



Dr. Mohammed Sohail Akhtar

Associate Professor

School of Pharmacy.....

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Time at UoN: Since 2009

Marital Status: Married.

Education and learning, in my opinion, rely on active learning, faculty-student engagement, time management, student collaboration, and a supportive academic environment for students` professional, social, and cultural development. I adhere to constructivism as well as cognitivism. The healthcare sector can make use of this through problem-based learning, in which students actively apply concepts to actual, real-world situations and experiments. Forming social ties and learning by watching others. Aspects of observational learning are incorporated. Meeting and interacting with peers and mentors are crucial for developing a professional identity in the healthcare sector and for picking up new skills from seasoned professionals.

Academic Qualifications

PhD (Pharmacognosy& Phytochemistry), Jamia Hamdard, 2008

M.pharma(Pharmacognosy & Phytochemistry), Jamia Hamdard, , 2004

B.Pharma, Jamia Hamdard , 2002

Bachelor of Science in Chemistry (Hons), Magadh University, Gaya, Bihar, India, 1997

Teaching Activities

Pharmacognosy, History definition of Pharmacognosy, types of crude drugs and its different classifications. Cultivation, collection and processing and storage of medicinal plants. Analysis of the crude drugs, method of drug evaluation for checking adulteration and phytochemical investigation of crude drugs. Study of carbohydrates and phenolic compounds., 2009

Phytochemistry and Marine Natural Products/Complementary medicine, Phytochemistry is the chemistry of plant constituents or chemicals produced by the plants. In this course, students will be provided with general knowledge on extraction, isolation, purification and determination of different drugs. Further, students will study chromatography and instrumental techniques which are in current use for the separation and determination of drugs. In addition, the course covers the study of various compounds including volatile oils, cardiac glycosides, terpenoids, saponins, and alkaloids. Besides, the students will gain knowledge of the different complementary medicines, their concepts, applications, advantages, and disadvantages. This course aims to provide the students with knowledge of phytochemical methods used for qualitative and quantitative analysis of crude drugs, study the plants that contain volatile oils, alkaloids, cardiac glycosides and saponins and study different marine natural products. , Spring 2010 to Fall 2011-12 & 2023 to till now

Advanced Phytotherapy, This course offers the fundamentals of phytotherapy, natural products of verified pharmacological effect with their mechanisms of actions, active ingredients are obtained from natural products and acting as bronchodilators, decongestants, inhalants, anti-allergic, expectorants, cough suppressants, hypnotics, sedatives, antidepressants, stimulants, analgesics, migraine-treating, tonics, cognitive enhancer, antifungal, arthritis , gout, general inflammation, skin inflammation, dry skin, cancer chemo protection, Immunostimulant, Immunosuppressant: and Adaptogens. Natural Products effective for the treatment of CV diseases like Heart failure and arrhythmias, Venous insufficiency, Antiplatelet and Anti-atherosclerotic drug will be studied, concerning mechanism of action, rational use, constituents, administration, adverse effects and interaction. Geographical distributions of vegetation of Oman, its medicinal and traditional uses among different community of Oman. List of threatened flora of Oman and its conservation, 2009 to till now.

Research Activities

- *Research Interests*

Bioactivity guided isolation of medicinal plants. Phytochemical investigation and Analysis of

volatile oils. Standardization of herbal drugs, screening the plants for various bioactivities. My current research objective has been focused on phytochemical research concentrates on native Omani traditional medicinal plants, their active constituents and potential for use in industry and medicine. Pharmacological screenings like Antimicrobial, Antioxidant, Antifungal and Cytotoxic studies of traditional medicinal plants. Formulation and evaluation of herbal preparations like shampoo, cream, lotion etc.

