



Dr Ashun Chaudhary
Assistant Professor

Name: Dr Ashun Chaudhary

Designation: Assistant Professor

Contact Details: 09805840053

Academic Qualification: Ph.D

Positions Held: Assistant Professor

Specialisation: Natural plant Chemistry and toxicological evaluations

Research Interest: Metabolic fingerprinting of medicinal plants, Anticancer, Anti-inflammation and Antioxidant

- Publications:**
1. **Ashun Chaudhary**, Geetanjali Rampal, Upendra Sharma, Tarunpreet Singh Thind, Bikram Singh, Adarsh Pal Vig and Saroj Arora. Anticancer, antioxidant activities and GC-MS analysis of glucosinolates in two cultivars of broccoli. *Medicinal Chemistry & Drug Discovery* 2012, 2(2) 30-37.
 2. **Ashun Chaudhary***, Upendra Sharma, Bikram Singh, Adarsh Pal Vig and Saroj Arora. Free radical scavenging,

antiproliferative activities, and profiling of variations in the level of phytochemicals in different parts of Broccoli (Brassica oleracea italica). Food Chemistry (2014) 148, 373-380.

<http://dx.doi.org/10.1016/j.foodchem.2013.10.042>. **(IF-5.399)**

3. Vishal Sharma, **Ashun Chaudhary**, Saroj Arora, Ajit K. Saxena, Mohan Paul S. Isha. *b-Ionone derived chalcones as potent antiproliferative agents. European Journal of Medicinal Chemistry (2013) 69, 310-315.*
<http://dx.doi.org/10.1016/j.ejmech.2013.08.017>. **(IF-4.833)**
4. Nitesh Kumar, Raj Kaushal, **Ashun Chaudhary**, Saroj Arora, Pamita Awasthi. *Studies on synthesis, structural elucidation and antiproliferative activities of titanium complexes. Medicinal chemistry research (2014), 23(8), 3897-3906* [DOI 10.1007/s00044-014-0963-7](https://doi.org/10.1007/s00044-014-0963-7) **(IF- 1.72)**
5. Raj Kaushal, Nitesh Kumar, **Ashun Chaudhary**, Saroj Arora, Pamita Awasthi, *Synthesis, spectroscopic and antiproliferative studies of titanium complexes. Bioinorganic chemistry and*
6. Jasmit Kaur, **Ashun Chaudhary**, Rajbir Kaur and Saroj Arora. *Assessment of cytotoxic, genotoxic, and mutagenic potential of water samples of Harike Wetland- a Ramsar Site in India using different ex vivo biological*

- systems. *Ecotoxicology* (2014) 23, 967-977. [http://link.springer.com/article/10.1007/s10646-014-1240-8\(2014\)](http://link.springer.com/article/10.1007/s10646-014-1240-8(2014)). (IF 2.46)
7. Alisha Sood, Vishal Sharma, **Ashun Chaudhry**, Rakesh Kumar, Saroj Arora, Rajnikant, Vivek gupta and Mohan Paul S. Ishar. Synthesis and evaluation of 3-salicyloylpyridine derivatives as cytotoxic mitochondrial apoptosis inducers. *Bioorganic and medicinal chemistry letters* (2014) 24, 4724-4728. <http://dx.doi.org/10.1016/j.bmcl.2014.08.010>. (IF-2.448)
8. Vishal Sharma, **Ashun Chaudhary**, Rohit Arora, Saroj Arora, Ajit k. Saxena and Mohan Paul S. Ishar. β -lonone derived apoptosis inducing endoperoxides; Discovery of potent leads for anticancer agents. *European Journal of Medicinal Chemistry* (2014) 87, 228-236. <http://dx.doi.org/10.1016/j.ejmech.2014.09.049>. (IF-4.833)
9. Vishal Sharma, **Ashun Chaudhary**, Gousia Chashoo, Saroj Arora, Ajit k. Saxena and Mohan Paul S. Ishar*. Induction of apoptosis by cyclobutanones and derived polycyclic γ -lactones: a preliminary analysis of antiproliferative activity. *Medicinal Chemistry Communications* (2015) 6, 1626-1634. DOI: [10.1039/C5MD00289C](http://dx.doi.org/10.1039/C5MD00289C) (IF-2.394).
10. **Ashun Chaudhary***,

Sonika Choudhary, Adarsh Pal Vig, and Saroj Arora (2016). Antioxidant and antiproliferative effect of phytochemical cocktail of broccoli. *Trends In Biosciences*, 9(4) 241-249. **(NAAS Rating -2.7)**

11. **Ashun Chaudhary***, Sonika Choudhary, Upendra Sharm, Adarsh Pal Vig, and Saroj Arora* (2016). In vitro evaluation of Brassica sprouts for its antioxidant and antiproliferative potential. *Indian Journal of Pharmaceutical Sciences* 78(5), 601- 610. **(IF-0.634)**
12. **Ashun Chaudhary***, Sonika Choudhary, Upendra Sharma, Bikram Singh, Adarsh Pal Vig and Saroj Arora* (2018). Purple Head Broccoli (*Brassica oleracea L. var. italica* Plenck), A functional food crop for antioxidant and anticancer potential". *Journal of Food Science and Technology* 55 (5), 1806-1815. **(IF- 1.85)**.
13. Nitesh Kumar, Raj Kaushal, **Ashun Chaudhary**, Saroj Arora, Pamita Awasthi (2019). Titanium based mixed ligand complexes: Synthesis, characterization and in vitro antiproliferative studies. *Inorganic and Nano-Metal Chemistry* 48(9)467-476. **(IF-0.685)**.
14. Suresh Kumar, Vishali Gupta, Basheerulla Shaik, Vijay K Agrawal, Viveksheel Jaswal and **Ashun Chaudhary** (2019). Phosphodiesterase 4 (PDE4) inhibition of 4,5,6,7-tetrahydro-1H - 1, 28 2 -

diaxepin - 7- one derivatives using physicochemical parameters. Current Trends in Biotechnology and Chemical Research 8 (1&2) 28-36.

