



**Name** : Dr. Nilesh Mahajan

**Designation** : Professor

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

**Specialization** : Industrial Pharmacy

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**Phone** : +91-8600882404

**Experience** : 23 yrs

Presently working as Professor at Dept of Pharmaceutics, Dadasaheb Balpande College of Pharmacy, Besa, Nagpur since July 2004 to till date. Worked as Associate Professor at IBSS College of Pharmacy, Malkapur, Dist.: Buldana (July 2011 – June 2014). Also served as Assistant Professor at GSPS Inst of Pharmacy, Akola (Sept 2002 – July 2011).

**Research areas:**

- Nanotherapeutics
- CRDDS/NDDS
- Phyto formulations
- Crystal engineering

## Research

- ✓  <https://scholar.google.com/citations?user=nkCV-YEAAAAJ&hl=en>
- ✓  [https://www.researchgate.net/profile/Nilesh-Mahajan-3?ev=hdr\\_xprf](https://www.researchgate.net/profile/Nilesh-Mahajan-3?ev=hdr_xprf)
- ✓  <https://orcid.org/my-orcid?orcid=0000-0002-2928-0769>

- Publications: 77 (International: 56, National: 21)
- Books: 01
- Book Chapters: 08
- Patents: 12 (04 Granted; 06 Published, 02 filed for examination)
- Copyrights: 01
- Presentations: 24 (International: 06, National: 18)
- Sponsored projects: 04
  - **Research Project under University Research Project Scheme** of Rs. **3.0 lakh** for the project entitled 'Exploring CD44 bio-ports for targeted delivery in multidrug resistant ovarian cancer' Project Ref. No.: RTMNU/RDC/2024/140 Date: 30/03/2024
  - **DBT-BIRAC COVID-19 Research Consortium** grant of Rs. **58.35 lacks** for project entitled, 'Dry Powder for Inhalation Containing Biodegradable Nanoparticles of Niclosamide to Combat COVID-19 Infection' Project Ref. No.: BT/PR41385/COT/142/19/2021; Project Duration – 24 months [Role - As a Principal Investigator; Multi- Institute project] (28/09/2021 – 09/07/2024)
  - **DBT-BIRAC COVID-19 Research Consortium** grant of Rs. **19.20 lacks** for project entitled, 'Development of Biodegradable Face Mask to Combat COVID-19' Project Ref. No.: BT/PR40750/COO/141/10/2020; Project Duration – 6 months [Role - As a Principal Investigator; Multi- Institute project] Sanctioned on: 24<sup>th</sup> March 2021
  - **Modernization and Removal of Obsolescence (MODROB)** by AICTE grant of Rs. **15.66 lacks** for the project entitled 'Set-up of Pilot Plant' Project Ref. No.: F. No. 84-19/RIFD/MODROB/Rural/Policy-1/2019-20; Project Duration – 2 yrs (16<sup>th</sup> May 2020 – 15<sup>th</sup> May 2022)
  - **Research Promotion Scheme (RPS)** by AICTE grant of Rs. **24.50 lacks** for the project entitled 'Preparation and Characterization of co-crystal of proton pump inhibitors to improve solubility and stability' Project Ref. No.: 8-102/RIFD/RPS/Policy-3/2013-14; Project Duration – 3 yrs (18<sup>th</sup> Dec 2013 – 17<sup>th</sup> Dec 2016)
- Consultancy projects:
  - Symbio Generics, Bengaluru 'Development of Semaglutide Tablets without SNAC Bio-Equivalent to RLD RYBELSIS Using an Alternative Material' for total financial outlay of 16,50,000/- (Agreement signed) [19/11/2024 – 18/03/2025]
  - Tak BioSuisse, Switzerland 'Development and characterization of scalable nutraceutical formulation for enhanced efficacy and reduced side effects' for

Rs. 9,80,000/- during academic year 2024-25 (Agreement signed) [31/12/2024 – 30/06/2025]

