

Detailed Biodata



Prof. (Dr.) Mohamad Yusuf

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Award

- Awarded Commonwealth Academic Fellowship for the year 2014 in Organic Chemistry by the “Commonwealth Scholarship Commission in the United Kingdom, London”. Under this fellowship, worked for three months (18/09/2014 to 17/12/2014) at the Department of Chemistry, School of Life Sciences, University of Sussex, Brighton, United Kingdom on the project entitled “*Novel Automated Synthesis of Heterocycles using Microwave and Flow Chemistry*”.

Educational Qualifications

- Matriculation, Haryana Education Board, Bhiwani (1990).
- Higher Secondary (Physics, Chemistry, Maths), Haryana Education Board, Bhiwani (1992).
- B.Sc. (Physics, Chemistry, Maths), Kurukshetra University, Kurukshetra (1995).
- M.Sc. (Organic Chemistry), Kurukshetra University, Kurukshetra (1997).
- Ph.D. (Organic Chemistry), Kurukshetra University, Kurukshetra (2002).
- Certificate
- Course in German Language, Kurukshetra University, Kurukshetra (2002).
- Punjabi Perveshika, Punjabi University, Patiala (2004).

Employment

- July, 2002 to July, 2003, Lecturer in the Department of Chemistry, Guru Jambheshwar University, Hisar.
- August 12, 2003 to August 11, 2007, Lecturer in the Department of Chemistry, Punjabi University, Patiala.

- August 12, 2007 to August 11, 2012, Sr. Lecturer in the Department Chemistry, Punjabi University, Patiala.
- August 12, 2012 to till 11 august 2015, Assistant Professor (Stage-3) in the Department Chemistry, Punjabi University, Patiala.
- August 12, 2015 to till date, Associate Professor (Stage-4) in the Department Chemistry, Punjabi University, Patiala.
- August 12, 2018 to till date, Professor (Stage-5) in the Department Chemistry, Punjabi University, Patiala.

Teaching Experience: 17 Years

Courses Taught

- Photochemistry (M.Phil.-Semester I)
- Organic Chemistry Practicals (M.Phil.-Semester I)
- Heterocyclic Chemistry (M.Sc. Part-II)
- Modern Synthetic Reaction and Rearrangements (M.Sc. Part-II)
- Organic Chemistry Practicals (M.Sc. Part-I & II).

Research Guidance (Ph.D./M.Phil.)

Ph. D. Guided

- **Mr. Rupesh Kumar, Awarded Ph.D. in April, 2010**
Thesis Title: *Synthesis and Photochemical Transformation of Some Novel Benzo- γ -pyrones*
- **Mrs. Ritu Bala, Awarded Ph.D. in April, 2010 (I Acted as Co-supervisor)**
Thesis Title: *Direct and Dye Sensitized Photoreactions of 3-Hydroxy-benzopyran-4-one*
- **Mrs. Mamta Rani, Awarded Ph. D. in December, 2012**
Thesis Title: *Design, Synthesis and Spectral Studies of Novel Heterocyclic Compounds*
- **Miss Payal Jain, Awarded Ph.D. in April, 2013**
Thesis Title: *Synthesis and Characterization of Novel Heterocyclic Compounds*
- **Miss Indu Solanki, Awarded Ph.D. in December, 2015**
Thesis Title: *New Heterocyclic Compounds: Synthetic and Characterization Studies*
- **Miss Manvinder Kaur, Awarded Ph.D. in February, 2017**
Thesis Title: *Synthesis and Characterization studies of New Bisheterocyclic Compounds*
- **Miss Saloni Thakur, Awarded Ph.D. in March, 2021**
Thesis Title: *New Heterocycles: Design, Synthesis and Antimicrobial Activity Studies*
- **Miss Shehneela Nisa, Awarded Ph.D. in September, 2021**
Thesis Title: *Synthetic and Characterization Studies of Biologically Active New Heterocycles*
- **Miss Promila Sharma, Submitted Ph.D Thesis in 2023 (Acted as Co-supervisor)**
- **Miss Manpreet Kaur, Submitted Ph.D Thesis in 2023 (Acted as Co-supervisor)**
- **Miss Manpreet Kaur, Registered for Ph.D.**

- **Miss Lailema Ahmady, Enrolled for Ph.D.**

M. Phil. Guided

- **Mr. Diwan Singh, Awarded M. Phil. in March, 2010**
Dissertation Title: *Synthesis and Characterization of New Bispyrazolines*
- **Miss Manvinder Kaur, Awarded M. Phil. in June, 2012**
Dissertation Title: *Synthesis and Characterization Studies of New Alkyl Based Bis(1,3,4-Thiadiazolines)*
- **Mrs. Varsha Samdhian, Awarded M. Phil. in June, 2012**
Dissertation Title: *New Rigid Linker Bispyrazolines: Synthesis and Characterization Studies*
- **Miss Manpreet Kaur, Awarded M. Phil. in June, 2013**
Dissertation Title: *Synthesis, characterization and antimicrobial Studies: New Bis(4-acetyl-4,5-dihydro-1,3,4-thiadiazole) derivatives*
- **Miss Amanpreet Kaur, Awarded M. Phil. in June, 2014**
Dissertation Title: *Aliphatic chain based new bis(4,5-dihydropyrazole) derivatives: Synthesis, characterization and antimicrobial Studies*
- **Mr. Manpreet Singh, Awarded M. Phil. in June, 2015**
Dissertation Title: *Synthesis and spectral studies of new bis [4,5-dihydro-3-(5-methylthophene-2-yl)-1-phenyl-1H-pyrazole] derivatives*
- **Mr. Pardeep Singh, Awarded M. Phil. in June, 2015**
Dissertation Title: *Synthesis and characterization studies of 2-butene linked new bischromones*
- **Miss Kavita Pal, Awarded M. Phil. in June, 2016**
Dissertation Title: *Synthesis and characterization studies of dithienyl based new heterocycles*
- **Miss Priya Devi, Awarded M. Phil. In June 2017**
Dissertation Title: *Butyl/butyne linked bischromones: Synthetic and antimicrobial studies*
- **Ms Kulwinder Kaur, M. Phil. Awarded M. Phil. In June 2018**
Dissertation Title: *Synthesis and antimicrobial/antioxidant studies of xylene based new bischromones*
- **Ms Rekha Thakur, Awarded M. Phil. In June 2018**
Dissertation Title: *Synthesis and antimicrobial/antioxidant studies of new bis[4,5-dihydro-1-phenyl-3-furyl-5(phenyl-3-alkoxy)pyrazole] derivatives*

Orientation Programme/Refresher Course/Resource Person

- Attended Refresher Course in Chemistry (8.12.2010-28.12.2010) at UGC Academic Staff College, Punjabi University, Patiala.
- Attended Refresher Course in Chemistry (27.11.2012-17.12.2012) at UGC Academic Staff College, Punjabi University, Patiala.

