Professor Diwan S Rawat, FNASc, FRSC, CChem (London)
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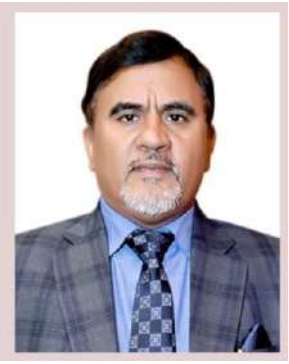
Date of Birth : January 1, 1970



Visiting Professor:

Japan Advanced Institute of Science and Technology (JAIST), Japan.

Associate Editor:

- Journal of Biochemical and Molecular Toxicology, Impact Factor : 3.63 (**2023**).
- Nature Scientific Reports, Impact Factor : 4.122 (**2019 – 2021**).
- RSC Advances (Royal Society of Chemistry), Impact Factor : 4.012 (**2016 – 2020**).

International Editorial Board Member:

- Bioconjugate Chemistry (ACS), **Impact Factor : 4.774** (**2022 – 2025**).
- Journal of Biochemical and Molecular Toxicology (Wiley), **Impact Factor : 3.61** (**2021 – 2023**).
- Anti-Cancer Agents in Medicinal Chemistry (Bentham), **Impact Factor 3.14** (**2007-Till Date*)***.
- Marine Drugs (MPDI), **Impact Factor 3.978** (**2005-2015**).
- Indian Journal of Heterocyclic Chemistry (**2013-Till Date**)
- Indian Journal of Chemistry (**2022 – 2025**).

Expertise : Development of small organic molecules as antimalarial, antimicrobial, anticancer and anti-Parkinson agents. Nanocatalysis

Total Publications: 169; **Citations :** 7220 ; **h-index :** 50; **i10-index:** 135 (Google scholar)
Citations : 5050 ; **h-index :** 42; (Scopus)

Patents: 9 (One molecule has cleared preclinical trials and industry has taken it up for Parkinson treatment, Times of India, Feb 16, 2020).

Technology Transfer

Prof Rawat`s research group developed a Nurr1 activator which stops death of dopamine neurons, and aggregation of α-synuclein in the brain of the Parkinson diseased mice. The work has been published in **Nature Communication 14:4283 (2023)**. The technology has been transferred to Boston based pharmaceutical industry. Recently, NurrOn entered into co-development agreement with HanAll Biopharma and Daewoong Pharmaceuticals to develop ATH-399A developed by the Prof Rawat`s laboratory for Parkinson's disease and MJ Fox foundation has funded the phase I clinical trials of the molecule. Details of the work can be found at: https://nurronpharma.com/media-relation and work has been patented (US 11,026,943 B2/2021; US 2017/0209441 A1; EP Application No. 13758678/2014; PCT/US2013/28329;

WO2013134047 A3, PCT/US2013/028329). The design, synthesis and characterization of the molecules covered under these patents was carried out by Prof Rawat`s research group and biological activity was carried out by Prof Kim`s research group.

https://nurronpharma.com/media-relation

Media Relation

March 29, 2023

NurrOn entered into co-development agreement with HanAll Biopharma and Daewoong Pharmaceuticals to develop ATH-399A for Parkinson's disease.

https://www.prnewswire.com/news-releases/hanall-biopharma-and-daewoong-pharmaceutical-enter-into-co-development-agreement-with-nurron-pharmaceuticals-to-develop-therapy-for-parkinsons-disease-301834508.html

December 1, 2022

NurrOn received the award of the translational pipeline program 2022 for a Phase I trial of ATH-399A from Michael J. Fox Foundation.

https://www.michaeljfox.org/grant/development-nurr1-activator-novel-therapeutic-parkinsons-disease

(12) **United States Patent**
Rawat et al.