- Ayushree Ayurvedic Hospital and Research Center, Nashik, 'Development and Characterization of Tin Oxide Nanoparticles and Screening of Anti- Diabetic Efficacy in Experimental Animals' for Rs. 1,55,000/- in academic year 2023-24 (Completed) [06/01/2025 – 21/03/2025]
- Fertis India Pvt. Ltd., Hyderabad 'Toxicity Assessment of Polyherbal Eye Drops Formulation' for 5,11,000/- during academic year 2024-25 (Completed) [11/12/2024 – 28/02/2025]
- Hovid Berhad, Malaysia through Kairos IP LPP 'Potential Synergistic or surprising effects of phospholipid and vitamin E (Tocotrienols and Tocopherol Mixture) on non-alcoholic fatty liver disease (NAFLD) in Rats' for Rs. 3,57,000/- during academic year 2023-24 (Completed) [20/06/2024 - 07/12/2024]
- Hovid Berhad, Malaysia through Kairos IP LPP 'The potential synergistic or surprising effects of a combination of phospholipids and Vitamin E (Tocotrienols and Tocopherol mixture) in rats, compared to each active ingredient alone, in terms of Non-Alcoholic Fatty Liver Disease (NAFLD)' for Rs. 3,52,163/- during academic year 2023-24 (Completed) [18/04/2024 - 27/06/2024]
- Ayushree Ayurvedic Hospital and Research Center, Nashik, 'Development of Tin oxide nanoparticles' for Rs. 60,000/- in academic year 2023-24 (Completed) [13/12/2023 – 27/03/2024]
- Nagpur Veterinary College, Nagpur 'Development of tablets of *Nigella sativa* extract for the *Peste des petits* virus infection in ruminants' for amount 45,000/- in academic year 2023-24 (Completed)
- Poultry Research and Training Center, Nagpur for work entitled, "Bioanalytical method development for the determination of PK and biodistribution of Azithromycin and Bromhexine HCl in Broiler chicken" for amount Rs. 2,14,776/- in academic year 2022-23 (Completed) [01/01/2023 – 03/02/2023]
- Chemfields Cellulose Pvt. Ltd., Nagpur "Characterization & physicochemical comparisons of different grades of Primesolv with marketed products" for amount 50,000/- in academic year 2020-21 (Completed)
- Maxwell Life Sciences Pvt Ltd., Mumbai – "Formulation development of Levothyroxin Na tablet" for amount Rs. 2,00,000/- in academic year 2018-19 (Completed) [03/12/2018 – 07/12/2019]
- Nagpur Veterinary College, Nagpur affiliated to Maharashtra Animal and Fishery Science University, "Targeted formulation and evaluation of

polyherbal Anthelmintic against *Haemonchosis* in small ruminants” for amount Rs. 35,000/- in academic year 2017-18 (Completed)

- Oniosome Healthcare Ltd., Mohali Punjab – “Development of probiotic chewable tablets with anti-diarrheal drug” for amount Rs. 60,000/- in academic year 2017-18 (Completed) [01/01/2016 – 31/03/2016]
- Oniosome Healthcare Ltd., Mohali Punjab – “Development of nanostructured lipid carrier based Anti-inflammatory gel for topical drug delivery system” for amount Rs. 1,20,000/- in academic year 2017-18 (Completed) [01/04/2016 – 25/01/2017]
- Conferences/Workshops/Seminars attended: 92
- As a Resource Person: 40
- Conference/Workshop/Symposium organized: 20

#### Academic activities

- M. Pharm. projects guided: 78
- PhD Supervision: 04

#### Awards & Recognitions

- Awarded as a ‘**Best Researcher**’ by Rashtrasant Tukdoji Maharaj Nagpur University, Nagpur on the occasion of Teacher’s Day 05<sup>th</sup> Sept 2022
- Awarded Second prize of Dr. P.D. Patil **National Award for Best Thesis in Pharmaceutical Sciences 2023** in Ph.D. category organized by Dr. DY Patil Institute of Pharmaceutical Sciences and Research, Pimpri, Pune on 01<sup>st</sup> April 2024
- Awarded Runner-up in ‘**Best Research Project**’ in PhD category under Research Initiative and Incentive Policy of Ambe Durga Education Society’s Dadasaheb Balpande College of Pharmacy, Besa, Nagpur on 10<sup>th</sup> March 2025
- Awarded Runner-up in ‘**Best Research Project**’ in UG category under Research Initiative and Incentive Policy of Ambe Durga Education Society’s Dadasaheb Balpande College of Pharmacy, Besa, Nagpur on 16<sup>th</sup> March 2024
- Recipient of ‘**Travel Grant**’ of Rs. 1,11,166/- by Anusandhan National Research Foundation (ANRF) for oral presentation at ‘**Controlled Release Society 2024 Annual Meeting and Exposition**’ held at Bologna, Italy during 08<sup>th</sup> – 12<sup>th</sup> July 2024.
- Awarded Runner-up in ‘**Best Research Project**’ in PhD category under Research Initiative and Incentive Policy of Ambe Durga Education Society’s Dadasaheb Balpande College of Pharmacy, Besa, Nagpur on 25<sup>th</sup> Feb 2022