Thrust Area of Research

- Synthesis and Photochemistry of 3-alkoxy-chromones/bischromones
- Synthesis and Antimicrobial evaluations of novel bisheterocyclic compounds

Research Publications

1. Photoisomerization of allyl ethers: syntheses of vinyl ethers
S. C. Gupta, **Mohamad Yusuf**, S. Sharma, S. Arora, *Tetrahedron Lett.*, 43, **2002**, 6875. **(Impact factor: 2.415)**
2. Photocyclisation of 3-alkoxythiochromones: activation for H-abstraction
S. C. Gupta, S. Sharma, **Mohamad Yusuf**, S. Arora, A. Saini, R. C. Kamboj, S. N. Dhawan, *J. Chem. Res. (S)*, **2002**, 165. **(Impact factor: 0.61)**
3. Photoreorganisation of some bischromones
S. C. Gupta, **Mohamad Yusuf**, M. S. Arora, S. Sharma, R. C. Kamboj, S. N. Dhawan, *Tetrahedron*, 58, **2002**, 3095. **(Impact factor: 2.457)**
4. Photolysis of xylylbischromones
S. C. Gupta, **Mohamad Yusuf**, S. Arora, R. C. Kamboj, *Tetrahedron*, **2003**, 59, 3609. **(Impact factor: 2.457)**
5. Phototransformations of some 3-alkoxy-2-styrylchromones: type II cyclisations of 1,4- and 1,6-biradicals
S. C. Gupta, **Mohamad Yusuf**, S. Sharma, A. Saini, S. Arora, R. C. Kamboj, *Tetrahedron*, 60, **2004**, 8445. **(Impact factor: 2.457)**
6. Photocyclisation of o-xylylbischromones: proximity effect
S. C. Gupta, **Mohamad Yusuf**, M. Thakur, R. C. Kamboj, *J. Chem. Res. (s)*, **2005**, 741. **(Impact factor: 0.61)**
7. Chromones and bischromones: an account of photoinduced reactions
R. Kumar and **Mohamad Yusuf**, *ARKIVOC* (ix), **2006**, 239-264. **(Impact factor: 1.253)**
8. Photochemical transformations of 1,10-decylbischromones: effect of spacer length
Mohamad Yusuf, R. Kumar and S. C. Gupta, *ARKIVOC* (xv), **2006**, 28-36. **(Impact factor: 1.253)**
9. Photochemistry of 6-Chloro-3-hydroxy-2-(2'-thienyl)-4-oxo-4H-1-benzopyran
R. Bala, R. Kumar, **Mohamad Yusuf** and W. R. Bansal, *Ind. J. Chem.*, 46A, **2007**, 1440-1444. **(Impact factor: 0.491)**

10. Photocyclisations of some 3-alkoxychromones: Substituent control on photoreactivity
Mohamad Yusuf, R. Kumar, R. Bala, and W. R. Bansal, *Ind. J. Chem.*, 46B, **2007**, 1860-1867. (Impact factor: 0.592)
11. Photolysis of some 3-alkoxy-2-thienylchromones
R. Kumar and **Mohamad Yusuf**, *ARKIVOC (xvi)*, **2007**, 227-237. (Impact factor: 1.253)
12. Photocyclisation of some 3-Alkoxy-2-thienylchromones
Yusuf, M.; Kumar, R.; Gupta, S. C. *J. Heterocyclic Chem.*, 45, **2008**, 963-968. (Impact factor: 2.193)
13. Photo-rearrangements of some 3-allyloxy-2-phenyl-chromones: Synthesis of vinyl substituted benzopyronopyranes
Kumar, R. and **Yusuf, M.** *Org. Commun.* 1:3, **2008**, 39-47. (Impact factor: 0.56)
14. Synthesis, spectral studies and in vitro antibacterial activity of steroidal thiosemicarbazone and their palladium Pd (II) complexes
Khan, S. A. and **Yusuf, M.** *Eur. J. Med. Chem.*, 44 (5), **2009**, 2270-2274. (Impact factor: 6.514)
15. Synthesis and biological evaluation of some thiazolidinone derivative of steroid as antibacterial agents
Khan, S. A.; Asiri, A. M.; **Yusuf, M.** *Eur. J. Med. Chem.*, 44, **2009**, 2597-2600. (Impact factor: 6.514)
16. Photolysis of some 2-butenyl/butynylbischromones: Effect of solvent Polarity
Kumar, R. and **Yusuf, M.** *Org. Commun.*, 2:1, **2009**, 7-19. (Impact factor: 0.56)
17. Synthesis and Photochemical H-abstractions of some 2-thienyl/furyl-3-allyloxy-bischromones
Kumar, R. and **Yusuf, M.**, *Ind. J. Chem.* **2010**, 49B, 216. (Impact factor: 0.592)
18. Synthesis and antimicrobial evaluation of bithiazolidinones built around aliphatic chains
Yusuf, M. and Jain, P. *Asian Journal of Research in Chemistry* **2011**, 4(7), 1103-1108.
19. Synthesis and *in-vitro*-antibacterial activity of [5-(furan-2-yl) - phenyl]-4, 5-carbothioamide-pyrazolines
Rani, M.; **Yusuf, M.**; Khan, S. A. *J. Saudi Chem. Soc.* **2012**, 16, 431-436. (Impact factor: 3.932)
20. Synthesis of some alkoxy based bithiadiazolines
Yusuf, M. and Jain, P. *Arab. J. Chem.* **2012**, 5, 93-98. (Impact factor: 5.165)

