Dr Amrendra Kumar Singh

ASSISTANT PROFESSOR



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PROFILE

Experienced Assistant Professor with a demonstrated history of working in the higher education industry. Skilled in Chemistry (Organic Chemistry), Microsoft Words, Microsoft PowerPoint, Research, Leadership and Team Management. Strong Education professional with a Master of Science focused in Organic Chemistry. Ph.D. Thesis Title is **Synthesis of 3H-Pyrazol-3-One of Medicinal Importance**.

EDUCATION

- Master of Science (M.Sc.)
 VBS PU, Jaunpur, U.P. India
 1991 1993
- Doctor of Philosophy (Ph.D.)
 VBS PU, Jaunpur, U.P. India
 1996 1998

SCHOLARSHIPS

- Merit Scholarship in HighSchool1985 1986
- National Scholarship1987 1988

EXPERIENCE

ASSISTANT PROFESSOR

2018 -

VBS Purvanchal University, Jaunpur, U.P. India

Working as Regular Faculty Member in the Department of Chemistry, Faculty of Engineering and Technology, Veer Bahadur Singh Purvanchal University, Jaunpur, U.P. India. Nature of duties are Teaching and Administrative.

LECTURER

2001 - 2018

VBS Purvanchal University, Jaunpur, U.P. India

Worked as Contract Faculty Member in the Department of Chemistry, Faculty of Engineering and Technology, Veer Bahadur Singh Purvanchal University, Jaunpur, U.P. India. Nature of duties were Teaching and Administrative.

COURSES TAUGHT

■ EAS102/EAS202: Engineering Chemistry 2001 - Present

EAS105/EAS205: Environment and Ecology 2001 - Present

NOE035/NOE045: Polymer Science and Technology 2007 - Present

SUMMARY OF Ph.D. THESIS

In thesis the syntheses, characterization, elucidation of Stereochemistry and fungicidal activities of some new 2,4-dihydro-3H-pyrazol-3-one derivatives. The synthetic part involves a 1,3-dipolarcycloaddition reaction and condensation reaction using 2,4-dihydro-3H-pyrazol-3-one as a substrate.

RESEARCH EXPERIENCE

During the Ph.D. course following experience have been acquired:

- Basic concepts of drug designing
- Low temperature anion chemistry
- Characterization of compounds using UV, IR. NMR and mass spectroscopy
- Flash chromatography
- Chromatotron-Circular chromatography, HPLC, TLC

RESEARCH INTERESTS

- Synthetic Organic Chemistry
- Synthesis of Bioactive small ring Heterocyclic Compounds Green Synthesis
- Development of new and usual synthetic routes for products, which exhibits high therapeutic values

CURRENT RESEARCH FOCUS

Syntheses, characterization, elucidation of stereochemistry and antimicrobial activities of some new pyrazolone derivatives.

REVIEWER / MEMBER OF EDITORIAL BOARD

Advance Scientific Research

(An International Journal of Science and Technology)

MEMBERSHIP OF PROFESSIONAL BODIES

- Purvanchal Academy of Sciences
- India Science Congress Association- LM 1192-2004
- International Congress of Chemistry & Environment-AICCE-2008
- International Society of Noni Sciences LM 075-2012

RESEARCH GANTS

Minor project Rs. 5. Lacks from UP Higher Education (Research & Development)

AWARDS & HONOR

INS Fellowship 2020, International Society of Noni Science, Chennai, India

ARTICLES / CHAPTERS PUBLISHED IN BOOKS

- A Textbook of Engineering Chemistry (Mechanism of Organic Reactions) 81-219-0539-9.
- The Role of Ethical Virtues and Green Technology to Build a New Social World Order (Role of Social Ethics and Technology) 978-93-85309-92-2.

- Organic and Medicinal Chemistry the Ferrier Rearrangement: A versatile methodology for the preparation of O,S,N and C-glycosides and application for the synthesis of Biologically active compounds. Nova Science Publisher New York Volume I, 395-425: ISBN:978-1-53614-453-6.
- Carbohydrate as a potential chiral auxiliary in synthesis of Bioactive molecules as a drugs candidate. Book Chapter in Elsevier (Under preparation).

