. Environmentally benign synthesis and anti-mycobacterial evaluation of 9,10-dihydro-4-methyl-chromeno[8,7-e][1,3]oxazin-2(8H)-one derivatives. *Indian Journal of Chemistry*, 56B, 1237-1242.
- 9. Shalini Agarwal, Mazaahir Kidwai, Roona Poddar and Mahendra Nath 2017. A facile and green approach for the one-pot multicomponent synthesis of 2,4,5-triaryl- and 1,2,4,5-tetraarylimidazoles by using zinc-proline hybrid material as a catalyst. *ChemistrySelect*, 2, 10360–10364.
- 10. Bijoy P. Mathew, Neha Batra and Mahendra Nath 2016. A convenient one-pot aqueous phase synthesis and properties of naphtho[e]bis[1,3]oxazines. *Current Green Chemistry*, 3, 360-365.

- Chandrasekhar Tekuri, Dileep Kumar Singh and Mahendra Nath 2016. Synthesis, characterization and optical properties of β-substituted pyrrolo- and indolo[1,2-a]quinoxalinoporphyrins. *Dyes and Pigments*, 132, 194-203.
- 12. Dileep Kumar Singh and Mahendra Nath 2016. Synthesis, characterization and photophysical studies of β-triazolomethyl-bridged porphyrin-benzo-α-pyrone dyads. *J. Chem. Sci.*, 128, 545–554.
- 13. Amreeta Preetam and Mahendra Nath 2016. Ambient temperature synthesis of spiro[indoline-3,2'-thiazolidinones] by a DBSA-catalyzed sequential reaction in water. *Tetrahedron Letters*, 57, 1502-1506.
- 14. Dileep Kumar Singh and Mahendra Nath 2015. Synthesis and photophysical properties of β-triazole bridged porphyrin-coumarin dyads. *RSC Advances*, 5, 68209–68217.
- 15. Dileep Kumar Singh and Mahendra Nath 2015. Synthesis and spectroscopic properties of β-triazoloporphyrinxanthone dyads. *Beilstein J. Org. Chem.*, 11, 1434–1440.
- 16. Raju Tiwari and Mahendra Nath 2015. Synthesis of 2-nitro-3-(pyrrol-1-yl)-5,10,15,20-tetraarylporphyrins via a Clauson-Kaas reaction and the study of their electronic properties. *New J. Chem.*, 39, 5500-5506.
- 17. Dileep Kumar Singh and Mahendra Nath 2015. meso-Phenyl-triazole bridged porphyrin-coumarin dyads: Synthesis, characterization and photophysical properties. *Dyes and Pigments*, 121, 256-264.
- 18. Neha Batra, Basabi Roy, Sibnath Mazumder and Mahendra Nath 2015. Synthesis and antibacterial evaluation of novel sulfonamide based [1,2,3]-triazoles. *Indian J. Chem.*, 54B, 650-655.
- 19. Amreeta Preetam, Davinder Prasad, Jatin K. Sharma and Mahendra Nath 2015. Facile one-pot synthesis of oxo-xanthenes under microwave irradiation. *Current Microwave Chemistry*, 2, 15-23.
- 20. Amreeta Preetam and Mahendra Nath 2015. An eco-friendly Pictet–Spengler approach to pyrrolo- and indolo[1,2-a]quinoxalines using pdodecylbenzenesulfonic acid as an efficient Brønsted acid catalyst. *RSC Advances*, 5, 21843–21853.