(10) **Patent No.: US 11,026,943 B2**
(45) **Date of Patent: *Jun. 8, 2021**

(54) **AMINOQUINOLINE DERIVATIVES AND USES THEREOF**

(71) Applicants: **UNIVERSITY OF DELHI**, Delhi (IN); **THE MCLEAN HOSPITAL CORPORATION**, Belmont, MA (US)

(72) Inventors: **Diwan S. Rawat**, Delhi (IN); **Sunny Manohar**, Delhi (IN); **Ummadisetty Chinna Rajesh**, Delhi (IN); **Deepak Kumar**, Delhi (IN); **Anuj Thakur**, Delhi (IN); **Mohit Tripathi**, Delhi (IN); **Panyala Linga Reddy**, Delhi (IN); **Shamseer Kulangara Kandi**, Delhi (IN); **Satyapavan Vardhineni**, Delhi (IN); **Kwang-Soo Kim**, Lexington, MA (US); **Chun-Hyung Kim**, Lexington, MA (US)

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2003/0229119	A1	12/2003	Kym et al.
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2005/0186591	A1	8/2005	Bumcrot et al.
2009/0226401	A1	9/2009	Kim et al.
2011/0251210	A1	10/2011	Peyton et al.

FOREIGN PATENT DOCUMENTS

WO	00/59510	A1	10/2000
WO	03/070244	A1	8/2003
WO	2004/002960	A1	1/2004
WO	WO 2004/002960		1/2004
WO	2008/036374	A2	3/2008
WO	2009/148659	A2	12/2009
WO	2010/059738	A1	5/2010
WO	2010/065932	A1	6/2010

PhD Supervision : 28

EDUCATION:

Ph. D, Organic Chemistry, Central Drug Research Institute (CDRI), Lucknow, UP/ Kumaun University, Nainital, Uttrakhand, India, 1998.

Thesis Title: **Studies on Nitrogen Heterocyclics Related to Purines and Xanthines**

M.Sc.*, Chemistry, Kumaun University, Nainital, Uttrakhand, India, 1993, **First Position in the University.**

AWARDS/HONORS:

- **Chief Guest**, 4th Convocation of Far Western University, Nepal (April 21, 2024).
- **Council Member**, National Organic Symposium Trust (**2023-2026**; Chemical Research Society of India (**2023-2026**); Indian Chemical Society North Zone (**2023-2025**).
- **ISCB Excellence Award** in Drug Research **2022**.
- **Fellow of National Science Academy (FNASc), Allahabad** (**2021**).
- **Vasvik Research Award (2021).**
- **Special Appreciation Award for Exemplary Services**, University of Delhi (**2021**).
- **Platinum Jubilee Lecture**, Indian Science Congress (**2021**).
- **Sectional President (Chemical Sciences),** Indian Science Congress Association (**2019 – 2020**).
- **Associate Editor,** RSC Advances (**2016, Impact Factor 3.84**).
- **Fellow,** Royal Society of Chemistry (**FRSC, 2016**).
- **CChem,** Royal Society of Chemistry (**London, 2016**)
- **Professor SP Hiremath Memorial Award**, Indian Council of Chemists, **2016**.
- **Professor RC Shah Memorial Lecture Award**, Indian Science Congress, **2015 – 16**.
- **Visiting Professor,** Japan Advanced Institute of Science and Technology (JAIST), Japan.
- **Gold Badge and Diploma**, International Scientific Partnership Foundation, Russia (**2015**).
- **Young Scientist Award**, Indian Society of Chemists and Biologists (ISCB), **2010.**
- **Prof. D. P. Chakraborty 60th Birth Anniversary Commemoration Award 2007** (Awarded by Indian Chemical Society).
- **Young Researcher Award**, Chemical Research Society of India (CRSI) **2007**.
- **Merit Certificate** (**MSc Topper**), Kumaun University, Nainital, UK, India, **1993**.