- Conference Presentations

GC-MS analysis, antibacterial and antioxidant studies of *Salvadora persica* leaves oil isolated from Omani cultivar, University of Nizwa, Research Day, University of Nizwa, 25/12/2024

Determination of Pesticides concentration in the Most consumable vegetables samples by LC-MS, 4th Health Research forum in Al , Approve Committee Al Dakhliya Governorate , 04/12/2024

Formulation and evaluation of shampoo comprising polyherbal extracts, 4th Health Research forum in Al, Research and Ethical Review and Approve Committee Al Dakhliya Governorate , 03/12/2024

Extraction and estimation of anthocyanin content and antioxidant activity of some common fruits,, Pharmaceutical Conference, Oman Medical College, 03/12/2019

Standardization and antibacterial activityof *Salvadora persica* roots grown in salalah region, Oman Pharmaceutical Conference, Oman medical college, Muscat., 28/10/2015

Phytochemical investigation and cytotoxic studies of *Thymus vulgaris* leaves grown in Oman, , Oman Pharmaceutical conference , Oman medical College. Muscat. Oman, 17/04/2013

Phytochemical investigation and Antimicrobial Activity of leaves of *Citrus aurantium*, Pharmacy Education in the Era of Globalization, School of Pharmacy,College of Pharmacy and Nursing,University of Nizwa,Sultanate of Oman, 25/01/2012

- Conference Attendance

The Omani Universities Ranking Forum, University of Nizwa,, 09/05/2024

Oman STEAM Education Conference, International Business and Economic Forum, Muscat, 21/02/2024

- Publications

Article:

1. 2025 [Investigating the cardioprotective potential of quercetin against tacrolimus-induced cardiotoxicity in Wistar rats: A mechanistic insights](#), Ankit Verma, Tarique Anwer*, Muzaffar Iqbal, Vinod Gahlot, Roshi Khan, Manju Sharma, Mohammad Sohail Akhtar
2. 2025 [Evaluation of acute plant toxicity, antioxidant activity, molecular docking and bioactive compounds of lemongrass oil isolated from Omani cultivar](#), Haneen Al Weshahi, Mohammad Sohail Akhtar *, Salem Said Al Tobi, Amzad, Hossain, Shah Alam Khan, Alia Bushra, Sadri Abdullah Said
3. 2024 [Dipeptidyl peptidase IV inhibitors as a potential target for diabetes: patent review 2019 - present](#), Ghulam Abbas, Mohammed S Akhtar, Quazi Mi Haq, Issa S Al Amri, Daijie Wang & Hidayat Hussain
4. 2024 [Assessment of pesticide residues in the highly consumable vegetable samples grown in Oman.](#), Arab J Geosci 17, 19 (2024). Alrashdi, Y.B.A., Al-Nidawi, Z.H.M., Akhtar, M.S. et al.
5. 2023 [Antidiabetic activity of Cichorium intybus L water extract against streptozotocin induced diabetic rats.](#), Md Sohail Akhtar, Mohamed Rafullah, Mohammad Amzad Hossain, Mohammed Ali, Journal of Umm Al-Qura University for Applied Sciences (2023) 9:565–571
6. 2023 [A novel terpenoid glycoside and other bioactive constituents from the seeds of Cichorium intybus.](#), Mohammad Sohail Akhtar, S.R. Mir, Mohammad Amzad Hossain, Mohammed Ali. Carbohydrate Research 524 (2023) 108745 (Elsevier).
7. 2023 [Quantification of polycyclic aromatic hydrocarbon derivatives in the Arabian coastal seawater and freshwater samples.](#), A. M. A. Ahmed, R. H. A. Qamshouai, A. A. I. Alsaid, M. S. Akhtar, S. S. J. Al-Touby & M. A. Hossain .International Journal of Energy and Water Resources (2023). International Journal of Energy and Water Resources, 2023 (Springer}
8. 2023 [Determination of trace metal levels in the sea and fresh water in Oman by using inductively coupled plasma-optical emission spectroscopy.](#), Ayman Alsaid Ibrahim Alsaid, Aya Mohammed Amin Ahmed, Rayyan Hamed Al Qamshouai, Mohammad Sohail Akhtar, Salem Said Jarooof Al-Touby & Mohammad Amzad Hossain. DO
Ihttps://doi.org/10.1007/s12517-023-11210-w.
9. 2023 Assessment of toxic normal saturated hydrocarbons in the Arabian seawater and Omani freshwater samples using liquid chromatography-mass spectrometry. , Rayyan Hamed Al 2 Qamshouai, Aya Mohammed Amin Ahmed, Ayman Alsaid Ibrahim Alsaid, Mohammad Sohail Akhtar, Salem Said Jarooof Al-Touby & Mohammad Amzad Hossain. Journal of Umm Al-Qura University of Applied.Science, 87-95, 2023 (Springer)

