

Profile of DR SANJAY JACHAK

QUALIFICATION:

Dr.rer.nat. (Pharmacy)	1997	Institute of Pharmacognosy, Karl Franzens University, Graz, Austria
M. Pharm.	1994	Pune University, Pune, India

AWARDS and HONOURS

- Most cited paper award, Bioorganic Medicinal Chemistry Letters, 2005-2008.
- Editorial Board Member (2009-2011), Anti-Infective Agents, Bentham Science Publishers.
- Research Fellowship, Austrian Academic Exchange Service, Vienna, Austria from 1995-1998.

REFEREE:

- Acting as referee for the *Journal of Ethnopharmacology* and *Bioorganic Medicinal Chemistry Letters* Elsevier Publishers, *Current Medicinal Chemistry*, Bentham Publisher and *Journal of Natural Products*, American Chemical Society Publisher since 2003.

SOCIETY MEMBERSHIP

1. Society for Medicinal Plant Research, Germany-Europe.
2. Indian Pharmaceutical Association (IPA), Mumbai, India- Life member.
3. Association of Pharmaceutical Teachers (APTI), Bangalore, India- Life member.

PERSONAL DATA :

- Date of Birth : 11/09/1971.
- Nationality : Indian.
- Languages known : English, German, Hindi, Marathi.

PROJECTS HANDLED:

- Completed 2 research projects as PI, funded by CSIR, New Delhi and Ministry of Health and Family Welfare, Govt. of India, New Delhi, India.
- Working as Co-Investigator in 2 projects funded by Ministry of Chemicals and Fertilizers, Govt. of India, New Delhi, India and Department of Biotechnology, Govt. of India.

INVITED LECTURES:

- Delivered more than 50 invited lectures in Conferences/Training courses at Institutes/Universities.
- Delivered an invited keynote lecture at the 55th International Congress and Annual Meeting of the Society for Medicinal Plant Research, Sept. 2-6, 2007, Graz, Austria.

PUBLICATIONS

PATENTS:

1. **Sanjay M. Jachak**, Uma Ramachandran, Alka Mital, Krishnamoorthy Srinivasan, Poduri Rama Rao, Chaman Lal Kaul. '**Naphthoquinones as Antidiabetic Agents**', Indian WTO Patent Application No. 669/DEL/2004. Granted on 31-03-2008.
2. C. Selvam, **Sanjay M. Jachak**, R. Thilagavathi and Asit K. Chakraborti. '**Novel Anti-inflammatory and Antioxidant Agents**', Indian WTO Patent Application No. 1704/DEL/2004 dated 09-09-2004.
3. Selvam, **Sanjay M. Jachak**, Gnana Oli R., K. K. Bhutani. '**New anti-inflammatory compounds from *Indigofera aspalathoides***', Indian WTO Patent Application No. 1489/DEL/2003 dated 28-11-2003.

RESEARCH PAPERS:

1. Somendu K Roy, Udai Chand Agrahari, Raju Gautam, Amit Srivastava, **Sanjay M. Jachak**. Isointrinsicanol, a new antioxidant homoisoflavonoid from the roots of *Caesalpinia digyna* Rottler. *Nat. Prod. Res.* **2011**, *in press*.
2. Raju Gautam, **Sanjay M. Jachak**, Vivek Kumar, C. Gopi Mohan. Synthesis, biological evaluation and molecular docking studies of stellatin derivatives as cyclooxygenase (COX-1, COX-2) inhibitors and anti-inflammatory agents. *Bioorg. Med. Chem. Lett.* **2011**, *in press*.
3. Raju Gautam, **Sanjay M. Jachak**, Arvind Saklani. Anti-inflammatory effect of *Ajuga bracteosa* Wall Ex. Benth. mediated through cyclooxygenase (COX) inhibition. *J. Ethnopharmacol.* **2011**, *133*, 928-930.
4. **Sanjay M. Jachak**, Raju Gautam, C. Selvam, Himanshu Madhan, Amit Srivastava, Taj Khan. Anti-inflammatory, cyclooxygenase inhibitory and antioxidant activities of standardized extracts of *Tridax procumbens* L. *Fitoterapia* **2011**, *82*, 173-177.
5. Uma R. Lal, Shailendra M. Tripathi, **Sanjay M. Jachak**, Kamlesh K. Bhutani, Inder P. Singh. RP-HPLC analysis of Jirakadyarishta and chemical changes during fermentation. *Nat. Prod. Comm.* **2010**, *5*, 1767-1770.
6. Harmeet S. Sandhu, Sameer Sapra, Mukesh Gupta, Kunal Nepali, Raju Gautam, Sunil Yadav, Raj Kumar, **Sanjay M. Jachak**, Manoj Chugh, Manish K. Gupta, Om P. Suri, K.L. Dhar. Synthesis and biological evaluation of arylidene analogues of Meldrum's acid

