

## FACULTY PROFILE

1. Name: **Dr. Mahendra Rana**

2. Designation: **Assistant Professor**

3. Qualification: **M. Pharm, Ph. D**

4. Area of Specialization/Research field: **Pharmacognosy, Herbal Nanotechnology,**

**Pharmaceutical Jurisprudence**

5. Awards/Recognitions: **AICTE Career Award for Young Teachers**

**Golden Jubilee of APTI - APTICON 2016 Award for valuable contribution to the profession of Pharmacy**

6. Number of Research projects:

Sl. No.	Particulars	Funding Agency
01	Entrepreneurship Development Cell ( <b>Principal Investigator</b> )	AICTE, New Delhi
02	‘Pharmacognostical investigations on Bryophytes and their evaluation for Pharmaceutical applications’ ( <b>Principal Investigator</b> )	AICTE, New Delhi
03	Pharmacognostical, Phytochemical and Ethnopharmacological investigations on Marchantia species growing in Kumaun Himalayas ( <b>Principal Investigator</b> )	UGC, New Delhi
04	Assessment of Core Competency of Skills and Natural Resources of the Districts ( <b>Co - Principal Investigator</b> )	Directorate of Economics and Statistics, Uttarakhand Government, Dehradun
05	Status of the Health and Pharmaceutical Care in the Hills of Uttarakhand ( <b>Principal Investigator</b> )	Directorate of Economics and Statistics, Uttarakhand Government, Dehradun
06	Revisiting Hill Agriculture, Medicinal & Aromatic Plants and Traditional Knowledge System ( <b>Co - Principal Investigator</b> )	Directorate of Economics and Statistics, Uttarakhand Government, Dehradun
07	“Formulation and development of healing Plasters from the herbs of Kumaun Himalaya” ( <b>Principal Investigator</b> )	UGC 12 <sup>th</sup> Plan Innovative Research, IQAC, Kumaun University, Nainital
08	“Environmentally Sustainable Smart Synthesis of Carbon Nano material along with the production of High Value Added Fuel and Additives for the Concrete Mixture from Waste Plastic, Hazardous Waste Around the Himalayan Region” ( <b>Co - Principal Investigator</b> )	Medium Grants (MG) Projects, National Mission on Himalayan Studies