10. 2022 Formulation and Evaluation of Shampoo Comprising Polyherbal Extracts, Malak M. Albahri, Amna S. Al. Mamri, Zainab A. Fawaz, Nadin S. Lotfi, Faisal Auf, Manickam Balamurugan, Md. Sohail Akhtar. *Journal of Pharmacological Research and Developments*, 2022,4(1): 10-16.
11. 2022 Comparative phytochemical, thin layer chromatographic profiling and antioxidant activity of extracts from some Indian herbal drugs. , Md Sohail Akhtar, Mohamed Rafiullah, Wegdan Aly Shehata, Amzad Hossain, Mohammed Ali, *Journal of Bioresources and Bioproducts* .2022, 7(2): 128-134.
12. 2022 Comparative Phytochemicals Investigation and in vitro pharmacological activities of different brands Olive oil. , Mawiya Jaifar Talib Al Mawali, Nada Ali Abd El Hamid Nassar, Mohammad Sohail Akhtar. *Journal of Applied Sciences*, 2022, 22(6): 2022.
13. 2021 Extraction, isolation and structural characterization of two triterpenoid glycosides from the fruits of *Ficus bengalensis*. , Mohammad Sohail Akhtar, S.R. Mir, Sadri Abdullah Said, Mohammad Amzad Hossain *, Mohammad Ali. 2021,Volume 510: 108444.
14. 2021 A pimarane diterpene from *Juniper servaschanica* inhibits growth of Ovarian and Breast Cancer Cells. , Sadri Abdullah Said, Yahya Tamimi, Afaf Mohd Weli, Md Sohail Akhtar. *Drug Discovery*, 2021,15(35): 1-5
15. 2020 Development and evaluation of herbal cream containing Curcumin from *Curcuma longa*.
16. 2020 Phytochemical and Pharmacological Aspects of Anthocyanins, . Md. Sohail Akhtar* and Wegdan Ali Shehata. *Asian Journal of Applied Sciences*, Vol:13, Iss:3, pp:94-99, 2020.
17. 2020 Extraction and Estimation of Anthocyanin Content and Antioxidant Activity of Some Common Fruits., Wegdan Ali Shehata, Md. Sohail Akhtar*, Tanveer Alam. *Trends in Applied Sciences Research*, Vol:15, Iss:2, pp:179-186, 2020
18. 2019 Antimicrobial, Antioxidant and Cytotoxic Activity of *Maytenus dhofarensis* growing in Oman., Afaf Mohd Weli, Rahma Salim Al-Burtamani, Maryam Sinan Al-Azzawi, Md. Sohail Akhtar and Sadri Abdullah Said. *Journal of Applied Sciences*, 2019,19(3): 229-234.
19. 2018 Phytochemical investigation, cytotoxicity, antibacterial and anti-oxidant activity of *Olea europea* fruits grown in Oman. , Md. Sohail Akhtar*, Sumaiya Darwesh Al-Balushi and Maryam Muhanna Saif Awladthani. *European Journal of Biomedical and Pharmaceutical sciences*, 2018, Volume 5, Issue 11: 98-102.
20. 2017 Isolation and characterization of antimicrobial compound from the stem-bark of the traditionally used medicinal plant *Adenium obesum*., Mohammed Sohail Akhtar, Mohammad Amzad Hossain*, Sadri Abdullah Said; *Journal of Traditional and Complementary Medicine*, (2017); 7:296-300.