- as a new class of antimalarial and antioxidant agents. *Bioorg. Med. Chem.* **2010**, *18*, 5626-5633.
7. Madhukar N. Jachak, Maruti G. Ghagare, Dilip R. Birari, Ramhari V. Rote, Muddassar A. Kazi, **Sanjay M. Jachak**, Raghunath B. Toche. A novel synthetic approach towards pyrazole-4-carboxamides using *N*-(3-(dimethylamino)-2-formylacryloyl) formamide. *Monatsh. Chem.* **2010**, *141*, 569-576.
 8. Raju Gautam, Amit Srivastava, **Sanjay M. Jachak**. Simultaneous determination of naphthalene and anthraquinone derivatives in *Rumex nepalensis* Spreng. roots by HPLC: Comparison of different extraction techniques and method validation. *Phytochem. Anal.* **2010**, DOI: 10.1002/pca.1261 (first published online: Nov 2, 2010).
 9. Raju Gautam, Kailas V. Karkhile, Kamlesh K Bhutani, **Sanjay M. Jachak**. Anti-inflammatory, cyclooxygenase (COX)-2, COX-1 inhibitory and free radical scavenging effects of *Rumex nepalensis* Spreng. *Planta Med.* **2010**, *76*, 1564-1569.
 10. Raju Gautam, Amit Srivastava, **Sanjay M. Jachak**. Determination of chromones in *Dysophylla stellata* by HPLC: Method development, validation and comparison of different extraction methods. *Nat. Prod. Comm.* **2010**, *5*, 555-558.
 11. Uma R. Lal, Shailendra M. Tripathi, **Sanjay M. Jachak**, Kamlesh K. Bhutani, Inder P. Singh. Chemical changes during fermentation of Abhayarishta and its standardization by HPLC-DAD. *Nat. Prod. Comm.* **2010**, *5*, 575-579.
 12. Raju Gautam, Amit Srivastava, **Sanjay M. Jachak**, Arvind Saklani. Anti-inflammatory, cyclooxygenase (COX)-2, COX-1 inhibitory and antioxidant effects of *Dysophylla stellata* Benth. *Fitoterapia* **2010**, *81*, 45-49.
 13. Uma R. Lal, Shailendra M. Tripathi, **Sanjay M. Jachak**, Kamlesh K. Bhutani, Inder P. Singh. HPLC analysis and standardization of Arjunarista- An Ayurvedic cardioprotective formulation. *Sci. Pharm.* **2009**, *77*, 605-616.
 14. Raju Gautam, **Sanjay M. Jachak**. Anti-inflammatory and cyclooxygenase (COX)-2 inhibitory activities of *Rumex nepalensis* Spreng. *Planta Med.* **2008**, *74*, 1019.
 15. **Sanjay M. Jachak**, Amit Srivastava, Doris Lechner, Franz Bucar. Evaluation of antimycobacterial activity of some *Piper* species. *Planta Med.* **2008**, *74*, 1013.
 16. Rajesh Rathore, Jay Prakash Jain, Amit Srivastava, **S. M. Jachak**, Neeraj Kumar. Simultaneous determination of Hydrazinocurcumin and phenol red in samples from rat intestinal permeability studies: HPLC method development and validation. *J. Pharm. Biomed. Anal.* **2008**, *46*, 374-380.

