


Prof. Inder Pal Singh

Education

	1994-1998	Ph.D. Natural Products Chemistry, Shizuoka University, Japan Thesis Advisor - Prof. Hideo Etoh, Thesis Title - Phloroglucinol compounds in <i>Eucalyptus</i> species as attachment-inhibitors against the blue mussel, <i>Mytilus edulis galloprovincialis</i>
	1989-1992	Ph.D. Organic Chemistry, Punjab Agricultural University, Ludhiana, India Thesis Advisor - Prof. P. S. Kalsi, Thesis Title - Chemistry and Biological Activity of Sesquiterpene Lactones from <i>Saussurea lappa</i>
	1986-1988	M.Sc. Organic Chemistry, Punjabi University, Patiala, India
	1984-1986	B.Sc. Punjabi University, Patiala, India

Academic Fellowships

Aug 2000 – March 2002	JSPS Post Doc Fellowship, Institute of Chemical Research, Kyoto University, Japan
June 1998- May 2000	Post Doctoral Fellow, Prof. W. H. Gerwick, College of Pharmacy, Oregon State University, Corvallis, OR 97331, USA
1994-1998	Monbusho Fellowship, Ministry of Education, Japan
1992-1994	Senior Research Fellowship, CSIR, New Delhi, India
1989-1992	Merit Fellowship, Punjab Agricultural University, Ludhiana, India
1981-1982	Merit Scholarship, Govt. of India

Employment

Organization	Position Held	Tenure
NIPER	Assistant Professor	01.07.2002 - 30.06.2007
NIPER	Associate Professor	01.07.2007 - 30.06.2012
NIPER	Professor	01.07.2012 - present
NIPER	Associate Dean (Student Affairs)	01.04.2013 - 31.03.2014

Academic & Research Activities

- Research Projects Granted: 12 (including four international projects)
- Research Papers: 74
- Review Articles: 10
- Book Chapters: 10
- One educational CD on HPLC training
- Invited lectures: >30
- Ph.D. students guided – 6 (completed); 8 (continuing)
- M.S. (Pharm.) students guided – 41 (completed); 5 (continuing)
- PhD Thesis evaluated: > 5; M.Sc. Thesis evaluated: > 20
- Extramural research projects evaluated: International > 15; National > 50

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Academic Contributions – Teaching

Dr Inder Pal Singh is involved in teaching postgraduate and doctoral students in various chromatographic techniques and spectroscopic techniques. He is the course coordinator for the following courses.

- Separation techniques (NP 510) for M.S. (Pharm.)
- Advanced separation techniques for research (NP 710) for Ph.D.
- Structure elucidation (NP 640) for M.S. (Pharm.)
- Advanced structure elucidation techniques for natural products (NP 810) for Ph.D.
- Chemical standardization of herbal drugs (TM-610) for M.S. (Pharm.)

Research collaborations (Past and Present)

- National Centre for Cell Science (NCCS), Pune
- National AIDS Research Institute (NARI), Pune
- Agnes Brown Duggan Chair of Oncological Research, University of Louisville, Louisville, USA
- Research School of Biology, The Australian National University, Canberra, Australia
- Molecular Immunology Laboratory, Department of Immunopathology, Postgraduate Institute of Medical Education and Research (PGIMER) Chandigarh, India
- Department of Biotechnology, Panjab University, Chandigarh
- University of Mississippi, USA

Recognitions

- Biography profiled in Marquis' WHO's WHO Asia – 2007
- Biography profiled in Marquis' WHO's WHO in the World – 2011, 2012
- Referee for Journal of Natural Products, Bioorganic and Medicinal Chemistry, Bioorganic and Medicinal Chemistry Letters, European Journal of Medicinal Chemistry, Natural Product Communications, Medicinal Chemistry, Current Medicinal Chemistry, Tetrahedron Letters, Biochemical Systematics and Ecology, Experimental Parasitology, Chemical Reviews, Medicinal Chemistry Research, Journal of Chemical Sciences etc.
- Member of various National and International Expert Committees

Conferences/seminars Co-organized

- 3rd Biennial Conference on Drug Discovery in Natural Products and Traditional Medicines (DDNPTM), November 2012, NIPER, S.A.S. Nagar, India
- 2nd Biennial Conference on Drug Discovery in Natural Products and Traditional Medicines (DDNPTM), November 2010, NIPER, S.A.S. Nagar, India
- 1st International Conference on Drug Discovery in Natural Products and Traditional Medicines (DDNPTM), November 2008, NIPER, S.A.S. Nagar, India
- Educational Programme for Drug regulatory, Industry representatives / labs from Nigeria'
- National workshop on cultivation practices of some important medicinal plants August 8 - 9, 2003, organized at NIPER.
- National workshop on curriculum development in natural products at post graduate level, November 23 – 25, 2003.

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Inder Pal Singh was born in 1967 in district Patiala, Punjab, India. He obtained his B. Sc. from Govt. Mohindra College, Patiala, M.Sc. from Punjabi University, Patiala and Ph.D. from Punjab Agricultural University, Ludhiana.

In 1994, he moved to Shizuoka University Japan on a Monbusho Fellowship by Ministry of Education, Japan and obtained Ph.D. under guidance of Prof. Hideo Etoh. During this period, he worked on isolation, characterization and biological evaluation of phloroglucinol molecules from Eucalyptus species and their evaluation for marine anti-fouling activity. In 1998, he moved to Oregon State University, Corvallis, Oregon, USA for a post doctoral fellowship in Prof. William Gerwick's laboratory where he worked on bioactive molecules from marine cyanobacteria. Two years later, he moved to Institute of Chemical Research, Kyoto University, Japan, on a JSPS fellowship for a two-year period to work on mechanism-based design and synthesis of inhibitors of peptide ligases.

He returned to India in 2002 and joined National Institute of Pharmaceutical Education and Research (NIPER), SAS Nagar as an Assistant Professor, where at present he is continuing as a Professor at the Department of Natural Products. He was Associate Dean (Student Affairs) for one year during 2013-2014.

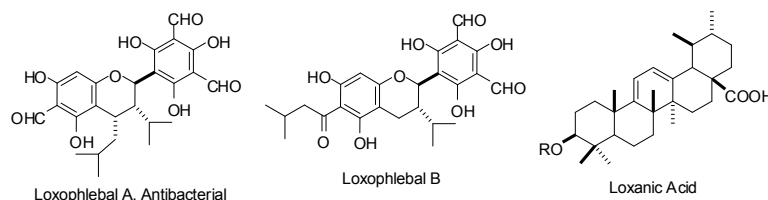
His research interests include isolation and structural characterization of bioactive molecules from natural sources, biomimetic synthesis of bioactive natural products for therapeutic areas such as cancer, HIV and leishmaniasis, and standardization of herbal/Ayurvedic formulations.

He has 74 research papers and 20 review articles/book chapters and three patent applications to his credit. Six students have completed their PhD and eight are currently enrolled for PhD under his guidance. His research has been funded by various national and international agencies. He has delivered number of invited talks. He is currently reviewer for a number of research journals such as Bioorganic and Medicinal Chemistry, Journal of Natural Products, Natural Product Research, European Journal of medicinal Chemistry, Natural Product Communications etc. He is co-author (along with Prof. R. S. Dhillon and Prof. C. Baskar) of a book 'Stereochemistry' published by Narosa Publications.

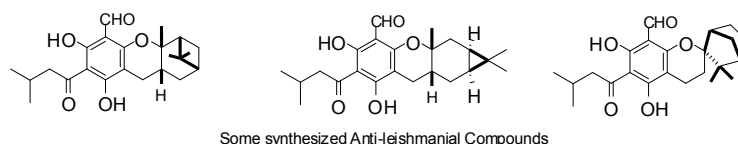
Dr Inder Pal Singh is working on challenging diseases of developing countries such as leishmaniasis, cancer and HIV. His research group is engaged in isolation of bioactive molecules from plants and microbial sources, standardization of active extracts, development of novel synthetic methodologies and synthesis of bioactive natural products and their analogs for evaluation in different therapeutic areas.

