# **Dr. Ashun Chaudhary**

**Area of specialization:** Medicinal plants metabolic fingerprinting, Functional Foods and Nutraceuticals.

#### Office Address:

Assistant Professor,

Department of Plant Science (Botany),

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## Job Experiences

## Teaching experience post Ph.D.

- 1. Presently working as Assistant Professor, Department of Plant Science (Botany), School of Life Sciences, Central University of Himachal Pradesh, Dharamshala, Himachal Pradesh from 16-January-2020 to Till date.
- 2. Worked as Assistant Professor, Department of Biotechnology, M.M. Engineering College, Maharishi Markandeshwar (Deemed to be University), Mullana, Ambala 133207 from 14-May-2018 to 13-January-2020.

#### Research and Industrial Experience post Ph.D.

- 3. Worked as National Post-Doctoral **Fellow** (Principal Investigator) in project sanctioned by Science and Engineering Research Board (SERB) from 06-April-2016 to 05-April-2018 (2 Years).
- **4.** Post-doctoral Research Associate in NPC PD Division, CSIR-IHBT Palampur (H.P), a project entitled Chemical profiling of saponins of saponin-rich plant and evaluation of cytotoxicity, immunomodulatory and adjuvant activities" (P-81101), from 09 Sept 2015 to 05 April 2016 (**6 months**).
- 5. Worked as Assistant Professor in PG Department of Botany, Khalsa College Amritsar, from 7 June 2014 to 20 April 2015 (10 months)

### Research & Teaching experience During Ph.D.: (Total experiences 5 years)

- 1. Evaluation of Anticancer Activities of Different Varieties of Brassica oleracea L. var. italica Plenck (5 years)
- 2. Teaching assistantship, during Ph.D. for the general biological laboratory course for M.Sc-Botany, M.Sc Environmental Sciences, M.Phil-Botany and M.Phil- Environmental Sciences at the Guru Nanak Dev University, Amritsar (5 years)

# Research work Pre Ph.D.: (Total experiences 8 months)

- 1. Effect of osmolytes on B.thuruingesis under different stress conditions (8 months).
- 2. Molecular characterization of a Apple stem grooving virus infecting Apple (2 months).

## **ACADEMIC CREDENTIALS**

Examinat	Name of the	Year of	Division	Subjects
ions	Board/	passing	/ Class/ Grade	
	University			
10+2	HP Board	2003	First	English, Chemistry,
	Dharamshala			Biology, Physics,
				Maths

B.Sc	Himachal Pradesh	2006	First	Chemistry, Botany,
	University, Shimla			Zoology, English,
				Hindi
M.Sc	Guru Nanak Dev	2008	First	Biotechnology
Biotechnol	University,			
ogy	Amritsar			
GATE	GATE-IITs-2009	2009	Qualified & First	Life Sciences
SLET	HPPSC Shimla	2014	Qualified & First	Life Sciences
NET	ICAR-ASRB, New Delhi	2015	Qualified & First	Agricultural Biotechnology
Ph.D	Guru Nanak Dev University, Amritsar	2015	First	Life Sciences (Botany)
National Post	CSIR-IHBT	2016-2018	Natural Product Chemistry and Toxicology	
Doctoral Fellow				

### **WORKSHOPS/ TRAINING ATTENDED:**

- 1. Participated in "Northern Zone Master Resource Persons" training programme on Total Solar eclipse-2009 on 29 June-1 July 2009 held at Department of Botanical and Env. Sciences. GNDU, Amritsar.
- 2 Training on in vitro cytotoxicity under Dr. A.K. Saxena in Indian Institute of Integrative Medicine (CSIR) from 15, February 2011 to 10, March 2011.
- 3 Participated workshop cum orientation programme on "Confocal Microscopy" Held at Department of Biotechnology, Guru Nanak Dev University, Amritsar on 4<sup>th</sup> November 2011.
- 4 Participated in DST Sponsored Brain Storming workshop "Promoting Extramural Research in Punjab-2013" on 12, February 2013 held at Department of Botanical and Env. Sciences. GNDU, Amritsar.
- 5 Participated in one week workshop "Microsoft software created for research and teaching" organized by Academic staff college, Guru Nanak Dev University, Amritsar on 24th -30th dec, 2014.