7. Number of Ph. D candidates successfully completed: **01**

8. Number of Ph. D candidates currently working: **04, 02 (under co-supervision)**

9. Publications:

Research Articles published in journals

S. No.	Author's Name	Name of the Journal (Volume no. and Page no.)	Title of the Paper
1.	Deepa Bisht, Chandan S. Chanotiya, <b>Mahendra Rana</b> and Manoj Semwal	Journal Of Industrial Crops And Products, 30 (3), 422-426	Variability in essential oil and bioactive chiral monoterpenoid compositions of Indian oregano ( <i>Origanum vulgare L.</i> ) populations from northwestern Himalaya and their chemotaxonomy
2.	Sah M.L., Mishra D., Sah S.P. and <b>Rana M.</b>	Indian Drugs, 47(4), 45-49	Formulation and Evaluation of Herbal Mosquito repellent preparations
3.	Amita J. Rana, Kaushik Joshi, Ajay S. Bisht, <b>Mahendra Rana</b>	OAKS, ISSN: 0975 – 5918, Issue 8, 18-28	Phytochemical analysis and in-vitro free radical scavenging potential of <i>Rumex nepalensis</i> SPRENG from Kumaun Himalaya
4.	Neha Saklani, Vijay K Purohit, Harish C Andola, <b>Mahendra Rana</b> , R S Chauhan, A R Nautiyal	Medicinal Plants - International Journal of Phytomedicines and Related Industries, 4(3), 115-120.	Biological activities of <i>Valeriana wallichii</i> DC
5.	K. Bankoti, <b>M. S. Rana</b> , M.K Bharadwaj	IOSR Journal of Pharmacy, 2(5), 01-06	Accelerated stability study of herbal capsules
6.	Deepak Singh Janoti, A.K.S. Rawat, <b>Mahendra Rana</b>	JPR:BioMedRx: An International Journal, 1(7), 653-656	Comparative Fluorescence analysis and Qualitative Phytochemical analysis of <i>Citrus limettoides</i> , <i>Citrus pseudolimon</i> of Nainital District
7.	Deepak Singh Janoti, <b>Mahendra Rana</b> , A. K. S. Rawat	Journal of Pharmacognosy and Phytochemistry, 2(5), 24-26	Comparative antioxidant activity of essential oil of leaves of <i>Citrus limettoides</i> and <i>Citrus pseudolimon</i> of Nainital district
8.	Amita J. Rana, <b>Mahendra Rana</b> , Vijay Juyal	International Journal of Chemical and Pharmaceutical Sciences, 5(3), 1-7	Prospective of thiosemicarbazones as a promising anticonvulsant: A review
9.	Santosh Kumar Behera, Amrita Panda, <b>Mahendra Rana</b> and Satpal Singh Bisht	Journal of Chemical Engineering and Chemistry Research, 3(11), 1085-1090	Molecular Docking Studies and In-silico Computational Analysis of Analogs of Anti-malarial Drugs
10.	Rojita Mishra, <b>Mahendra Rana</b> and Satpal Singh Bisht	Journal of Chemical Engineering and Chemistry Research, 3(11), 1091-1095	Biochemical Analysis and Antioxidant Activity of Methanolic Leaf Extracts of <i>Paederia foetida</i> and <i>Tribulus terrestris</i>
11.	Amrita Kumari Panda, Satpal Singh Bisht, <b>Mahendra Rana</b> and Bodh Raj Kaushal	Journal of Chemical Engineering and Chemistry Research, 3(11), 1096-1098	Microbial Geochemistry of Yumthang Hot Water Spring, Sikkim Special Reference to Sulfide Nanoparticles
12.	Karandeep Singh*, <b>Mahendra Rana</b> , Sumit	Advances in Tissue Engineering and	Comprehensive Update on Carbon Nanotubes and their Significances