Currently he is engaged in isolation and synthesis of phloroglucinol class of compounds for their anti-infective potential. Phytochemical investigations on several Eucalyptus species resulted in isolation of several new and known compounds. Phloroglucinol terpene adducts (both natural and synthetic euglobals) have shown promising antileishmanial activity *in vitro* against the promastigotes of *L. donovani*. Analytical methods have been developed for quantification of phloroglucinols as well as other phenolics and triterpenoidal compounds from several species of Eucalypts.

Some of the bioactive phloroglucinol molecules and others (isolated as well as synthesized) are:



Some new compounds isolated from Eucalyptus

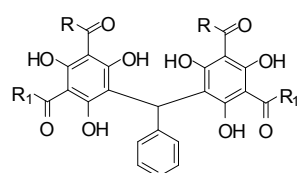


Some synthesized Anti-leishmanial Compounds

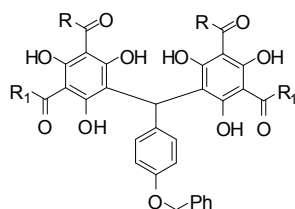
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In order to find improved leads for HIV, synthesis of analogs of known active molecules was undertaken. Dimeric phloroglucinols (mallotojaponin analogs) and berberine derivatives have shown promising activity against HIV *in vitro*. The mechanistic studies showed that these compounds are potent RTase inhibitors. Newly design caffeoyl-anilide derivatives were found to have dual inhibitory activity (double shields) against HIV. These molecules show both HIV-integrase and CCR5 inhibitory activity. Forskolin, a diterpene was isolated as anti-HIV compound from the active extract of *Coleus forskohlii*. Berberine was isolated as an active constituent from the leaves of *Argemone mexicana*. Several synthetic 9-ester derivatives of berberine were prepared and evaluated for anti-HIV activity.

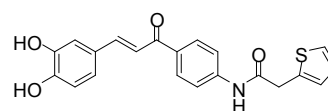
Some anti-HIV lead molecules:



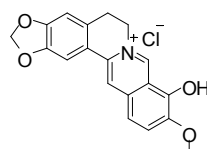
$\text{IC}_{50} = 0.28 \mu\text{M}$



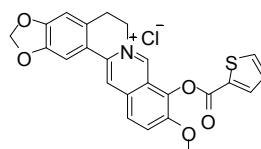
$\text{IC}_{50} = 2.71 \mu\text{M}$



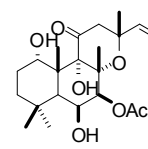
$\text{EC}_{50} = 0.09 \mu\text{M}$



$\text{EC}_{50} = 2.8 \mu\text{M}$

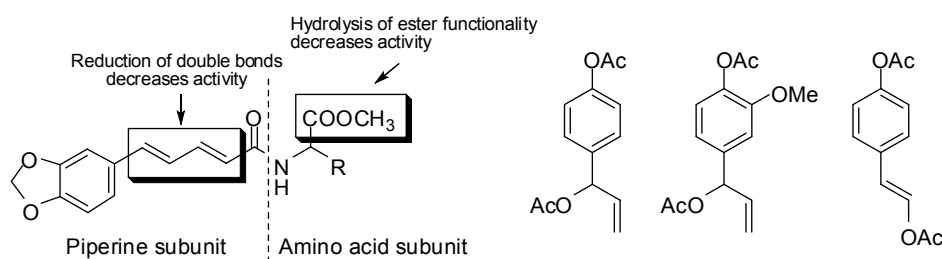


$\text{EC}_{50} = 1.82 \mu\text{M}$

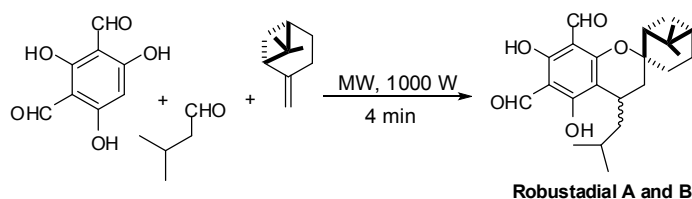


Forskolin

Various piperoyl-amino acid conjugates were synthesized and SAR established for anti-leishmanial activity. Several Indian medicinal plants were evaluated for anti-leishmanial activity. Phenyl propanoids were isolated from the active extracts of *Alpinia galanga*. Some anti-leishmanial compounds isolated or synthesized in the lab:

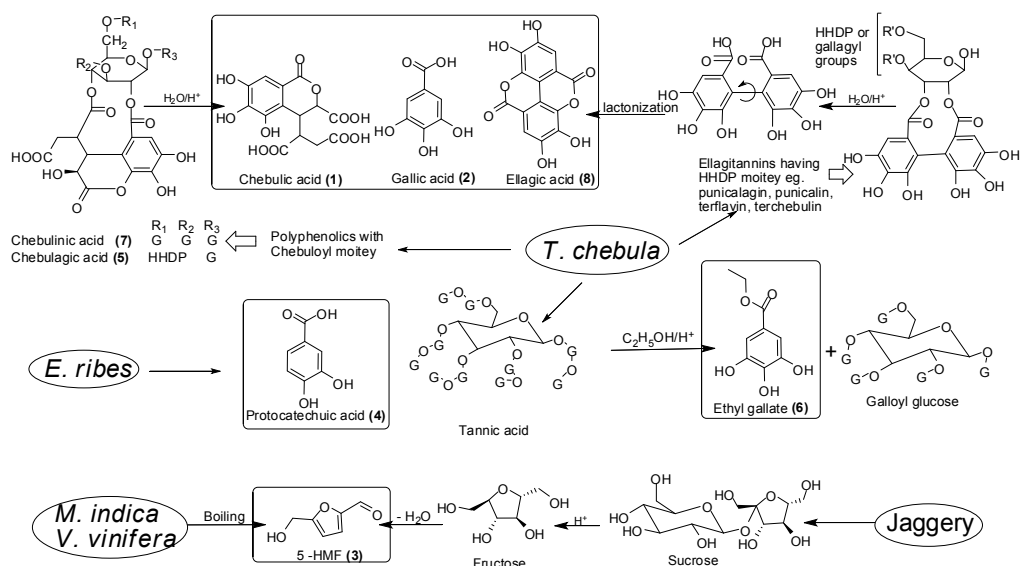


An elegant two-step synthesis of anti-malarial compounds, robustadials A and B was achieved via a three component reaction starting from phloroglucinol.



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His research interests also include standardization of Ayurvedic formulations. Several Ashvas and Aristhas such as Abhayarishta, Jirakadyaristha and Arjunarishta have been prepared in-house and standardized taking into account the detailed investigation for chemical changes occurring during fermentation (See the Figure below). Another formulation from a traditional healer was standardized with respect to its marker constituents, which is now marketed as KAFGON.



Sources of marker constituents and their transformations during fermentation in *Abhayarishta*

Quantitative NMR: His research interests include the use of NMR spectroscopy for quantitative analysis of plants and for purity determination of organic compounds. Comparative studies on purity determination have shown that the results obtained are as good as those obtained using routine analytical methods such as elemental analysis and HPLC and at the same time offer several advantages.