- 21. Dileep Kumar Singh and Mahendra Nath 2015. Ambient temperature synthesis of β,β'-fused nickel(II) pyrrolo[1,2-a]pyrazinoporphyrins via a DBSA-catalyzed Pictet–Spengler approach. *Org. Biomol. Chem.*, 13, 1836-1845.
- 22. Dileep Kumar Singh and Mahendra Nath 2014. First synthesis of *meso*-substituted pyrrolo[1,2-*a*]quinoxalinoporphyrins. *Beilstein J. Org. Chem.*, 10, 808–813.
- 23. Bijoy P. Mathew, Nisha Aggarwal, Rajesh Kumar and Mahendra Nath 2014. Synthesis and anti-bacterial activity of novel dihydrochromeno[8,7-e][1,3]oxazine-2(8H)-thiones. *Journal of Sulfur Chemistry*, 35, 31–41.
- 24. Davinder Prasad, Amreeta Preetam and Mahendra Nath 2013. L-proline accelerated, eco-friendly synthesis of 9-substituted-2,3,4,9-tetrahydro-1*H*-xanthen-1-ones under mild conditions. *C. R. Chimie*, 16, 1153–1157.
- 25. Ranjan K. Bhatt, Dileep Kumar Singh and Mahendra Nath 2013. Synthesis and characterization of *meso*-substituted triazonoporphyrins. *J. Indian Chem. Soc.*, 90, 1493-1496.
- 26. Davinder Prasad, Amreeta Preetam and Mahendra Nath 2013. DBSA catalyzed cyclotrimerization of acetophenones: An efficient synthesis of 1,3,5-triarylbenzenes under solvent-free conditions. *C. R. Chimie*, 16, 252–256.
- 27. Satyasheel Sharma and Mahendra Nath 2013. Synthesis of *meso*-substituted dihydro-1,3-oxazinoporphyrins. *Beilstein J. Org. Chem.*, 9, 496–502.
- 28. Davinder Prasad and Mahendra Nath 2012. Three-component domino reaction in PPG: An easy access to 4-thiazolidinone derivatives. *Journal of Heterocyclic Chemistry*, 49, 628-633.
- 29. Davinder Prasad, Amreeta Preetam and Mahendra Nath 2012. Microwave-assisted green synthesis of dibenzo[*a*,*j*]xanthenes using p-dodecylbenzenesulfonic acid as an efficient Bronsted acid catalyst under solvent-free conditions. *C. R. Chimie*, 15, 675–678.
- 30. Davinder Prasad, Rajesh Kumar Rohilla, Nilanjan Roy and Mahendra Nath 2012. Synthesis and antibacterial evaluation of benzazoles tethered dihydro[1,3]oxazines. *Indian J. Chem.*, 51B, 739-745.
- 31. Davinder Prasad, Nisha Aggarwal, Rajesh Kumar and Mahendra Nath 2012. Synthesis of novel heteroarenes based [1,2,3]-triazoles *via* click chemistry and their evaluation for antibacterial activity. *Indian J. Chem.*, 51B, 731-738.
- 32. Davinder Prasad, Amreeta Preetam and Mahendra Nath 2012. DBSA catalyzed, one-pot three-component "on water" green protocol for the synthesis of 2,3-disubstituted 4-thiazolidinones. *RSC Advances*, 2, 3133–3140.
- 33. Davinder Prasad and Mahendra Nath 2012. PEG–SO₃H catalyzed, environmentally benign synthesis of 14-aryl-14*H*-dibenzo[*a*,*j*]-xanthenes under solvent-free conditions. *Catalysis Science & Technology*, 2, 93–96.