RESEARCH PAPERS PUBLISHED IN JOURNALS

- **1.** 1,3-Dipolar Cycloaddition reaction of benzonitrile oxide with 4- aryl methylene- 2,4- dihydro-5-mithyl-2-phenyl/phenylmethyl-3H-pyrazol- 3-Ones. **201-204/42(1996)**, **J. Indian Chem. Soc.,0019-4522**.
- 2. A Novel reaction of 2,4-Dihydro-4-Hydroxy imino-2,5-disubstituted-3H-pyrazol-3-one. 22-25/01(1996), Asian Journal of Pure & Applied Chemistry 00500/22.
- 3. Syntheses of some pyrazolones as potential Fungicides. 118-122/03(1997), Journal of PAS 0972-3498.
- **4.** Synthesis and Characterization of E/Z-4,5-Dihydro spiro [3-Phenyl-5-Substituted Phenyl isoxazole, 4,4'(2',4'-Dihydro-5'-Methyl-2'-Phenyl/Phenylmemyl-3'H-Pyrazol-3'-ones)^. **J.PAS. Vol. 10,75-80, 2004**.
- **5.** Synthesis and Characterization some novels 4-Arylmethylene-2,4-Dihydro-2,5-Disubstituted-3H-Pyrazol-3-ones and 4,4'-Arylmethylene bis-(2,4-dihydro-2,5-disubstituted-3H-Pyrazol-3-ones). **J.P.A.S., Vol.11, 1-17,2005**.
- **6.** Antibacterial Activity of some Novel 4-Arylmethylenes-2,4-Dihydro-2,5-Disubstitued-3H-Pyrazol-3-ones and 4,4'-Arylmethylene bis (2, 4-Dihydro-2, 5-Disubstituted-3H-Pyrazol-3-ones. **J. PAS,27-30,2005**.
- 7. Antimicrobial Activity of some Isomeric Spiro Pyrazolones. J. PAS, 23-26, 2005.
- **8.** Synthesis and Characterization of some Isomeric Biologically active spiro Pyrazolones. **Research Journal Chemistry Environ.**, **Vol.9 No.(2),2005**.

- **9.** Synthesis and Fungicidal Activity of some new 2-[4'-Arylidene-2'-phenyl-5'-oxo-Imidazolin-1'-yl]-5-Aryl-1,3,4-oxadiazoles. **J.PAS.,Vol.12,S-B,10"14,2006**.
- **10.** New Novel Synthesis and Antimicrobial Activity of 1-(substituted phenyl-4-(3'-Halo, 4'-Hydroxy-5'-Methoxy Benzylidene) Imidazol-5-ones. **Journal P.A.S., Vol. 13 (S-B), 184-189,2007**.
- **11.** Synthesis of some Imidazolones Bearing Benzo (B) Thiophene nucleus As Antimicrobial Agents. **Journal of PAS. Vol. 14 (Chem. Sci.) 1-8, 2008**.
- **12.** Synthesis and Biological activity of some Pyrazole and 1,2,4-Triazole derivative. **Journal of PAS.Vol.14(Chemical Science) pp.23-26.2008**.
- **13.** Synthesis of Some Novel Proponohydrazides and Substituted Pyrazolones. **Asian Journal of Chemistry(Vol.-20),4,2008,2497-2503**.
- **14.** Study of Phosphate Solubilizers as Bio Fertilizer and Antifungal Agent. **Int. J. Che. Sci. 16/01(2010), 0976-4526**.
- **15.** Effect of irrigation with ground water and pollutant elements in a crop Growing area of Sonbhadra district. **India Bull Che. Sci., 21-25/08(2010), 0973-8134**.
- **16.** Synthesis of Benzimidolyl Chalcones into N-Substituted Pyrazolines and Evaluation of Their Antimicrobial Activities. **70-75/07(2013), Indian Journal of Research ANVIKSHIKI 0973-9777**.
- 17. Synthesis of Trifluoromethyl, Containing 1-(3,5-dialkyl-4-hydroxybenzyl)-Pyrazole and Pyrazol-5-Oned derivative, as Potential Fungicides. Indian Journal of Research ANVIKSHIKI 62-66/07(2013),0973-9777.
- **18.** Effect of 1,3-Disubstituted Pyrazol-5-one Derivatives, Photo Stability of Dyes On Proteins Molecules. **(187-191)Vol-04(14)(2017)Current Journal 2348-6228**.
- **19.** Synthesis and Characterization of some Novel 4-Arylmethylene-2,4 dihydro-2,5-Disubstituted-3H-pyrazaol-3ones and 4,4'- Aryl methylene bis-(2,4-dihydro-2,5-disubstituted-3H-pyrazol-3-ones. **(244-250)Vol-01 (2017) IJMLSS 2456-4303**.