AFFILIATIONS:

- **Life member**, Indian Chemical Society, India [F 4685, 1996].
- **Life member**, UP Association for the Advancement of Science and Technology, India [Since 2000].
- **Life member**, Chemical Research Society of India [LM 1109, 2008].
- **Life member**, Indian Society of Chemist and Biologist [LF 499/09, 2009].
- **Life member**, Association of Chemistry Teachers, India [2013].
- **Elected Life Member**, The National Academy of Sciences, Allahabad **2007.**
- **Life member**, Indian Science Congress Association, India [L 23152, 2013].
- **Life member**, Indian Council of Chemist, India [LF/1686, 2014].
- **Life member**, Association of Chemistry Teachers, India [LM 1301, 2013].

RESEARCH/TEACHING EXPERIENCE: Over 25 Years

Academic Experience:

- **Vice Chancellor**, Kumaun University, Nainital, Uttrakhand (**July 2023 – Till date**).

- **Senior Professor**, Department of Chemistry, University of Delhi, Delhi, 110007, India **(March 2020-Till Date**).

- **Professor**, Department of Chemistry, University of Delhi, Delhi, 110007, India **(March 2010-March 2020**).

- **Associate Professor**, Department of Chemistry, University of Delhi, Delhi, 110007, India **(July 2006-March 2010**).

- **Reader**, Department of Chemistry, University of Delhi, Delhi, 110007, India **(July 2003-July 2006**).

- **Assistant Professor**, Department of Medicinal Chemistry, National Institute of Pharmaceutical Education and Research (NIPER), Mohali, Punjab, India (**November 2002-July 2003**).

- **National Institute of Health (NIH) Postdoctoral Fellow**, Department of Medicinal Chemistry and Molecular Pharmacology, Purdue University, West Lafayette, IN, USA (**September 2001-November 2002**).

- **American Cancer Society (ACS) Postdoctoral Fellow**, Department of Chemistry, Indiana University, Bloomington, IN, USA (**November 1999 - September 2001**).

- **Research Fellow**, Central Drug Research Institute, Lucknow, India (**April 1994 - August 1997**).

Industrial Expereicne:

- **Scientist, R & D Department**, **Lupin Laboratories Ltd. Mandideep, M.P., India** (**September 1998- November 1999**). Involved in the process and development of Lisinopril, quinalapril based antihypertensive drugs, and handled reaction on 50 kg scale.

- **R & D Executive**, **Panchsheel Org. Ltd. MP, India.** (**August 1997- September 1998**). Process and development of Loperamide hydrochloride, promethazine hydrochloride, and triclosan. Handled reaction on 50 kg scale.

ADMINISTRATIVE EXPERIENCE:

- **Vice Chancellor**, Kumaun University, Nainital (**July 2023 – Till Date**).
- **Dean Examinations**, University of Delhi, Delhi (**August 2020 – July 2023**).
- **Dean Works**, University of Delhi, Delhi (**2020**).
- **Provost, Jubilee Hall**, University of Delhi, Delhi (**May 2012 – Jan 2019**).
- **OSD, University Press, and Head**, **Graphic Art Centre**, University of Delhi, Delhi (**January 2011 – May 2017**).
- **Chairman, Governing Body,** Shaheed Rajguru College, (**2011- 2012**), Deen Dayal Upadhyay College, (**2019 – 2020**) University of Delhi; Kirorimal College, University of Delhi (**2021 – 2022**).
- **Warden**, Jubilee Hall, University of Delhi (**September 2003 – May 2012**).
- **Coordinator, M. Tech.** (Chemical Synthesis and Process Technologies), Department of Chemistry,

University of Delhi (**December 2010 – July 2017**).

- **Treasurer**, **Governing Body**, Swami Shraddhanand College, (**2011-2012**), SGTB Khalsa Colleges, (**2014-2014**), Adity Mahavidyalaya, (**2014-2015**), Sri Arvindo College, University of Delhi, Delhi (**2017**).
- **Treasurer**, **Delhi University Students Union (DUSU)**, University of Delhi, Delhi (**June 2012-May 2017**).
- **Chief Election Officer (2014-2016)**, **Chief Returning Officer (2012-2013), Returning Officer (2011), DUSU Election, University of Delhi**.