NMR spectroscopy was used for quantitative analysis of active constituents in several plant extracts. The content of anthocyanins in *Eugenia jambolana* was determined by qNMR spectroscopy. The anthocyanins enriched extracts were prepared by chromatography over XAD (ACs-EEX) and followed by chromatography over Sephadex LH-20 (ACs-EES). The proton NMR spectrum ACs-EEX and ACs-EES showed distinct signals at δ 9.11 (MH-4), δ 9.07 (PH-4), δ 9.04 (DH-4) for H-4 of C ring of malvidin, petunidin and delphinidin diglucoside, respectively; at δ 7.98 (MH-2' & 6'), δ 7.97 & 7.77 (PH-2' & 6'), δ 7.76 (DH-2' & 6') for H-2' & H-6' of B ring of malvidin, petunidin and delphinidin diglucoside, respectively. The internal standard Trimethoxybenzene (TMB) showed three aromatic protons signal at δ 6.09. These protons are well separated in proton NMR spectra of enriched extracts of *Eugenia jambolana*. These signals were used for the determination of three major anthocyanins individually as well as collectively in *Eugenia jambolana* pulp extract using the formula:

$$W_x = (A_x/A_s) (N_s/N_x) (M_x/M_s) W_s$$

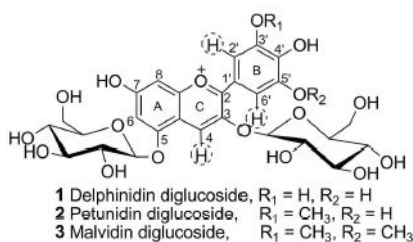
Where, W_x is weight of the analyte (per 0.6 mL of the solution), W_s is weight of standard, A_x is value of integral for analyte, A_s is value of integral of standard, N_x is number of protons of analyte integrated, N_s is number of protons of standard integrated, M_x is molecular weight of analyte and M_s is molecular weight of standard.

The signals at δ 7.98 for 2' & 6' protons of malvidin-3,5-diglucoside with an integral of 0.73 (ACs-EEX) and 1.70 (ACs-EES) and three aromatic protons of internal standard 1,3,5-trimethoxybenzene at δ 6.09 with an integral of 10.0 were considered as reference signals for quantitative analysis. Using the qNMR formula, the total malvidin-3,5-diglucoside content in ACs-EEX and ACs-EES was calculated to

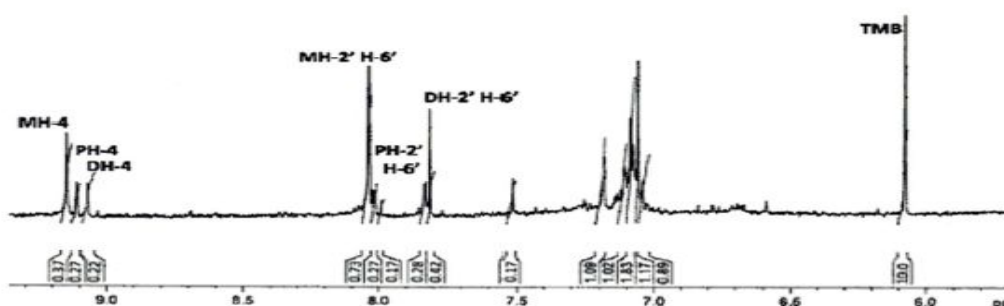
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6.44% and 15.46%, respectively. The HPLC analysis of EEX and ACs-EES showed 7.00% and 16.17% of malvidin-3,5-diglucoside, respectively. Similarly, the total delphinidin-3,5-diglucoside content in EEX and ACs-EES was calculated to 3.68% and 9.51% by qNMR and 3.82% and 8.74% by HPLC. The total petunidin-3,5-diglucoside content was 4.77% and 12.12% by qNMR and 5.09% and 12.92% by HPLC.

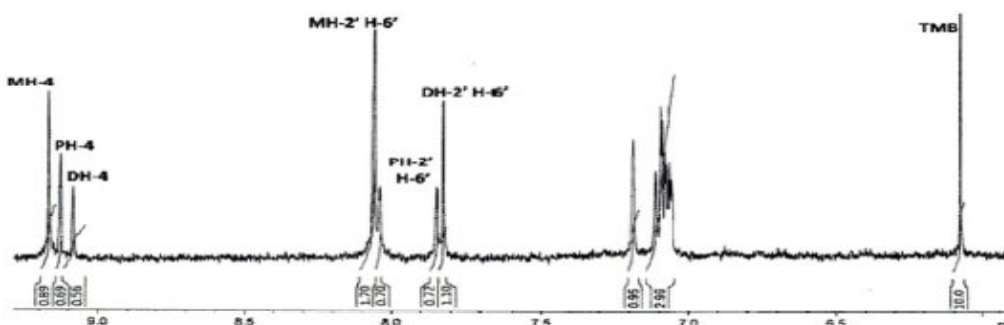
The reference signals at 9.11, 9.07 and 9.04 for H-4 protons of malvidin, petunidin and delphinidin diglucosides with integral of 0.37, 0.27 and 0.22 respectively were used for quantitative analysis of individual anthocyanin with internal standard TMB having integral of 10.0 for three aromatic protons. Using the formula, the malvidin-3,5-diglucoside, petunidin-3,5-diglucoside and delphinidin-3,5-diglucoside content in ACs-EEX and ACs-EES was calculated to 6.55% & 15.70%, 4.72% & 12.07% and 3.77% & 9.57%, respectively. These results indicate that the amount of markers calculated by using different protons of the same molecule were similar.



Protons	¹ H NMR shift in δ ppm		
	Delphinidin diglucoside	Petunidin diglucoside	Malvidin diglucoside
H-4	9.04	9.07	9.11
H-2' & H-6'	7.76	7.97 & 7.77	7.99



¹H NMR spectrum of ACs-EEX



¹H NMR spectrum of ACs-EES

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Research Projects (Completed and ongoing)

Title of the project	Funding agency	
A composite proposal for comprehensive research on Asavas and Aristas by studying markers of the plant materials used therein and stability and shelf-life studies and technology development of these formulations (2003)	Ministry of Health and Family welfare, Dept. of ISM&H, GOI, New Delhi	Co-I
Preparation, standardization and stability related issues of pippalyadi yoga - an Ayurvedic oral contraceptive (2003)	Dept. of Family Welfare, Ministry of Health and Family Welfare, GOI, New Delhi	Co-I
To develop a method to extract and purify sideroxytonals from <i>Eucalyptus loxophleba</i> foliage (2005)	Australian National University, Canberra, Australia	PI
Synthesis of natural Piperine-amino acid derivatives as potential anti-leishmanial agents (2006)	International Foundation for Science (IFS), Sweden	PI
Phytochemical and biological evaluation of selected <i>Eucalyptus</i> species (2006)	Australian National University, Canberra, Australia	PI
Identification of anti-viral compounds with potential for development of microbicides to prevent HIV infection and transmission (2006)	DBT, New Delhi	Co-PI
Discovery of potential antileishmanial chemotherapeutics and ethnotherapeutics from medicinal plants (2007)	DST, New Delhi	PI
Isolation of anthocyanins from Berries (2007)	University of Louisville, USA	PI
Anti-candida metabolites of <i>Burkholderia gladioli</i> OR-1: Identification, characterization, chemical modifications and toxicity assays (2008)	DBT, New Delhi	Co-PI
Standardization and quality control of selected anti-HIV formulations (2008)	ICMR, New Delhi	PI
Studies on anti-tumor and radioprotective potential of <i>Potentilla fulgens</i> Wall ex Hook. And characterization of its active constituents (2010)	DBT, New Delhi	Co-I
Identification of potential anti-HIV natural product analogs using molecular docking and medicinal chemistry approaches (2013)	DBT, New Delhi	PI

Industrial Consultancies

Title	Client
Quantification of Steviol glycosides in Chinese Steviol glycosides enrich extract (2010)	Stanpack Pharma Pvt. Ltd, Mumbai
Caralluma Herbal Project (2010)	Chemical Resources
HPLC analysis of polysorbate using ELSD (2008)	Panacea Biotech, Lalru
HPLC analysis of <i>Euphorbia prostata</i> using ELSD (2009)	Panacea Biotech, Lalru

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Development of a herbal product KAFGON (2007)	Mrs. Raj Katyal, Jalandhar
HPLC analysis of five herbal samples (2008)	Mrs. Raj Katyal, Jalandhar
Fingerprinting of herbal oil sample (2006)	Venus Remedies, Panchkula
Testing of oil samples on GC-MS (2005)	Alliance Engineers

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PUBLICATIONS

BOOK: Dhillon RS, Singh IP, Baskar C. 2014, STEREOCHEMISTRY, Narosa Publications.

