DR. NAVNEET KISHORE

ASSISTANT PROFESSOR

HTTPS://SCHOLAR.GOOGLE.CO.IN/CITATIONS?USER=O2ZJJB4AAAAJ&HL=EN

CONTACT

Address:
A-568, Shastri Nagar
New Delhi
INDIA-110052
Cell No.: +91-9560617897

E-mail:
kishore.navneet6@gmail.com
nkishore@maitreyi.du.ac.in

SKILLS

- Medicinal Value of Plants
- Extraction of plant material
- Isolation of metabolites
- Purification of compounds
- Structural elucidation
- Spectroscopic Techniques
- Derivatization of isolates
- Proficiency in MS office
- Skilled in review writing
- Manuscript preparation
- Excellent in data mining

LANGUAGE

- Hindi (Speak/Write)
- English (Speak/Write)

INTERESTS

- Delicious Cooking
- Know More About Plants
- Wild Safari Sighting

EXPERIENCE (11 YEARS RESEARCH AND TEACHING, AFTER PHD)

ASSISTANT PROFESSOR (NOVEMBER 2020 TO TILL DATE)
Maitreyi College, University of Delhi, Delhi-110007

Lecturing organic chemistry section (Theory & practical classes) for B.Sc. (Honors) and B.Sc. (Life Science) students.

ASSISTANT PROFESSOR (GUEST FACULTY) (SEPTEMBER 2019 TO OCTOBER 2020, **Maitreyi College, University of Delhi, Delhi.**

I have taught main group elements unit, green chemistry unit and GOC for courses B.Sc. (Life Science) and BSc (Honors) chemistry.

DR. D.S. KOTHARI POSTDOCTORAL FELLOW (APRIL 2017 TO MARCH 2020) **Department of Chemistry, University of Delhi, Delhi**

Natural products isolation and purification from medicinal plants.

POSTDOCTORAL AND SENIOR POSTDOCTORAL FELLOW (APRIL 2012 TO MARCH 2017) Department of plant & soil science, University of Pretoria, Pretoria, South Africa

Natural products isolation and purification from medicinal plants

EDUCATION

Ph.D. (Chemistry) BANARAS HINDU UNIVERSITY (BHU), VARANASI, INDIA (Awarded August 2011)

Thesis Title: Chemical Investigation of Medicinal Plants (Isolation and identification of bioactive phytochemicals).

M.Sc. (Chemistry) MAHATMA JYOTIBA PHULE (MJP) ROHILKHAND UNIVERSITY, BAREILLY, INDIA (June 2004)

Organic chemistry major (Inorganic and physical minor).

B.Sc. (Biological Sciences) MAHATMA JYOTIBA PHULE (MJP) ROHILKHAND UNIVERSITY, BAREILLY, INDIA (June 2001)

Studied zoology, botany and chemistry

Nature prevents us- Dr. Navneet Kishore

TOPICS

- Aromaticity
- General Organic Chemistry
- Name Reactions
- Pericyclic Reactions
- Reaction Mechanism
- Reagents
- Stereochemistry
- Chemical Periodicity
- Coordination Chemistry

KEY POINTS

- Conduct Live Classes
- Consult with Senior Teachers
- Explanation of Doubts
- Feedback from Students
- Online Teaching
- Power Point Presentations
- Previous Years Solution
- Questions from Students
- Reading Material
- Regular Test and Assignments
- Response on Same Day
- Weekly Interactive Session
- Regular Presence in FDPs and Seminar to Enhance Teaching and Research Skill

After adaptation of mentioned key points, it must be said that I feel improving and evolving as a teacher.

STATEMENT OF TEACHING

I have a huge regard for teaching because it makes unique and motivational experience for me. It is because the education plays a paramount role in building the future of the nation. I do believe that teaching is a mutual process of learning and understanding the subject in depth. Teaching requires the subject knowledge with clear explanation of concepts which can effectively delivers to the learners. My aim as a teacher is to develop a clear picture of each concept among the students. It can be done by explaining the chemical phenomenon because all the concepts are evidence from a chemical incident or an interesting story behind it. It is compulsion for teaching to abstract the appropriate concept and compile them in simplified manner to make eloquent learning. Hence, to clear these concepts in own mind before lecturing to the students, it acts as a driving force for the tutor. I have the subject knowledge, will teach and spend time to gain new knowledge to impart the quality education. I will try to maintain and enhance the subject knowledge, standards, enthusiasm, caring attitude, love of learning and management of classroom discipline.

I teaches organic chemistry, but I can also teach some inorganic chemistry topics. The organic chemistry is just a game of electron density. It can be conceptually strengthened by the focusing on the electronic displacement effect. The reaction mechanism and stereochemistry are backbone of organic chemistry. If concept of electronic displacement is well understood, then the reaction mechanism can be understood very easily. Along with this, if you understand stereochemistry, then the reaction mechanism of higher level will become even more easier. To make the mechanism easier, firstly will discuss the properties of reagents and substrate. I will go through the syllabus thoroughly before starting my teaching. Based on the content, I will prepare the lecture. While preparing the lecture, my focus will be on adding as many examples/questions as possible. I always communicate and keep in touch with students via small tests, assignments, chemistry quiz, small projects and research-oriented manuscript writeup. One lecture also be organized weekly to discuss the latest advancement in chemical sciences to create innovative research ideas.