21. Synthesis, characterization and antimicrobial studies of new bispyrazolines linked via 3-aryl ring with aliphatic chains
Yusuf, M. and Jain, P. *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy* **2012**, 96, 295-304. **(Impact factor: 4.098)**
22. Synthesis and antimicrobial studies of new thiadiazoline based symmetrical bisheterocyclics
Yusuf, M. and Jain, P. *Der Pharma Chemica* **2012**, 4(4):1458-1466. **(Impact factor: 0.32)**
23. Synthesis and Antimicrobial studies of New N,N'-[5,5'-{2,2'-(bis-alkoxy)bis(2,1-phenylene)]bis(4-acetyl-4,5-dihydro-1,3,4-thiadiazole-5,2-diyl)diacetamide
Yusuf, M.; Solanki, I. and Jain, P. *J. Chem. Sci.* **2012**, 124(3), 703-715.
(Impact factor: 1.573)
24. Synthesis and *in-vitro* antibacterial activity of some alkoxy based N- substituted -5-(furan-2-yl)-phenyl-bispyrazolines
Rani, M. and **Yusuf, M.** *Eur. J. Chem.* **2012**, 3(1), 21-25. **(Impact factor: 0.5439)**
25. Synthesis and *in-vitro* antibacterial activity of some bis-5-(thiophen-2-yl)-carbothioamide-pyrazoline derivatives
Rani, M. and **Yusuf, M.** *Eur. J. Chem.* **2012**, 3(4), 406-410. **(Impact factor: 0.5439)**
26. Photoinduced Synthesis of New Diisochromenochromen-4-ones and Their Antimicrobial Activities
Yusuf, M.; Solanki, I.; Jain, P. *The Scientific World Journal* **2012**, MS ID 954934, 8 pages. **(Impact factor: 1.625)**
27. New 1,3,4-Bisthiadiazolines: Synthesis, characterization and antimicrobial evaluations
Yusuf, M.; Kaur, M.; Jain, P.; Solanki, I. *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy* **2012**, 97, 470-478.
(Impact factor: 4.098)
28. New bispyrazoline derivatives built around aliphatic chains: synthesis characterization and antimicrobial studies
Yusuf, M. and Jain, P. *J. Chem. Sci.* **2013**, 125 (1), 117-127. **(Impact factor: 1.573)**
29. Synthesis and Antimicrobial Studies of New Bis[4,5-dihydro-1-phenyl-5-thienyl-3-(phenyl-4-alkoxy)-1H-pyrazole] Derivatives
Yusuf, M. and Jain, P. *J. Heterocyclic Chem.* **2014**, 51, 1162-1170.
(Impact factor: 2.193).
30. Synthesis and biological significances of 1,3,4-thiadiazolines and related heterocyclic compounds

- Yusuf, M.** and Jain, P.; *Arabian J. Chem.* **2014**, 7(5), 525-552. (Impact factor: 5.165)
31. Synthetic and biological studies of pyrazolines and related heterocyclic compounds
Yusuf, M. and Jain, P.; *Arab. J. Chem.* **2014**, 7(5), 553-596. (Impact factor: 5.165)
32. Synthesis, studies and in vitro antibacterial activity of some 5-(thiophene-2-yl)-phenyl-pyrazoline derivatives
Rani, M. and **Yusuf, M.** *J. Saudi Chem. Soc.* **2014**, 18, 411-417. (Impact factor: 3.932)
33. Synthesis, studies and in vitro-antibacterial activity of N-substituted 5-(furan-2-yl)-phenyl-pyrazolines
Rani, M.; **Yusuf, M.**; Khan, S. A.; Sahota, P. P.; Pandove, D. G. *Arab. J. Chem.* **2015**, 8, 174 -180. (Impact factor: 5.165)
34. Synthesis, Characterization and Antimicrobial Studies of New Rigid Linker based Bispyrazoline
Yusuf, M.; Samdhian, V.; Jain, P. *J. Heterocyclic Chem.* **2015**, 52(1), 260-266. (Impact factor: 2.193)
35. Synthesis and Antimicrobial Evaluations of 1,3,4-Thiadiazoline based Bisheterocyclics
Mohamad Yusuf, Manpreet Kaur and Payal Jain *J. Heterocyclic Chem.* **2015**, 52(3), 692-700. (Impact factor: 2.193)
36. Synthesis and antimicrobial studies of furyl based new bispyrazolines linked via aliphatic chains
Yusuf, M. and Solanki, I. *J. Saudi Chem. Soc.* **2017**, 2(3), 251-261. (Impact factor: 3.932)
37. Synthesis, Antimicrobial Evaluations and DNA Photo Cleavage Studies of New Bispyranopyrazoles
Yusuf, M.; Kaur, M. and Sohal, H. S. *J. Heterocyclic Chem.* **2017**, 54(1), 706-713 (Impact factor: 2.193)
38. Synthesis and Antimicrobial Evaluations of New 5-Aryl linked Bispyrazolines
Yusuf, M. and Kaur, M. *J. Heterocyclic Chem.* **2017**, 54(1), 735-742. (Impact factor: 2.193)
39. Synthesis, Antimicrobial and Docking Simulations of New Bis(4,5-dihydropyrazole) Derivatives
Yusuf, M.; Kaur, A. and Abid, M. *J. Heterocyclic Chem.* **2017**, 54(4), 2536-2547. (Impact factor: 2.193)
40. Photochemical synthesis and antimicrobial studies of new chromen-4-one based vinyl Ethers
Yusuf, M.; Solanki, I.; Jain, P. *Arab. J. Chem.* **2017**, 10, S971- S977.