- **Special Award** for Innovation during poster session of CRS-IC Sponsored 18<sup>th</sup> International Symposium on “Advances in Technology and Business Potential of New Drug Delivery Systems” held at Hotel Sahara Star, Mumbai on 28-29<sup>th</sup> February 2020
- **Winner** of oral presentations session **at SFE, India, Sponsored** two days **International Conference** on “Academic and Industrial Innovations: Transition in Pharmaceutical, Medical and Biosciences” organized by **Innovare Academic Sciences** and VNS group of Institutions, Bhopal at Kala Academy, Panjim, Goa on 22<sup>nd</sup> and 23<sup>rd</sup> October, 2018
- **Runner-up** poster presentation at **CRS - IC Sponsored** one day National Seminar on “Excipients – The Key Drivers in Formulation Success” organized by Indira College of Pharmacy, Pune on 06<sup>th</sup> October, 2018
- **Winner**, at **APTI MS** and **IPA, Nagpur sponsored**, National level oral presentation competition “Innovations in Pharmaceutical Research”, on the occasion of science day, Organized by SKBCOP, Kamptee, Nagpur 28 Feb 2017
- Awarded **2<sup>nd</sup> merit** of SGB Amravati University, Amravati in **M. Pharm. 2002**
- Passed, **GATE 2000**, IIT Kharagpur, with 72.52 percentile.
- **Registered Ph.D. guide** in the Faculty of Science & Technology, RTMNU, Nagpur University, Nagpur
- Rashtra Sant Tukadoji Maharaj Nagpur University, Nagpur **VC Nominee, Board of Studies**, Priyadarshani JL Chaturvedi College of Pharmacy, Nagpur (An Autonomous Institute)
- **Member**, Research Advisory Committee, Nagpur Veterinary College, affiliated to Maharashtra Animal and Fisheries Science University (MAFSU), Nagpur
- **External Expert Member**, Biosafety Committee, Nagpur Veterinary College, Nagpur
- **Executive Council Member**, Controlled Release Society, Indian Chapter
- **Certified “Yoga Trainer”** by qualifying ‘Yoga Pravesh’ examination by Yogvidya Gurukul, Nashik, approved by Pune University, Pune, Maharashtra state, India
- **Qualified GATE – Pharmacy 2007**, with 87 percentiles

### Professional Memberships

- **Executive Committee (EC) Member**, Controlled Release Society - Indian Chapter (CRS - IC)
- **Life member** of Association of Pharmacy Teachers of India (**APTI**), Bangalore, Registration No. MA/LM-910

- **Member**, Controlled Release Society - Indian Chapter (**CRS - IC**), Membership No. ACD\_1807

## Recent Publications:

- More S, Rashid MA, Tiwari PK, Kharwade R, Alhamhoom Y, Asar TO, Kaleem M, **Mahajan N**, Pise A, Danao K and Kumar S (2025) Therapeutic potential of a rhein-loaded self-nanoemulsifying drug delivery system in ameliorating LPS-induced depression: mechanistic insights and behavioral outcomes. *Frontiers in Pharmacology* (2025) 16:1577080. <https://doi.org/10.3389/fphar.2025.1577080> [Frontiers, Impact factor 4.4]
- Rohini Kharwade, **Nilesh Mahajan\***, Sayyed Ali, Madhav Chakolkar, Shirish Jain, Sachin More, “Development and Characterization of Genistein-Loaded Silver Nanoparticles for the Induction of Apoptosis on Human Hepatocellular Carcinoma Cell Lines” *BioNanoscience* (2025) 15: 227 <https://doi.org/10.1007/s12668-025-01829-2> [Springer Nature, Impact factor 3.0]
- Rohini Kharwade, Mohsin Kazi, **Nilesh Mahajan\***, Payal Badole, Sachin More, Mohammed Kaleem, “Mannosylated PAMAM G2 dendrimers mediated rate programmed delivery of efavirenz target HIV viral latency at reservoirs” *Saudi Pharmaceutical Journal* (2024); 32: 102154 <https://doi.org/10.1016/j.jsps.2024.102154> [Elsevier, Impact factor 3.0]
- Darshan R. Telange, **Nilesh M. Mahajan**, Tushar Mandale, Sachin More, Amol Warokar “*Pongamia pinnata* seed extract-mediated green synthesis of silver nanoparticle loaded nanogel for estimation of their antipsoriatic properties” *Bioprocess and Biosystems Engineering* 2024; 47: 1409-1431 <https://doi.org/10.1007/s00449-024-03058-5> [Springer Nature Publications, Impact factor 3.3]
- Vaishnavi Shete, **Nilesh Mahajan**, Ruchi Shivhare, Ashish Akkewar, Amisha Gupta, Shailendra Gurav, “Genistein: A promising phytoconstituent with reference to its bioactivities” *Phytotherapy Research* 2024; 38 (8): 3935-3953 <https://doi.org/10.1002/ptr.8256> [John Wiley & Sons Ltd., Impact factor 6.1]
- **Nilesh Mahajan**, Suchitra Mishra\*, Amol Warokar, Sachin More, Anil Pethe “Pharmacokinetics of Niclosamide in Rat Plasma by RP HPLC via Intranasal and Intraperitoneal Route of Administration” *Journal of Applied Bioanalysis* 2024; 10 (01): 01-11 <http://dx.doi.org/10.17145/jab.15.009>
- Frazer Andrade, Christopher Jenipher, Nilambari Gurav, Sameer Nadaf, Mohd Shahnawaz Khan, **Nilesh Mahajan**, Durgacharan Bhagwat, Mohan Kalaskar, Rupesh Chikhale, Ritesh Bhole, Sulabha Lalsare, Akshay Baheti, Muniappan Ayyanar, Shailendra Gurav. “Endophytic fungi-assisted biomass synthesis of eco-friendly formulated silver nanoparticles for enhanced antibacterial, antioxidant, and antidiabetic activities”. *Journal of Drug Delivery Science and Technology*. 2024; 97: 105749 <https://doi.org/10.1016/j.jddst.2024.105749> [Elsevier, Impact factor 5.0]
- **Nilesh Mahajan**, Sudharshan Reddy Dachani, Mohammed Kaleem, Md. Ali Mujtaba, Sayyed A. Ali, Ali F Almutairy, Danish Mahmood, Md. Khalid Anwer, Mohammad Daud Ali, Sanjay Kumar. “A comprehensive review of various therapeutic strategies for the management of skin cancer” *ACS Omega* 2024; 9(9): 10030–10048 <http://doi.org/10.1021/acsomega.3c09780> [ACS, Impact factor 4.1]
- **Nilesh Mahajan**, Md Ali Mujtaba, Ritesh Fule,\* Sonali Thakre, Md Sayeed Akhtar, “Self-Emulsifying Drug Delivery System for Enhanced Oral Delivery of Tenofovir: Formulation, Physicochemical Characterization, and Bioavailability Assessment” *ACS Omega* 2024; 9 (7): 8139–8150 <https://doi.org/10.1021/acsomega.3c08565> [ACS, Impact factor 4.1]