To inculcate the ability to teach along with the studies of the students, one day group discussion will be conducted every month. In this, each student will have to explain a topic in classroom and all other students will give their views. My efforts will be to make the subject interesting and keep the student's curiosity to know the subject more alive for ever. I will put my every endeavor to make the practical interesting.

MEDICINAL PLANTS

- Scientific literature on Plant
- Phytochemical Analysis
- Natural Product Isolation
- Structure Elucidation

OBJECTIVES

- Bioactivity Guided Isolation
- Scientific Validation Plants
- Search for Novel compounds
- Search for Biomarkers
- Upscale Bioactive Molecules

TECHNIQUES

- 1D NMR and 2D NMR
- CHN Analysis
- Column Chromatography
- HPLC and LC-MS
- Mass Spectroscopy
- Soxhlet Apparatus
- Thin Layer Chromatography
- UV and IR Spectrums

METHODS

- Screening of Crude Extract
- Isolation of Compounds
- Derivatization of bioactive
- Structure Activity Relationship
- Working Capacity in Team
- Work in Collaboration

OUTCOMES

- Beneficial to Society
- Novel Potential Molecules
- To Generate SCI Articles
- Validation of Folklore Facts

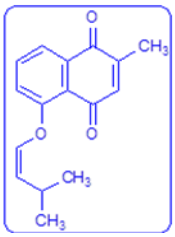
STATEMENT OF RESEARCH

Plants have always been an exemplary source of fundamental needs like food, clothing, drugs and shelter. Plants provide a variety of products of economic importance for human beings. Hence, aromatic and medicinal plants have played a vital role in alleviating human sufferings since ancient time. Therefore, Plants are natural pharmaceutical production system and attracts various drug development programs at national and international level. A number of plants are used to treat several ailments in the folklore system of medicine. Many of these plants are still not validated scientifically. Similarly, many plants have been scientifically validated but chemical investigation is still warranted. Hence, my aim is to identify plant based bioactive leads with higher efficacy and lower toxicity. Hence, scientific validation of folklore plants and isolation of bioactive constituents from these plants, will inspire medicinal chemists for further exploration to developing them into novel drug candidate. My research work is pedestal on isolation and structure elucidation of bioactive molecules from medicinal plants. The derivatization of bioactive molecules, which leads to enhance the activity and establish the structure activity relationship. However, phytochemical identification needs deeper studies, which is time consuming and laborious. As my expertise, I will focus my future research in the identification of bioactive phytomolecules and biomarkers from medicinal plants to obtain some good results.

Most of the drugs are either natural products or NPs derivatives. With the increasing acceptance that the chemical diversity of natural products is well suited to provide the core scaffolds for future drugs, there will be further developments in the use of novel natural products and chemical libraries based on natural products in drug discovery. The synthetic derivatives of isolated bio-active compounds will be screened for different bioassays to establish the structure activity relationship study. This SAR based study will provide the ideas about how to be enhanced activity. The further derivatization will lead to advance methodologies in synthesis and to the possibility of making potential analogues with improved pharmaceutical properties. Hence, phytochemical study has introduced significant information in the synthesis of organic compounds in past few decades, which has opened new vistas in the field of medical science. It is my belief; this approach would strengthen the health sector. Additionally, I will also contribute towards coherent and narrative reviews to update the significant potential and current research on medicinal plants.

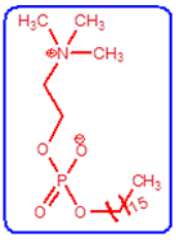
RESEARCH AND DEVELOPMENTS/OUTCOME

- I had *isolated and characterized four new compounds* along with six known metabolites from plant *Plumbago zeylanica*.
- Out of one new compound showed excellent anti-leishmanial activity *more than Miltefosine*, used as standard drug.



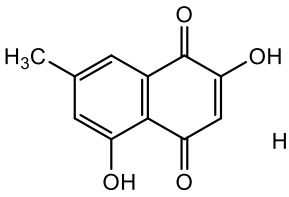
Isolated Compound
(Exhibited excellent activity)
Activity and Cytotoxicity
Promastigotes EC_{50} = **0.573** mg/L
Amastigotes EC_{50} = **1.045** mg/L
RAW264.7 CC_{50} = **6.13** mg/L

Miltefosine
(Approved drug for Leishmaniasis)
Activity and Cytotoxicity
Promastigotes EC_{50} = **1.697** mg/L
Amastigotes EC_{50} = **3.053** mg/L
RAW264.7 CC_{50} = **10.68** mg/L

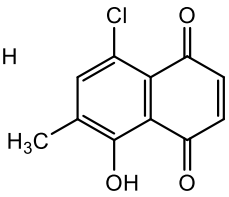


- Another plant *Aegle marmelos*, I had *isolated three new compounds* along with seven known metabolites. All the three compounds displayed good antifungal activity.
- I had also *isolated and characterized a new compound* along with four known compounds from the plant *Leucosidea sericea*, and five known compounds from *Syzygium jambos*.
- Moreover, I had isolated and characterized two new compounds along with 18 known compounds from the plant *Myrsine africana* (13 out of 18 identified and published in Journal of Natural Products).
- In conclusion, *I had isolated total ~65 compounds* (*10 new* compounds and *55 known* compounds) during my research tenure from the investigated plants.
- Additionally, we have synthesized 18 naphthoquinone derivatives and evaluated against different cancer cell lines, one derivative displayed significant anticancer activity *more than Cisplatin* (used as standard drug) cervical epithelial carcinoma cancer cell lines.