- 34. Ranjan K. Bhatt, Satyasheel Sharma and Mahendra Nath 2012. La(OTf)₃-catalyzed one-pot synthesis of *meso*-substituted porphyrinic thiazolidinones. *Monatshefte fur Chemie*, 143, 309-316.
- 35. Satyasheel Sharma and Mahendra Nath 2012. An efficient synthetic approach to novel nickel(II) 2-benzazolo-5,10,15,20-tetraphenylporphyrins. *Journal of Heterocyclic Chemistry*, 49, 88-92.
- 36. Satyasheel Sharma and Mahendra Nath 2012. Novel 5-benzazolyl-10,15,20-triphenyl-porphyrins and β,mesobenzoxazolyl-bridged porphyrin dyads: synthesis, characterization and photophysical properties. *Dyes and Pigments*, 92, 1241-1249.
- Mahendra Nath, Maren Pink, Jeffrey M. Zaleski 2011. PtCl₂-catalyzed benzannulation of nickel(II) 2,3dialkynylporphyrins to form unusual phenanthroporphyrins. *Journal of Organometallic Chemistry*, 696, 4152-4157.
- 38. Leigh J. K. Boerner, Mahendra Nath, Maren Pink, and Jeffrey M. Zaleski 2011. Synthesis of unique extended π structures by Pt-mediated benzannulation of nickel(II) tetraalkynyl-porphyrins. *Chem. Eur. J.*, 17, 9311–9315.
- 39. Rashmi Tandon, Prija Ponnan, Neha Aggarwal, Rakesh Pathak, Anil S. Baghel, Garima Gupta, Anu Arya, Mahendra Nath, Virinder S. Parmar, Hanumantharao G. Raj, Ashok K. Prasad and Mridula Bose 2011. Characterization of 7-amino-4-methylcoumarin as an effective anti-tubercular agent: structure–activity relationships. J. Antimicrob. Chemother., 66, 2543–2555.
- 40. Anil S. Baghel, Rashmi Tandona, Garima Gupta, Ajit Kumar, Raman K. Sharma, Neha Aggarwal, Abha Kathuria, Neeraj K. Saini, Mridula Bose, Ashok K. Prasad, Sunil K. Sharma, Mahendra Nath, Virinder S. Parmar and Hanumantharao G. R. 2011. Characterization of protein acyltransferase function of recombinant purified GlnA1 from Mycobacterium tuberculosis: A moon lighting property. *Microbiological Research*, 166, 662-672.
- 41. Davinder Prasad, Awanit Kumar, P. K. Shukla, Mahendra Nath 2011. Design, synthesis and antimicrobial evaluation of novel 2-aryl-thiazolidin-4-one derivatives. *Organic and Medicinal Chemistry Letters*, 1, 4.
- 42. Satyasheel Sharma and Mahendra Nath 2011. Synthesis and spectroscopic properties of *meso*-substituted quinoxalinoporphyrins. *New J. Chem.*, 35, 1630-1639.
- 43. Ishwar Dutt Vats, S. Chaudhary, Ahuti Sharma, Mahendra Nath and Santosh Pasha 2010. Rationally designed chimeric peptide of met-enkephalin and FMRFa-[_D-Ala^{2,} *p*-Cl-Phe⁴]YFa induce multiple opioid receptors mediated antinociception and up-regulate their expression. *European Journal of Pharmacology*, 638, 54-60.
- 44. Bijoy P. Mathew, Awanit Kumar, Satyasheel Sharma, P. K. Shukla and Mahendra Nath 2010. An eco-friendly synthesis and antimicrobial activities of dihydro-2*H*-benzo- and naphtho-1,3-oxazine derivatives. *European Journal of Medicinal Chemistry*, 45, 1502-1507.
- 45. Ishwar Dutt Vats, Snehlata, Mahendra Nath, M. A. Q. Pasha and Santosh Pasha 2010. Effect of chronic intraperitoneally administered chimeric peptide of met-enkephalin and FMRFa-[_D-Ala²]YFa-on antinociception and opioid receptor regulation. *European Journal of Pain*, 14, 295.e1-295.e9.
- 46. Ishwar D. Vats, SnehLata, Jayashree Karar, Mahendra Nath, M A Q Pasha and Santosh Pasha 2009. Endogenous chimeric peptide: Met-enkephalin-Arg-Phe, differently regulate expression of opioid receptors on chronic treatment. *Neuropeptides*, 43, 355-362.
- 47. Bijoy P. Mathew and Mahendra Nath 2009. One-pot three-component synthesis of dihydrobenzo- and naphtho[*e*]-1,3-oxazines in water. *Journal of Heterocyclic Chemistry*, 46, 1003-1006.
- 48. Ishwar Dutt Vats, Karamjit Singh Dolt, Krishan Kumar, Jayashree Karar, Mahendra Nath, Anita Mohan, M. A. Qadar Pasha, Santosh Pasha 2008. YFa, a chimeric opioid peptide, induces kappa-specific antinociception with no tolerance development during 6 days of chronic treatment. *Journal of Neuroscience Research*, 86, 1599-1607.
- 49. Mahendra Nath, Maren Pink, and Jeffrey M. Zaleski 2005. Controlling both ground and excited state thermal barriers to Bergman cyclization with alkyne termini substitution. *J. Am. Chem. Soc.*, 127, 478-479.
- 50. Mahendra Nath, John C. Huffman, and Jeffrey M. Zaleski 2003. Ambient temperature activation of haloporphyrinic-enediynes: electronic contributions to Bergman cycloaromatization. J. Am. Chem. Soc., 125, 11484-11485.
- 51. Mahendra Nath, John C. Huffman, and Jeffrey M. Zaleski 2003. Accelerated Bergman cyclization of porphyrinic-enediynes. *Chem. Commun.*, 858-859.
- 52. Brian J. Kraft, Nicole L. Coalter, Mahendra Nath, Aurora E. Clark, Allen R. Siedle, John C. Huffman, and Jeffrey M. Zaleski 2003. Photo-thermally induced Bergman cyclization of metalloenediynes via near- infrared ligand-to-metal charge transfer excitation. *Inorganic Chemistry*, 42, 1663.