(Impact factor: 5.165)

41. Green approach for synthesis of optical brightening agents and their application in wet end of papermaking.
Kumar, S.; **Yusuf, M.**; Doomra, A.; Bhardwaj, N. K. IPPTA: *Quarterly Journal of Indian Pulp and Paper Technical Association* **2017**, 29 (1), 78-83.
42. An Innovative & Green approach for Synthesis of optical brightening agents and their applications in Paper Industry
Kumar, S.; **Yusuf, M.**; Silori, S; Bhardwaj, S.; Bhardwaj, N. K. *Indian Pulp and Paper Technical Association* **2017**, 30(4), 73-76.
43. Concentrated solar radiation promoted unconventional greener approach: solvent-free benign synthesis of functionalized benzimidazoles
Harsh, S.; **Yusuf, M.**; Sharma, R.; Kumar, Y and Kumar, R. *ARKIVOC* (vii), **2018**, 7, 1-12
(Impact factor: 1.253)
44. Synthesis and Applications of Bisheterocyclic Compounds
Yusuf, M.; Thakur, S. *Curr. Org. Synth.* **2018**, 15(5), 603-649. (Impact factor: 1.975)
45. Bis(4,5-dihydropyrazole) Derivatives : Synthesis, Characterization and Antimicrobial-Antioxidant Evaluations
Yusuf, M.; Thakur, S. *Asia. J. Chem.* **2018**, 30(9), 2097-2102 (Scopus Indexed)
46. Photochemical Studies: Chromones, bischromones and anthraquinone derivatives
Yusuf, M. and Solanki, I; Jain, P.; Kumar, R. *Arab. J. Chem.* **2019**, 12(7), 1197-1221.
(Impact factor: 5.165)
47. Synthesis and Antimicrobial Evaluation of New Pyrrolo-isoxazolidine Derivatives
Yusuf, M.; Shehneela. *Asia. J. Chem.* **2019**, 31(1), 220-228. (Scopus Indexed)
48. Multicomponent synthesis of new bis(pyranopyrazoles) and their antimicrobial-antioxidant evaluations
Yusuf, M.; Thakur, S. *J. Serb. Chem. Soc.* **2019**, 84 (2), 119-128
(Impact factor:1.240)
49. New Biphenyl-Based Bispyrazolines: Synthesis, Antimicrobial, and Docking Studies
Yusuf, M.; Nisa, S.; Paul, K. *J. Heterocyclic Chem.* **2019**, 56, 2659-2670.
(Impact factor: 2.193)
50. Synthesis, characterization & in vitro antimicrobial- antioxidant studies of novel N,1-diphenyl-4,5-dihydro-1H- 1,2,4-triazol-3-amine derivatives
Yusuf, M.; Thakur, S. *J. Heterocyclic Chem.* **2019**, 56, 3403-3413. (Impact factor: 2.193)
51. Synthetic and antimicrobial studies of N-substituted pyrazoline-based new bisheterocycles
Nisa, S.; **Yusuf, M.** *J. Heterocyclic Chem.* **2020**, 57, 2024-2036. (Impact factor: 2.193)

52. Synthesis and antimicrobial evaluation of varied ring new heterocycles
Nisa, S.; Yusuf, M. *Ind. J. Chem.* **2020**, 59B, 420-430. (Impact factor: 0.592)
53. Synthesis, Characterization & Antimicrobial Evaluation of New *bis*(5-Biphenyl-3-alkoxyphenyl-4,5-dihydro-1*H*-pyrazole-*N*-carbothioamide) Derivatives
Nisa, S.; Yusuf, M. *Asia. J. Org. Med. Chem.* **2020**, 5(1), 77-83.
54. Novel bisbenzopyronopyran derivatives: photochemical synthesis and their in-vitro antimicrobial studies
Nisa, S.; Yusuf, M. *J. Heterocyclic Chem.* **2021**, 58(1), 357-374. (Impact factor: 2.193)
55. Novel 1,3,4-bisthiadiazoline derivatives: Syntheses, *in-vitro* antimicrobial and antioxidant studies
Nisa, S.; Yusuf, M. *J. Saudi Chem. Soc.* **2021**, 25(2), 101195. (Impact factor: 4.712)
56. Post-Synthesis Modification of Metal-Organic Frameworks Using Schiff Base Complexes for Various Catalytic Applications
Kaur, M.; Kumar, S.; Younis, S. A.; Yusuf, M.; Lee, J.; Weon, S. and Malik, A. K. *Chem. Eng. J.* **2021**, 423(4), 130230. (Impact factor: 16.744)
57. Post-synthetic modification of luminescent metal-organic frameworks using schiff base complexes for biological and chemical sensing
Kaur, M.; Kumar, S.; Yusuf, M.; Lee, J.; Brown, R. J.; Kim, K. H. and Malik, A. K. *Coord. Chem. Rev.* **2021**, 449, 214214. (Impact factor: 24.833)
58. Synthesis of copper metal organic framework based on Schiff base tricarboxylate ligand for highly selective and sensitive detection of 2, 4, 6-trinitrophenol in aqueous medium.
Kaur, M.; Yusuf, M. and Malik, A. K. *J. Fluoresc.* **2021**, 31, 1959-1973. (Impact factor: 2.525)
59. Schiff base-functionalized Metal-Organic Frameworks for Selective Sensing of Chromate and Dichromate in Water
Kaur, M.; Yusuf, M. and Malik, A. K. *J. Fluoresc.* **2022**, 1-15. (Impact factor: 2.525)
60. Amine/Hydrazone functionalized Zn(II)/Cd(II) metal-organic framework for ultrafast sensitive detection of hazardous 2,4,6-Trinitrophenol in water
Kaur, M.; Yusuf, M.; Yiu Fai Tsang; Ki-Hyun Kim and Malik, A. K. *Sci. Total Environ.* **2022**, 159385. (Impact factor: 10.75)
61. Schiff base Pillar-layered Metal-Organic Frameworks: From Synthesis to Applications.
Kaur, M.; Yusuf, M. and Malik, A. K. *Inorg. Chem.* (Accepted) (Impact factor: 4.33)
62. A Luminescent Cu(II)-MOF with Lewis Basic Schiff Base Sites for the Highly Selective and Sensitive Detection of Fe³⁺ Ions and nitrobenzene

Kaur, M.; **Yusuf, M.** and Malik, A. K. *J. Fluoresc.*

(Accepted)

(Impact factor: 2.525)

63. Fluorescence “Turn-off” Sensing of Iron (III) Ions Utilizing Pyrazoline Based Sensor: Experimental and Computational Study

Sharma, P.; Bhogal, S; Mohiuddin, I; **Yusuf, M.** and Malik, A. K. *J. Fluoresc.* **2022**, 32(6), 2319-2331.

(Impact factor: 2.525)

64. Experimental and Theoretical Studies of the Pyrazoline Derivative 5-(4-methylphenyl)-3-(5-methylfuran-2-yl)-1-phenyl-4, 5-dihydro-1H-Pyrazole and its Application for Selective Detection of Cd²⁺ ion as Fluorescent Sensor

Sharma, P.; Bhogal, S.; Lealam, A.; Kumar, S.; **Yusuf, M** and Malik, A. K. *J. Fluoresc.* **2022**, 32(3), 969-981.