Patent Applications Filed

1. Singh IP, Bhutani KK, Mitra D, Chauthe SK, Bharate S, Sabde S. Novel dimeric phloroglucinol compounds as anti-HIV and microbicidal agents. Patent application number – 1055/DEL/2009
2. Bhutani KK, Mitra D, Singh IP, Nafees, Sabde S. Novel alkylated derivatives of quinoline 2,4-diol with anti-HIV activity. Patent application number – 1557/DEL/2009
3. Singh IP, Bhutani KK, Mitra D, Bodiwala HS, Sabde S. Novel caffeoyl-anilides as Portmanteau inhibitors of HIV. Patent application number – 2852/DEL/2010

Research Papers

Sr. No.	Authors	Title	Impact Factor
1	Talwar KK, Singh IP, Kalsi PS	A sesquiterpenoid with plant growth regulatory activity from <i>Saussurea lappa</i> . <i>Phytochemistry</i> , 1992 , 31, 336-338.	1.133
2	Singh IP, Talwar KK, Arora JK, Chhabra BR, Kalsi PS	A biologically active guaianolide from <i>Saussurea lappa</i> . <i>Phytochemistry</i> , 1992 , 31, 2529-2531.	1.133
3	Singh IP, Kalsi PS	A novel transesterification with diazomethane. <i>Indian Journal of Chemistry</i> , 1992 , 31B, 723-724.	0.275
4	Singh IP, Goyal R, Anu, Kalsi PS	Reduction of terpenoid lactones with Na/MeOH. <i>Indian Journal of Chemistry</i> , 1993 , 32B, 1234-1236.	0.275
5	Sharma JR, Singh IP, Kaur G, Anu, Kalsi PS	Terpenoids from costus root oil as potential antifungal agents. <i>Pesticide Research Journal</i> , 1993 , 5, 151-154.	--
6	Kalsi PS, Mittal V, Singh IP, Chhabra BR	Pseudoguaianolides from <i>Parthenium hysterophorus</i> . <i>Fitoterapia</i> , 1995 , LXVI, 94.	--
7	Kalsi PS, Sharma A, Singh A, Singh IP, Chhabra BR	Biogenetically important sesquiterpenes from <i>Cyperus rotundus</i> . <i>Fitoterapia</i> , 1995 , LXVI, 191.	--
8	Singh IP, Etoh H	New macrocarpal-am-1 from <i>Eucalyptus amplifolia</i> . <i>Bioscience Biotechnology Biochemistry</i> , 1995 , 59, 2330-2332.	0.889
9	Singh IP, Takahashi K, Etoh H	Potent attachment-inhibiting and -promoting substances for the blue mussel, <i>Mytilus edulis galloprovincialis</i> , from two species of <i>Eucalyptus</i> . <i>Bioscience Biotechnology Biochemistry</i> , 1996 , 60, 1522-1523.	0.913
10	Singh IP, Hayakawa R, Etoh H, Takasaki M, Konoshima T	Grandinal, a new phloroglucinol dimer from <i>Eucalyptus grandis</i> . <i>Bioscience Biotechnology Biochemistry</i> , 1997 , 61, 921-923.	0.919
11	Singh IP, Etoh H, Asai E, Kikuchi, K, Ina K, Koyasu K, Terada Y	Flavonoids and stilbenes as repellents against the blue mussel, <i>Mytilus edulis galloprovincialis</i> . <i>Natural Product Sciences</i> , 1997 , 3, 49-54.	--
12	Singh IP, Umehara K, Etoh H, Takasaki M, Konoshima T	Euglobals-G6 and -G7, two new phloroglucinol-monoterpene adducts from <i>Eucalyptus grandis</i> . <i>Phytochemistry</i> , 1998 , 47, 1157-1159.	1.179

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13	Umehara K, Singh IP , Etoh H, Takasaki M, Konoshima T	Five phloroglucinol-monoterpene adducts, from <i>Eucalyptus grandis</i> . <i>Phytochemistry</i> , 1998 , 49, 1699-1704.	1.179
14	Terada Y, Saito J, Kawai T, Singh IP , Etoh H	Structure-activity relationship of phloroglucinol compounds from <i>Eucalyptus</i> as marine antifoulants. <i>Bioscience Biotechnology Biochemistry</i> , 1999 , 63, 276-280.	0.973
15	Singh IP , Milligan KE, Gerwick WH	Tanikolide, a toxic and antifungal lactone from the marine cyanobacterium <i>Lyngbya majuscula</i> . <i>Journal of Natural Products</i> , 1999 , 62, 1333-1335.	1.652
16	Singh IP , Umehara K, Etoh H	Macrocarpals in <i>Eucalyptus</i> spp. As Attachment-inhibitors against the blue mussel. <i>Natural Product Letters</i> , 2000 , 14, 11-15.	0.732
17	Takasaki M, Konoshima T, Etoh H, Singh IP , Tokuda H, Nishino H	Cancer chemopreventive activity of euglobal-G1 from leaves of <i>Eucalyptus grandis</i> . <i>Cancer Letters</i> , 2000 , 155, 61-65.	1.741
18	Ban T, Singh IP , Etoh H	Polygodial, a potent attachment-inhibiting substance for the blue mussel, <i>Mytilus edulis galloprovincialis</i> from <i>Tasmania lanceolata</i> . <i>Bioscience Biotechnology Biochemistry</i> . 2000 , 64, 2669-2701.	0.968
19	Matsumoto T, Singh IP , Etoh H, Tanaka H	The first total synthesis of grandinal, a new phloroglucinol derivative isolated from <i>Eucalyptus grandis</i> . <i>Chemistry Letters</i> , 2001 , 210-211.	1.557
20	Etoh H, Kondoh T, Noda R, Singh IP , Sekiwa Y, Morimitsu K, Kubota K	Shogaols from <i>Zingiber officinale</i> as promising anti-fouling agents, <i>Bioscience Biotechnology Biochemistry</i> , 2002 , 66, 1748-1750.	0.968
21	Williamson RT, Singh IP , Gerwick WH	Taveuniamides: new chlorinated toxins from a mixed assemblage of marine cyanobacteria. <i>Tetrahedron</i> , 2004 , 60, 7025-7033.	2.276
22	Singh DD, Chitra G, Singh IP , Bhutani KK.	Immunostimulatory compounds from <i>Vitex negundo</i> . <i>Indian Journal of Chemistry</i> , 2005 , 44B, 1288-1290.	0.446
23	Bharate SB, Chauthe SK, Bhutani KK, Singh IP*	An efficient two step synthesis of Jensenone isolated from <i>Eucalyptus jensenii</i> . Synthesis of analogues and evaluation as antioxidants. <i>Australian Journal of Chemistry</i> , 2005 , 58, 551-555.	1.456
24	Bharate SB, Bhutani KK, Khan SI, Tekwani BL, Jacob MR, Khan IA, Singh IP*	Biomimetic synthesis, antimicrobial, antileishmanial and antimalarial activities of euglobals and their analogues. <i>Bioorganic & Medicinal Chemistry</i> , 2006 , 14, 1750-1760.	2.662
25	Bharate SB, Singh IP*	A two-step biomimetic synthesis of antimalarial robustadials A and B. <i>Tetrahedron Letters</i> , 2006 , 47, 7021 – 7024.	2.615
26	Bharate SB, Khan SI, Yunus NAM, Chauthe SK, Jacob MR, Tekwani BL, Khan IA, Singh IP*	Antiprotozoal and antimicrobial activities of <i>O</i> -alkylated and formylated acylphloroglucinols. <i>Bioorganic & Medicinal Chemistry</i> , 2007 , 16, 87-96.	2.662
27	Singh IP , Bharate SB, Singh A, Bhutani KK	Fate of embelin in Pippalyadi Yoga, an oral Ayurvedic contraceptive: Structure of Embelin-borax complex and evaluation of anti-fertility activity. <i>Indian Journal of Chemistry</i> , 2007 , 46B, 320-325.	0.368
28	Bodiwala HS, Singh G, Singh R, Dey CS, Sharma SS, Bhutani KK, Singh IP*	Antileishmanial amides and lignans from <i>Piper cubeba</i> and <i>Piper retrofractum</i> . <i>Journal of Natural Medicines</i> , 2007 , 61, 418-421.	0.424
29	Bharate SB, Khan SI, Tekwani BL, Jacob MR, Khan IA, Singh IP*	S-Euglobals: biomimetic synthesis, antileishmanial, antimalarial and antimicrobial activities. <i>Bioorganic & Medicinal Chemistry</i> ,	2.822

