

Curriculum Vitae

Kewal Kumar, PhD

Assistant Professor
Department of Applied Chemistry
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General details

Date of birth: July 06, 1986
Sex: Male
Nationality: Indian
Marital Status: Married

Education

2010-15 PhD Synthetic Organic/Medicinal & Organometallic Chemistry
Department of Chemistry
Guru Nanak Dev University, Amritsar, India

Thesis Title: “**Organometallic and Uracil Based Molecular Conjugates: Synthesis and their Bioevaluation**” Supervised by:
Dr. Vipin Kumar (Assistant Professor)

2007-09 M.Sc. Applied Chemistry Guru Nanak Dev University, Amritsar
(Pharmaceuticals) First division (74.6%)
Gold Medalist

2004-07 B.Sc. (Non Medical) (SPN College, Affiliated to Panjab University, Chandigarh)
Distinction in Chemistry First division (75.7%)

Tests Qualified

NET-Qualified (All India Rank 58)
GATE-Qualified

Professional Experience

2009-10 Research Chemist Ranbaxy Laboratories Ltd., R&D, New Drug Discovery Research (NDDR)/
Medicinal Chemistry
2015-16 Assistant Professor PG Department of Chemistry, Khalsa College, Amritsar
25-08-2016-onwards Assistant Professor Department of Applied Chemistry, GZSCCET,
Bathinda

Awards & Fellowships

- 21-04-2016 to 22-08-2016: UGC Postdoctoral Fellow
2012-15: Innovation in Science Pursuit for Inspired Research Fellow (INSPIRE-SRF)
2010-12: INSPIRE Fellow (JRF)
2010: Distinction in making difference and driving excellence of work in the Department of New Drug Discovery Research, R&D, Ranbaxy Laboratories, India
2009: Masters Degree (1st rank holder at University level)

Current research interests

- Drug Discovery/Medicinal Chemistry
- Organic and Natural product synthesis
- Transition metal catalyzed reactions
- Synthesis of organometallic compounds

Scopus Author Details

Publications: 17

***h*-index: 8**

Citations: 188

Impact points: 62.331

List of publications

1. Recent insights into synthetic β -carboline with anti-cancer activities, Sumit Kumar, Amandeep Singh, **Kewal Kumar**, Vipin Kumar, *Eur. J. Med. Chem.* DOI: [10.1016/j.ejmech.2017.05.059](https://doi.org/10.1016/j.ejmech.2017.05.059) (IF: 4.519).
2. 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 (IF: 2.396).
3. 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 (IF = 2.930).
4. Prodigiosin Alkaloids: Recent Advancements in Total Synthesis and their Biological Potential, Nisha, **Kewal Kumar**, Vipin Kumar, *RSC Advances* **2015**, 5, 10899-10920 (IF = 3.289).
5. 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 (IF = 4.519).
6. 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 (IF = 4.519).

7. Cu-promoted single-pot intramolecular esterification of C-3 functionalized azetidino-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 (IF = **2.193**).
8. *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 (IF = **4.519**).
9. 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 (IF = **4.519**).
10. 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 (IF = **4.798**).
11. 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 (IF = **3.862**).
12. 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 (IF = **3.862**).
13. 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 (IF = **4.177**).
14. 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 (IF = **4.177**).
15. 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 (IF = **4.519**).
16. 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 (IF = **2.454**).

17. 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 (IF = 1.079).

Patents

1. MATRIX METALLOPROTEINASE INHIBITORS: Inventors, 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, US patent, *International Publication Number* **WO 2012/014114 A1**.

Conferences/Symposia participated

1. Chemical Research Society of India (CRSI), IIT Bombay, February **2014**.
2. IVth National Symposium on Advances in Chemical Sciences to Commemorate the national Science day, GNDU, Amritsar, February **2014**.
3. National Symposium on Recent Trends in Chemistry (Organized Under UGC-CAS), GNDU, Amritsar, March **2013**.
4. National Organic Symposium (J-NOST), IIT Guwahati, December **2012**.
5. Workshop on the usage of Various Scientific Instruments, Department of Chemistry, GNDU, Amritsar, September **2012**.
6. International conference on Innovations in Chemistry for Sustainable Development (ICSD), Panjab University, Chandigarh, December **2011**.
7. National Symposium on Chemistry in 21st Century, Department of Chemistry, GNDU, Amritsar, December **2011**.