21. 2017 In vitro Anticancer Activity of Selected Medicinal Plants from Oman. , Sadri Abdullah Said1*, Yahya Tamimi, Md. Sohail Akhtar, Afaf Mohd Weli, Suleiman Said Al-Khanjari and Qassim Ahmed Al-Riyami. British Journal of Pharmaceutical Research 15(5): 1-8, 2017.
22. 2017 Two new flavonoids from *Adenium obesum* growing in Oman., Mohammad Amzad Hossain *, Md. Sohail Akhtar, Sadri Said, Tahiya Hilal Ali. Journal of King Saud University, (2017)29, 62-69.
23. 2017 Cytotoxic, Antimicrobial and Anti-oxidant Screening of *Psidium Guajava* Leaves Grown in Oman., Afaf M Weli*, Amna Al-Kaabi, Sadri Said, Amzad Hossain, Md. Sohail Akhtar, Ahlam Al-Abri and Qasim Al-Riyami . Global Journal of Pharmacy & Pharmaceutical Sciences, 2017; 1(2) : 555557. DOI: 10.19080/GJPPS.2017.01.555557
24. 2015 Phytochemical investigation and antioxidant activity of *Cymbopogon citratus* leaves grown in Oman, , Md Sohail Akhtar* and Samar Sami AL-Qadim Bait Ambrok. IJPSR Conference Proceeding; 2015: 43.
25. 2015 Standardization and antibacterial activity of *Salvadora persica* roots grown in salalah region, Haneen salim Al-weshahi, Md Sohail Akhtar and Kothar Zahran Khamis Al-Bahri, IJPSR Conference Proceeding; 2015: 42.
26. 2014 A comparison of the antimicrobial effectiveness of different polarities crude extracts from the leaves of *Adenium obesum* used in Omani traditional medicine for the treatment of microbial infections,, Mohammad Amzad Hossain, Amira Hamood Salim Al-Musalami, Mohammad Sohail Akhtar, Sadri Said, Asian Pacific Journal of Tropical Disease, 2014; 4(2) : S934-S937
27. 2014 Evaluation of different extraction methods on antimicrobial potency of *Adenium obesum* stem against food borne pathogenic bacterial strains in Oman, Mohammad Amzad Hossain*, Tahiya Hilal Ali Al-Abri, Amira Hamood Salim Al-Musalami, Md. Sohail Akhtar, Sadri Said. Asian Pacific Journal of Tropical Disease, 2014; 4(Suppl 2): S985-S989.
28. 2014 Evaluation of in vitro antioxidant potential of different polarities stem crude extracts by different extraction methods of *Adenium obesum*; , Mohammad Amzad Hossain, Tahiya Hilal Ali Alabri, Amira hamood Salim Al Musalami, Md Sohail Akhtar, Sadri Said, Journal of coastal life medicine, 2014; 2(9):699-703.
29. 2014 Cytotoxic properties of some herbal plants in Oman., Sadri A. Said, Sheikha Hamed Ali Al-Saadi, Ahlam R. Al-Abri, Md. Sohail Akhtar, Afaf M. Weli, Qassim Al-Riyami. Journal of Taibah University for Science 8 (2014) 71-74.
30. 2013 Phytochemical Screening, Antibacterial and Cytotoxic Activities of *Petroselinum crispum* Leaves Grown in Oman., Al Marwah Hamood Alhaadi, Samia Saleem Al Rahbi, Md

Sohail Akhtar ,Sadri Abdullah Sayeed, Afaf Mohammed Weli, Qasim Al Riyami. Accepted for publication in the Iranian Journal of Pharmaceutical Sciences. 2013 ; 9 (1): 61-65
(Correspondence Author: Md Sohail Akhtar).

