

Professor Diwan S Rawat, FNASc, FRSC, CChem (London)
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Web of Science ResearcherID: B-1150-2008
Scopus Author ID: 35498443400
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: 166; **Citations :** 6620 ; **h-index :** 48; **i10-index:** 130 (Google scholar)
Citations : 5050 ; **h-index :** 42; (Scopus)

Patents: 8 (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**

(56) **References Cited**

U.S. PATENT DOCUMENTS

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

3,196,155 A	7/1965	Gailliot et al.
2003/0119026 A1	6/2003	Le et al.
2003/0229119 A1	12/2003	Kym et al.
2004/0072818 A1	4/2004	Dunning et al.
2005/0186591 A1	8/2005	Bumcrot et al.
2009/0226401 A1	9/2009	Kim et al.
2011/0251210 A1	10/2011	Peyton et al.

(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)

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 : 26

EDUCATION:

Sunday, August 13, 2023

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

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

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

AWARDS/HONORS:

- Council Member, NOST (2023-2026; CRSI (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).
- **Pratap Bhaiya Smiriti Alankar**, Awarded by Acharya Narendra Dev Shiksha Nidhi, Nainital (2020).
- **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 Chemist, 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 Chemist and Biologist (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:

- **Fellow**, National Academy of Science, India 2021.
- **Fellow**, Royal Society of Chemistry (FRSC, 2016).
- **Sectional President**, Chemical Science Section, Indian Science Congress Association 2020.
- **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:

- **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 Experience:

- **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 Fellowship 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, Uttarakhand (2007 –2014).**

Total Publications: 166; **Citations :** 6620 ; **h-index :** 48; **i10-index:** 130 (Google scholar)
Citations : 5050 ; **h-index :** 42; (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
Tetrahedron Letters 57, 4468 (2016)	SYNFACTS 2016, 12(12), 1314
RSC Advances 6, 2935 (2016)	SYNFACTS 2016, 12(4), 0427
RSC Advances 5, 92121 (2015)	SYNFACTS 2016, 12(2), 0214

Selected Publications (Medicinal Chemistry)

1. 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].
2. Shashikant Tiwari, [Diwan S. Rawat*](#) Regiodivergent synthesis of densely functionalized indolizines" **J. Org. Chem.** 88, 6805–6815 (2023). **Impact Factor: 4.192.**
3. 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.**
4. 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.**
5. 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.**

6. 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.**
7. 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.**
8. 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.**
9. 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.**
10. 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.**
11. 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.**
12. 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.**
13. 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>)
14. 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.**
15. 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.**
16. Girjesh Kumar Verma, Manish Rawat, [Diwan S. Rawat*](#) [Cp*Co(CO)I₂] 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.**

17. 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**.
18. 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**.
19. 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**.
20. 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**.
21. P. Linga Reddy, Shabana I. Khan, Prija Ponnann, 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**.
22. 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**.
23. 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**.
24. Beena Negi, Deepak Kumar, Widuranga Kumbukgolla, Sampath Jayaweera, Prija Ponnann, 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**.
25. Mohit Tripathi, Shabana I. Khan, Anuj Thakur, Prija Ponnann, [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**.
26. 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**.
27. 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**.

28. 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.**
29. 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].
30. 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.**
31. 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* Antiamebic Activity Evaluation. **Chem. Med. Chem.** 9, 2439 - 2444 (2014). **Impact Factor: 4.816.**
32. 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.**
33. 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.**
34. Anuj Thakur, Sunny Manohar, Christian E. Vélez Gerena, Beatriz Zayas, Vineet Kumar, Sanjay V. Malhotra, [Diwan S Rawat*](#), Novel 3,5-bis(aryldiene)-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**
35. 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**
36. 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.**
37. 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).
38. 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.**

39. Kapil Arya, U. Chinna Rajesh, [Diwan S. Rawat*](#) Proline confined FAU zeolite: Hybrid heterogeneous catalyst for one pot synthesis of spiroheterocycles via mannich type reaction. **Green Chemistry**, 14, 3344-3351 (2012), **Impact factor: 11.034**.
40. Seema Joshi, Gopal S. Bisht, [Diwan S. Rawat](#), Santosh Pasha, Comparative mode of action of novel hybrid peptide CS-1a and its rearranged amphipathic analog CS-2a, **FEBS Journal**, 279, 3776 - 3790 (2012), **Impact factor: 4.25**.
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