

CV: Dr. Kewal Kumar

(Correspondence Address)

Dr. Kewal Kumar
Assistant Professor of Organometallic & Organic Chemistry
Department of Chemistry
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Qualifications:

1. B.Sc., 2004-07
SPN College Mukerian, Affiliated to Panjab University, Chandigarh
Percentage Marks: **75.7%**
2. M.Sc. Applied Chemistry, 2007-09
Guru Nanak Dev University, Amritsar
Percentage Marks: **74.6%**
3. PhD
Guru Nanak Dev University, Amritsar, 2010-15
Pre PhD course work CGPA: **8.2/10**

Tests Qualified:

1. National Eligibility Test for Lectureship (NET) conducted by Council of Scientific & Industrial Research, New Delhi, July 2016
All India Rank: **58/755**
2. GATE organized by Indian Institute of Science, Bengaluru, 2016

Awards & Fellowships:

1. M.Sc. Gold Medalist, Guru Nanak Dev University, 2010
2. INSPIRE Fellowship, Department of Science & Technology, New Delhi, 2010
3. Award for Making a Difference & Driving Excellence, R&D Ranbaxy, Gurgaon, 2010
4. UGC Postdoctoral Fellowship, University Grants Commission, New Delhi, 2016

Industrial Experience:

1. Served as Trainee Chemist, Department of Medicinal Chemistry, New Drug Discovery Research, R&D Ranbaxy, Gurgaon, 2009-10

Academic & Research Experience:

1. Assistant Professor, Khalsa College Amritsar, 2015-16
2. Assistant Professor, Maharaja Ranjit Singh Punjab Technical University, Bathinda, 2016-till date

STC/FDP/workshops attended/participated:

1. Climate change & Water Security, Six days, 2021
2. Managing virtual classrooms and open educational resources, Six days, 2020
3. e-Workshop on Research Methodology, Five Days, 2020
4. Intellectual Property Rights-Aspects for Business Start-ups, One Week, 2019
5. Curriculum Development, One Week, 2017

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6. Lasers: Developments and Applications, One Week, 2017

Research Interests:

1. Synthesis of potentially active organometallic compounds
2. Synthesis of organic compounds of medicinal importance
3. Multistep organic synthesis

Research Record:

1. Number of Publications: 18 (Scopus Indexed)
2. Patents Granted: 01 (International US)
3. Scopus Citations: 568
4. Scopus *h*-index: 16

PhD Students Registered:

1. One

List of Publications and Patents:

1. Recent Developments in Biological Aspects of Chalcones: The Odyssey Continues, Anu Rani, Amit Anand, **Kewal Kumar**, Vipin Kumar, *Expert Opinion on Drug Discovery* **2019**, *14*, 249-288.
2. Recent insights into synthetic β -carboline with anti-cancer activities, Sumit Kumar, Amandeep Singh, **Kewal Kumar**, Vipin Kumar, *Eur. J. Med. Chem.* **2017**, *142*, 48-73.
3. 1*H*-1,2,3-triazole-tethered uracil-ferrocene and uracil-ferrocenylchalcone conjugates: Synthesis and antitubercular evaluation, Amandeep Singh, Christophe Biot, Alburto Viljoen, Christian Dupont, Laurent Kremer, **Kewal Kumar**, Vipin Kumar, *Chem. Biol. & Drug Design* **2017**, *89*, 856-861.
4. Mono- and bis-uracil-isatin conjugates: Synthesis and *in vitro* activity against the protozoal pathogen *Trichomonas vaginalis*, **Kewal Kumar**, Donald Yang, Daniel Na, John Thompson, Lisa A. Wrischnik, Kirkwood M. Land, Vipin Kumar, *Bioorg. & Med. Chem.*, **2015**, *23*, 5190-5197.
5. Prodigiosin Alkaloids: Recent Advancements in Total Synthesis and their Biological Potential, Nisha, **Kewal Kumar**, Vipin Kumar, *RSC Advances* **2015**, *5*, 10899-10920.
6. 1*H*-1,2,3-triazole tethered isatin-ferrocene conjugates: Synthesis and *in vitro* antimalarial evaluation, **Kewal Kumar**, Bruno Pradines, Marilyn Madamet, Rémy Amalvict, Nicolas Benoit, Vipin Kumar, *Eur. J. Med. Chem.* **2014**, *87*, 801-804.
7. 1*H*-1,2,3-triazole tethered mono- and bis- ferrocenylchalcone- β -lactam conjugates: Synthesis and antimalarial evaluation, **Kewal Kumar**, Bruno Pradines, Marilyn Madamet, Rémy Amalvict, Vipin Kumar, *Eur. J. Med. Chem.* **2014**, *86*, 113-121.
8. Cu-promoted single-pot intramolecular esterification of C-3 functionalized azetidin-2-one: an efficient diastereoselective access to azido-/amino-aza-lactones, **Kewal Kumar**, Sumit Kumar, Tejinder Singh, Amit Anand, Vipin Kumar, *Tetrahedron Lett.* **2014**, *55*, 3957-3959.