(Impact factor: 2.525)

65. In water” diastereoselective [3+2] cycloaddition reaction: Clean and green synthesis of pyrrolo[1,2-a]quinolines

Kaur, M.; **Yusuf, M** and Kumar, S. *Sustain. Chem. Pharm.* **2023**, 31, 100926.

(Impact factor: 5.464)

Invited Talks in the National/International Conferences

1. Delivered an Invited talk on the topic entitled, “**Chemistry in our Lives**” National Science Day Celebration of International Year of Chemistry and Forests (28-02-2011), Arya Post Graduate College, Panipat, Haryana held on dated Feb. 28, 2011.

2. Delivered an Invited talk on the topic entitled, “**Chemistry in our Lives**” (International Year of Chemistry), Sanatan Dharma College, Ambala, Haryana held on dated March 16, 2011.

3. Delivered an Invited talk on the topic entitled, “**Chemistry in our Lives**” U. G. C. sponsored National Conference on Chemistry in Our Lives, Arya Post Graduate College, Panipat, Haryana held on dated March 29, 2011.

4. Delivered an Invited talk on the topic entitled “**Role of Chemistry in our Lives**” Mukand Lal National College, Yamuna Nagar, Haryana held on dated April 08, 2011.

5. Delivered an Invited talk on the topic entitled “**Importance of IYC-2011 and Chemistry in our Lives**” Multani Mal Modi College Patiala held on dated Nov. 18, 2011.

6. Delivered an Invited talk in the 2nd National Conference on Recent Advances in Chemistry and their impact on Environment NCRACE-2012, Department of Chemistry, Arya (P. G.) College, Panipat held on dated Feb. 4-5, 2012.

7. Delivered an Invited talk on the topic entitled “**Photoinduced H-Abstractions: A Synthetic tool to Heterocyclic Compounds**” in the 4th National Seminar on Chemistry: An Inter Disciplinary Science, Department of Chemistry, Punjabi University, Patiala held on dated Feb. 15-16, 2012.

8. Delivered an Invited talk on the topic entitled “**Photochemical H-abstractions in 3-alkoxychromones/bischromones**” in the 1st International Conference on Recent Advances in Chemical Sciences, Department of Chemistry, Arya (P. G.) College, Panipat held on dated Feb. 24-26, 2013.
9. Delivered an Invited talk on the topic entitled “Applications of photoinduced H-abstractions: Synthesis of oxygen Heterocyclics” in the 1st National Conference on "Science: Emerging Scenario and Future Challenges" (Him Science Congress Association, Himachal Pradesh) organized by **Shoolini University, Solan (Himachal Pradesh)** on dated March 08-10, 2013.
10. Delivered an Invited talk on the topic entitled “Synthesis of Heterocyclic Compounds via Photochemical H-abstractions” in the National Conference on "Interdisciplinary Approach in Science in Emerging Scenario" organized by **Vaish College, Bhiwani, Haryana** on dated March 16, 2013.
11. Delivered an Invited talk on the topic entitled “Synthesis and characterization studies of symmetrical bisheterocyclics” in the “3rd National Conference on Advances in Chemical and Environmental Sciences”, **Department of Chemistry, Arya (P. G.) College, Panipat** held on dated Feb. 27-28, 2014.
12. Delivered a lecture on “Organic photochemistry: Basic concepts and reactions of carbonyl chromophores” at **Academic Staff College, GJUS&T, Hisar** on dated May 13, 2014.
13. Delivered a lecture on “Organic photochemistry: Basic concepts and reactions of carbonyl chromophores” at **Academic Staff College, Punjabi University, Patiala** on dated December 25, 2014.
14. Delivered an Invited talk on the topic entitled “Design, Synthesis and antimicrobial evaluations of some symmetrical bisheterocyclics” in the “4th National Conference on Recent Advances in Chemical and Environment Science”, **Department of Chemistry, Arya (P. G.) College, Panipat** held on dated Feb. 27-28, 2015.
15. Delivered an Invited talk at UGC sponsored National seminar on Green Chemistry-II”, **Department of Chemistry, G.H.G Khalsa College, Gurusar, Sadhar, Ludhiana** held on dated March 25, 2015.
16. Delivered an Invited lecture on “NMR Spectroscopy” at **Department of Chemistry, I.B. Post Graduate College, Panipat** held on dated April 8, 2015.
17. Delivered a Lecture as a Speaker in the “International Conference on Nascent Developments in Chemical Sciences: Opportunity for Academia-Industry Collaborations” at **Department of Chemistry, Birla Institute of Technology & Science, Pilani** held on dated Oct. 16-18, 2015.

18. Delivered an Invited talk in the “National Conference on Interdisciplinary Approaches in Chemical Sciences” at **Centre for Interdisciplinary Research in Basic Sciences, Jamia Millia Islamia, New Delhi** held on dated Dec. 16, 2015.

19. Delivered an Invited talk in the “National Conference on Organic Synthesis and Catalysis” at **Department of Chemistry, Guru Jambheshwar University of Science & Technology, Hisar** held on dated Feb. 17-18, 2016.

20. Delivered an Invited talk in the “UGC sponsored National Conference on Global Challenge-Role of Science & Technology in imparting their Solutions” held at **Technological Institute of Textile & Sciences, Bhiwani** on dated April 23-24, 2016.

21. Delivered an Invited talk in the “Advanced Physical Methods in Chemical Sciences” held at **Department of Chemistry, Guru Jambheshwar University of Science & Technology, Hisar** held on dated Feb. 22-23, 2017.

22. Delivered an Invited talk in the “6th National Conference on Chemical and Environmental Sciences: Emerging Dimensions and Challenges Ahead”, **Department of Chemistry, Arya (P. G.) College, Panipat** held on dated April 01, 2017.

23. Delivered an Invited talk in the “National Conference on Organics, Metallorganics and Thermodynamics”, **Department of Chemistry, GJUS&T, Hisar, Haryana** held on dated November 17-18, 2017.

24. Delivered an Invited talk in the “2nd International Conference ICICBES-2019”, **Department of Chemistry, Arya (P. G.) College, Panipat** held on dated Feb 27-28, 2019.