Expert-Funding Agencies:

- **Member, INSPIRE Fellowhip NBHF/HOPE Committee**, DST **(2019 – 2022).**
- **Member, Subject Expert Committee,** Women Scientist Scheme-A (WOS-A), DST **(2016 – 2020; 2022 - 2025).**
- **Member Expert Committee,** Technological Intervention for Addressing Societal Needs (TIASN), Department of Science & Technology (DST), New Delhi (**2016 – 2019**).
- **Project Advisory Committee (PAC),** International Cooperation Division (ICD), Department of Science & Technology (DST), New Delhi (**2014 – 2019, 2022 – 2025**).
- **UGC-Nominee, SAP Programme**, Department of Chemistry, Shivaji University, Kolhapur (**2013 - 2018**).
- **UGC-Nominee, SAP Programme**, Department of Chemistry, Guru Nanak Dev University, Amritsar (**2015 - 2020**).
- **Member project evaluation committee**, Uttarakhand State Council for Science and Technology (UCOST), Dehradun, Uttrakhnad (**2007 –2014**).

Total Publications: 169; **Citations :** 7220 ; **h-index :** 50; **i10-index:** 135 (Google scholar)
Citations : 5583 ; **h-index :** 45; (Scopus)

Key Publications:

Nature Communications (IF: 17.694)

American Chemical Society: J. Am. Chem. Soc. (**IF = 15.42**); ACS Chem. Biol. (**IF = 5.1**); Org. Lett. (**IF = 6.492**); ACS Sus. Chem. Engg. (**IF = 9.224**); J. Org. Chem. (**IF = 4.805**); Inorg. Chem. (**IF = 9.224**); ACS Med. Chem. Lett. (**IF = 4.345**); J. Agric. Food Chem. (**IF = 5.279**), ACS Omega (**IF = 4.132**).
Royal Society: Green Chem. (**IF = 11.034**); Chem. Commun. (**IF = 6.222**); RSC Adv (**IF = 4.036**); New J. Chem. (**IF = 3.925**); Org. Biomol. Chem. (**IF = 3.876**); Med. Chem. Commun. (**IF = 3.597**).

Elsevier Publication: Eur. J. Med. Chem. (**IF = 7.088**); BBA Biomembrane (**IF = 4.647**); Bioorg. Med. Chem. (**IF = 3.641**); Biorg. Med. Chem. Lett. (**IF = 2.823**); Tetrahedron Lett (**IF = 2.39**).

Wiley Publication: Med. Res. Rev. (**IF = 13.59**); Adv. Synth. Catal. (**IF = 6.453**); ChemCatChem (**IF: 5.497);** Chemistry - An Asian Journal (**IF: 4.568**); FEBS J (**IF = 5.542**); Asian J. Org. Chem. (**IF = 3.275**); Chem. Biol. Drug. Des. (**IF = 2.802**).

Research work Highlighted in the Cover Page:

- **Tetrahedron Letters** 59 (24), 13 June **2020**
- **Tetrahedron Letters** 59 (24), 13 June **2018**
- **Tetrahedron Letters** 57 (4), 5 October **2016**
- **ACS Sustainable Chemistry and Engineering 3 (1), 2015**

Research work Highlighted by Synfacts:

Green Chemistry 22, 3170 **(2020)**	**SYNFACTS** 2020, 16(08): 0995
Tetrahedron Letters 59, 2341 **(2018)**	**SYNFACTS** 2018, 14(08): 0883
Chemistry - An Asian Journal 12, 785 (**2017**)	**SYNFACTS** 2017, 13(07), 0766
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RSC Advances 6, 2935 **(2016)**	**SYNFACTS** 2016, 12(4), 0427
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Selected Puplications (Medicinal Chemistry)