- **20.** Physico-Chemical and Biological Investigations of two lakes Mirzapur, India. **(231-236) Vol.-1 (2017) IJMLSS 2456-4303**.
- 21. Antibacterial Activity of some Novel 4-Arylmethylene-2,4-dihydro 2,5-disubstituted-3H-pyrazol-3-ones and 4,4'- Aryl methylene bis-(2,4-dihydro-2,5-disubstituted-3H-pyrazol-3-ones.). Varanasi Management Review 2395-0390 Vol. 3(3) 2017.
- **22.** Antimicrobial Activity of some Isomeric Spiro Pyrazolones. **Research Highlights 2350-0611 Vol. 4(3) 2017**.
- 23. Microwave-Induced Bismuth Nitrate-Impregnated Clay-Mediated Novel Dinitration 9,10- Dihydrophenanthrene: A precursor for new heterocycles. Vol. 8/No.2/273-276/Feb.-April (Heterocyclic Letter) 2231-3087(print) 2230-9632(online) CODEN: HLEEAI 2018.
- **24.** Novel Synthesis of Bis-β-Lactams with Unusual 2,7-Phenanthrene and 9,10-Dihydrophenanthrene Derivatives. **Vol.3**, **Issue (3)**, **pp 1-4**, **P110**, **Asian Journal of Organic and Medicinal Chem. 2018**.
- **25.** Microwave-induced stereo specific synthesis of trans 3-phenylthio β -lactams. **Vol.96, pp.1359-1363, J. Indian Chem. Soc., 2019**.
- **26.** Antifungal activity of some isomeric spiro pyrazolones. **Vol.5**, **pp.26-29**, **OAIJSE**, **2020**
- **27.** Synthesis and Characterization of E/Z-4,5-Dihydro spiro [3-Phenyl-5-Substituted phenyl isoxazole-4,4'(2',4'-Dihydro-5'-Methyl-2'-Phenyl/Phenylmethyl-3'H-Pyrazol-3'-ones) (accepted in Heterocyclic Letter, 2023).

RESEARCH PAPERS GIVEN IN CONFERENCE

- 1,3-Dipolar Cycloaddition Reaction of Benzonitrile Oxide with 4- Arylmethylene-3H-Pyrazol-3-one, 31st annual convention of Chemists, Ind. Chem. Soc., C-14, 1994.
- **2.** A Novel Reaction of 2,4-Dihydro-4-Hydroxyimino-2,5-Disubstituted-3H-Pyrazol-3-Ones. **7**th **Annual Conference of PAS 8, 1995**.
- **3.** 1,3-dipolar cyclo-addition reaction of Benzonitrile oxide with 4- aryl methylene-2,4-dihydro-5-methyl-2- phenyl/phenylrnethyl-3H-pyrazol-3-ones. **Indian Chem. Soc., 42,1995**.