Synthesized Derivatives of 7-MJ



(A) IC_{50} = **5.3** µM

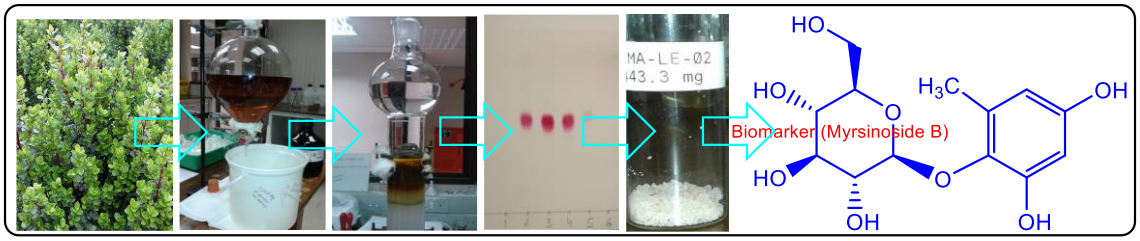


(B) IC_{50} = **10** µM

Cisplatin
(Approved drug for cancer)

The IC_{50} 10.0 µM against cervical epithelial carcinoma cell lines, whereas the synthesized compound (A) is more active (IC_{50} 5.3 µM) and compound (B) has same activity (IC_{50} 10 µM) as cisplatin against HeLa cells.

- The biomarker (Myrsinoside B) was isolated from the South African plant *Myrsine africana* showed significant Anti-tyrosinase, Anti-elastase and Anti-wrinkle activity.



- Recently, I have isolated and identified cox-2 inhibitor compounds from the root extract of herb *Peristrophe bicalyculata* (Retz) NEES. The plant extract and isolated compounds displayed good cox-2 inhibitory activity (Unpublished Results).

RESEARCH AWARDS/FELLOWSHIPS

1. Qualified Combined-Research Eligibility Test (C-RET/BHU) 2007.
2. Research Fellowship (UGC, New Delhi), 2007.
3. Junior Research Fellowship (UGC-RGNF, New Delhi), 2008.
4. Senior Research Fellowship (UGC-RGNF, New Delhi), 2009.
5. Post-doctoral Fellowship (DST Project, University of Pretoria, South Africa), 2012.
6. UP Senior Post-Doctoral Fellowship (University of Pretoria, South Africa), 2016.
7. Dr. D.S. Kothari Postdoctoral Fellowship (UGC, New Delhi) 2017.

FACULTY DEVELOPMENT PROGRAMME COMPLETED

1. One Week Workshop on "Ayurveda and Nutrition" from 14th to 20th March **2024** for Capacity Building of faculty for transaction of VAC: Ayurveda & Nutrition, organized by Department of Food & Nutrition and Food Technology, Lady Irwin College, University of Delhi.
2. Ten days "NEP Orientation & Sensitization Programme" from 5th December to 14th December **2023**, organized by Centre for Professional Development in Higher Education (CPDHE) under UGC - Malaviya Mission Teacher Training Centre (MMTTC), University of Delhi.
3. One-week National Level Faculty Development Programme on "Four-Quadrant Model for Development of E-Content, MOOCs and Teacher's e-Kit" organized by Guru Angad Dev Teaching Learning Centre, SGTB Khalsa College, University of Delhi under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT) of Ministry of Education. 29th September to 05th October **2021** (Obtained GRADE "A+").
4. A Continuous Professional Development (CPD) under National Workshop entitled "Blended Learning with LMS-MOODLE (ADVANCED)" organized by Guru Angad Dev Teaching Learning Centre, SGTB Khalsa College, University of Delhi under the PMMMNMTT of Ministry of Education held from 18th and 19th September **2021**.
5. A Continuous Professional Development (CPD) under National Workshop entitled "Blended Learning with LMS-MOODLE (BASIC)" organized by Guru Angad Dev Teaching Learning Centre, SGTB Khalsa College, University of Delhi under the PMMMNMTT of Ministry of Education held from 11th and 12th September **2021**.
6. One Day Online National Webinar entitled "Implementation of Academic Bank of Credits" organized by Guru Angad Dev Teaching Learning Centre, SGTB Khalsa College, University of Delhi under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT) of Ministry of Education on 10th July **2021**.