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		2008, 1328-1336.	
30	Bhrahmbhatt KG, Ahmed N, Singh IP, Bhutani KK	Aromatization and chemoselective alkylation of 1-methyl-3,4-dihydro-β-carboline-3-carboxylic acid and its derivatives. <i>Tetrahedron Letters</i> , 2009, 50, 5501-5504.	2.538
31	Lal UR, Tripathi SM, Jachak SM, Bhutani KK, Singh IP*	HPLC analysis and standardization of Arjunarishta – An Ayurvedic cardioprotective formulation. <i>Scientia Pharmaceutica</i> , 2009, 77, 605-616.	--
32	Bodiwala HS, Sabde S, Mitra D*, Bhutani KK*, Singh IP*	Anti-HIV diterpenes from <i>Coleus forskhlii</i> . <i>Natural Product Communications</i> , 2009, 4, 1173-1175.	0.746
33	Kaur A, Singh R, Dey CS, Sharma SS, Bhutani KK, Singh IP*	Antileishmanial phenylpropanoids from <i>Alpinia galangal</i> (Linn.) Willd. <i>Indian Journal of Experimental Biology</i> , 2010, 48, 314-317.	0.599
34	Chauthe SK, Bharate, SB, Sabde S, Mitra D*, Bhutani KK, Singh IP*	Biomimetic Synthesis and Anti-HIV Activity of Dimeric Phloroglucinols. <i>Bioorganic & Medicinal Chemistry</i> , 2010, 18, 2029-2036.	2.822
35	Lal UR, Tripathi SM, Jachak SM, Bhutani KK, Singh IP*	Chemical changes during fermentation of <i>Abhayarishta</i> and its standardization by HPLC-DAD. <i>Natural Product Communications</i> , 2010, 5, 575-579.	0.894
36	Nafees A, Brahmbhatt KG, Sabde S, Mitra D, Singh IP, Bhutani KK	Synthesis and anti-HIV activity of alkylated quinoline 2,4-diols. <i>Bioorganic & Medicinal Chemistry</i> , 2010, 18, 2872 – 2879.	2.822
37	Singh IP*, Jain SK, Kaur A, Singh S, Kumar R, Garg P, Sharma SS, Arora SK	Synthesis and antileishmanial activity of piperoyl-amino acid conjugates. <i>European Journal of Medicinal Chemistry</i> , 2010, 45, 3439-3445.	3.269
38	Sidana J, Rohilla RK, Roy N, Barrow RA, Foley WJ*, Singh IP*	Antibacterial sideroxylonals and loxophlebal a from <i>Eucalyptus loxophleba</i> foliage. <i>Fitoterapia</i> , 2010, 81, 878-883.	1.899
39	Kumar R, Gupta P, Garg P, Singh IP	Active site binding modes of dimeric phloroglucinols for HIV-1 reverse transcriptase, protease and integrase. <i>Bioorganic & Medicinal Chemistry Letters</i> , 2010, 20, 4427-4431.	2.65
40	Bhrahmbhatt KG, Ahmed N, Sabde S, Mitra D, Singh IP, Bhutani KK	Synthesis and evaluation of β-carboline derivatives as inhibitors of human immunodeficiency virus. <i>Bioorganic & Medicinal Chemistry Letters</i> , 2010, 20, 4416-4419.	2.65
41	Lal UR, Tripathi SM, Jachak SM, Bhutani KK, Singh IP*	HPLC analysis of Jirakadyarishta and chemical changes during fermentation. <i>Natural Product Communications</i> , 2010, 5, 1767-1770.	0.894
42	Bedi N, Bedi PMS, Bodiwala HS, Singh IP, Bansal P	Scientific evaluation of an innovative herbal medicine for relief in respiratory disorders. <i>Canadian Journal of Pure and Applied Sciences</i> , 2010, 4, 1249-1255.	--
43	Nafees A, Brahmbhatt K, Singh IP, Bhutani KK	Efficient chemoselective alkylation of quinolin-2,4-diol derivatives in water. <i>Journal of Heterocyclic Chemistry</i> , 2011, 48, 237-240.	0.899
44	Bodiwala HS, Sabde S, Gupta P, Mukherjee R, Kumar R, Garg P, Mitra D*, Bhutani KK, Singh IP*	Design and synthesis of Caffeoyl-Anilides as portmanteau Inhibitors of HIV-1 integrase and CCR5. <i>Bioorganic & Medicinal Chemistry</i> , 2011, 19, 1256–1263.	2.822
45	Ghagargunde KG, Sidana J, Singh IP*	HPTLC fingerprinting and quantification of phenolics in Brahmarasayana – An Ayurvedic rejuvenator. <i>Analytical Chemistry Letters</i> , 2011, 1, 123 – 129.	--
46	Kaur A, Singh IP*	Densitometric determination of antileishmanial phenylpropanoids of <i>Alpinia galanga</i> (Linn.) Willd. <i>Journal of Planar Chromatography – Modern TLC</i> , 2011, 24, 352-256.	1.247

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47	Sabde S, Bodiwala HS, Karmase A, Deshpande PJ, Kaur A, Ahmed N, Chauthe SK, Brahmhatt KG, Phadke RU, Mitra D*, Bhutani KK*, Singh IP*	Anti HIV activity of Indian medicinal plants. <i>Journal of Natural Medicines</i> , 2011 , 65, 3-4, 662-669.	1.469
48	Bodiwala HS, Sabde S, Mitra D*, Bhutani KK, Singh IP*	Synthesis of 9-Substituted Derivatives of Berberine as Anti-HIV Agents. <i>European Journal of Medicinal Chemistry</i> , 2011 , 46, 1045-1049.	3.269
49	Sidana J, Foley WJ, Singh IP*	Quantitative analysis of euglobals in <i>Eucalyptus loxophleba</i> leaves by qNMR. <i>Natural Product Communications</i> , 2011 , 6, 1281-1284.	0.894
50	Bharate S, Singh IP	Quantitative structure–activity relationship study of phloroglucinol-terpene adducts as anti-leishmanial agents. <i>Bioorganic & Medicinal Chemistry Letters</i> , 2011 , 21, 4310-4315.	2.661
51	Sidana J, Singh S, Arora SK, Foley WJ, Singh IP*	Formylated phloroglucinols from <i>Eucalyptus loxophleba</i> foliage. <i>Fitoterapia</i> , 2011 , 82, 1118-1122.	1.899
52	Sidana J, Singh S, Arora SK, Foley WJ, Singh IP*	Terpenoidal constituents of <i>Eucalyptus loxophleba</i> ssp. <i>Lissophloia</i> . <i>Pharmaceutical Biology</i> , 2012 , 50, 823-827.	0.878
53	Sidana J, Foley WJ, Singh IP*	Isolation and quantitation of ecologically important phloroglucinols and other compounds from <i>Eucalyptus jensenii</i> . <i>Phytochemical Analysis</i> , 2012 , 23, 483-491.	2.633
54	Bharti P, Anand V, Chander J, Singh IP, Singh TV, Tewari R	Heat stable antimicrobial activity of <i>Burkholderia gladioli</i> OR1 against clinical drug resistant isolates. <i>Indian Journal of Medical Research</i> , 2012 , 135, 666-671.	1.826
55	Chauthe SK, Bharate SB, Giridharan Periyasamy G, Khanna A, Bhutani KK, Mishra PD, Singh IP*	One pot synthesis and anticancer activity of dimeric phloroglucinols. <i>Bioorganic & Medicinal Chemistry Letters</i> , 2012 , 22, 2251-2256.	2.661
56	Aqil F, Gupta A, Munagala R, Jeyabalan J, Kausar H, Sharma RJ, Singh IP, Gupta RC	Antioxidant and antiproliferative activities of anthocyanin/ellagitannin-enriched extracts from <i>Syzygium cumini</i> L. ('jamun', the Indian Blackberry). <i>Nutrition and Cancer: An International Journal</i> , 2012 , 64 (3) 428-438.	2.553
57	Chauthe SK, Sharma R, Aqil F, Gupta RC, Singh IP*	qNMR: an applicable method for quantitative analysis of medicinal plant extracts and herbal products. <i>Phytochemical Analysis</i> , 2012 , 23 (6), 689-696.	2.633
58	Kausar H, Jeyabalan J, Aqil F, Chabba D, Sidana J, Singh IP, Gupta RC	Berry anthocyanidins synergistically suppresses growth and invasive potential of human non-small-cell lung cancer cells. <i>Cancer Letters</i> , 2012 , 325 (1), 54-62.	4.86
59	Aqil F, Jeyabalan J, Kausar H, Bansal SS, Sharma RJ, Singh IP, Vadhanam MV, Gupta RC	Multi-layer polymeric implants for sustained release of chemopreventives. <i>Cancer Letters</i> , 2012 , 326 (1), 33-40.	4.86
60	Hubert DJ, Celine N, Johnson BN, Florence T, Bonaventure NT, Gupta I, Reddy GV, Singh IP, Sehgal R	Ethnopharmacological investigation and in vitro anti-giardial activity of some Cameroonian medicinal plants. <i>Pharmacologia</i> , 2012 , 3, 672-678.	--
61	Manikandan P, Ramalingam SM, VinothiniG, Ramamurthi VP, Singh IP, Anandan R, Gopalakrishnan M, Nagini S	Investigation of the chemopreventive potential of neem leaf subfractions in the hamster buccal pouch model and phytochemical characterization. <i>European Journal of Medicinal Chemistry</i> , 2012 , 56, 271-281.	3.346
62	Mahajan S, Singh IP*	Determining and reporting purity of organic molecules - why	1.437