- 53. Rakesh Kumar, Mahendra Nath, and D.Lorne J.Tyrrell 2002. Design and synthesis of novel 5-substituted acyclic pyrimidine nucleosides as potent and selective inhibitors of hepatitis B virus. *J. Med. Chem.*, 45, 2032-2040.
- 54. Rakesh Kumar, Neerja Sharma, Mahendra Nath, Holly A. Saffran and D.Lorne J.Tyrrell 2001. Synthesis and antiviral activity of novel acyclic nucleoside analogues of 5-(1-azido-2-halo-ethyl)uracils. *J. Med. Chem.*, 44, 4225-4229.
- 55. R. Kumar, M. Nath, R. Blush, and S. K. Sharma 2000. Synthesis, antiviral evaluation and structure activity relationships of novel 5-ethyl analogs of 2'-deoxyuridine, 1-β-D-arabino-furanosyl uracil and uridine. *Antiviral Research*, 46, A76.
- 56. Vishnu J. Ram, Mahendra Nath, Pratibha Srivastava, Sanjay Sarkhel and Prakas R. Maulik 2000. A facile access to the synthesis of functionalised unsymmetrical biaryls from 2H-pyran-2-ones through carbanion induced C-C bond formation. *J. Chem. Soc. Perkin Trans.* 1, 3719-3723.
- 57. Vishnu Ji Ram, Pratibha Srivastava, M. Nath, Abhishek S. Saxena 1999. Synthesis of quinolizines, pyrano[4,3b]quinolizines and azaquinolizines through nucleophile induced ring transformation reactions. *Synthesis*, 1884-1888.
- 58. Mahendra Nath, Pratibha Srivastava, Atul Goel and Vishnu Ji Ram 1998. An expeditious synthesis of heteroarenes through carbnion-induced ring transformation reactions of suitable functionalized pyran-2-ones. *Eur. J. Org. Chem.*, 2083-2088.
- 59. Atul Goel, Pratibha Srivastava, Mahendra Nath and Vishnu Ji Ram 1998. Synthesis of 1,3-teraryls through carbanion induced ring transformation of functionalized pyran-2-ones. *Synthesis*, 167-170.
- 60. Vishnu J. Ram Navedul Haque, Mahendra Nath, Sunil K. Singh, Falak A. Hussaini, S.C. Tripathi, A. Shoeb 1997. Polysubstituted 2H-pyran-2ones: A new class of hepatoprotective agents. *Bioorg. Med. Chem. Letters*, 7, 3149-3152.
- 61. Vishnu J. Ram, Mahendra Nath, and P. K. Shukla 1997. 1,3-Dithian-2-ylidene and thiazolidin-2-ylidene derivatives as a novel class of antimycotic agents. *Bioorg. Med. Chem. Letters*, 7, 2137-2140.
- 62. Vishnu Ji Ram and Mahendra Nath 1997. Synthesis of diheteroarylmethanes from activated nitriles. *Indian J. Chem.*, 36B, 394-398.
- 63. Vishnu J. Ram. Sunil K. Singh, Mahendra Nath and Pratibha Srivastava 1996. An inadvertent synthesis of cyclic and acyclic trithiocarbonates under phase transfer conditions. *J. Chem. Research (S)*, 64-65.
- 64. Vishnu Ji Ram, Mahendra Nath and Sunik K. Singh 1996. Synthesis of azoles, azolomethylazoles and azolomethyltriazines as biodynamic agents. *Indian J. Chem.*, 35B, 273-275.
- 65. Vishnu J. Ram and Mahendra Nath 1995. Synthesis of azoles, azines and azoloazines: A versatile approach. *Phosphorus, Sulfur and Silicon*, 105, 11-15.
- 66. Vishnu Ji Ram, Mahendra Nath, Binduja Saraswat and G.K. Patnaik 1995. Amino azoles and azolo-azines as potential hepatoprotectants: Part III. *Bioorg. Med. Chem. Letters*, 5, 1537-1540.
- 67. Vishnu Ji Ram. Mahendra Nath and G.K. Patnaik 1995. 6-Imino-1,3-oxazines: A new class of hepatoprotectants. *Bioorg. Med. Chem. Letters*, 5, 695-698.
- 68. Vishnu J. Ram and Mahendra Nath 1995. Synthesis and evaluation of π -deficient symmetrical and unsymmetrical triazines as antimalarials. *Indian J. Chem.*, 34B, 423-426.
- 69. Vishnu J. Ram and Mahendra Nath 1995. Regioselective synthesis of substituted and fused pyrazolo[1,5-a]pyrimidines as leishmanicides. *Indian J. Chem.*, 34B, 416-422.
- 70. Vishnu J. Ram, Mahendra Nath and Subhash Chandra 1994. Benzylmalononitriles, a versatile synthon for the synthesis of azoles and azines as antimalarials. *Indian J. Chem.*, 33B, 1048-1052.
- 71. Vishnu Ji Ram, Atul Goel, Mahendra Nath and Pratibha Srivastava 1994. 5-Cyano-2-thiouracils and their derivatives: A new class of leishmanicides. *Bioorg. Med. Chem. Letters*, 4, 2653-2656.
- 72. Vishnu J. Ram, Navedul Haque, S.K. Singh, M. Nath and A. Shoeb 1994. Polarized ketene dithioacetals: Part II: Synthesis of S, S- and S, N -cyclic ketene dithioacetals and their transformation to azoles and 1,3-dithiole-2-thiones. *Phosphorus, Sulfur and Silicon*, 88, 155-161.
- 73. Vishnu J. Ram, N. Haque, S. K. Singh, Mahendra Nath, A Shoeb, S.C. Tripathi and G. K. Patnaik 1994. Synthesis of sulphur heterocycles as hepatoprotectants: Part I. *Bioorg. Med. Chem. Letters*, 4, 1453-1456.
- 74. Falak A. Hussaini, Pragya, Vishnu J. Ram, Sunil K. Singh, Mahendra Nath, Aboo Shoeb and Amiya Prasad Bhaduri 1994. Synthesis of substituted 2-aminopyridines: A versatile approach. J. Chem. Res. (S), 86.