- **4.** Synthesis of 4,5-Dihydro Spiro [3-Phenyl-1,5-Disubstituted Phenyl isoxazole-4,4¹ (2',4'-Dihydro-5'-Methyl-2'-Phenyl/Pheny! methylo'H-Pyrazole-3'-ones)] **XII Annual Conference of PAS C-1,2001**.
- 5. Characterization and Antimicrobial Activity of Some Novel 4-Arylmethylene-2,4-dihydro-2,5-disubstituted-3H- pyrazol-3-ones and 4,4'-Arylmethylene-bis[(2,4-dihydro-2,5-disubstituted-3H- pyrazol-3-oncs)], XII Annual Conference of PAS, C-2 2001.
- **6.** 1,3-dipolar cyclo addition reaction of benzonitrile oxide with alkyl, aryl, chlorosubstituted-3H-pyrazol-3-ones as potential bactericidesand fungicides. **Indian Journal of Chemistry., S-B 029., 2003**.
- 7. Synthesis and characterization of some Novel 4-Aryl methylene-2,4-Dihydro-2,5-Disubstituted-3H-pyrazol-3-ones and 4,4'-Aryl methylene bis (2,4-dihydro-2,5-Disubstituted-3H-Pyrazol-3-one. XIII annual conference of PAS., C-8, 2004.
- **8.** Antimicrobial activity of some Novel 4-Arylmethylenes-2,4-Dihydro-2,5-Disubstituted-3H-Pyrazol-3-onesand 4,4'-Arylmethylene Bis-(2,4-Dihydro-2,5-Disubstituted-3H-pyrazol-3-ones. **XIII Annual Conference of PAS, C-9, 2004**.
- 9. Synthesis and characterization of some novel 4-Arylmethylenes-2,4-Dihydro-2,5-Disubstituted-3H-Pyrazol-3-ones and 4, 4'-arylmethylenes bis (2,4-Dihydro-2,5-Disubstituted-3H-Pyrazol-3- ones). 41st Annual Convention of Chemists, Ind. Chem. Soc., C-28, 2004.
- **10.** To study the pollution of different water bodies in Jaunpur City. **41**st **Annual Convention of Chemists Ind. Chem. Soc., D-19. 2004**.
- **11.** Antibacterial Activity of some Novel 4-Arylmethylenes-2,4-Dihydro-2,5-Disubstitued-3H-Pyrazol-3-ones and 4,4'-Arylmethylene bis (2,4-Dihydro-2,5-Disubstituted-3H-Pyrazol-3-ones. **XIV Annual Conference of PAS, C-32, 2005**.
- **12.** Antimicrobial Activity of some Isomeric Spiro Pyrazolones. **XIV Annual Conference PAS, C-33, 2005**.
- **13.** Synthesis and Characterization of E/Z-4,5-Dihydro spiro[3-Phenyl-5-Substituted Phenyl isozazole,4,4'(2^t,4^t-Dihydro-5^l-Methyl-2^T-Phenyl/Phenylmethyl-3'H-Pyrazol-3'-ones)]. **92nd Ind. Sci. Cong.,41, 2005**.
- 14. Effects of Cu and Cd in Gomti River at Jaunpur. 92nd Ind. Sci. Cong.,128, 2005.

- **15.** Syntheses of some pyrazolones as potential anti ischemic agents. **Ind. Sci. Cong. 3205. Journal, 2006**.
- **16.** Synthesis of some new proponohydrazides and their hydrolysis product pyrazolones. **43**rd **Annual Convention of Chemists, Indian Chem. Soc., C-26, 2006**.
- 17. Studies of water quality parameters at Satharia Tehsil Industrial Area. 43th Annual Convention of Chemists. Indian Chem. Soc., D-14, 2006.
- **18.** Study of Activated Nitriles Towards Barbituric Acid Thiobarbituric acid and 3-methyyl-l-phenyl-pyrazol-5-one. **National Conference on Newly Emerging Areas in Chem., Sci., 68, 2006**.
- **19.** Synthesis of somel,2,4-Triazoles as potential Antibacterial & Antifungal agents. **National Conference on Newly Emerging Areas in Chem. Sci., 69, 2006**.
- **20.** Study of Activated Nitriles towards Barbituric Acid, Thiobarbituric Acid and 3-Methyl-l-phenyl-pyrazol-5-one. **16**th **Annual Conference of PAS, 32, 2007**.
- **21.** Synthesis of 8-Fluoro-9-substituted (l,3)-Benzothiazolo (5,l-b)-l,2,4-Triazoles as Antimicrobial Agents. **16**th **Annual Conference of PAS, C-21, 2007**.
- **22.** Studies of Water Quality Parameters at Satharia Tehsil Industrial Area. **16**th **Annual Conference of PAS, C-21, 2007**.
- **23.** Synthesis and Tautomeric Studies of Enamines from l-(n-Hexyl)-3-Methyl-2-Pyrazolin-5-one. **17**th **Annual Conference of PAS, C-37, 2008**.
- **24.** Synthesis of 1,2,4-Triazole Derivative and their Insecticidal Activity. **17**th **Annual Conference of PAS, C-29, 2008**.
- 25. Synthesis and characterization of pyrazolones, Triazoles and Imidazoles derivatives as potential antifungal agents. National Conference on Advanced Materials, 55, 2008.
- **26.** Synthesis 1,2,4-Triazolo mercapto and aminonitriles as potent antifungal agents. **National Conference on Advanced Materials, 61, 2008**.