7. National Online Webinar "Examining India's Examination System" organized by Guru Angad Dev Teaching Learning Centre (GAD-TLC) of MHRD under PMMMNMTT Scheme, 25 January **2021**.
8. One-week National Level Faculty Development Programme on DIGITAL PEDAGOGY TO ENHANCE TEACHING AND LEARNING EXPERIENCE in collaboration with Teaching Learning Centre (TLC), SGTB Khalsa College, University of Delhi, under the most coveted MHRD Sponsored Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT), December 15 to 21, **2020**.
9. One Day Workshop on ICT (Information and Communication Technology) ENABLED ENHANCED TEACHING AND LEARNING organized by Maitreyi College, University of Delhi on 03 Dec. **2020**.

LIST OF PUBLICATIONS

1. D Twilley, VC Thipe, N Kishore, P Bloebaum, C Roma-Rodrigues, PV Baptista, AR Fernandes, MA Selepe, L Langhansova, K Katti, N Lall. Antiproliferative activity of *Buddleja saligna* (Willd.) against melanoma and in vivo modulation of angiogenesis. Pharmaceuticals, 2022, 15, 1497. ISSN: 1424-8247 (IF-5.215
2. R Kumari, N Kishore, K Soni. Phytochemical analysis of selected Indian medicinal plants to know the antiviral potential against novel coronavirus. Journal of Emerging Technologies and Innovative Research (JETIR), 2021, 8, 751-764. (ISSN-2349-5162) UGC No 63975. (IF-7.980)
3. N. Kishore, P. Kumar, K. Shanker, A.K. Verma. Human disorders associated with inflammation and the evolving role of natural products to overcome. Eur. J. Med. Chem., 2019, 179, 272-309.
4. N Kishore, D Twilley, A Blom van Staden, P Kumar, B Singh, G Cardinali, D Kovacs, M Picardo, V Kumar, N Lall. Isolation of flavonoids and flavonoid glycosides from *Myrsine africana* and their inhibitory activities against mushroom tyrosinase, J. Nat. Prod., 2018, 81, 49-56.
5. MN DeCanha, N Kishore, V Kumar, D Meyer, S Nehar, B Singh, N Lall. The potential of *Clausena anisata* (Willd.) Hook.f. ex Benth against *Propionibacterium acnes*. S. Afr. J. Bot., 2018, 119, 410-419.
6. BD Fibrich, N Kishore, B Madikizela, X Gao, A Puri, A Banga, N Lall. Mother nature's remedies to reduce the appearance of wrinkles. S. Afr. J. Bot., 2018, 115, 285.
7. A pharmacokinetic and hepatoprotective evaluation of *Lippia scaberrima* Sond. in combination with Aspalathus linearis (Burm. f.) R. Dahlgren. A Kok, CB Oosthuizen, N Kishore, P Huuskonen, R Juvonen, M Pasanen, N Lall. S. Afr. J. Bot., 2018, 115, 290.
8. Natural coumarin derivatives as inhibitors of mycobacterial biofilms. CB Oosthuizen, N Kishore, V Kumar, A Ohja, N Lall. S. Afr. J. Bot., 2018, 115, 305.
9. South African plants for potential treatment and prevention against skin cancer. D Twilley, N Kishore, L Langhansov, I Moodley, H Rolfes, N Lall. S. Afr. J. Bot., 2018, 115, 313.

10. Drug development against tuberculosis: Impact of alkaloids. Mishra SK, Tripathi G, Kishore N, Singh RK, Singh A, Tiwari VK. Euro. J. Med. Chem., 2017, 137, 504-544.
11. In vitro and In vivo activity of *Myrsine africana* on elastase inhibition and anti-wrinkle activity. Lambrechts I, Kishore N, Lall N, Pharmacogn. Mag., 2017, 13, 583-589.
12. Investigation towards propagation and cosmeceutical application of *Athrixia phylicoides* DC. Kleynhans R, Singh S, Kishore N, Lall N. S. Afr. J. Bot., 2017, 112, 319-321.
13. Alkaloids from aerial parts of *Annona senegalensis* against *Streptococcus mutans*, Lall N, Kishore N, Bodiba D, More G, Tshikalange E, Kikuchi H, Oshima Y, Nat. Prod. Res., 2017, 31, 1944-1947.
14. The effect of *Helichrysum odoratissimum* (L.) Sweet on cancer cell proliferation and cytokine production. Twilley D, Kishore N, Meyer D, Moodley I, Kumar V, Lall N. Int. J. Pharmacogn. Phytochem. Res., 2017, 9,621-631.
15. The effect of a South African *Helichrysum sp*. against important pathogenic mechanisms of Propionibacterium acnes, de Canha MN, Kishore N, Lall N, Planta Med., 2016, 82, (S01): S1-S381.
16. Antifungal Eudesmanolide glycoside isolated from *Sphaeranthus indicus* Linn. (Family-Compositae), Mishra BB, Kishore N, Tiwari VK, Nat. Prod. Res., 2016, 30, 2770-2776.
17. Extract from *Ceratonia siliqua* exhibits depigmentation properties, Lall N, Kishore N, Momtaz S, Hussein A, Naidoo S. Phytother. Res., 2015, 29, 1729-1736.
18. Cytotoxicity of Syringin and 4-Methoxycinnamyl alcohol isolated from *Foeniculum vulgare* on various human cell lines, N Lall, N Kishore, B Binneman, D Twilley, M de Venter, D Plessis-Stoman, G Boukes, A Hussein. Nat. Prod. Res., 2015, 29, 1752-1756.
19. Are plants used for skin care in South Africa fully explored? N Lall, N Kishore. J. Ethnopharmacol., 2014, 153, 61-84.
20. Natural products as leads to potential mosquitocides, N Kishore, BB Mishra, V Tripathi, VK Tiwari, N Lall, Phytochem. Rev., 2014, 13, 587-627.
21. Cytotoxicity of 1,4-naphthoquinone analogues on human cancer cell lines, N Kishore, B Binneman, A Mahapatra, M van de Venter, D Plessis-Stoman, G Boukes, P Houghton, JJM Meyer, Namrita Lall. Bioorg. Med. Chem., 2014, 22, 5013-5019.
22. The potential of *Leucosidea sericea* against *Propionibacterium acnes*, R Sharma, N Kishore, A Hussein, N Lall. Phytochem. Lett., 2014, 7, 124-129.
23. Antibacterial and anti-inflammatory effects of *Syzygium jambos* L. (Alston) and isolated compounds on *Acne vulgaris*, R Sharma, N Kishore, A Hussein, N Lall. BMC Complement. Altern. Med., 2013, 13, 292.
24. An anti-leishmanial prenyloxy-naphthoquinone isolated from roots of *Plumbago zeylanica*, BB Mishra, J Gour, N Kishore, V Tripathi, RK Singh, Nat. Prod. Res., 2013, 27, 480-485.