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		qNMR. <i>Magnetic Resonance in Chemistry</i> , 2013 , 51 (2), 76-81.	
63	Ahmed N, Brahmabhatt KG, Khan SI, Jacob M, Tekwani BL, Sabde S, Mitra D, Singh IP , Khan IA, Bhutani KK	Synthesis and biological evaluation of tricyclic guanidine analogues of batzelladine K for antimalarial, antileishmanial, antibacterial, antifungal and anti-HIV activities. <i>Chemical Biology & Drug Design</i> , 2013 , 81, 491–498.	2.282
64	Sharma RJ, Aqil F, Jeyabalan J, Gupta RC, Singh IP*	Quantitative analysis of <i>Eugenia jambolana</i> (Willd. Ex O.Berg) for its major anthocyanins by Densitometry. <i>Journal of Planar Chromatography – Modern TLC</i> . 2013 , 26, 363-369.	0.767
65	Sidana J, Neeradi D, Choudhary A, Singh S, Foley WJ, Singh IP*	Anti-leishmanial polyphenols from <i>Corymbia maculata</i> . <i>Journal of Chemical Sciences</i> , 2013 , 125, 765-775.	1.177
66	Hubert DJ, Celine N, Michel N, Reddy GV, Florence TN, Johnson BN, , Bonaventure NT, Singh IP , Sehgal R	In vitro leishmanicidal activity of some Cameroonian medicinal plants. <i>Experimental Parasitology</i> . 2013 , 134, 304-308.	2.122
67	Choudhary A, Mittal AK, Radhika M, Tripathy D, Chatterjee A, Banerjee UC, Singh IP*	Two new stereoisomeric antioxidant triterpenes from <i>Potentilla fulgens</i> . <i>Fitoterapia</i> , 2013 , 91, 290–297.	2.139
68	Khan MS, Prasanna K, Mukesh N, Tripathi SM, Singh IP , Bhutani KK, Jachak SM	Analysis of Khadirarishta, an Ayurvedic formulation by HPLC and HPTLC. <i>CRIPS</i> , 2013 , 14(3), 61-65.	-
69	Handa T, Singh S, Singh IP	Characterization of a new degradation product of nifedipine catalyzed by atenolol: a typical case of alteration of degradation pathway of one drug by another. <i>Journal of Pharmaceutical and Biomedical Analysis</i> 2014 , 89, 6-17.	2.947
70	Kaur A, Kaur PK, Singh S, Singh IP*	Antileishmanial compounds from <i>Moringa oleifera</i> Lam. <i>Zeitschrift fuer Naturforschung C</i> , 2014 , 69c, 110-116.	0.604
71	Aqil F, Vadhanam MV, Jeyabalan J, Cai J, Singh IP , Gupta RC	Detection of anthocyanins/anthocyanidins in animal tissues. <i>J. Agric. Food Chem.</i> 2014 , 62 (18), 3912-3918.	2.906
72	Mahajan S, Khullar S, Mandal S, Singh IP*	A one-pot, three-component reaction for the synthesis of novel 7-arylbenzo[<i>c</i>]acridine-5,6-diones,. <i>Chemical Communications</i> , 2014 , 50, 10078-10081.	6.718
73	Choudhary A, Radhika M, Chatterjee A, Banerjee UC, Singh IP*	Qualitative and quantitative analysis of <i>Potentilla fulgens</i> roots by NMR, MALDI-TOF-MS, ESI-MS/MS and HPLC-UV. <i>Phytochemical Analysis</i> , 2014 , (Accepted)	2.48
74	Choudhary A, Sharma RJ, Singh IP*	Quantitative analysis of major sesquiterpene lactones in essential oil of <i>Inula racemosa</i> and <i>Saussurea lappa</i> using qNMR. <i>Journal of Essential Oil Bearing Plants</i> , 2014 (Accepted)	0.187

Review Articles

Sr. No.	Authors	Title	Impact Factor
1	Singh IP , Etoh H	Biological activities of phloroglucinol derivatives from <i>Eucalyptus</i> spp. <i>Natural Product Sciences</i> , 1997 , 3, 1-7.	--
2	Singh IP* , Bharate SB, Bhutani KK	Anti-HIV natural products. <i>Current Science</i> , 2005 , 89 (2), 269-290.	0.728

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3	Singh IP*, Bharate SB, Bhutani KK	Interactions of herbs and food products with drugs: grape fruit juice as an example. <i>Natural Product Radiance</i> , 2005 , 4, 107-112.	--
4	Singh IP*, Bharate SB	Phloroglucinol compounds of natural origin. <i>Natural Product Reports</i> , 2006 , 23, 558 - 591.	7.89
5	Singh IP*, Sidana J, Bansal P, Foley WJ	Phloroglucinol compounds of therapeutic interest: global patent and technology status. <i>Expert Opinion on Therapeutic Patents</i> , 2009 , 19 (6), 847-866.	1.335
6	Singh IP*, Sidana J, Bharate SB, Foley WJ	Phloroglucinol compounds of natural origin: Synthetic aspects. <i>Natural Product Reports</i> , 2010 , 27, 393-416.	9.202
7	Singh IP*, Bodiwala HS	Recent advances in anti-HIV natural products. <i>Natural Product Reports</i> , 2010 , 27, 1781-1800.	9.202
8	Singh IP*, Chauthe S	Small molecule HIV entry inhibitors - Part I: Chemokine receptor antagonists: 2004-2010. <i>Expert Opinion on Therapeutic Patents</i> , 2011 , 21(2), 227-269.	3.571
9	Singh IP*, Chauthe S	Small molecule HIV entry inhibitors - Part II: Attachment and fusion inhibitors: 2004-2010. <i>Expert Opinion on Therapeutic Patents</i> , 2011 , 21(3), 399-416.	3.571
10	Singh IP*, Mahajan S	Berberine and its derivatives: a patent review (2009-2012). <i>Expert Opinion on Therapeutic Patents</i> , 2013 , 23,(2), 215-231.	3.571