- **27.** Synthesis of Copper (III) Complexes of a Schiff Base from 2,3-Dimethyl-1-phenyl-4- Aminopyrazole-5-one as Antimicrobial Activity. **19th Annual Conference of PAS, C-1, 2010**.
- **28.** Synthesis of New 4-Aryl pyrazolo-pyrimidin-6-one derivative of potential Antihypertensive activity. **19**th **Annual Conference of PAS, C-2, 2010**.
- 29. Synthesis of Chlorosubstituted-4-chloroaroly and 4-chloroalkyl-pyrazolins,pyrazole-2-one and their effect on some flowering plants as antifungal. National Conference on Biotechnology And Human Welfare: New Vistas 55,2015.
- **30.** Phosphorescence of Tungsten Light: An Energy Source for Synthesis of 4,5-Dihydro-pyrazolone derivatives. **ICEECS pp. 41-43, 2020**.

PROGRAMMES ATTENDED

FDP Scheme of DST-NIMAT.
 27 June – 10 July 2013

- ETI- The Ministry of Youth Affairs & Sports Government Of India. 17 23 November 2013
- Training of Trainers on Life Skills Ministry of Skill Development, Youth Affairs and Sports, Government of India.

23 - 27 February 2017

 Advances in Corrosion Science and Engineering Static & Fatigue Analysis of Engineering System Using ANSYS
 23-28 February 2021

ADMINISTRATIVE WORK AT UNIVERSITY

- Warden (13 October 2017 Present)
- Assistant Proctor (23 November 2012 Present)
- Member of Anti-Ragging Cell (2011 2012)
- Programme Officer, Unit-II of NSS (2011 2015)
- Programme Officer, Unit-I of NSS (2017 Present)

- Assistant Coordinator, Evaluation of Answer Booklet University Examination (2012 – Present)
- Assistant Coordinator, Technical cell Result preparation cell for the whole campus courses (2015 – 2016)
- Assistant Centre Superintendent, Semester Exam Campus (2015–2017)
- Assistant Centre Superintendent, of B.Ed., M.Ed., Ph.D., JEE, CPMT Entrance Examination
- Member, Sports meet of Campus (2017 Present)
- Observer, University Examination (2014 2016)
- Assistant Coordinator, Central Observer Team of University Exam (2017)
- Assistant Coordinator, Academic Activities Committee of B.Tech First year
 (2014 Present)
- Member of "स्वच्छ भारत अभभयान" of Government of India in the locality of the VBS Purvanchal University, Jaunpur (2015 2016)
- Coordinator Technical Cell (campus)

TASKS FOR UNIVERSITY AND SOCAIL DEVELOPEMENT

- As an Assistant Coordinator of a Free Coaching "Prerna" which is running in nearby villages of the V.B.S. Purvanchal University, Jaunpur to upgrade the knowledge of financially weak children w.e.f. **Sept. 2014**.
- Actively participated as Member of a committee constituted for making proposal and implementation for "स्वच्छ भारत अभभयान" of Govt. of India in the locality of the VBS Purvanchal University, Jaunpur.
 May 2015 April 2016.
- Organized "मतदाता जागरूकता अभभयान" as Member in the V.B.S. Purvanchal University, Jaunpur campus on 18th February 2017.