25. Naturally occurring Bioactive C-glycosides, N Kishore, BB Mishra, VK Tiwari, V Tripathi, Trends Carbohydr. Res., 2011, 3, 1-12.
26. Antifungal constituents from seeds of *Aegle marmelos* Correa, BB Mishra, N Kishore, VK Tiwari, V Tripathi, Med. Chem. Res., 2010, S63-64.
27. Antifungal constituents isolated from the seeds of *Aegle marmelos*, BB Mishra, DD Singh, N Kishore, VK Tiwari, V Tripathi, Phytochemistry, 2010, 71, 230-234.
28. A novel antifungal anthraquinone from seeds of *Aegle marmelos* Correa, BB Mishra, N Kishore, VK Tiwari, DD Singh, V Tripathi, Fitoterapia, 2010, 81, 104-107.
29. Difuranonaphthoquinone from *Plumbago zeylanica* L. Roots, N Kishore, BB Mishra, VK Tiwari, V Tripathi, Phytochem. Lett., 2010, 3, 62-65.
30. A novel naphthaquinone from *Plumbago zeylanica* L. roots, N Kishore, BB Mishra, VK Tiwari, V Tripathi, Chem. Nat. Compd., 2010, 46, 517-519.
31. Alkaloids as potential anti-tubercular agents, N Kishore, BB Mishra, V Tripathi, VK Tiwari, Fitoterapia, 2009, 80, 149-163.
32. COX-2 inhibitory potential of *Peristrophe bicalyculata* (Retz) NEES root extract and isolated constituents, N. Kishore and A.K. Verma, Phytochem. Lett., 2022 (Manuscript Submitted).

LIST OF PATENTS

1. A patent entitled "Skin care composition containing *Leucosidea sericea* extract for the treatment of *Propionibacterium acnes*". Patent No: PCT/IB2013/056343. Inventors: Sharma R, Lall N, Hussein A, Kishore N, Moodley I. (Filing date: 02 August 2013; Publication date: 6 Feb 2014) Publication No: WO2014020575A1.
2. A patent entitled "Anticancer activity (Melanoma) of *Buddleja saligna* compositions". Patent Application No: 2019/00387. Inventors: Twilley D, Lall N, Kishore N. (Filing date: 21 Jan. 2019).

LIST OF PUBLICATIONS (BOOK CHAPTERS)

1. Kishore, N., Gondwal, M., Soni, R., Verma, G.K., Lal, R., Gautam, B.P.S. (2023). Impact of Physical and Chemical Processes on Marine Environment. In: Soni, R., Suyal, D.C., Morales-Oyervides, L., Fouillaud, M. (eds) Current Status of Marine Water Microbiology. Springer, Singapore. ISBN: 978-981-99-5022-5.