15. Vaishali Aggarwal, Dharambir Kashyap, Vivek Kumar Garg, Katrin Sak, Aklank Jain, **Ashun Chaudhary**, Hardeep Singh Tuli*, Gautam Sethi*(2019). Molecular mechanisms of action of tocotrienol in cancer: Recent trends and advancements. *International Journal of Molecular Sciences*, 2019, 20, 656 **(IF- 4.183)**.
16. Dharambir Kashyap, Hardeep Singh Tuli*, Katrin Sak, Vivek Kumar Garg, Neelam Goel, Sandeep Punia, **Ashun Chaudhary** (2019). Role of reactive oxygen species in cancer progression. *Current Pharmacology Reports*, 5, (2), 79-86 **CiteScore (Scopus): 2.95**.
17. Rohit Sharma*, Natália Martins*, Kamil Kuca, **Ashun Chaudhary**, Atul Kabra, Meda M. Rao, Pradeep Kumar Prajapati (2019). Chyawanprash: An Indian Traditional Bioactive Health Supplement. *Biomolecules*, 9, (5), 161; doi:10.3390/biom9050161 **(IF- 4.694)**.
18. **Ashun Chaudhary**, Vivek Sheel, Sonika Choudhary, Sonika, Ajay Sharma, Vikas Beniwal, Hardeep Singh Tuli* (2019). Ferulic Acid: A Promising Therapeutic phytochemical and recent patents advances. *Recent*

Patents on Inflammation & Allergy Drug Discovery, DOI-

10.2174/1872213X13666190621125048, 13, (2), 000-000. **CiteScore (Scopus): 1.00.**

19. Jasmit Kaur, **Ashun Chaudhary**, Namita Khanna, Saroj Arora and Adarsh Pal Vig (2013). Battery of bioassay as tool for water quality monitoring. *In Water for Health: Healthy water, Healthy Life* (Editors: S.S. Gill, R. Manhas, and P. Bansal). Gulab Publisher, Sangrur and Basera Verlag, Germany ISBN 978-81-92064-0-5.
20. **Ashun Chaudhary**, Praveen Kumar, Vivek Sheel and Abhinay Thakur (2019). Book Chapter: "Analytical techniques for the identification and quantification of Flavonoids" in book "Current Aspects of Flavonoids: Their Role in Cancer Treatment" (Editors: Hardeep Singh Tuli) Springer Nature ISBN 978-981-13-5873-9, pp-9-22.
21. Abhinay Thakur, **Ashun Chaudhary**, Hardeep Singh Tuli and Anil Sharma (2019). Book Chapter: "Recent trends in flavonoids studies in term of toxicity" in forthcoming book "Current Aspects of Flavonoids: Their Role in Cancer Treatment" (Editors: Hardeep Singh Tuli) Springer Nature ISBN 978-981-13-5873-9, pp-139-148.

22. Vivek Sheel Jaswal, **Ashun Chaudhary**, Pankaj Thakur, Diksha Sharma, Avanish Kumar Arora, Radhika Khanna Hardeep Singh Tuli*. ZnO nanoparticle with promising anti-microbial and antiproliferation synergistic properties. CAC Vol 87: Analysis, Fate and Toxicity of Engineered Nanomaterials in Plants, (Editors: Sandeep Singh Verma) Chapter 9. Elsevier Hardcover ISBN:9780128213209. Comprehensive Analytical Chemistry, Volume 87 # 2019 Elsevier B.V. ISSN 0166-526X. <https://doi.org/10.1016/bs.coa.c.2019.09.006>

Research Projects Completed/Ongoing:

Biological and Chemical Investigation of Nutritive *Pyrus Pashia* Wildly Grown in Western Himalayas by SERB for NPDF

M.Phil. Supervised:

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Ph.D. Supervised:

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Ph.D. Supervising: Respected Sir,

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Kindly find the attachment and reply as soon as possible.

Participation in Seminars/Conferences:

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)**. 17th 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)**. 4th 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
anti-inflammatory 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.

10. **Ashun Chaudhary***
(2018). *Secondary
metabolites rich plant as
functional food (Invited
Lecture).* March 8-9, 2018
"Him Science Congress
Association" at NIT,
Hamirpur, Himachal
Pradesh, India.

11. **Participated** in
international Symposium on
**"Molecular Aspects of
Brain Aging and
neurological Disorders"**
on 28-29th November 2008
Held at Department of
Biotechnology, GNDU,
Amritsar.

12. 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.

13. 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.

14. Participated UGC-SAP sponsored a **National seminar** on **“Environmental Conservation”** on 28, March 2013 held at Department of Botanical and Env. Sciences. GNDU, Amritsar.

15. 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.

16. Participated in a seminar on **“International Biodiversity Day Celebrations-2012”** on 22, March 2012 held at Department of Botanical and Env. Sciences. GNDU, Amritsar.

Membership of Learned Societies/ Professional Bodies:

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.

Awards & Honours Received:

National Post-Doctoral Fellow by Science and Engineering Research Board (SERB)

Others:

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