	Durgapal, Amita Rana, Suraj Pratap Verma, Vinit Raj	Regenerative Medicine,1(3), 1-11	in the Field of Pharmaceutics
13.	<b>Mahendra Rana</b> , Satpal Singh Bisht , Amita Joshi Rana and Jyoti Upadhyay	Journal of Pharmaceutical Sciences and Research, 9(2), 131-138	Neural Tube Defects, Its Etiology: Environmental Exposures and Genes, Possible Risk Factors
14.	<b>Rana M.</b> , Durgapal S., Rana Joshi A. And Vidyarathi R. K*.	Indian Drugs, 54(05), 63-66	Formulation and Evaluation of Microparticulated Gel Drug Delivery System of Lornoxicam for the Effective Treatment of Rheumatoid Arthritis
15.	Jyoti Upadhyay, <b>Mahendra Rana</b> , Vijay Juyal, Amita Rana and Satpal Singh Bisht	Research J. Pharm. and Tech., 10(08), 2535-2537	Effect of pesticide exposure on the Female Rats and their pups throughout their Gestation Period
16.	<b>Mahendra Rana</b> , Jyoti Upadhyay, Amita Rana, Sumit Durgapal, Arvind Jantwal	International Journal of Nutrition, Pharmacology, Neurological Diseases, 7(4), 76-83	A Systematic Review on Etiology, Epidemiology, and Treatment of Cerebral Palsy
17.	<b>Mahendra Rana</b> , Janmejay Pant, Arvind Jantwal, Amita Joshi Rana, Jyoti Upadhyay and Satpal Singh Bisht	World Journal of Pharmaceutical Research,7(9), 864-875	In-vitro anti-inflammatory and antioxidant activity of ethanolic extract of <i>Marchantia polymorpha</i> in Kumaun region
18.	Jyoti Upadhyay, <b>Mahendra Rana</b> , Amita Rana and Satpal Singh Bisht	World Journal of Pharmaceutical Research,7(5), 665-672	Birth disorder prevalence in the hilly region of uttarakhand
19.	Aadesh Kumar, <b>Mahendra Rana</b> , Tanuj Joshi, Swati Bhoj, Amita J Rana	Plant Archives, 18, 121-127	Potential of <i>Cissus quadrangularis</i> , Transdermal Patch for fracture healing.
20.	Sumit Durgapal, <b>Mahendra Rana</b> , Sayantan Mukhopadhyay, Amita Joshi Rana, Laxmi Goswami, Sumit Joshi	International Journal of Pharmaceutical Sciences and Research, 7(9), 2792-2799	Formulation and Evaluation of In-Situ Gel of Montelukast Sodium For The Effective Treatment of Asthma.
21.	Netrapal Sharma , Satpal Singh Bisht, Sanjay Gupta, Amrita Kumari Panda and <b>Mahendra Rana</b>	International Journal of Pharmaceutical Sciences and Research, 9(8), 3274-3280.	Analysis of proteomic diversity and calcium binding protein(s) in seeds Of horse gram ( <i>Macrotyloma uniflorum</i> ) cultivars from Uttarakhand
22.	Khemraj Joshi, S. T Shukla, <b>Mahendra Rana</b> , Abhishek Pateriya, Rajesh Mishra	International Ayurvedic Medical journal, 6(9), 1994-2003	Evaluation and comparison of diuretic activity of leaf and root Extract of plant <i>Vitex negundo</i> L.
23.	Jyoti Upadhyay, <b>Mahendra Rana</b> , Amita Rana, Sumit Durgapal and Satpal Singh Bisht	International Research Journal of Pharmacy, 9(10), 94-100	Congenital Anomalies Prevalence In Kumaun Region Of Uttarakhand, India: A Multicentre Study
24.	Jyoti Upadhyay, <b>Mahendra Rana</b> , Satpal Singh Bisht, Amita Rana, Sumit Durgapal, Vijay Juyal	Brazilian Journal of Pharmaceutical Sciences, 55,1-9	Biomarker responses (serum biochemistry) in pregnant female wistar rats and histopathology of their neonates exposed prenatally to pesticides
25.	Rashi Miglani, Jyoti Upadhyay, <b>Mahendra Rana</b> and Satpal Singh Bisht	Applied Biological Research, 22(2), 207-209	<i>in vitro</i> effect of insecticide emamectin benzoate on earthworm, <i>Metaphire posthuma</i> , using contact filter paper method

26.	Netrapal Sharma, Satpal Singh Bisht, Sanjay Gupta, <b>Mahendra Rana</b> , Ajay Kumar and Rajesh Pathak	International Journal of Recent Scientific Research, 10(07-E), 33630-33634	<i>in-silico</i> Study for antiurolithiatic activities of compounds extracted from horse gram (macrotyloma uniflorum) collected from uttarakhand (india) as xanthine dehydrogenase inhibitor by molecular docking
27.	Jyoti Upadhyay, Nidhi Tewari <b>Mahendra Rana</b> , Amita Rana, Sumit Durgapal and Satpal Singh Bisht	Journal of Indian College of Cardiology, 9, 67-77	Pathophysiology, Etiology and Recent Advancement in the Treatment of Congenital Heart Disease

ii) Papers presented in Conferences/Seminars

S. No.	Name of the title of event (Conference/workshop/seminar/training program)	Place organized at	Date & Duration of the event	Title of the paper if presented
1.	Invited speaker during Orientation course for Tourism Police	Nainital	2008	Invited speaker
2.	Seminar on Concepts and modern Approach for the budding pharmacists	Lucknow	April 2002	Nanoparticles as a new drug delivery system'
3.	Sujok Accupressure Training programme	Nainital	May 2002	delegate
4.	Accupressure Basic / Advance & Sujok Training programme	Allahabad	August 2003	Delegate
5.	national Seminar on new millennium strategies for quality, safely & GMPs of Herbal Drugs/ Products	Lucknow	Nov2003,	Protective Action of the Leaves of Cassia tora L. on rat Liver cells'
6.	Workshop on Prospects of Essential oil industry and the role of GC-MS in Analysis of Essential oils'	Nainital	September 2004	chemical investigation and antimicrobial study of Tagetes minuta'
7.	International conference on Recent advances in Biomedical & Therapeutic Sciences	Jhansi	January 2005	<p>'Study of Herbal formulation being used in the therapy of cardio- vascular disease in Jhansi'</p> <p>'Potential of Traditional Medicine for the cure of AIDS'</p> <p>'new trends in skin and Hair care: Herbal Cosmetics'</p> <p>'some herbal shows the potent immunomodulant'</p>