## **SEMINAR:**

- 1. Participated in international Symposium on "Molecular Aspects of Brain Aging and neurological Disorders" on 28-29<sup>th</sup> November 2008 Held at Department of Biotechnology, GNDU, Amritsar.
- 2. Participated UGC sponsored a National seminar on "Environmental Analysis and Remediation" on 21-22, March 2011 held at Department of Botanical and Env. Sciences. GNDU. Amritsar.

- 3. Participated UGC-SAP sponsored a National seminar on "Environmental Management" on 22-23, March 2012 held at Department of Botanical and Env. Sciences. GNDU, Amritsar.
- **4.** Participated UGC-SAP sponsored a National seminar on "Environmental Conservation" on 28, March 2013 held at Department of Botanical and Env. Sciences. GNDU, Amritsar.
- 5. Participated UGC-CPEPA sponsored a National seminar on "Recent Advances in Cancer Research" on 29, March 2013 held at Department of Botanical and Env. Sciences. GNDU, Amritsar.
- 6. Participated in a seminar on "International Biodiversity Day Celebrations-2012" on 22, March 2012 held at Department of Botanical and Env. Sciences. GNDU, Amritsar.
- 7. Participated in International Online Conference on "COVID-19 Biotechnology: A way Forward" Organized by Department of Biosciences, School of Basic Sciences, Manipal University, Jaipur on 30 April 2020.
- 8. Participated in One day Online workshop on "Book & Article Publishing and Springerlink Platform Demonstration" Organized by School of Education, Guru Nanak Dev University, Amritsar on 22 April 2020.
- 9. Organizing member and Participated in Online International webinar on "Innovation in crop improvement under changing climatic conditions" Organized by School of Life Science, Central University of Himachal Pradesh, Kangra on 3 June 2020.
- 10. Organizing member and Participated in Online webinar on "Genome-wide changes under Microgravity" Organized by School of Life Science, Central University of Himachal Pradesh, Kangra on 15th May 2020.
- 11. Organizing member and Participated in Online Conference on "Environmental pollutants and Cancer" Organized by School of Life Science, Central University of Himachal Pradesh, Kangra on 20-21, May 2020.
- 12. Organizing member and Participated in Online Webinar on "Women in Science, Education and Research" on topic "From a Biology Researcher to an Academic Administrator" Organized by School of Life Science, Central University of Himachal Pradesh, Kangra on 24, February 2021.
- **13.** Coordinated a Seminars on "Disease Management in Rice and Wheat" by Dr.Sachin Upmanyu on 08/03/2022
- **14.** Participated in a Seminar on "Native Wild Ornamentals of Himalayas" by Dr. M.R. Dhiman (07/03/2022).
- **15.** Participated in a Seminar on "Wild Edible of North Western Himalayan Region" by Dr. Tara Sen Thakur (09/03/2022).
- **16.** Participated in a Seminar on "Advances in Hybrid Seed Production of Vegetable Crops" by Dr. Santosh Kumari (10/03/2022).
- 17. Coordinated a Seminars on "Millets: Food for the Future" by Dr. Gopal Katna on 20/10/2022

### Scholarship and Curricular Activity

- 1. Got meritorious position in 12th standard & received Scholarship under Dr.Ambedkar Medhavi Chhatarvriti Yojna in 2002-03 for Rs 10,000.
- 2. Participated in Regular N.S.S Activities From 2004 to 2006 and Attended N.S.S Camp From 25-12-2004 to 03-01-2005.
- 3. Receive Certificate of Appreciation in 15th Punjab Science Congress (7-9, February 2012) held in Guru Nanak Dev University as an active volunteer.Receive Certificate of Appreciation by Society of Botanical & Environmental Sciences GNDU, Amritsar (2011-2012) and winning 2<sup>nd</sup> Prize in Sharm daan camp.