25. Delivered an Invited talk in the “3rd International Conference ICISSET-2019”, **Department of Chemistry, Arya (P. G.) College, Panipat** held on dated Nov 09-10, 2019.

Convener/Organizing Secretary in the National/International Conferences

1. Acted as Convener, Technical Programme Committee, in the seminar “**National Seminar on Recent Advances in Chemistry and their impact on Environment: NSRACE-11**” Department of Chemistry, Punjabi University, Patiala held on dated Feb. 15-16, 2011.

2. Acted as Convener, Technical Programme Committee, in the seminar “**4th National Seminar on Chemistry: An Inter Disciplinary Science**” Department of Chemistry, Punjabi University, Patiala held on dated Feb. 15-16, 2012.

3. Acted as Convener, Technical Programme Committee, in the seminar “**5th National Seminar on New Frontiers in Chemistry**” Department of Chemistry, Punjabi University, Patiala held on dated Feb. 15-16, 2013.

4. Acted as Convener, Technical Programme Committee in the “**6th National Seminar on New Paradigm in Chemical Sciences**” Department of Chemistry, Punjabi University, Patiala held on dated Feb. 13, 2014.

5. Acted as Organizing Secretary in the “**7th National Seminar on Synergistic Aspects of Chemistry and other Sciences-2015**” Department of Chemistry, Punjabi University, Patiala held on dated Feb. 19-20, 2015.

6. Acted as Organizing Secretary in the “**8th National Seminar on New Paradigm in Chemical Sciences: Synthetic and Analytical Prespective-2016**” Department of Chemistry, Punjabi University, Patiala held on dated Feb. 04-05, 2016.

7. Acted as Organizing Secretary in the “**9th National Seminar on New Paradigm in Chemical Sciences: Synthetic and Analytical Prespective-2017**” Department of Chemistry, Punjabi University, Patiala held on dated Feb. 09-10, 2017.

8. Acted as Organizing Secretary in the “**10th National Conference on Chemical and Environmental Sciences: Innovations and Advances-2018**” Department of Chemistry, Punjabi University, Patiala held on dated Feb. 15-16, 2018.

9. Acted as Organizing Secretary in the “**11th National Conference on “Recent Trends in Chemical and Environmental Sciences-2019**” Department of Chemistry, Punjabi University, Patiala held on dated Feb. 07-08, 2019.

10. Acted as Organizing Secretary in the “**12th National Conference on “Chemical and Environmental Sciences: Advanced Innovations-2020**” Department of Chemistry, Punjabi University, Patiala held on dated Feb. 19-20, 2020.

Chairperson in the National/International Conferences

1. Acted as Chairperson (Technical Session) in the “**National Symposium on Emerging Trends in Chemistry**” Department of Chemistry, Punjabi University, Patiala held on dated Feb. 15-16, 2010.

2. Acted as Chairperson (Technical Session) in the “**National Seminar on Chemistry and their impact on environment**” Department of Chemistry, Punjabi University, Patiala held on dated Feb. 15-16, 2011.

3. Acted as Chairperson (Technical Session) in the “**International Conference on Chemistry: Frontiers and Challenges**” Department of Chemistry, Aligarh Muslim University, Aligarh held on dated March 5-6, 2011.

4. Acted as Chairperson (Technical Session) in the “**Recent Advances in Chemistry and their impact on environment**” Department of Chemistry, Arya (P. G.) College, Panipat held on dated Feb. 4-5, 2012.

5. Acted as Chairperson (Technical Session) in the “**4th National Seminar on Chemistry: An Inter Disciplinary Science**” Department of Chemistry, Punjabi University, Patiala held on dated Feb. 15-16, 2012.
6. Acted as Chairperson (Technical Session) in the National Conference on “**Global Challenges: New Frontiers in Chemical Sciences**”, Department of Chemistry, Kurukshetra University, Kurukshetra on dated September 22-23, 2012.
7. Acted as Chairperson (Technical Session) in the “**5th National Seminar on New Frontiers in Chemistry**” Department of Chemistry, Punjabi University, Patiala held on dated Feb. 15-16, 2013.
8. Acted as Chairperson (Technical Session) in the “**1st International Conference on Recent Advances in Chemical Sciences**”, Department of Chemistry, Arya (P. G.) College, Panipat held on dated Feb. 24-26, 2013.
9. Acted as Chairperson (Technical Session) in the “**DAV National Congress on Science & Technology**”, **Department of Applied Sciences, D. A. V. Institute of Engineering & Technology, Jalandhar** held on dated May 30-31, 2013.
10. Acted as Chairperson (Technical Session) in the “**6th National Seminar on New Paradigm in Chemical Sciences**” **Department of Chemistry, Punjabi University, Patiala** held on dated Feb. 13, 2014.
11. Acted as Chairperson (Technical Session) in the “**3rd National Conference on Advances in Chemical and Environmental Sciences**”, **Department of Chemistry, Arya (P. G.) College, Panipat** held on dated Feb. 27-28, 2014.
12. Acted as Chairperson (Technical Session) in “**7th National Seminar on synergistic aspects of Chemical and other Sciences**” **Department of Chemistry, Punjabi University, Patiala** held on dated Feb. 19-20, 2015.
13. Acted as Chairperson (Technical Session) in the “**4th National Conference on Advances in Chemical and Environmental Sciences**”, **Department of Chemistry, Arya (P. G.) College, Panipat** held on dated Feb. 27-28, 2015.
14. Acted as Chairperson (Technical Session) in the “**8th National Seminar on New Paradigm in Chemical Sciences: Synthetic and Analytical Perspective-2016**” **Department of Chemistry, Punjabi University, Patiala** held on dated Feb. 04-05, 2016.
15. Acted as Chairperson (Two Technical Session) “**5th National Conference on Chemical Sciences Emerging Scenario & Global Challenges**”, **Department of Chemistry, Arya (P. G.) College, Panipat** held on dated March 26, 2016.

16. Acted as Chairperson (Technical Session) in the “9th National Seminar on New Paradigm in Chemical Sciences: Synthetic and Analytical Perspective-2017” **Department of Chemistry, Punjabi University, Patiala** held on dated Feb. 09-10, 2017.