				activity'
8.	International workshop on Adverse Drug Reaction Monitoring & 4 <sup>th</sup> Annual Conference of Pharmacovigilance Society of India	Bareilly	January 2005	'monitoring of medicine in market'
9.	National workshop on 'Parameters for standardization of Ayurvedic drugs'	Nagpur	July 2005	Delegate
10.	National workshop on Establishment of Ayush Research training institute and Laboratories	Gwalior	August 2006	Delegate
11.	National Seminar on 'Relevance of Indian Stotra Literature'	Almora	February 2007	manavtavadi Sidhanta ke Pratipadan mein vedo ka amuly sandesh'
12.	Workshop on 'Herbal Insect Repellents-New Developments'	New Delhi	June 2007	Delegate
13.	2 <sup>nd</sup> Uttarakhand Science Congress	Nainital	November 2007	'Commercial potential of the leaf distillate of Geranium' 'pharmacognostic Evaluation of Tagetes minuta from Uttarakhand'
14.	National seminar on convergence of industries in India	Haldwani	November 2007	'Pharmaceutical industry in Uttarakhand: A retrospective analysis in context of industrial policy and impact of globalisation'
15.	National seminar on convergence of industries in India	Haldwani	November 2007	'Pharmaceutical management : A holistic approach in transforming healthcare industry'
16.	National seminar on challenges of Indian Society and solutions to development	Nainital	March 2008	'desh ke vikas mein mahilaon ki bhagidari-ek vivekanachtamak addhiyan'
17.	APTI-13 <sup>th</sup> Annual National Convention -2008	Bilaspur	Oct 2008	'Industrial/ Professional Training: Practical Approach' 'Teaching of Management in

				‘Pharmacy Education’ ‘Suggested new topics in Pharmacy curriculum’
18.	3 <sup>rd</sup> Uttarakhand Science Congress	Roorkee	November 2008	‘Field Assessment of Health Scenario in Bhimtal Region’
19.	60 <sup>th</sup> Indian Pharmaceutical Congress	New Delhi	December 2008	‘Formulation and Evaluation of Antibacterial Herbal Ointment’
20.	13 <sup>th</sup> National Convention of Society of Pharmacognosy	Bhopal	February 2009	‘Histological & Biochemical evidence of Antihepatotoxic activity of leaves of Cassia tora L.’
				‘Pharmacognostical Evaluation of Spleenwort’
21.	10 days ICAR sponsored short course on Application of Molecular Techniques in Coldwater Fishes	Bhimtal	July 2009	Delegate
22.	Advance Training Program for registered pharmacist	Bhimtal	November 2009	Guest speaker
23.	61 <sup>st</sup> Indian Pharmaceutical Congress	Ahmedabad	December 2009	Synthesis, Analgesic and anti- inflammatory activity for various derivatives of substituted indole-3 phthalamide and maleimide (thio) semicarbazides’
24.	National seminar on present relevance of Indian Culture	Almora	February 2010	Delegate
25.	Workshop on "Gandhi darshan ki prasangikta aur bavasiya dristi"	Bhimtal	March 2010	Delegate
26.	5 <sup>th</sup> Uttarakhand State Science & Technology Congress	Dehradun	November, 2010	Determination of Pharmacognostical parameters of Himalayan Pissumbar butti
27.	DBT sponsored National Training on “Bioinformatics and its Application in Drug Designing”	Bhimtal	March 2011	Delegate
28.	National Workshop on	Bhimtal	July 2011	Delegate