31. 2013 Antibacterial and cytotoxic activities of *Thymus vulgaris* leaves grown in Oman, , Aisha Haroon Al- Balushi, Maryam Aljabri, Md Sohail Akhtar*, Sadri Said, Afaf Weli, Qasim Al-Riyami, Ahlam A. Alabri, 2013 Vol. 4, Issue 11:4253 - 4257

32. 2013 In vitro Antioxidant, Cytotoxic and Antibacterial Screening of the leaves of *Acridocarpus orientalis*, Native to Sultanate of Oman, Ahlam Al-Abri1, Hazaa Al-Maqbali, Afaf Weli*Sadri Said,Amzad Hossain and Md. Sohail Akhtar, British Journal of Pharmaceutical Research, 3(4): 734-742, 2013.

33. 2013 Antimicrobial, antioxidant and cytotoxic activities of *Anogeissus dhofarica* from Oman., Abeer j. al-noumani, Maryam Z.J. al-Qasmi, Asila s.a. al-shabibi, Salem A.I. al-Mashani, Ahlam a. Alabri, Md. Sohail Akhtar, Afaf M. Weli, Qassim A. al-Riyami, Sadri a. said* International Journal of Recent Advances in Pharmaceutical Research, July 2013; 3(3): 35-38.

34. 2012 Chemical Composition of Essential Oil of *Teucrium mascatenses* Bois grown in Oman, Afaf Mohammed Weli, , Dina Selima, Mohammad Sohail Akhtara , Jamal Nasser Al-Sabahib , Qasim Al-Riyamia , Rasha Khamis Saif Al-Wahibia , Marwa Mubarak AL Oraimi, Suliman Al-Khanjaric , Journal Of Essential bearing oil plants, July-August issue of JEOPB 2012.

35. 2011 Essential oil composition and antimicrobial screening of *Launaea nudicaulis* grown in Oman, , Jamila A. Al-Mahrezi , Jamal Nasser Al-Sabahi , Mohammed Sohail Akhtar , Dina Selim and Afaf Mohammed Weli*, IJPSR, 2011; Vol. 2(12): 3166-3169.

36. 2011 Phytochemical investigations and antimicrobial screening of *Coleus aromaticus* grown in Oman, , Afaf Mohammed Weli, * , Dina Selima, Mohammad Sohail Akhtara , Jamal Nasser Al-Sabahib , Suliman Al-Khanjaric , Qasim Al-Riyamia , Zakia Mubarak Al-Sulimia , Samera Suliman Adi Al-Salmania , Basema Obaida ,Electronic Journal of Environmental, Agricultural and Food Chemistry (EJEAFChe). 2011, 10(11), 3083-3090.

37. 2010 Comparative in-vitro evaluation of *Vitex leucoxyloides* Linn bark for antioxidant activity, , Akhtar Md S, Shukla Padmini,Shakula Prabodh,Shashi Alok, Mahor Alok. International journal of Pharmaceutical Sciences and Research, 1(1). 2010, 27-33.

38. 2009 New chromone derivatives from *Evolvulus alsinoides* Linn. Aerial parts.`` , Md. Sohail Akhtar, Raad A. Kaskoos, Showkat Rasool Mir and Mohammed Ali, Journal of Saudi Chemical Society. (2009) 13, 191-194.

39. 2009 Pharmacognostic and phytochemical analysis of *Gymnema Sylvestre* R. (BR.)

leaves. , Madhurima, S.H. Ansari, Prawez Alam, Sayeed Ahmad, and Md. Sohail Akhtar..
Journal of Herbal Medicine and Toxicology 3 (1) 73-80 (2009).

40. 2007 Pharmacognostic evaluation of *Calendula officinalis* flowers. , Madhurima, S.H. Ansari, Mohd Ali, Prawez Alam, Md. Sohail Akhtar, Sayeed Ahmad. Natural Products an Indian Journal, 3(3), 2007, 182-186.