2. Gondwal, M., Kishore, N., Soni, R., Verma, R.K., Gautam, B.P.S. (2023). The Chemical Composition of the Water in the Rivers, Lakes, and Wetlands of Uttarakhand. In: Soni, R., Suyal, D.C., Morales-Oyervides, L., Sungh Chauhan, J. (eds) Current Status of Fresh Water Microbiology. Springer, Singapore. ISBN: 978-981-99-5018-8.
3. Emerging Role of Medicinal Plants in the Prevention of Oral Cavity Disorders, N Kishore and BP Singh, Chapter 02, **2023**, pp 33-46. Book "Pharmacological Studies in Natural Oral Care" 1st Edition, Editors: DN Chauhan PR Singh, NS Chauhan and K Shah. John Wiley & Sons Inc USA. ISBN No: 9781394166268.
4. Flavouring, pharmacological, phytochemical and folklore aspects of fennel herb (*Foeniculum vulgare* Mill.), N Kishore and AK Verma, Chapter 04, **2021**, pp xx-xx. Book "The Medicinal Plants: Whole Plants to Molecules" Editors: AB Sharangi and KV Peter. Apple Academic Press, New York (Taylor and Francis group), USA. ISBN No: 9781003277408.
5. Pharmacological Properties of Mulberry (*Morus alba*), N Kishore and D Kumar, Chapter 3, **2020**, pp 35-44. Book "Assessment of Medicinal Plants for Human Health" 1st Edition, Editors: DN Chauhan and MR Goyal. Apple Academic Press, New York (Taylor and Francis group), USA. ISBN No: 9780429328541.
6. Coconut palm (*Cocos Nucifera*): A natural gift to human being for dental ministrations, N Kishore and AK Verma, Chapter 17, **2020**, pp 271-284. Book, "Natural Oral Care in Dental Therapy", Editors: DN Chauhan, PR Singh, K Shah, NS Chauhan. Scrivener Publishing LLC, Wiley Online Library, USA. ISBN No: 9781119618973.
7. Egg-Laying Behaviour of *Caryedon serratus* (Olivier) on the Essential Oils of *Skimmia anquetilia*. M Gondwal, BPS Gautam, N Kishore. In Trends in Insect Molecular Biology and Biotechnology, Editors: D Kumar and C Gong, **2017**, Chapter 11, pp 233-249. Springer International Publishing AG. ISBN No: 978-3-319-61343-7.
8. Role of Protein Interleukin 8 (IL-8) in Human Life, R Sharma, N Lall and N Kishore. In Book Biomedical Applications of Natural Proteins, Editors: D Kumar and R Kundapur, Chapter 7, **2015**, pp 89-100, Springer publisher, Heidelberg Germany. ISBN No: 978-81-322-2491-4.
9. Adverse Effect in Human Beings Associated with Excess Dietary Protein Intake, BPS Gautam, M Gondwal and N Kishore. In Book Biomedical Applications of Natural Proteins Editors: D Kumar and R Kundapur, Chapter 9, **2015**, pp 115-128, Springer publisher, Heidelberg Germany. ISBN No: 978-81-322-2491-4.
10. Scope of Alkaloids in Anti-leishmanial Drug Discovery and Development, BB Mishra, N Kishore, RK Singh, VK Tiwari, Chapter 40, **2013**, pp 1263-1299. In Handbook of Natural Products, Editors: KG Ramawat, JM Merillon, Springer-Verlag Berlin, Heidelberg, Germany. ISBN No: 978-3-642-22144-6.

11. Phytochemical Profile of *Aegle marmelos* (family-Rutaceae), BB Mishra, N Kishore, VK Tiwari, V Tripathi, Chapter 5, **2012**, pp 121-154. In Natural Products: Research Reviews, Volume 1, Editor-VK Gupta, M/S Daya Publishing House, New Delhi. ISBN No: 978-81-703-5775-9.
12. A review on natural products with mosquitosidal potentials, N Kishore, BB Mishra, VK Tiwari, V Tripathi, Chapter 11, **2011**, pp 223-253. In Opportunity, Challenge and Scope of Natural Products in Medicinal Chemistry, Trans World Publishers, Research Signpost, 37/661 (2), Fort P.O. Trivandrum-695023, Kerala. ISBN No: 978-81-308-0448-4.

LIST OF OTHER PUBLICATIONS

1. An account of phytochemials from *Plumbago zeylanica* (Family-Plumbaginaceae): A natural gift to human being, N Kishore, BB Mishra, VK Tiwari, Vyasji Tripathi, Chronicles of Young Scientists, 2012, 3, 178-198.
2. Medicinal aspects of routine kitchen ingredients, N Kishore, BB Mishra, V Tripathi, Journal of Scientific Research, 53, 73-88, 2009.
3. Anti-swine flu: prospects of medicinal plants, N Kishore, BB Mishra, VK Tiwari, Vyasji Tripathi, Journal of Chemtracks, 2009, 11, 639-650.
4. Chemistry is a natural gift to fight against coronavirus, N Kishore, Departmental magazine "CHEMZONE-**2021** (Annual magazine published by department of chemistry, Maitreyi college).
5. Teeth and Chewing Twigs (दांत और दांतून), N Kishore, Departmental magazine "CHEMZONE-**2022** (Annual magazine published by department of chemistry, Maitreyi college).