	“Intellectual Property Rights & Patent Awareness”			
29.	National Seminar on “Bioresource Management & Global Sustainability”	Hardoi	December 2011	Delegate
30.	Regional Workshop and Brain storming session on Water quality Management and River Bank Filteration (RBF)	Bhimtal	February 2012	Delegate
31.	National Science Day	Bhimtal	February 2012	Delegate
32.	Workshop on Sustainable Development and Natural Resource management	Nainital	July 2012	Delegate
33.	Workshop on In Vivo MR spectroscopy	New Delhi	September 2012	Delegate
34.	2 <sup>nd</sup> State Level Science and Technology Youth Festival on “Uttarakhand – A modern science state”	Bhimtal	February 2013	Delegate
35.	DBT sponsored National Training on “Computational Biology and its Applications”	Bhimtal	March 2013	Delegate
36.	One day workshop "Shimadzu Food safety seminar series 2014"	Toshvin analytics, New Delhi	November 2014	Delegate
37.	International Seminar on "Our Genes and Genomes - Past, Present and Future"	Dehradun	February 2015	Delegate
38.	Golden Jubilee of APTI - APTICON 2016	Manipal	October 2016	Delegate
39.	Workshop Industry academia Interface, "Industry-academia Synergy for bridging Technical Skill gap"	Pantnagar	Nov 2016	Delegate
40.	Centre for Excellence in Pharmacy- panel discussion,	Dehradun	December 2016	Expert speaker
41.	National Conference on "Recent trends in Drug Discovery and Development"	Roorkee	April 2017	Invited speaker
42.	Short term Training program on 'HPLC Shimadzu LC-2010 CHF'	Bhimtal	May 2017	delegate
43.	Workshop on "HPLC - a smart tool for Pharmaceutical Analysis"	Bhimtal	October 2017	Delegate
44.	69 <sup>th</sup> Indian Pharmaceutical Congress	Rajpura	December 2017	Delegate

45.	National Workshop on 'Big data and cloud computing in Bioinformatics'	Bhimtal	March 2018	Delegate
46.	Regional workshop on Research based pedagogical tools held at Kumaun University Nainital	Nainital	July – August 2018	Delegate
47.	23rd Annual National Convention of APTI, 'Innovative Teaching & learning strategies in pharmacy- Requirement and Barriers'	Jaipur	October 2018	Delegate
48.	Invited talk on "Natural Healers scope and application in pharmaceutical science" on 6th September 2019 during DBT twining program at Dakshin Kamrup College	Mirza, Assam	September 2019	Invited speaker
49.	National seminar on Draft National education Policy - 2019 organised by All India University Employees Confederation held on 28th September 2019 at Kumaun University, Nainital.	Nainital	September 2019	Invited speaker

iii) Articles/review articles published in books:

S. No.	Title of the Book	ISBN No.	Author's Name	Publisher Name	Title of Chapter
1.	Socio Economic Profile of Uttarakhand : Issues and Challenges,		N S Rana and <b>Mahendra Rana</b> Eds. R.K. Pandey, Rajnish Pande	Gyanodaya Prakashan, Nainital	Pharmaceutical Industry in Uttarakhand: A Critical evaluative study of the tax holiday offered and assessment of its overall impact on the industry
2.	Socio Economic Profile of Uttarakhand : Issues and Challenges,		Nandan Singh Bisht, Geeta Rawat and <b>Mahendra Rana</b> Eds. R.K. Pandey, Rajnish Pande	Gyanodaya Prakashan, Nainital	Prospects of Herbal drug industry in Uttarakhand
3.	Ethno-pharmacology, Biodiversity and Conservation	ISBN: 978-81-932499-5-6	Rojita Mishra, Satpal Singh Bisht and <b>Mahendra Rana</b> . Sahu, H.K. (editor).	Kunal Books(India),	Trends in Natural product Research.
4.	New and Future Developments in Microbial Biotechnology and	ISBN: 978-0-444-63994-3	Panda, A.K., Bisht, S.P.S., <b>Rana, M.</b> , De Mandal S,	Elsevier	Biotechnological potential of thermophilic actinobacteria associated with hot springs.