Book Chapters

Sr. No.	Authors	Title
1	Singh IP, Etoh H	Biofouling: screening of attachment-inhibitors and -promoters by using the blue mussel, <i>Mytilus edulis galloprovincialis</i> . In: S. G. Pandalai (Ed), Recent Research Developments in Agricultural and Biological Chemistry, Vol. 1 . Research Signpost, Trivandrum, 1997 , pp. 1-14.
2	Watanabe N, Singh IP	Analysis of aroma release from scented teas. In: H. F. Linskens and J. F. Jackson (Eds), Modern Methods of Plant Analysis, Vol. 19 . Plant Volatile Analysis, Springer-Verlag, Berlin, Heidelberg, 1997 pp. 231-258.
3	Etoh H, Singh IP	Chemistry of lycopene - A Review. In: S. G. Pandalai (Ed), Recent Research Developments in Agricultural and Biological Chemistry, Vol. 2 . Research Signpost, Trivandrum, 1998 , pp. 97-113.
4	Gerwick WH, Singh IP	Structural diversity of marine oxylipins. In: T. M. Kuo and H. W. Gardner (Eds), Lipid Biotechnology, Marcel and Dekker, New York, 2002, pp 249-275.
5	Singh IP, Etoh H, Takasaki M, Konoshima T	Euglobins - anti tumor promoters from <i>Eucalyptus</i> species. Recent Advances in Phytochemistry. Global Research Network, Trivandrum, 2000 , 1 , 51-64.
6	Singh IP	Nuclear magnetic resonance methods in structure elucidation. In: Rakesh K. Sharma and Rajesh Arora (Eds), Herbal Drugs A twenty first century perspective, Jaypee Brothers, New Delhi, 2006 , pp 163-174.
7	Singh IP*, Lal UR, Bodiwala HS, Mahajan RC, Bhutani KK	Anti-leishmanial natural products, In: Recent Progress in Medicinal Plants, Studium Press LLC, P.O. Box-722200, Houston, Texas 77072, U.S.A. 2006 , 13, 116-149.
8	Singh IP, Sidana J	Phlorotannins, In: Herminia Dominguez (Ed) Functional ingredients from algae for foods and nutraceuticals, Woodhead Publishing Ltd. UK. 2013 , pp 181-204.
9	Aqil F, Munagala R, Jeyabalan J, Joshi T, Singh IP, Gupta RC	The Indian Blackberry (Jamun), Antioxidant Capacity, and Cancer Protection In: Victor R Preedy (Ed) Cancer: Oxidative Stress and Dietary Antioxidants 2014. Elsevier Academic Press USA. 2014 , 100-114.
10	Singh IP*, Sidana J	Chemistry of the genus <i>Eucalyptus</i> . In Bhojvaid et al (Eds) <i>Eucalypts</i> in India, ENVIS centre on Forestry, FRI, Dehradun, India. 2014 , 429-469.

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Invited Lectures/Presentations (National & International)

1. Singh IP. Natural product based drug discovery. Technologies in carcinogenesis and chemoprevention. May 30-31, University of Louisville, USA.
2. Singh IP. Discovery of anti-HIV molecule based on natural leads. Indo-US symposium organized by HNBU, Garhwal and University of Texas-Pan American. Dehradun 13th December 2012.
3. Singh IP. Natural product based discovery of anti-leishmanial agents. Modi College, Patiala. 3rd March 2012.
4. Singh IP. Natural product based discovery of antileishmanial and anti-HIV agents. Indo-UK seminar on innovative medicines. Organized by IIT Chennai and University of Strathclyde UK. Hyderabad, 15th November 2011.
5. Singh IP. Avenues for an organic chemist – why become a scientist. DST-INSPIRE lecture at HNBU, Garhwal, 29th September 2011.
6. Afsana, Mittal N, Tewari R, Singh IP. Chemical investigation of *Burkholderia gladioli* OR-1. Presented at 14th Punjab Science Congress, Sangrur, Punjab, February 2011.
7. Joshi N, Ghagargunde KG, Sidana J, Singh IP. HPTLC Fingerprinting and quantification of phenolics in Brahma Rasayana – An Ayurvedic Rejuvenator. Presented at 14th Punjab Science Conference, Sangrur, Punjab, February 2011.
8. Singh IP, Lal UR, Nisha, Tripathi SM, Jachak SM, Bhutani KK. Standardization of Ayurvedic formulations: *Asava* and *Arishtas*. Presentation at Chitkara college, Punjab, India, October 2010.
9. Sharma RJ, Gupta RC, and Singh IP. Densitometric determination of anthocyanins in *Eugenia jambolana*. DDNPTM, NIPER, S.A.S. Nagar, India, November 2010.
10. Aqil F, Jeyaprakash J, Ravoori S, Gupta A, Sharma RJ, Sidana J, Singh IP, Gupta RC. Breast cancer chemopreventive potential of 'jamun', the indian blackberry. DDNPTM, NIPER, S.A.S. Nagar, India, November 2010.
11. Kaur A, Singh R, Dey CS, Sharma SS, Bhutani KK, Singh IP. Antileishmanial Phenylpropanoids from *Alpinia galanga* (Linn.) Willd. DDNPTM, NIPER, S.A.S. Nagar, India, November 2010.
12. Chauthe SK, Mitra D, Bhutani KK, Singh IP. Simple, rapid, economical and environment friendly synthesis of Antibiotic 2,4-Diacetylphloroglucinol and anti-HIV dimeric phloroglucinols. Presented at DDNPTM at NIPER, S.A.S. Nagar, India in November 2010.
13. Bodiwala HS, Sabde S, Mitra D, Bhutani KK, Singh IP. Synthesis of 9-substituted derivatives of berberine as anti-HIV agents. DDNPTM, NIPER, S.A.S. Nagar, India, November 2010.
14. Bodiwala HS, Sabde S, Mitra D, Bhutani KK, Singh IP. Design and synthesis of caffeoyl-anilides as *Portmanteau* inhibitors of HIV-1 integrase and CCR5. ISACS-1, San Francisco, USA, July 2010.
15. Sidana J, Rohilla RK, Roy N, Barrow R, Foley WJ, Singh IP. Antibacterial sideroxylenals and loxophlebal from *Eucalyptus loxophleba* foliage. DDNPTM, NIPER, S.A.S. Nagar, India, November 2010.
16. Singh IP, Jain SK, Kaur A, Sharma SS, Singh S, Arora SK. Synthesis and antileishmanial activity of Piperine-amino acid conjugates. Presented at workshop on 'Chemistry in Nature – Natural resources: chemical, biological and environmental aspects' in Thailand, December 2009.
17. Jain SK, Kaur AK, Singh IP. Synthesis of Piperoyl-amino acid conjugates as potential antileishmanial agents. Presented at DDNPTM at NIPER, S.A.S. Nagar, India in November 2008.
18. Chauthe SK, Bharate SB, Sabde S, Mitra D, Bhutani KK, Singh IP. Synthesis and biological evaluation of Mallotojaponin analogues as potential anti-HIV agents. Presented at DDNPTM at NIPER, S.A.S. Nagar, India in November 2008.