1. Shashikant Tiwari, Manisha Kumari, **Diwan S Rawat***, Air induced phosphoryl radical mediated stereoselective hydrosulfonylation of alkynes via halogen atom transfer (XAT): Ingress of Z-vinyl sulfones, **Organic Letters, 6, 2303−2308 (2024). Impact Factor: 6.072.**

2. Woori Kim,+ Mohit Tripathi,+ Chunhyung Kim, Satyapavan Vardhineni, Young Cha, Shamseer Kulangara Kandi, Melissa Feitosa, Rohit Kholiya, Eric Sah, Anuj Thakur, Yehan Kim, Sunny Manohar, Youngbin Kong, Gagandeep Sindhu, Yoon-Seong Kim, Bruce Cohen, **Diwan S Rawat*,** Kwang-Soo Kim,* An optimized Nurr1 agonist provides disease-modifying effects in Parkinson's disease models, **Nature Communications 14:4283 (https://doi.org/10.1038/s41467-023-39970-9). (2023). Impact Factor: 17.694. [+WK and MT equal contribution].**

3. Shashikant Tiwari, **Diwan S. Rawat*** Regiodivergent synthesis of densely functionalized indolizines" **J. Org. Chem. 88, 6805−6815 (2023). Impact Factor: 4.192.**

4. Padam Singh, Srishti Rawat, Ashish K Agrahari, Manisha Singh, Saurabh Chugh, Sudagar Gurcha, Albel Singh, Katherine Abrahams, Gurdyal S Besra, Shailendra Asthana, **Diwan S Rawat**, Ramandeep Singh* NSC19723, a thiacetazone like benzaldehyde thiosemicarbazone improves the efficacy of TB drugs *in vitro* and *in vivo*, **Microbiology Spectrum**, DOI: https://doi.org/10.1128/spectrum.02592-22, **Impact Factor: 9.043.**

5. Gagandeep, Rohit Kholiya, Saqib Kidwai, Padam Singh, Ramandeep Singh, **Diwan S. Rawat*** Design and Synthesis of Benzimidazole derivatives as anti-mycobacterial agents" **J. Biochem. Mol. Toxicol. DOI: 10.1002/jbt.23123 (2022). Impact Factor: 3.606.**

6. Vandana Kumari, Kona Madhavinadha Prasad, Inderjeet Kalia, Gagandeep Sindhu, Rajnikant Dixit, **Diwan S Rawat**, O. P Singh, Agam P Singh, Kailash C Pandey, Dissecting the role of Plasmodium Metacaspase-2 in malaria gametogenesis and sporogony, **Emerg. Microbes & Infect.**, DOI: **10.1080/22221751.2022.2052357. Impact Factor: 5.84.**

7. Aparna Bahuguna, Srishti Rawat, **Diwan S. Rawat*** QcrB in Mycobacterium tuberculosis: The new drug target of antitubercular agents, **Med. Res. Rev. 41, 2565–2581 (2021). Impact Factor: 13.59.**

8. Aparna Bahuguna, P. V. Bharatam, **Diwan S. Rawat*** 3D QSAR studies on cationic amphiphilic indole derivatives for antimycobacterial activity, **J. Biochem. Mol. Toxicol. 35, e22675, DOI: 10.1002/jbt.22675 (2021). Impact Factor: 3.606.**

9. Kamlesh Kumar, Penny Joshi, **Diwan S. Rawat*** (±)-Camphor sulfonic acid assisted IBX based oxidation of 1° and 2° alcohols, **Tetrahedron Letts. 81, 153298 (2021), *Impact Factor:* 2.415.**