	Bioengineering Actinobacteria: Diversity and Biotechnological applications		Senthil Kumar Nachimuthu (eds.) Singh B. P., Gupta V. K. and Passari A. K. (editors)		
5.	The Therapeutic Properties of Medicinal Plants Health- Rejuvenating Bioactive Compounds Native Flora	<b>ISBN:</b> 9 78177188 8035	Rojita Mishra, Satpal Singh Bisht, and <b>Mahendra Rana</b> (eds.) Editors: Megh R. Goyal, PhD, PE Hafiz Ansar Rasul Suleria, PhD Ademola Olabode Ayeleso, PhD T. Jesse Joel, PhD Sujogya Kumar Panda, PhD	Apple Academic Press, CRC Press, Taylor & Francis Group	Omics Technology: Novel Approach for Screening of Plant-Based Traditional Medicines
6.	Agroforestry and Climate Change: Issues and Challenges	ISBN: 978-1- 77188- 790-8 (Hard cover) 978-0- 42905- 727-4 (e- book)	Amrita Kumari Panda, Rojita Mishra, Satpal Singh Bisht, Aseem Kerketta and <b>Mahendra Rana</b> (eds.) Manoj Kumar Jhariya, Dhiraj Kumar Yadav, Arnab Banerjee (editors)	Apple Academic Press, CRC Press, Taylor & Francis Group	Vermicomposting Practices: Sustainable strategy for Agriculture and Climate change

## 12. Academic/Administrative positions held

<b>S. No.</b>	<b>Administrative Position Held</b>
1.	Member, Senate, Kumaun University, Nainital
2.	Honorary Director, Centre for Excellence in Himalayan Medicinal Plants and Nanotechnology and Department of Forensic Sciences
3.	Public Relations Officer, Kumaun University, Nainital
4.	Assistant Nodal officer RUSA, Kumaun University, Nainital
5.	Founder Coordinator, Digital Initiative cell, Kumaun University, Nainital
6.	Assistant Controller of Examination, Kumaun University, Nainital
7.	Assistant Dean Students Welfare, D. S. B. Campus, Kumaun University, Nainital
8.	Assistant Proctor, Kumaun University campus, Bhimtal
9.	Co-Coordinator, NIRF, Kumaun University, Nainital
10.	Coordinator, Centre for Excellence in Medicinal Plants and Nanotechnology, Kumaun University, Bhimtal
11.	Chief Co-ordinator, AICTE sponsored Entrepreneurship Development Cell(EDC)
12.	Assistant Director, Directorate of Placement and Counseling, Kumaun University

	Nainital.
13.	Co-cordinator SC/ST Net coaching centre, Kumaun University campus, Bhimtal
14.	Co-cordinator of the Continuing education Programme for Diploma Pharmacist
15.	Promoter and co-Editor of “Ripples” a quarterly news magazine of Bhimtal campus
16.	Conceptualised the Departmental website (kudops.org)
17.	Initiated the High Altitude Himalayan Medicinal and Aromatic Plants Research laboratory in the Department of Pharmaceutical Sciences.
18.	In-charge, Library, Department of Pharmacy, Bhimtal since 2011.
19.	In-charge, ICT and website, Department of Pharmacy, Bhimtal since 2011.

13. Membership to professional Organization/Associations:

Sl. No.	Name of the Association/Organizations	Status of the membership
1.	Association of Pharmacy Teachers of India (APTI)	Life member
2.	OAKS, Kumaun University, Nainital	Life member
3.	Uttarakhand State Pharmacy Council.	Registered Pharmacist
4.	Association of Pharmacy Teachers of India (APTI) Uttarakhand State Branch.	Former President (elected)
5.	Association of Pharmacy Teachers of India (APTI) Uttarakhand State Branch.	Vice President (elected)

**26/05/2020**

Signature of the Faculty Member