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19. Bodiwala HS, Sabde S, Mitra D, Bhutani KK, Singh IP. Anti-HIV diterpenes from *Coleus forskohlii*. DDNPTM, NIPER, S.A.S. Nagar, India, November 2008.
20. Singh IP and Bharate SB. Biomimetic synthesis of naturally occurring phloroglucinol compounds. Presented at SLIET meeting on Green Chemistry, March 2007.
21. Lal UR, Nisha, Tripathi SM, Jachak SM, Bhutani KK, Singh IP. Separation and determination of flavonoids and other phenolic compounds in fermented Ayurvedic formulations by RP HPLC. Presented at National Symposium on New Challenges in Chemistry, GNDU, Amritsar, Punjab, March 2006.
22. Singh IP, Bharate SB, Khan SI, Tekwani BL, Jacob MR, Khan IA, Bhutani KK. Biogenetic thinking for designing novel molecules: Biomimetic synthesis and biological evaluation of euglobals and their analogues. Presented at National Symposium on New Challenges in Chemistry, GNDU, Amritsar, Punjab, March 2006.
23. Singh IP, Bharate SB, Khan SI, Tekwani BL, Jacob MR, Khan IA, Bhutani KK. Biomimetic synthesis and biological evaluation of euglobals and their analogues. Presented at OCCB held at Pune in 2006.
24. Singh IP, Bharate SB, Chauthe SK, Bhutani KK. Application of Duff's reagent in natural product synthesis: An efficient two-step synthesis of Jensenone and its biological evaluation. Presented at National Conference on New Trends in Chemistry at Jalandhar, Punjab, India in November 2005.
25. Bharate SB, Chauthe SK, Bhutani KK, Singh IP. Biomimetic synthesis and LC-MS assisted separation of euglobals G1-G4. Oral Presentation at ISMAS-WS 2004 on Mass Spectrometry, Shimla, India in October 2004.
26. Bharate SB, Bhutani KK, Singh IP. Biomimetic synthesis of anti-malarial robustadiols. Presented at International Conference on Chemistry-Biology Interface: Synergistic New Frontiers (CBISNF) held at New Delhi, India in November 2004.

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Currently enrolled students

PhD	M.S.(Pharm.)	Staff
Ram Jee Sharma	Richa Baghel	Rakesh Kumar (JTA)
Shivani Mahajan	Revathi	
Alka Choudhary	Jignesh	
Shiv Gupta	Chandresh	
Isha Saraf	Sarala	
Shah Purvi		
Sanjay Kumar		
Shweta		

Past students and their current affiliations

PhD Students

Name	Thesis title	Current affiliation
Sandip B. Bharate	Design and biomimetic synthesis of phloroglucinol compounds for anti-infective agents (2007)	Scientist, Indian Institute of Integrative Medicine (IIIM), Jammu
Uma Ranjan Lal	Development of analytical profiles of selected Arishtas (2010)	Assistant Professor, BITS Mesra, Jharkhand
Hardik S Bodiwala	Natural products and their analogs as potential anti-HIV agents (2011)	Research Scientist, Zydus Cadila, Ahmedabad, Gujarat
Jasmeen Sidana	Phytochemical investigations on selected Eucalyptus species for potential anti-leishmanial activity (Thesis submitted 2011)	Assistant Professor, Lovely Professional University, Punjab
Siddheshwar K Chauthe	Design and synthesis of natural product analogues as potential anticancer and anti-HIV agents (Thesis submitted 2012)	Postdoc at Georgetown University, USA
Amandeep Kaur	Phytochemical investigations on selected medicinal plants for antileishmanial activity (2012)	GVK Biosciences, Gurgaon

M. S. (Pharm.) Students

Sr No	Name	Thesis title	Year
1	Siddheshwar K Chauthe	Synthesis of phloroglucinol derivatives as potential anti-malarial compounds	2003
2	Hardik S Bodiwala	Chemistry and biology of chemical constituents of <i>Piper cubeba</i> and <i>Piper retrofractum</i>	2005
3	Nafees Ahmad	Synthesis of <i>O</i> -alkylated phloroglucinol derivatives as potential anti-malarial agents	2005
4	Jasmeen Sidana	Phytochemical investigations on <i>Eucalyptus loxophleba</i>	2006
5	Nisha Jambu	Isolation and characterization of marker constituents from Ayurvedic formulations <i>Arjunarishta</i> , <i>Rohitakrishta</i> and <i>Babbularishta</i>	2006
6	Amandeep Kaur	Phytochemical investigations on <i>Alstonia scholaris</i>	2007
7	Shreyans Jain	Synthesis and antileishmanial activity of Piperine-Amino acid conjugates	2007

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8	Aniket Karmase	Phytochemical investigations of <i>Aegle marmelos</i>	2008
9	Vinod Mandowara	Synthesis of natural phloroglucinol compounds as potential antimicrobials and antileishmanials	2008
10	Amit Kumar Gautam	Synthesis of Piperoyl-Amino acids conjugates	2008
11	Ram Jee Sharma	Large-scale isolation of Anthocyanins from <i>Eugenia jambolana</i>	2009
12	Maulik G. Patel	Phytochemical investigations of <i>Eucalyptus paniculata</i>	2009
13	Kiran Ghagargunde	Standardization of Ayurvedica formulation <i>Brahma Rasayana</i>	2010
14	Neha Jain	Chemical aspects of Ayurvedic Detoxification of <i>Plumbago zeylanica</i>	2010
15	Dharmendra Yadav	Synthesis of Naturally occurring Phloroglucinol glycosides	2010
16	Afsana	Chemical investigation of <i>Burkholderia gladioli</i>	2011
17	Aruna Meena	Standardization of Ayurvedic formulation <i>Dravyadi kvatha churna</i>	2011
18	Neeta Joshi	Chemical investigation of <i>Bacillus vallismortis</i>	2011
19	Rajesh Ghanta	Standardization of Ayurvedic formulation <i>Haritakiyadi churna</i>	2011
20	Vijay Rakholiya	Phytochemical investigation of <i>Eucalyptus tereticornis</i>	2012
21	Deep Patel	Synthesis of Macrocarpal analogues	2012
22	Naresh Marella	Synthesis and Biological evaluation of Cubebin and Berberine analogs for anti-leishmanial activity	2012
23	Divya Sreepada	Synthesis of phloroglucinol and sesquiterpene derivatives	2012
24	Ekhar Prashant	Isolation of Gingerols and Shogaols from <i>Zingiber officinalis</i>	2012
25	Lokesh Joshi	Synthesis of Piperoyl- dipeptide conjugates for anti-leishmanial activity	2012
26	Priyanka Jindal	Standardization of <i>Vasant Malti Rasa</i> and <i>Phaltrikadi kwatha</i>	2012
27	Jyothsana	Standardization of Marketed samples of <i>Abhrak-bhasma</i> and <i>Dhantri lauh</i>	2012
28	G. Krishna Rajitha	Scale-up and preformulation studies on anti-HIV caffeoyl-anilide derivatives	2013
29	Sourabh jain	Isolation and characterization of chemical constituents from aerial parts of <i>Tephrosia purpurea</i>	2013
30	Priyanka Mangal	Standardization and quantification of plant materials and their herbal products using quantitative NMR technique	2013
31	Kathik Dandi	Phytochemical investigation of selected Eucalyptus species	2013
32	Srikanth Munnagi	Chemical investigation of radio-protective fraction isolated from <i>Bacillus</i> sp. INM-1	2013
33	Sanjay Kumar	Scale-up and preformulation studies on anti-HIVphloroglucinol compounds	2013
34	Yogin Mevada	Finding a substitute of cow urine for Ayurvedic formulations	2013
35	Parikh Mayurkumar N	Isolation of marker compounds from <i>Andrographis paniculata</i> and <i>Butea monosperma</i>	2014
36	Manoj Kumar Sharma	Synthesis of sulphated flavanoid-O-glucosides	2014

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37	Naik Dharav Hitendrabhai	Design and synthesis of quinoline derivatives as antileishmanial and anti-HIV agents	2014
38	Nanasaheb Dhavan	Synthesis of N-acetyl-L-tryptophan-N-glucoside	2014
39	Haritha Chowdhary	Synthesis of 4-substituted quinolin-2-(1 <i>H</i>)one analogs as potential anti-HIV agents	2014
40	Seema Soni	Development and standardization of solid dosage form (tablet) of Phatrikadi Kwatha	2014
41	Roohi Mohi-ud- din	Development and standardization of liquid dosage form (syrup) of phaltrikadi kwatha	2014