CONFERENCES/SEMINARS (ORAL/POSTER/ATTENDED)

1. National Workshop on "Spreading Awareness on Emerging Challenges of Air Pollution and Climate Change on Human Health in Urban Ecosystem" organized by Environmental Pollution Laboratory, Department of Environmental Studies, University of Delhi in collaboration with Maitreyi College, University of Delhi, 09 November **2023** (**Organising Committee**).
2. National Seminar on "Tribal Empowerment" on the occasion of 76th Independence Day Celebration Week under Azadi ka Amrit Mahotsav organized by Student Union, Maitreyi College, 10th August, 2023. (Attended)
3. An International Conference 'Recent Trends in Drug Discovery and Development' organized by the Department of Chemistry under the aegis of IQAC, Maitreyi College, University of Delhi, 08-09 October **2021** (**Organising Committee**).

4. A National Webinar on Healthy Heart organised by the Health & Hygiene Committee, and Enabling Unit, Maitreyi College (University of Delhi) Under the aegis of Azadi Ka Amrit Mahotsav held on 11th September, **2021**.
5. National Conclave on "National Education Policy-**2020**: A New Vision for India's Higher Education System" organized by IQAC (Internal Quality Assurance Cell) and Department of Chemistry, Maitreyi College, 7th August, 2021. (Attended)
6. National Webinar "Immunity and Natural Immunity Booster: A Scientific Overview" organised by BLOSSOM-The Botanical Society, Department of Botany, Maitreyi College, University of Delhi, 31 July **2021** (Attended).
7. International Workshop on 'Public Health, Wellness and Well Being', organized by Maitreyi Alumni Association, Maitreyi College, University of Delhi held from 12th to 13th July **2021** (Attended).
8. National Webinar on "Sustainable Technological Solutions to Provide Potable Water in Rural Areas" organised by The Department of Chemistry, Maitreyi College collaboration with Madhyanchal University under Vidhya Vistar Scheme, 10 July **2021** (Attended).
9. An Oral Presentation entitled "Natural Prevention and Defense Against (COVID-19) Pandemic Blow" organised a webinar under recent developments of the pandemic COVID-19 and the various safety measures issued by the Government of India, by Department of Chemistry, Maitreyi College, University of Delhi, Blow'15th May, **2020** (**Oral Presentation**).
10. XV J-NOST-**2019** (National Organic Symposium Trust-2019) for research scholars organized by the Department of Chemistry, University of Delhi, 18-21 October 2019 (**Organising Committee**).
11. An Oral Presentation entitled Coconut water: A conservative natural power booster drinks for human beings in international conference on "6th World Congress on Nanomedical Sciences ISNSCON-2018 and Chemistry Biology Interface Synergistic in New Frontiers (CBISNF-2019)" 7-9th January **2019** at Vigyan Bhawan, New Delhi (**Oral Presentation**).
12. An Oral Presentation entitled Skin Care Potential of Myrsinoside B: A Biomarker Identified from *Myrsine africana* L in International Conference on "*Emerging Trends in Drugs Development and Natural-Products*" on 12th -14th January **2018** at Department of Chemistry, University of Delhi, Delhi (**Oral Presentation**).
13. American Chemical Society (ACS) on Campus events on 05th Feb **2018** at Sir Shankar Lal Concrete Hall, University of Delhi, India (Attended).
14. A seminar of MHRD-GIAN course on "RNA Metabolism and Neurodegenerative Diseases" from 2-7 April **2018**. Department of Chemistry, University of Delhi, India (Attended).
15. A seminar entitled "Development of New Energetic Materials" by Prof. Michael Gozin on 13th Feb. **2018** at Department of Chemistry, University of Delhi, India (Attended).
16. Lecture series on Prof. Amar Nath Maitra Memorial Lecture series on 10th Feb. 2018 at Department of Chemistry, University of Delhi, India (Attended).
17. International Seminar on "Effects of Pollution on Human Health", on Friday, December 1st, **2017** at Department of Chemistry, University of Delhi, India.
18. International Conference on "Advancing Green Chemistry: Building a Sustainable Tomorrow" on 3-4 October **2017**. at Department of Chemistry, University of Delhi, India.