4. Receive Certificate of Appreciation by Society of Botanical & Environmental Sciences GNDU, Amritsar (2011-2012), Sharm daan camp, Indoor Games & Basant Panchami and Bot Env Fest.

# **External Examiner**

- 1. External examiner for M.Sc Botany and M.Sc Environment practical examination Guru Nanak Dev University, Amritsar
- 2. Thesis Evaluator and Subject Expert to Conduct of Viva Voice for M.Sc Agriculture DAV University, Jalandhar
- **3.** Thesis Evaluator and Subject Expert to Conduct of Viva Voice for M.Sc Agriculture Dr. Yashwant Singh Parmar University of Horticulture and Forestry, Solan.

## Membership:

Life Membership (HSCA-LM-312) from Him Science Congress Association (HSCA) Himachal Pradesh (Reg. No.566/2012) dt. 28.04.2012, H.P. Societies Registration Act 2006 regd. Office: Shoolini University, Post Box No-9, Solan (H.P)-173212.

#### **Publications:**

- 1. https://www.mdpi.com/2218-273X/9/5/161
- 2. https://pubmed.ncbi.nlm.nih.gov/24262571/
- 3. https://pubmed.ncbi.nlm.nih.gov/24056146/
- 4. https://link.springer.com/article/10.1007/s00044-014-0963-7
- 5. <a href="https://www.hindawi.com/journals/bca/2014/142828/">https://www.hindawi.com/journals/bca/2014/142828/</a>
- 6. <a href="https://link.springer.com/article/10.1007/s10646-014-1240-8">https://link.springer.com/article/10.1007/s10646-014-1240-8</a>
- 7. https://pubmed.ncbi.nlm.nih.gov/25176329/
- 8. <a href="https://pubmed.ncbi.nlm.nih.gov/25259515/">https://pubmed.ncbi.nlm.nih.gov/25259515/</a>
- 9. <a href="https://pubs.rsc.org/en/content/articlelanding/2015/md/c5md00289c">https://pubs.rsc.org/en/content/articlelanding/2015/md/c5md00289c</a>
- 10. <a href="https://www.ijpsonline.com/articles/in-vitro-evaluation-of-brassica-sprouts-for-its-antioxidant-and-antiproliferative-potential.html">https://www.ijpsonline.com/articles/in-vitro-evaluation-of-brassica-sprouts-for-its-antioxidant-and-antiproliferative-potential.html</a>
- 11. https://link.springer.com/article/10.1007/s13197-018-3095-0
- 12. https://www.tandfonline.com/doi/full/10.1080/24701556.2019.1569690
- 13. <a href="https://www.mdpi.com/1422-0067/20/3/656">https://www.mdpi.com/1422-0067/20/3/656</a>
- 14. https://link.springer.com/article/10.1007/s40495-019-00171-y
- 15. https://www.mdpi.com/2218-273X/9/5/161
- 16. https://www.eurekaselect.com/article/99154
- 17. <a href="https://www.researchgate.net/publication/341759820\_Microbiome\_and\_host\_crosstalk\_A\_new\_paradigm\_to\_cancer\_therapy">https://www.researchgate.net/publication/341759820\_Microbiome\_and\_host\_crosstalk\_A\_new\_paradigm\_to\_cancer\_therapy</a>
- 18. https://doi.org/10.1016/j.semcancer.2020.05.014
- 19. https://doi.org/10.1016/j.tifs.2020.10.020
- 20. <a href="https://agribiop.com/synthesis-and-biochemical-characterization-of-iron-oxide-nanoparticles/">https://agribiop.com/synthesis-and-biochemical-characterization-of-iron-oxide-nanoparticles/</a>
- 21. <a href="https://www.researchgate.net/publication/352738621\_Factors\_Affecting\_Immune\_Responses\_in\_H">https://www.researchgate.net/publication/352738621\_Factors\_Affecting\_Immune\_Responses\_in\_H</a> oney Bees An Insight
- 22. https://pubmed.ncbi.nlm.nih.gov/34355102/
- 23. <a href="https://jusst.org/a-review-on-synthesis-of-cadmium-and-manganese-oxide-nanoparticles-with-its-vitro-applications/">https://jusst.org/a-review-on-synthesis-of-cadmium-and-manganese-oxide-nanoparticles-with-its-vitro-applications/</a>
- 24. https://www.botanyjournals.com/archives/2021/vol6/issue5/6-5-229
- 25. <a href="https://link.springer.com/article/10.1007/s40495-022-00286-9">https://link.springer.com/article/10.1007/s40495-022-00286-9</a>
- 26. <a href="https://pubs.aip.org/aip/acp/article-abstract/2393/1/020009/2821457/A-synthesis-characterization-and-biological?redirectedFrom=fulltext">https://pubs.aip.org/aip/acp/article-abstract/2393/1/020009/2821457/A-synthesis-characterization-and-biological?redirectedFrom=fulltext</a>
- 27. https://pubmed.ncbi.nlm.nih.gov/35923801/
- 28. https://pubmed.ncbi.nlm.nih.gov/36084676/
- 29. <a href="https://www.researchgate.net/publication/363771235">https://www.researchgate.net/publication/363771235</a> Green Synthesis of Cadmium Oxid e Nanoparticles with Various Plant Extracts and their Use as an Anticancer Agent
- 30. https://ethnobotanyjournal.org/index.php/era/article/view/4453