75. Vishnu J. Ram, Navedul Haque and Mahendra Nath 1993. Synthesis of π -deficient pyrimidines and fused pyrimidines as leishmanicides. *Indian J. Chem.*, 32B, 754-759.

Review Articles

- 1. Vishnu Ji Ram and Mahendra Nath 1996. Progress in chemotherapy of leishmaniasis. *Current Medicinal Chemistry*, 3, 303-316.
- 2. Bijoy P. Mathew and Mahendra Nath 2009. Recent approaches to antifungal therapy for invasive mycoses. *ChemMedChem*, 4, 310-323.
- 3. Rashmi Tandon and Mahendra Nath 2017. Tackling drug-resistant tuberculosis: Current trends and approaches. *Mini-Reviews in Medicinal Chemistry*, 17, 549-570.
- 4. Ishan Wadi, A. R. Anvikar, Mahendra Nath, C. R. Pillai, A. Sinha, N. Valecha, 2018. Critical examination of approaches exploited to assess the effectiveness of transmission-blocking drugs for malaria. *Future Medicinal Chemistry*, *10*(22), 2619-2639.

Book Chapter

1. Neha Batra, Rahul Panwar, Ramendra Pratap and Mahendra Nath 2018. Microwave-assisted synthesis and functionalization of six membered oxygen heterocycles. *Advances in Microwave Chemistry*, CRC Press (Edited by Bimal Krishna Banik and Debasish Bandyopadhyay).

Patent Filed

1. A process for the synthesis of 1,3-dithian-2-ylidenes useful as antimycotic agents: Vishnu Ji Ram, Mahendra Nath, Praveen K. Shukla, (Patent No. 2957/DEL/96).

Conference Organization/ Presentations (in the last five years)

- 1. Ankit Lathwal and Mahendra Nath 2019. Synthesis of coumarin-based dihydro-1,3-oxazine-1,2,3-triazole hybrids as potential antimicrobial agents. National Conference on Recent Trends and Advancements in Chemical Sciences, 29-31st March 2019 held at the Conference Centre, University of Delhi, India (Poster PP-8).
- 2. Pargat Singh and Mahendra Nath 2018. Synthesis and spectroscopic properties of β , β' -fused pyridoporphyrins. 40th ISCB International Conference on Frontier Research in Chemistry & Biology Interface (ISCBC-2018), 11st-13th January 2018 organized at Manipal University, Jaipur, India (Poster P-87).
- Chandrasekhar Tekuri and Mahendra Nath 2018. Synthesis and photophysical properties of β,β'-fused benzo[f]quinoxalinoporphyrins. 40th ISCB International Conference on Frontier Research in Chemistry & Biology Interface (ISCBC-2018), 11st-13th January 2018 organized at Manipal University, Jaipur, India (Poster P-89).
- 4. Mahendra Nath 2016. Development of Environmentally Benign Protocols for Arenes and Heteroarenes. National Conference on Innovative Research on Materials in Science & Engineering (IRMSE-2016) under Faculty Development Programme, 17th-22nd April 2016 organized by Faculty of Engineering and Technology, M.J.P. Rohilkhand University, Bareilly, Uttar Pradesh, India (Invited lecture).
- Mahendra Nath 2016. Development of eco-friendly methods for arenes and heteroarenes via DBSA-catalyzed reactions. *National Conference in Chemistry (NCC 2016): Environment & Harmonius Development*, 7th-8th April 2016 organized by Department of Chemistry, Shyam Lal College, University of Delhi, Delhi, India (Invited plenary lecture).