41. 2006 Chemical Composition of Volatile Oil of *Lantana indica* Roxb. Leaves. , Md. Sohail Akhtar, M.Ali, Madhurima and S.R. Mir; Journal of Essential Oil Research, 2006 18(6): 611-612.

42. 2006 Anthraquinones from *Rubia cordifolia* roots., Md. Sohail Akhtar, M. Ali, Madhurima S.R. Mir, Onkar Singh. Indian Journal of Chemistry.2006, vol 45B (8), pp 1945

43. 2006 Essential Oil composition of the fruits of *Elettaria cardamomum*., Raad A. Kaskoos, Mohd Ali, Reni Kapoor, Madhurima, Md. Sohail Akhtar and Showkat R.Mir, Journal of essential oil bearing plants, 9 (1), 2006, pp 81-84.

44. Composition of volatile oil of *Syzygium aromaticum* buds, Reni Kapoor, M. Ali, Md. Sohail Akhtar, Raad A. Kaskoos, Abdul W. Siddiqui, S.R. Mir, Journal of Essential Oil Bearing Plants (Journal of essential oil bearing plant 8(2). 2005 pp196-199.

Book Section:

1. 2024 Plants as medicine and aromatics: Phytochemistry and Neuroprotective Spectrum of a Medicinal Food Product *Crocus sativus* Linn. (Taylor & Francis, Mohammad Sohail Akhtar

2. 2023 Isolation of Bioactive Compounds From Medicinal Plants to Treat Neurological Disease, Mohammed Sohail Akhtar, Shyam Sundar Arputhanantham, Wegdan Aly Shehata

3. 2022 Chemistry, Biological Activities and Uses of Benzoin Resin., Mohammad Sohail Akhtar*, Tanveer Alam

Faculty Administrative Experience

2014 - 2025: Assistant Dean for Graduate studies and Research - College of Health Sciences, University of Nizwa

Community Services

27/11/2022: Graduate studies Research and innovation committee, National University, Oman 2022-23

Consultancy Activities

Phase 1 "Identification of active ingredients in the given sample" was successfully completed. Budget for Phase 1: 900 OMR, 2023- 2024

Membership in Professional Bodies

2009-Present: Life time member of Indian Pharmacy Graduate Association, membership number: 3409.

2004-Present: Life time member of Indian Society of Analytical Scientist, membership number: LM 2013.

2004-Present: Life time member of Association of Pharmacy Teachers in India, membership number: HA/LM-094.

Award and Recognitions

2023 Determination of Concentration of Carcinogenic Polycyclic Aromatic Hydrocarbons and Toxic Heavy Metals in Some Sea Fish Samples in Oman. Research Grant from MOHERI : 9150 RO

2020 URG from MOHERI, Oman: Formulation and Evaluation of shampoo comprising Poly-herbal extracts 1250 OMR

2019 URG fund by TRC Oman titled "Comparative phytochemical and in vitro pharmacological activities of different brands of olive oil" RO 700

2019 TRC research grant as Co-PI titled "Discovery of anticancer metabolites from Oman Marine Invertebrates" RO 5900

2015 FURAP research project funded by TRC Oman for the session 2015-16 titled "Phytochemical investigation, cytotoxicity, antibacterial and anti-oxidant activity of Olea europaea leaves and fruits grown in Oman" of RO 1800

2015 The FURAP Research Award, Oct 10, 2015. An amount of 500 RO, trophy and certificate was given

2014 FURAP research project externally funded by TRC Oman titled "Phytochemical investigation, standardization and antibacterial activity of Miswak (Salvadora persica) grown in different geographical regions of Oman "of RO 2353.8

2014 TRC research grant as Co-investigator titled "In vitro anticancer activity of selected

medicinal plants from Oman” RO 74000

2012 University of Nizwa funded research project as Co-investigator titled “Isolation and Characterization of antioxidant and antimicrobial compounds from Adenium obesum (Desert rose) grown in Sultanate of Oman” RO 9910

2002 Awarded junior research fellowship by University grand commission India,for 2 years

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