10. Gagandeep, Manisha Singh, Saqib Kidawi, Ujjalkumar Subhash Das, Thirumurthy Velpandian, Ramandeep Singh, **Diwan S. Rawat***, Mono-carbonyl Curcuminoids as Anti-Tuberculosis Agents With Their Moderate *In-vitro* Metabolic Stability on Human Liver Microsomes" **J. Biochem. Mol. Toxicol. 35, e22754, doi.org/10.1002/jbt.22754 (2021). Impact Factor: 3.606.**

11. Aparna Bahuguna, **Diwan S. Rawat*** Recent trends and strategies for the anti-tubercular drug development, **Med. Res. Rev. 40, 263-292 (2020). Impact Factor: 13.59.**

12. Garima Arora, Gagandeep, Assirbad Behura, Tannu Priya Gosain, R. P. Shaliwal, Saqib Kidwai, Padam Singh, Shamseer Kulangara Kandi, Rohan Dhiman, **Diwan S. Rawat** and Ramandeep Singh, NSC 18725, a pyrazole derivative inhibits growth of intracellular *Mycobacterium tuberculosis* by induction of autophagy **Front. Microbiol. 10, 3051 – 3063 (2020), Impact Factor: 4.259.**

13. Gagandeep, Prince Kumar, Shamseer Kulangara Kandi, Kasturi Mukhopadhyay, **Diwan S. Rawat***, Synthesis of novel monocarbonyl curcuminoids, evaluation of their efficacy against MRSA, including ex vivo infection model and their mechanistic studies, **Eur. J. Med. Chem. 195, 112276 (2020). *Impact Factor:* 7.088.**

14. Kamlesh Kumar, Prashant Kumar, Penny Joshi, **Diwan S Rawat***, IBX-TfOH mediated oxidation of alcohols to aldehydes and ketones under mild reaction conditions, **Tetrahedron Letters, 61, 51749 (2020). *Impact Factor:* 2.379. Featured in Org. Chem. Highlights: Oxidation (https://www.organic-chemistry.org/Highlights/2021/25January.shtm**

15. Gunjan Purohit, **Diwan S. Rawat*,** Hierarchically porous mixed oxide sheet like copper-aluminium (CuAl-MO) nanocatalyzed synthesis of 2-alkynyl-pyrrolidines/piperidines and their ideal green chemistry metrics. **ACS Sustainable Chem. Engg.** 7, 19235−19245 **(2019). Impact Factor: 9.224.**

16. Mohit Tripathi, Dale Taylor, Shabana I. Khan, Babu L. Tekwani, Prija Ponnan, Thirumurthy Velpandian, Ujjalkumar Das, **Diwan S. Rawat*** Hybridization of fluoro-amodiaquine (FAQ) with pyrimidines: Synthesis, *in vitro* and *in vivo* antimalarial potency of FAQ-pyrimidines, **ACS Med. Chem. Lett. 10, 714−719 (2019). *Impact Factor:* 4.345.**

17. Girjesh Kumar Verma, Manish Rawat, **Diwan S. Rawat*** [Cp*Co(CO)I_2] Catalysed C—C bond formation and [2+2+2] annulation of 1,3-dicarbonyls to terminal alkynes, **Eur. J. Org. Chem. 4101–4104 (2019). Impact Factor: 3.029.**

18. S. S. Maurya, A. Bahuguna, S. I. Khan, D. Kumar, R. Kholiya, **Diwan S. Rawat***, *N*-Substituted aminoquinoline-pyrimidine hybrids: Synthesis, *in vitro* antimalarial activity evaluation and docking studies. **Eur. J. Med. Chem. 162, 277 – 289 (2019), *Impact Factor:* 7.088.**

19. Prince Kumar, S. K. Kandi, S. Manohar, K. Mukhopadhyay, **Diwan S. Rawat***, Monocarbonyl curcuminoids with improved stability as antibacterial agents against *Staphylococcus aureus and their mechanistic studies*, **ACS Omega, 4, 675 – 687 (2019), *Impact Factor:* 4.132.**