17. Acted as Chairperson (Technical Session) in the “6th National Conference on Chemical and Environmental Sciences: Emerging Dimensions and Challenges Ahead”, **Department of Chemistry, Arya (P. G.) College, Panipat** held on dated April 01, 2017.

18. Acted as Chairperson in UGC Sponsored “9th National Conference on Recent Advances in Chemical, Biological and Environmental Science -2018” **Multani Mal Modi College, Patiala** held on dated Feb. 09-10, 2018.

19. Acted as Chairperson in “10th National Conference on Chemical and Environmental Sciences: Innovations and Advances-2018” **Department of Chemistry, Punjabi University, Patiala** on dated Feb. 15-16, 2018.

20. Acted as Chairperson in “11th National Conference on “Recent Trends in Chemical and Environmental Sciences-2019” Department of Chemistry, Punjabi University, Patiala held on dated Feb. 07-08, 2019.

21. Acted as Chairperson in the “2nd International Conference ICICBES-2019”, **Department of Chemistry, Arya (P. G.) College, Panipat** held on dated Feb 27-28, 2019.

22. Acted as Chairperson in the “3rd International Conference ICISSET-2019”, **Department of Chemistry, Arya (P. G.) College, Panipat** held on dated Nov 09-10, 2019.

23. Acted as Chairperson in “12th National Conference on “Chemical and Environmental Sciences: Advanced Innovations-2020” Department of Chemistry, Punjabi University, Patiala held on dated Feb. 19-20, 2020.

Oral/Poster presentations in the National/International Conferences

1. Presented Poster on the topic entitled "Photochemical H-abstratction of some 2-phenyl-3-allyloxy bischromones" in “National Seminar on Recent Trends In Chemistry” **Department of Chemistry, Punjabi University, Patiala** held on dated Jan. 21-22, 2009.

2. Presented Poster on the topic entitled "Solvent dependent photolysis of 3-Allyloxy-2-aryl bischromones" in the “National Symposium on Green Chemistry, Application in Science and Engineering”, **Department of Chemistry, Thapar University, Patiala** held on dated October February 5-6, 2009.

3. Presented Poster on the topic entitled "Synthesis and Characterization studies of some bithaidiazolines", “**National Symposium on Emerging Trends in Chemistry**” Department of Chemistry, Punjabi University, Patiala held on dated Feb. 15-16, 2010.

4. Presented Poster on the topic entitled "Synthesis and Photochemical studies of some 3-cyclobutylmethoxy-chromones", **"National Symposium on Recent Trends in Chemistry"** Department of Chemistry, Aligarh Muslim University, Aligarh held on dated Feb. 25-26, 2010.
5. Presented Poster in "International conference on Emerging Trends in Chemistry" **Department of Chemistry, Punjab University, Chandigarh** held on dated Feb. 11-12, 2011.
6. Presented Poster in "**National Seminar on Recent Advances in Chemistry and their impact on Environment NSRACE-11**" Department of Chemistry, Punjabi University, Patiala held on dated Feb. 15-16, 2011.
7. Presented Poster in "National Conference on Chemistry in Our Lives" **Department of Chemistry, Arya P.G. College, Panipat** held on dated March 29, 2011.
8. Delivered Oral presentation on the topic entitled "**Synthesis and Biological Evaluation of some acetophenone based Bis(1,3,4-thaidiazolines)**" National Chemical Constellation seminar in the Department of Chemistry Dr. B. R. Ambedkar National Institute of Technology Jalandhar, Jalandhar held on dated August 20-21, 2011.
9. Delivered Oral presentation on the topic entitled "**Synthesis and Antimicrobial studies of new bis(1,3-diphenyl-5-thienyl-pyrazoline) derivatives**" in the 6th National Conference on Thermodynamics of Chemical and Biological Systems, Department of Chemistry, Maharishi Dayanand University, Rohtak held on dated Nov. 2-4, 2011.
10. Presented Poster in "International conference on Innovations in Chemistry for Sustainable Development ICSD-2011" **Department of Chemistry, Punjab University, Chandigarh** held on dated Dec. 01-03, 2011.
11. Delivered Oral lecture on the topic entitled "**Synthesis and Antimicrobial studies of new Bis[3-(4-Alkoxyphenyl)-4,5-dihydro-1-phenyl-5-(thiophene-2-yl)-1H-pyrazole]**" in the 3rd International Conference on Heterocyclic Chemistry Department of Chemistry, University of Rajasthan, Jaipur held on dated Dec. 10-13, 2011.
12. Presented poster in the "**4th National Seminar on Chemistry: An Inter Disciplinary Science**" Department of Chemistry, Punjabi University, Patiala held on dated Feb. 15-16, 2012.
13. Delivered an Oral lecture on the topic entitled "**Synthesis of New Bis(1,3,4-thaidiazolines) and their Antimicrobial studies**" in the APA International Congress on Advances in Human Healthcare Systems Healthcare, New Delhi held on dated Feb. 20-24, 2012.
14. Presented poster in "Recent Advances in Chemical and Environmental Sciences", **Multani Mal Modi College, Patiala** held on dated March 03, 2012.
15. Delivered an Oral presentation on the topic entitled "**Pyrazoline based Symmetrical bisheterocyclic Compounds: Synthesis and Antimicrobial Studies**" in the Chemical Constellation Cheminar-2012: Chemistry For Sustainable Development and Innovations

Department of Chemistry, Dr B R Ambedkar National Institute of Technology Jalandhar on dated September-10-12, 2012.

16. Delivered an Oral lecture on the topic entitled "**Synthesis, Characterization and Antimicrobial Studies of New Alkyl Based Bis(1,3,4-Thiadiazolines)**" in the National Conference on "Global Challenges: New Frontiers in Chemical Sciences, Department of Chemistry, Kurukshetra University, Kurukshetra on dated September 22-23, 2012.

17. Presented a poster on the topic entitled "**Synthetic and antimicrobial studies of symmetrical bispyrazolines**" in the National Conference on "Recent Advances in Chemical and Environment Sciences, Department of Chemistry, Multani Mal modi College, Patiala on dated January 31, 2013.

18. Presented Poster in "**5th National seminar on New Frontiers in Chemistry**" Department of Chemistry, Punjabi University, Patiala held on dated Feb. 15-16, 2013.