- 31. https://www.degruyter.com/document/doi/10.1515/dmdi-2023-0024/html
- 32. https://www.eurekaselect.com/article/132228

# **Book chapters**

- 1. https://link.springer.com/book/10.1007/978-981-13-5874-6
- 2. https://link.springer.com/book/10.1007/978-981-13-5874-6#about-this-book
- 3. <a href="https://www.semanticscholar.org/paper/ZnO-nanoparticle-with-promising-antimicrobial-and-Jaswal Chaudhary/d59c5498458514e5b26d68802135019a8bb6ec0a">https://www.semanticscholar.org/paper/ZnO-nanoparticle-with-promising-antimicrobial-and-Jaswal Chaudhary/d59c5498458514e5b26d68802135019a8bb6ec0a</a>
- 4. https://link.springer.com/chapter/10.1007/978-981-16-4779-6\_3
- 5. <a href="https://www.appleacademicpress.com/himalayan-medicinal-plants-for-the-treatment-of-depression-a-source-of-rich-antidepressant-agents/9781774916308">https://www.appleacademicpress.com/himalayan-medicinal-plants-for-the-treatment-of-depression-a-source-of-rich-antidepressant-agents/9781774916308</a>

#### **Abstracts: Poster/Oral Presentations**

- 1. Raj Kaushal, Nitesh Kumar\*, Ashun Chaudhary, Saroj Arora, Pamita Awasthi (2013) Synthesis, Structural Elucidation and in vitro Antiproliferative Activities of Mixed Ligand Titanium Complexes "International Conference on Interdisciplinary areas with Chemical Sciences" (Abstract+Oral). Organized by Panjab University (India), held on 30 October-1st November.
- 2. Ashun Chaudhary\*, Jasmit Kaur, Adarsh Pal Vig, and Saroj Arora (2014). "Antioxidant and Antiproliferative effect of Phytochemical cocktail of Brassica oleracea Italica" (Abstract+Oral). 17<sup>th</sup> Punjab Science Congress 14-16, February held at Punjab Technical University, Jalandhar.
- 3. Shallina Gupta\*, Saroj Arora, Ashun Chaudhary and Satwinder K. Sohal (2014). A feeding deterrent effect of ethyl acetate extract of a cultivar of Broccoli (Brassica oleracea L. var. italica) on Spodoptera litura (Fab.) (Abstract+Poster). 4<sup>th</sup> International Science Congress on 8-9, December in Pacific University Udaipur (Rajasthan).
- **4.** Ashun Chaudhary\*, Geetanjali Rampal, Adarsh Pal Vig and Saroj Arora (2012) "Chemical analysis of volatile compounds of the Broccoli at different developmental stages by Gas Chromatography-Mass Spectroscopy and Cytotoxicity studies" (Abstract+Poster). 15th Punjab Science Congress on 7-9, February held in Guru Nanak Dev University.
- 5. Ashun Chaudhary\*, Adarsh Pal Vig and Saroj Arora (2012). "Diminution of free radicals and cancer cell proliferation of Brassica oleracea Italica" (Abstract+Poster). International symposium on translational neurosciences, unraveling mysteries of brain in health and disease, on 27-30, October Held at Department of Biotechnology, GNDU, Amritsar.