20. B. Negi, P. Poonan, M. F. Ansari, D. Kumar, S. Aggarwal, R. Singh, A. Azam, **Diwan S Rawat*** Synthesis, antiamoebic activity and docking studies of metronidazole-triazole-styryl hybrids. **Eur. J. Med. Chem.** 150, 633 – 641 **(2018). *Impact Factor:* 7.088.**

21. Archana Gupta, Rohit Kholiya, **Diwan S. Rawat,*** Lewis acid mediated tetrahydrofuran synthesis *via* [3+2] cycloaddition reaction of 2-arylcyclopropyl ketones with aldehydes, **Asian J. Org. Chem.** 6, 993 – 997 **(2017). Impact Factor: 3.275.**

22. P. Linga Reddy, Shabana I. Khan, Prija Ponnan, Mohit Tripathi, **Diwan S. Rawat*** Design, synthesis and evaluation of 4-aminoquinoline-purine hybrids as potential antiplasmodial agents; **Eur. J. Med. Chem.** 126, 675-686 **(2017). Impact Factor: 7.088.**

23. Rohit Kholiya, Shabana I. Khan, Aparna Bahuguna, Mohit Tripathi, **Diwan S. Rawat*** N-Piperonyl substitution on aminoquinoline-pyrimidine hybrids: Effect on the antiplasmodial potency; **Eur. J. Med. Chem.** 131, 126 – 140 **(2017). *Impact Factor:* 7.088.**

24. Shiv Shyam Maurya, Shabana I. Khan, Deepak Kumar, Aparna Bahuguna, **Diwan S. Rawat*** Synthesis, antimalarial activity, heme binding and docking studies of *N*-substituted 4-aminoquinoline-pyrimidine molecular hybrids; **Eur. J. Med. Chem.** 129, 175 – 185 **(2017). Impact Factor: 7.088.**

25. Beena Negi, Deepak Kumar, Widuranga Kumbukgolla, Sampath Jayaweera, Prija Ponnan, Ramandeep Singh, Sakshi Agarwal, **Diwan S. Rawat***, Anti-methicillin resistant *Staphylococcus aureus* activity, synergism with oxacillin and molecular docking studies of metronidazole-triazole hybrids, **Eur. J. Med. Chem. 115, 426 – 437 (2016). Impact Factor: 7.088.**

26. Mohit Tripathi, Shabana I. Khan, Anuj Thakur, Prija Ponnan, **Diwan S. Rawat***, 4-Aminoquinoline-pyrimidine-aminoalkanols: Synthesis, *in vitro* antimalarial activity, docking studies and ADME predictions, **New J. Chem.** 39, 3474 – 4383 **(2015). *Impact Factor:* 3.925.**

27. Deepak Kumar, Garima Khare, Beena, Saqib Kidwai, Anil K. Tyagi, Ramandeep Singh, **Diwan S. Rawat*,** Novel isoniazid-amidoether derivatives: Synthesis, characterization and antimycobacterial activity evaluation, **Med. Chem. Commun.** 6, 131 - 137 **(2015). *Impact Factor:* 5.523.**

28. Shamseer K. Kandi, Sunny Manohar, Christian E. Vélez Gerena, Beatriz Zayas, Sanjay V. Malhotra, **Diwan S. Rawat***; C5-curcuminoid-4-aminoquinoline based molecular hybrids: Design, synthesis and mechanistic investigation of anticancer activity, **New J. Chem.** 39, 224 - 234 **(2015). *Impact Factor:* 3.925.**

29. Deepak Kumar, Shabana I. Khan, Prija Poonan, **Diwan S. Rawat*** "4-Aminoquinoline-pyrimidine hybrids: Synthesis, antimalarial activity, heme binding and docking studies" **Eur. J. Med Chem.** 89, 490 - 502 **(2015). *Impact Factor:* 7.088.**