- Raju Tiwari and Mahendra Nath 2016. Pyrrolo[1,2-a]pyrazinoporphyrins: Synthesis, photophysical properties and mercuric ion recognition. DU-JIAST Indo-Japan Symposium on Chemistry of Functional Molecules/Materials, February 26-27, 2016, organized by Department of Chemistry, University of Delhi (Poster).
- 7. Mahendra Nath 2015. Novel π-extended pyrrolo[1,2-a]pyrazinoporphyrins: Synthesis and photophysical properties. 5th National Symposium on Functional Applications of Colorants (NSFAC-2015), 29th-30th October 2015 organized by the Department of Dyestuff Technology, Institute of Chemical Technology, Matunga, Mumbai, India (Invited lecture).
- 8. Neha Batra and Mahendra Nath 2014. Synthesis of novel sulfonamide based [1,2,3]-triazoles via click chemistry and their evaluation for antibacterial activity. 20th ISCB International Conference on Chemistry and Medicinal Plants in Translational Medicine for Healthcare (ISCBC-2014), 1st-4th March 2014 (Poster PP-2).
- Amreeta Preetam and Mahendra Nath 2014. An eco-friendly synthetic approach to pyrrolo[1,2-a]quinoxalines. 20th ISCB International Conference on Chemistry and Medicinal Plants in Translational Medicine for Healthcare (ISCBC-2014), 1st-4th March 2014 (Poster PP-23).
- 10. Dileep Kumar Singh and Mahendra Nath 2014. Synthesis and spectroscopic properties of β -triazole linked porphyrin-xanthone conjugates. 20th ISCB International Conference on Chemistry and Medicinal Plants in Translational Medicine for Healthcare (ISCBC-2014), 1st-4th March 2014 (Poster PP-106).
- Mahendra Nath 2013. *meso*-Substituted quinoxalinoporphyrins and their diporphyrin analogues: Synthesis, characterization and photophysical properties. 3rd National Symposium on Functional Applications of Colorants (NSFAC-2013), 29th-30th October 2013 organized by the Department of Dyestuff Technology, Institute of Chemical Technology, Matunga, Mumbai, India (Invited lecture).
- Amreeta Preetam, Davinder Prasad and Mahendra Nath 2013. A convenient one pot synthesis of xanthene derivatives using DBSA as an efficient Bronsted acid catalyst under microwave irradiation. 19th ISCB International Conference on Recent Advances and Current Trends in Chemical and Biological Sciences, March 2nd -5th 2013 (Poster P-336)
- Dileep Kumar Singh and Mahendra Nath 2013. Synthesis, characterization and photophysical properties of novel *meso*-triazole linked porphyrin-coumarin conjugates. 19th ISCB International Conference on Recent Advances and Current Trends in Chemical and Biological Sciences, March 2nd -5th 2013 (Poster PP-374)

Awards and Distinctions

1994: Senior Research Fellowship (CSIR, New Delhi, India) 1996: Research Associateship (CSIR, New Delhi, India)

Association With Professional Bodies

- 1. Reviewer, Elsevier, Wiley, Bentham, Indian Chemical Society, Serbian Chemical Society and many other International and National Research Journals.
- 2. Committees and Boards
- Member, Young Scientist Award Committee, 3rd Uttarakhand State Science & Technology Congress-2008 at Indian Institute of Technology, Roorkee
- Member, Quick Review of NCERT Chemistry Textbooks for Higher Secondary Stage in the year 2006
- Member, Examination Board: University of Lucknow, MJP Rohil Khand University, Govind Ballabh Pant University of Agriculture & Technology, HNB Garhwal University, Allahabad University, Panjab University, NIPER, Mohali, NIPER, Ahmedabad

3. Memberships

- Life member, Indian Chemical Society, India
- Life member, Chemical Research Society of India
- Life member, The Indian Science Congress Association
- Member, American Chemical Society, USA (Year-2004)

• **Member**, Organizing Committee, National and International conferences/Symposia organized by Department of Chemistry, University of Delhi, India

Signature of Faculty Member