17. **Sanjay M. Jachak**, C. Selvam, Amit Srivastava, Vijay Ahuja. Evaluation of anti-inflammatory activity and identification of bioactive compounds from *Vitex negundo* L., *Cardiospermum halicacabum* L. and *Tridax procumbens* L. *Planta Med.* **2007**, *73*, 802-803.
18. **Sanjay M. Jachak**. Characterization, design and synthesis of potential COX-2 inhibitors based on natural products. *Planta Med.* **2006**, *72*, 1021.
19. C. Selvam, **Sanjay M. Jachak**, R. Thilagavathi and Asit K. Chakraborti. Design, synthesis, biological evaluation and molecular docking of curcumin analogues as antioxidant, cyclooxygenase inhibitory and anti-inflammatory agents. *Bioorg. Med. Chem. Lett.* **2005**, *15*, 1793-1797.
20. C. Selvam, **Sanjay M. Jachak**, Gnana Oli R., Ramasamy Thilagavati, Asit K. Chakraborti, K. K. Bhutani. A New Cyclooxygenase (COX) Inhibitory Pterocarpan from *Indigofera aspalathoides*: Structure Elucidation and Determination of Binding Orientation in the Active Sites of the Enzyme by Molecular Docking. *Tetrahedron Lett.* **2004**, *45*, 4311-4314.
21. C. Selvam, **Sanjay M. Jachak**. A Cyclooxygenase (COX) Inhibitory Biflavonoid from the seeds of *Semecarpus anacardiu'*. *J. Ethnopharmacol.* **2004**, *95*, 209-212.
22. C. Selvam, **Sanjay M. Jachak**, K.K. Bhutani. Cyclooxygenase Inhibitory Flavonoids from the stem bark of *Semecarpus anacardium* Linn. *Phytother. Res.* **2004**, *18*, 582-584.
23. Shilpi Mittal, Alpeshkumar Malde, C. Selvam, K.H.S. Arun, P. S. Johr, **Sanjay M. Jachak**, P. Rama Rao, P. V. Bharatam and H. P. S. Chawla. Synthesis and evaluation of S-4-(3-thienyl)phenyl- α -methylacetic acid. *Bioorg. Med. Chem. Lett.* **2004**, *14*, 979-982.
24. **S. M. Jachak**, F. Bucar, Th. Kartnig. Anti-inflammatory activity of *Biophytum sensitivum* in carrageenin induced rat paw oedema. *Phytother. Res.* **1999**, *13*, 73-74.
25. F. Bucar, **S. M. Jachak**, Y.Noreen, Th. Kartnig, L. Bohlin, M. Schubert-Zsilavec., Amentoflavone from *Biophytum sensitivum* and its effect on COX - 1/COX-2 catalysed prostaglandin biosynthesis. *Planta Med.* **1998**, *64*, 373-374.
26. F. Bucar, **S. M. Jachak**, Th. Kartnig, M. Schubert-Zsilavec. Phenolic compounds from *Biophytum sensitivum*. *Pharmazie* **1998**, *53*, 651-653.

REVIEW ARTICLES

27. Raju Gautam, **Sanjay M. Jachak**. Recent Developments in Anti-inflammatory Natural Products. *Med. Res. Rev.* **2009**, *29*, 767-820.

28. **Sanjay M. Jachak**. PGE synthase inhibitors as an alternative to COX-2 inhibitors. *Curr. Opinion Invest. Drugs* **2007**, 8, 411-415.
29. Raju Gautam, Arvind Saklani, **Sanjay M. Jachak**. Indian Medicinal Plants as a Source of Antimycobacterial Agent. *J. Ethnopharmacol.* **2007**, 110, 200-234.
30. **Sanjay M. Jachak**, Arvind Saklani. Challenges and Opportunities in Drug Discovery from Plants. *Curr. Sci.* **2007**, 92, 1251-1257.
31. **Sanjay M. Jachak**. "Cyclooxygenase Inhibitory Natural Products: Current Status", *Curr. Med. Chem.* **2006**, 13, 659-678.
32. **Sanjay M. Jachak**, Rahul Jain. Current Status of Target-based Antimycobacterial Natural Products. *Anti-Infective Agents in Medicinal Chemistry* **2006**, 5, 123-133.
33. **Sanjay M. Jachak**, Arvind Saklani, K. K. Bhutani. Nature-Best combinatorial chemist: Drug Discovery from Plants. *Pharmabiz Exclusive 57th Indian Pharmaceutical Congress* **2005**, December 1-3, 169-172.

Conference presentations/abstracts: 20.