Curriculum Vitae

Dr. Kewal Kumar
Assistant Professor
Department of Chemistry
Maharaja Ranjit Singh Punjab Technical University
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General details

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

Education

2016 (4M)	UGC Post-Doctoral Fellow	Department of Chemistry, Guru Nanak Dev University, Amritsar
2010-15	PhD	Synthetic Organic/Medicinal & Organometallic Chemistry Department of Chemistry, Guru Nanak Dev University, Amritsar Thesis Title: "**Organometallic and Uracil Based Molecular Conjugates: Synthesis and their Bioevaluation**" Supervised by: Dr. Vipan Kumar (Associate Professor)
2007-09	M.Sc. Applied Chemistry (Pharmaceuticals) **Gold Medalist**	Guru Nanak Dev University, Amritsar First division (74.6%)
2004-07	B.Sc. (Non Medical) Distinction in Chemistry	(SPN College, Affiliated to Panjab University, Chandigarh First division (75.7%)

Tests Qualified

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

Professional Experience (Teaching & Research)

2009-10	Trainee 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-till date	Assistant Professor	Department of Chemistry, MRSPTU, Bathinda

Administrative Responsibilities

S.No.	Committee/Type of Experience	Duration
1.	Member Board of Studies	01-10-2017 to 39-09-2019
		01-04-2020 to 31-03-2022 and till date
2.	Nodal Officer (Scholarships for North Eastern Region of India)	20-09-2018 to till date
3.	Nodal Officer for UGC Scholarships/Fellowships	29-10-2018 to till date
4.	NAAC Accreditation Criterion Co-Coordinator	30-03-2021 to 14-03-2023
5.	Member Board of Control at Department	20-12-2018 to 31-12-2020
		29-10-2021 to till date
6.	Nodal Officer (National Scholarship Portal)	14-09-2021 to till date

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Number of Students Supervised

PhD: 01 **Status:** Degree in Progress

M.Sc. 14 **Status:** 12 competed degree, 2 in progress

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

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

Scopus Citation Details

Publications: 18 (Scopus Indexed)

Patent: 01 (US)

***h*-index: 16**

i10 index-16

Citations: 720

Total Impact Points: 89.818

List of publications

1. Recent Developments in Biological Aspects of Chalcones: The Odyssey Continues, Anu Rani, Amit Anand, **Kewal Kumar**, Vipan Kumar, *Expert Opinion on Drug Dis.* **2019** (Accepted manuscript) **(IF: 4.692).**

2. Recent insights into synthetic *β*-carbolines with anti-cancer activities, Sumit Kumar, Amandeep Singh, **Kewal Kumar**, Vipan Kumar, *Eur. J. Med. Chem*. **2017,** *142*, 48-73 **(IF: 4.519).**

3. 1*H*-1,2,3-triazole-tethered uracil-ferrocene and uracil-ferrocenylchalcone conjugates: Synthesis and antitubercular evaluation, Amandeep Singh, Christophe Biot, Alburtus Viljoen, Christian Dupont, Laurent Kremer, **Kewal Kumar**, Vipan Kumar, *Chem. Biol. & Drug Design* **2017**, *89*, 856-861 **(IF: 2.396).**

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, Vipan Kumar, *Bioorg. & Med. Chem.*, **2015**, *23*, 5190-5197 (**IF = 2.930**).

5. Prodigiosin Alkaloids: Recent Advancements in Total Synthesis and their Biological Potential, Nisha, **Kewal Kumar**, Vipan Kumar, *RSC Advances* **2015**, *5*, 10899-10920 **(IF = 3.289).**

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, Vipan Kumar, *Eur. J. Med. Chem*. **2014**, *87***,** 801-804 (**IF = 4.519**).

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, Vipan Kumar, *Eur. J. Med. Chem*. **2014**, *86*, 113-121 (**IF = 4.519**).

8. Cu-promoted single-pot intramolecular esterification of C-3 functionalized azetidin-2-one: an efficient diastereoselective accessto azido-/amino-aza-lactones, **Kewal Kumar**, Sumit Kumar, Tejinder Singh, Amit Anand, Vipan Kumar, *Tetrahedron Lett.* **2014**, *55*, 3957-3959 (**IF = 2.193**).

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, Vipan Kumar, *Eur. J. Med. Chem*. **2014**, *74*, 657-663 (**IF = 4.519**).

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, Vipan Kumar, *Eur. J. Med. Chem*. **2014**, *86*, 81-86 (**IF = 4.519**).

11. Electrochemical and Chromogenic Sensors Based on Ferrocene Appended Chalcone for Selective Quantification of Copper (II), Ajar Kamal, **Kewal Kumar**, Vipan Kumar, Rakesh Kumar Mahajan, *Electrochimica Acta* **2014**, *145*, 307-313 (**IF = 4.798**).

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, Vipan Kumar, *Organometallics* **2013**, *32,* 7386-7398 (**IF = 3.862**).

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, Vipan Kumar, *Organometallics* **2013**, *32***,** 5713-5719 (**IF = 3.862**).

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, Vipan Kumar, *Dalton Trans*. **2013**, *42*, 1492-1500 (**IF = 4.177**).

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, Vipan Kumar, *Dalton Trans.* **2012**, *41*, 5778-5781 (**IF = 4.177**).

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, Vipan Kumar, *Eur. J. Med. Chem*. **2012**, *58*, 153-159 (**IF = 4.519**).

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**, Vipan Kumar, Mohinder P. Mahajan, Krishna Bisetty, *Bioorg. & Med. Chem. Lett.* **2012**, *22*, 57-61 (**IF = 2.454**).

18. Synthetic studies on the role of substituents at C-3 posotion on C3-C-4 bond cleavage of *β*-lactam ring conveninet route for diasteroselective synthesis of pyridin-2-ones, Pardeep Singh, Parvesh Singh, **Kewal Kumar**, Vipan Kumar, Mohinder P. Mahajan, Krishna Bisetty, *Heterocycles* **2012**, *86*, 1301 (**IF = 1.079**).

Patents

1. 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, US patent, *International Publication Number* **WO 2012/014114 A1**.

FDP/STC/FIP/Workshops attended

S.No.	FDP/STC/FIP/ Workshop/	Title	Year	Duration
1.	STC	Lasers: Development and Applications	2017	One Week
2.	STC	Curriculum Development	2017	One Week

3.	STC	Intellectual Property Rights-Aspects for Business Start-ups	2019	One Week
4.	e-Workshop	Research Methodology	2020	Five Days
5.	National Workshop	Managing Virtual Classrooms and open Educational Resources	2020	Six Days
6.	STC	Climate Change and Water Security	2021	Six Days
7.	FDP	Accreditation for Quality Assurance (NBA and NAAC Guidelines)	2021	One Week
8.	FIP	Faculty Induction Programme-05	2021	Twenty Eight Days

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**.