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9. *N*-Propargylated isatin-Mannich mono- and bis-adducts: Synthesis and preliminary analysis of *in vitro* activity against *Tritrichomonas foetus*, Nisha, **Kewal Kumar**, Gaurav Bhargava, Kirkwood M. Land, Kai-Hsiang Chang, Reena Arora, Somdutta Sen, Vipin Kumar, *Eur. J. Med. Chem.* **2014**, *74*, 657-663.
10. Highly potent anti-proliferative effects of a gallium(III) complex with 7-chloroquinoline-thiosemicarbazone as a ligand: Synthesis, cytotoxic and antimalarial evaluation, **Kewal Kumar**, Sarah Schniper, Antonio González-Sarrías, Alvin A. Holder, Natalie Sanders, David Sullivan, William L. Jarrett, Krystyn Davis, Fengwei Bai, Navindra P. Seeram, Vipin Kumar, *Eur. J. Med. Chem.* **2014**, *86*, 81-86.
11. Electrochemical and Chromogenic Sensors Based on Ferrocene Appended Chalcone for Selective Quantification of Copper (II), Ajar Kamal, **Kewal Kumar**, Vipin Kumar, Rakesh Kumar Mahajan, *Electrochimica Acta* **2014**, *145*, 307-313.
12. Base-Promoted Expedient Access to Spiro-Isatins: Synthesis and Anti-Tubercular Evaluation of 1*H*-1,2,3-Triazole-Tethered Spiro-Isatin-Ferrocene and Isatin-Ferrocene Conjugates, **Kewal Kumar**, Christophe Biot, Séverine Carrère-Kremer, Laurent Kremer, Yann Guérardel, Pascal Roussel, Vipin Kumar, *Organometallics* **2013**, *32*, 7386-7398.
13. 1*H*-1,2,3-Triazole-Tethered Isatin-Ferrocene and Isatin-Ferrocenylchalcone Conjugates: Synthesis and *in vitro* Anti-tubercular Evaluation, **Kewal Kumar**, Séverine Carrère-Kremer, Laurent Kremer, Yann Guérardel, Christophe Biot, Vipin Kumar, *Organometallics* **2013**, *32*, 5713-5719.
14. Azide-alkyne cycloaddition *en route* towards 1*H*-1,2,3-triazole-tethered β -lactam-ferrocene and β -lactam-ferrocenylchalcone conjugates: Synthesis and *in vitro* Anti-tubercular Evaluation, **Kewal Kumar**, Séverine Carrère-Kremer, Laurent Kremer, Yann Guérardel, Christophe Biot, Vipin Kumar, *Dalton Trans.* **2013**, *42*, 1492-1500.
15. Synthesis and *in vitro* anti-tubercular evaluation of 1,2,3-triazole tethered β -lactam-ferrocene and β -lactam-ferrocenylchalcone chimeric scaffolds, **Kewal Kumar**, Pardeep Singh, Laurent Kremer, Yann Guérardel, Christophe Biot, Vipin Kumar, *Dalton Trans.* **2012**, *41*, 5778-5781.
16. Synthesis of novel 1*H*-1,2,3-triazole tethered C-5 substituted uracil-isatin conjugates and their cytotoxic evaluation, **Kewal Kumar**, Sunil Sagar, Luke Esau, Mandeep Kaur, Vipin Kumar, *Eur. J. Med. Chem.* **2012**, *58*, 153-159.
17. Synthesis, docking and *in vitro* antimalarial evaluation of bifunctional hybrids derived from β -lactams and 7-chloroquinoline using click chemistry, Pardeep Singh, Parvesh Singh, Malkeet Kumar, Jiri Gut, Philip J. Rosenthal, **Kewal Kumar**, Vipin Kumar, Mohinder P. Mahajan, Krishna Bisetty, *Bioorg. & Med. Chem. Lett.* **2012**, *22*, 57-61.
18. Synthetic studies on the role of substituents at C-3 position on C3-C-4 bond cleavage of β -lactam ring convenient route for diastereoselective synthesis of pyridin-2-ones, Pardeep Singh, Parvesh Singh, **Kewal Kumar**, Vipin Kumar, Mohinder P. Mahajan, Krishna Bisetty, *Heterocycles* **2012**, *86*, 1301.

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Patents Granted:

19. **Title:** Matrix Metalloproteinase Inhibitors

Inventers: Manoj Kumar Khera, Jitendra Sattigeri, Viswajanani Sattigeri, Neeraj Kumar Yadav, **Kewal Kumar**, Abdul Rehman Abdul Rauf, Ian A. Cliffe, Pardip Kumar Bhatnagar, Abhijit Ray, Punit Srivastava, Sunanda Ghosh Dastidar.

Country: U.S.A

National/International: International

Publication Number: WO 2012/014114 A1.

Conferences/Symposium/Workshops attended/participated:

1. Chemical Research Society of India (CRSI), IIT Bombay, 2014
2. IVth National Symposium on Advances in Chemical Sciences, GNDU, Amritsar, 2014
3. National Symposium on Recent Trends in Chemistry, GNDU, Amritsar, 2013
4. National Organic Symposium (J-NOST), IIT Guwahati, 2012
5. Workshop on the usage of Various Scientific Instruments, GNDU, Amritsar, 2012
6. International conference on Innovations in Chemistry for Sustainable Development (ICSD), Panjab University, Chandigarh, 2011
7. National Symposium on Chemistry in 21st Century, GNDU, Amritsar, 2011.