19. Delivered Oral Presentation on the topic entitled "Synthesis and Antimicrobial Analysis of Aliphatic Chain linked Bisthiadiazolines" in the National Conference on "Advances in Chemical; Sciences", **Department of Chemistry, Maharshi Dayanand University, Rohtak** held on dated March 01-02, 2013.

20. Awarded best Oral Presentation Award in the National Conference on "Advances in Chemical; Sciences", **Department of Chemistry, Maharshi Dayanand University, Rohtak** held on dated March 01-02, 2013.

21. Delivered Oral Presentation on the topic entitled "Synthesis and Antimicrobial Analysis of New Dihydropyrazole based Bisheterocyclic derivative" in the "DAV National Congress on Science & Technology", **Department of Applied Sciences, D. A. V. Institute of Engineering & Technology, Jalandhar** held on dated May 30-31, 2013.

22. Delivered Oral Presentation on the topic entitled "Synthesis and antimicrobial analysis of symmetrical bis(4-acetyl-4,5-dihydro-1,3,4-thiadiazole)" in the "National Conference on Innovative Molecules for Sustainable Future", **School of Chemistry and Biochemistry, Thapar University, Patiala** held on dated October 24-26, 2013.

23. Presented Poster on the topic entitled "Synthesis and Antimicrobial Analysis of Bis(4-acetyl-4,5-dihydro-1,3,4-thiadiazole-5-yl)diacetamides" in the "International Conference on Interdisciplinary Areas with Chemical Sciences", **Department of Chemistry, Punjab University, Chandigarh in Association with Institute of Nano Science and Technology (INST), Mohali** held on dated October 30th-November 1st, 2013.

24. Delivered Oral Presentation on the topic entitled "Synthesis and antimicrobial studies of symmetrical bis(dihydropyrazoles) derivatives" in the "6th National Conference on Recent Advances in Chemical and Environmental Sciences", **Multani Mal Modi College, Patiala** held on dated November 13-14, 2013.

25. Presented Poster on the topic entitled "Photoinduced synthesis and antimicrobial evaluations of new chromen-4-one based vinyl ethers" in the Proceedings of the "50th Annual Convention of Chemists (Golden Jubilee Celebration of Indian Chemical Society, Kolkata)", **Department of Chemistry, Punjab University, Chandigarh** held on dated December 04-07, 2013.
26. Presented Poster in "6th National Seminar on New Paradigm in Chemical Sciences-2014" **Department of Chemistry, Punjabi University, Patiala** held on dated Feb. 13, 2014.
27. Delivered Oral Presentation on the topic entitled "Synthesis and Characterization studies of symmetrical bispyrazolines" in the "National Conference on Recent Developments in Chemical Sciences", **Department of Chemistry, Guru Jambheshwar University of Science & Technology, Hisar** held on dated Feb. 25-26, 2014.
28. Presented Poster in the "7th National Conference on Recent Advances in Chemical, Biological and Environmental Sciences", **Multani Mal Modi College, Patiala** held on dated January 30-31, 2015.
29. Presented Poster in the "7th National Seminar on synergistic aspects of Chemical and other Sciences" **Department of Chemistry, Punjabi University, Patiala** held on dated Feb. 19-20, 2015.
30. Presented Poster in the "8th National Seminar on New Paradigm in Chemical Sciences: Synthetic and Analytical Perspective-2016" **Department of Chemistry, Punjabi University, Patiala** held on dated Feb. 04-05, 2016.
31. Presented Poster in the "9th National Seminar on New Paradigm in Chemical Sciences: Synthetic and Analytical Perspective-2017" **Department of Chemistry, Punjabi University, Patiala** held on dated Feb. 09-10, 2017.
32. Presented Poster in the "National Conference on Advanced Physical Methods in Chemical Sciences", **Department of Chemistry, Guru Jambheshwar University of Science & Technology, Hisar** held on dated Feb. 22-23, 2017.
33. Presented Poster in the UGC Sponsored "9th National Conference on Recent Advances in Chemical, Biological and Environmental Sciences", **Multani Mal Modi College, Patiala** held on dated February 09-10, 2018.
34. Presented Poster in the "10th National Conference on "10th National Conference on Chemical and Environmental Sciences: Innovations and Advances-2018" **Department of Chemistry, Punjabi University, Patiala** held on dated Feb. 15-16, 2018.
35. Delivered an Oral presentation on the topic entitled "Photochemical synthesis and biological studies of novel Bispyranopyranes" in the National Conference on Beating the plastic hazard, **Department of Environment Engineering , Delhi Technological University and Green Institute for Research & Development** held on dated June 04, 2018.

36. Presented Poster in the in the “**11th National Conference on “Recent Trends in Chemical and Environmental Sciences-2019”** Department of Chemistry, Punjabi University, Patiala held on dated Feb. 07-08, 2019.

37. Presented Poster in the in the “**12th National Conference on “Chemical and Environmental Sciences: Advanced Innovations-2020”** Department of Chemistry, Punjabi University, Patiala held on dated Feb. 19-20, 2020.

Membership of Academic Bodies

- Life member of Asian Polymer Association (L 237).
- Life member of Indian Science Congress Association (L 21078).
- Life member of Him Science Congress Association (LM-51).
- Life Member of Indian Society of Analytical Scientists-Delhi Chapter (LM-20/2013)

Research Projects (Completed/Ongoing)

- Title of Project: Photochemical H-abstractions in some dialkoxy-anthraquinones
Funding Agency: CSIR, New Delhi
Year of award: April, 2007
Amount: Rs. 6.03 lacs
Duration of Scheme: 3 Years (Completed)
- Title of Project: Design Synthesis and Biological Activity of Some Bisheterocyclic Compounds
Funding Agency: DST, New Delhi
Year of award: December, 2010
Amount: Rs. 17.80 lacs
Duration of Scheme: 3 Years (Completed)
- Title of Project: Green approach for synthesis of optical brightening agents and its activation for better performance for industrial applications
(In collaboration to ACIRD, Yamuna Nagar, Haryana)
Funding Agency: DST, New Delhi
Year of Completion: July, 2018
Amount: Rs. 42.32 lacs
Duration of Scheme: 2 Years (Completed)

Dated: 29.03.2023

(Prof. Dr. Mohamad Yusuf)