19. Southern African Plants for Skin and Cervical Cancer, IPUF (Indigenous Plant Use Forum) conference. University of Free State, Qwaqwa campus, Phuthaditjhaba, 30th June -3rd July **2014** (Products Display).
20. A cyclooxygenase-2 (COX-2) protein inhibitor from *Aegle marmelos*, BB Mishra, **N Kishore**, VK Tiwari, V Tripathi, UGC Sponsored National Conference on Emerging Frontiers in Chemical Sciences, PG department of Chemistry, Sri Baldeo PG College, Baragaon, Varanasi, 23-24 Jan. **2012**.
21. Phytochemicals significant against infectious diseases, BB Mishra, **N Kishore**, RK Singh, V Tripathi, VK Tiwari, National Symposium on Advanced Functional Materials (NSAFM-2012), Department of Chemistry, Faculty of Science, Banaras Hindu University, Varanasi-221005 on Feb. 11-12, **2012**.
22. *Plumbago zeylanica* (Family- Plumbaginaceae): A folk remedy for Leishmaniasis, **N Kishore**, BB Mishra, RK Singh, VK Tiwari, Vyasji Tripathi, 4th NIPER (RBL)-CDRI Symposium on Medicinal Chemistry and Pharmaceutical Sciences, CDRI Lucknow, Feb. 23-25, **2012**.
23. Naphthoquinones isolated from roots of *Plumbago zeylanica*, **N Kishore**, BB Mishra, VK Tiwari, V Tripathi, *13th CRSI-5th* RSC National Symposium in Chemistry, Feb 4-6, **2011**, NISER-KIIT University Bhubaneswar (India).
24. Minor constituents for *Aegle marmelos* seeds, BB Mishra, **N Kishore**, VK Tiwari, V Tripathi, National Conference on Advances of chemistry in last few decades and contribution of chemical research to the mankind, Jan. 29-30, **2011**, Sri Baldeo PG College, Baragaon.
25. Natural Products in Drug Discovery, BB Mishra, **N Kishore**, VK Tiwari, V Tripathi, National Symposium on Emerging Trends in Chemical Sciences (ETCS-2011), Department of Chemistry, Faculty of Science, BHU, Varanasi-221005 on Feb. 19-20, **2011**.
26. Antifungal constituents from seeds of *Aegle marmelos* correa, BB Mishra, **N Kishore**, VK Tiwari, V Tripathi, 4th International conference on current trends in drug development research (CTDDR-**2010**) 17-21 February, CDRI, Lucknow, India.
27. *Aegle marmelos* (Bael fruit tree): A natural source of antifungal agents, BB Mishra, **N Kishore**, VK Tiwari, DD Singh, V Tripathi, International Conference on Recent Advances in Pharmaceutics, December 22-23, **2010**, IT-BHU, Varanasi-221005 (India).
28. Phytochemical constituents isolated from seeds of *Aegle marmelos* Correa, BB Mishra, **N Kishore**, VK Tiwari, V Tripathi, pp 68, *12th CRSI* National Symposium in Chemistry held at Indian Institute of Chemical Technology, Hyderabad on 4-7 Feb **2010**.
29. Attended the National symposium-cum Workshop on X-ray Crystallogrphy (NSWXRD) on 8-9 March **2010** in Department of Chemistry, Faculty of Science, Banaras Hindu University (Attended).
30. National symposium on "Frontiers of Chemical Science Interfacing Physical and Biological Phenomena", organized by Department of Chemistry, Faculty of Science, Banaras Hindu University, Varanasi-221005 on February 28 and March 1, **2009** (Attended).
31. Phytochemical constituents of *Aegle marmelos* Corr. seeds, BB Mishra, **N Kishore**, VK Tiwari, V Tripathi, 11'th CRSI National symposium in chemistry, 6-8 Feb. **2009**, National Chemical Laboratory, Pune.

32. A novel coumarin from the seeds of *Aegle marmelos* Correa (family- Rutaceae), BB Mishra, **N Kishore**, VK Tiwari, V Tripathi, Asian symposium on medicinal plants, spices and other natural products (ASOMPS) XIII, 3-6 Nov. **2008**, Hydrabad, India.
33. National seminar on "Recent Advances in Chemical Sciences", organized by Department of Chemistry, Faculty of Science, Banaras Hindu University, Varanasi-221005 on August 1-2, **2008** (Attended).

OTHER ACTIVITIES

1. Member: Criteria 3 technical team SSR submission June 2022 (Received A^{++} Rank by NAAC).
2. Member: Criteria 3 AQAR for the academic session 2022-23.
3. Member: Website committee (under Green Initiative tab), academic session 2023-24.
4. Member: Student Union Committee for the academic session 2021-22, 2022-23 and 2023-24.
5. Member: Discipline Committee for the academic session 2021-22.
6. Departmental coordinator of **Avgaahan** (An International interdisciplinary annual fest)
7. Member: **"Chemsophy-23"** for the year 2022 (Annual Chemistry Fest).
8. Member: **"RHAPSODY-2023"** for the year 2023 (A College Annual Fest).
9. Member: Eco-Club 'Prakriti', 2023-24.
10. Actively participated and completed the duties assigned by Maitreyi College authorities.
11. Appointed Internal and External Examiner of Practical Examination for B.Sc. Hons and Prog. courses.
12. Appointed Examiner for Paper Setting of B.Sc. Programme and B.Sc. Hons Generic Courses in academic session 2021-22 and 2022-22 odd/even semester.
13. Invigilation duties for Practical and Theory Examination in Maitreyi College premises for Regular and SOL exam.
14. Received Certificate of Appreciation for the timely evaluation of answer scripts of Open Book Examination (OBE). Unique Paper Code (UPC-42171103) held in March, 2021.
15. Member: ECA admission committee, under graduate admission, session 2021-2022, University of Delhi, Delhi-110007.
16. Member: admission committee, under graduate admission, session 2022-2023, University of Delhi, Delhi-110007.

QUICK RESEARCH AND ACADEMIC INDICATOR

1. Teaching and Research Experience: **11** Years (After PhD)
2. Faculty Development Programme: 04
3. Teaching and skill enhancement programme: 05
4. Research Publications: **35**
5. Book Chapters: **12**
6. Patents: **02**
7. Conferences/Seminars/Oral/Poster/Participation: **33**
8. Total Citations: > **1230**
9. h-index: **18**
10. i10-index: **22**