30. Deepak Kumar, Shabana I. Khan, Prija Poonan, **Diwan S. Rawat*,** Triazine-pyrimidine based molecular hybrids: Synthesis, docking studies and antimalarial activity evaluation, **New J. Chem.** 38, 5087-5095 **(2014). *Impact Factor:* 3.925. [Most downloaded article].**

31. Deepak Kumar, Beena, Garima Khare, Saqib Kidwai, Anil K. Tyagi, Ramandeep Singh, **Diwan S Rawat*** Synthesis of novel 1,2,3-triazole derivatives of isoniazid and their *in vitro* and *in vivo* antimycobacterial activity evaluation, **Eur. J. Med Chem.** 81, 301 - 313 **(2014). *Impact Factor:* 7.088.**

32. Beena, K. Kranthi Raj, Shadab Miyan Siddiqui, D. Ramachandran, Amir Azam, **Diwan S. Rawat,*** Metronidazole-Triazole Hybrids as *Entamoeba histolytica* Thioredoxin Reductase Inhibitors and their *In Vitro* Antiamoebic Activity Evaluation. **Chem. Med. Chem.** 9, 2439 - 2444 **(2014). Impact Factor: 4.816.**

33. Amit Anthwal, Kundan Singh, M.S.M. Rawat, Amit K. Tyagi, Bharat B. Aggarwal, **Diwan S. Rawat*** C5-curcuminoid-dithiocarbamate based molecular hybrids: Synthesis, anti-inflammatory and anti-cancer activity evaluation. **RSC Adv** 4, 28756 - 28764 (**2014**). ***Impact Factor:* 4.036.**

34. Amit Anthwal, U. Chinna Rajesh, M. S. M. Rawat, Bhavana Kushwaha, Jagdamba P Maikhuri, Vishnu L. Sharma, Gopal Gupta, **Diwan S. Rawat*** Novel metronidazole-chalcone conjugates with potential to counter drug resistance in *Trichomonas vaginalis,* **Eur. J. Med. Chem.** 79, 89 - 94 **(2014). *Impact Factor:* 7.088.**

35. Anuj Thakur, Sunny Manohar, Christian E. Vélez Gerena, Beatriz Zayas, Vineet Kumar, Sanjay V. Malhotra, **Diwan S Rawat*,** Novel 3,5-bis(arylidiene)-4-piperidone based monocarbonylanalogs of curcumin: Anticancer activity evaluation and mode of action study, **Med. Chem. Commun.** 5, 576 - 586 **(2014), *Impact Factor*: 5.324**

36. Deepak Kumar, K. Kranthi Raj, Sanjay V. Malhotra, **Diwan S Rawat*** Synthesis and anticancer activity evaluation of resveratrol-chalcone conjugate. **Med. Chem. Commun**. 5, 528 - 535 **(2014). *Impact Factor:* 5.324**

37. Sunny Manohar, Shabana I. Khan, Shamseer K. Kandi, Kranthi Raj, Guojing Sun , Xiaochuan Yang, Angie D. Calderon Molina, Nanting Ni, Binghe Wang, **Diwan S Rawat*,** Synthesis and cytotoxic potential of new monocarbonyl analogues of Curcumin. **Bioorg. Med. Chem. Lett.** 23, 112-116 *(***2013***). Impact Factor:* **2.82.**

38. Beena, **Diwan S. Rawat*** "Antituberculosis drug research: A critical overview" **Med. Res. Rev.** 33, 693–764 **(2013), *Impact Factor*: 13.59 *(*ranked #1 among the medicinal chemistry journals*).**

39. Sunny Manohar, U. Chinna Rajesh, Shabana I. Khan, Babu L. Tekwani, **Diwan S. Rawat***, Novel 4-aminoquinoline-pyrimidine based hybrids with improved *in vitro* and *in vivo* antimalarial activity, **ACS Med. Chem. Lett.** 3, 555-559 (**2012**). **Impact factor: 4.345.**

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