- 6. Ashun Chaudhary\*, Geetanjali Rampal, Adarsh Pal Vig and Saroj Arora (2010) "Antimicrobial potential of glucosinolates rich extract of leaves and florets of Broccoli" (Abstract+Poster). "xxxv annual conference of environmental mutagen society of India and international symposium on mutagens and genetic diversity for health and agriculture" Punjab University, Chandigarh 12-14 march.
- 7. Ashun Chaudhary\*, Upendra Sharma, Vishal Sharma, Adarsh Pal Vig, Bikram Singh and Saroj Arora (2016). Biological and Chemical Investigation of Brassica oleracea
- L. Var. italica Plenck (Broccoli) at Different Developmental Stages (Abstract+Oral). February 17-19, 2016 (ICEMCH-2016) at Guru Nanak Dev University, Amritsar, Punjab, India
- **8.** Ashun Chaudhary\*, Adarsh Pal Vig and Saroj Arora (2017). Hydrolytic products analysis of glucosinolates from broccoli associated with the anticancer and antioxidant activity (Abstract+Poster). February 9-10, 2017 National seminar on "Recent Trends in Plant and Environmental sciences" at Guru Nanak Dev University, Amritsar, Punjab, India.

**9.** Ashun Chaudhary\*, Adarsh Pal Vig and Saroj Arora (2018). Cytotoxic and antiinflammatory effects of Brassica oleracea L. var. italica Plenck extracts and their chemical composition (Abstract+Poster). March 29-30, 2018 "National Seminar on Emerging Trends in Plant and Environmental Sciences" at Guru Nanak Dev University, Amritsar, Punjab, India.

#### **References:-**

- ❖ Dr. Saroj Arora, Professor, Department of Botanical and Env. Sciences, GNDU, Punjab Amritsar, 143005, E.mail: <u>irosh1@rediffmail.com</u>, Moblie: +919417285485
- ❖ Dr. Adarsh Pal Vig, Professor, Department of Botanical and Env. Sciences, GNDU, Punjab Amritsar, 143005, E.mail: adarshpalvig@yahoo.co.in, Moblie: +919417062796
- ❖ Dr. Pardeep Kumar, Professor, Dean- Academics, Central University of Himachal Pradesh, Dharamshala, Himachal Pradesh, Mob:+91-7018277931, pardeepsangla@gmail.com
- ❖ Dr. Sunil Thakur, Professor, Head of Department of Animal Science, Dean, School of Life Sciences, Central University of Himachal Pradesh, Dharamshala, Himachal Pradesh, Mob:+91-9418050067, sunilibes@gmail.com
- ❖ Dr. Sachin Upmanyu, Associate Professor, Head of Department of Plant Sciences, School of Life Sciences, Central University of Himachal Pradesh, Dharamshala, Himachal Pradesh, Mob:+91-7018058606, sachinupmanyu1974@hpcu.ac.in
- Links to Google scholar, ResearchGate, Scopus, and Orcid iD
- \* <a href="https://scholar.google.co.in/citations?user=vDzwPsMAAAAJ&hl=en">https://scholar.google.co.in/citations?user=vDzwPsMAAAAJ&hl=en</a>
- ttps://www.researchgate.net/profile/Ashun-Chaudhary-2
- thttps://www.scopus.com/authid/detail.uri?authorId=55857326800
- https://orcid.org/0000-0001-9495-6131

#### **DECLARATION:**

I do declare that the information given above is true and correct to the best of my knowledge and belief.

Place: Dharamshala

Date: June 27, 2023

Dr. Ashun Chaudhary