- Purushottam Gangane, Vidhi Sharma, Mokshada Selokar, Dipali Vidhate, Kapil Pawar, **Nilesh Mahajan**, “A review of Anti-inflammatory Phytoconstituents Used in Herbal Cosmeceuticals for the Treatment of Atopic Dermatitis”, *Current Drug Delivery*. 2024; 21(3): 312-325 DOI: <https://doi.org/10.2174/1567201820666230512110344> [Bentham Science, Impact factor 3.758]
- **Nilesh Mahajan**, Kalyani Wanaskar, Nemat Ali, Debarshi Mahapatra, Muzaffar Iqbal, Abid Bhat, Mohammed Kaleem “Innovative Wound Healing Hydrogel Containing Chicken Feather Keratin and Soy Isoflavone Genistein: In-vivo Studies” *Gels* 2023; 9 (6): 462 <https://doi.org/10.3390/gels9060462> [MDPI, Impact Factor 4.432]
- Rohini Kharwade, **Nilesh Mahajan**, Sachin More, Amol Warokar, Sachin Mendhi, Akshay Dhobley & Devendra Palve “Effect of PEGylation on drug uptake, biodistribution, and tissue toxicity of efavirenz–ritonavir loaded PAMAM G4 dendrimers”, *Pharmaceutical Development and Technology* 2023; 2 (28): 200-218 <https://doi.org/10.1080/10837450.2023.2173230> [Taylor & Francis, Impact factor 3.915]
- Vaishnavi S. Shete, Darshan R. Telange, **Nilesh M. Mahajan**, Anil M. Pethe, Debarshi K. Mahapatra “Development of phospholipon®90H complex nanocarrier with enhanced oral bioavailability and anti-inflammatory potential of genistein” *Drug Delivery* 2023; 30 (1): 2162158, <http://doi.org/10.1080/10717544.2022.2162158> [Taylor and Francis, Impact factor 6.819]
- **Nilesh Mahajan**, Ashish Akkewar, Purushottam Gangane, Rohini Kharwade “Liposomes in the Targeted Gene Therapy of Cancer: A Critical Review” *Current Drug Delivery*. 2023; 20 (4): 350-370 <https://doi.org/10.2174/1567201819666220421113127> [Bentham Sciences, Impact factor 3.758]
- **Nilesh Mahajan**, Rohini Kharwade, Sachin More, Elizabeth Suresh, Amol Warokar, Ujwala Mahajan “Improvement in Bioavailability and Pharmacokinetic Characteristics of Efavirenz with Booster Dose of Ritonavir in PEGylated PAMAM G4 Dendrimers”, *AAPS PharmSciTech* 2022; 23:177 <https://doi.org/10.1208/s12249-022-02315-8> [Springer Nature, Impact Factor 3.246]
- **Mahajan Nilesh**, Kharwade Rohini, Badole Payal, More Sachin, “Toxicity and Surface Modification of Dendrimers: A Critical Review”, *Current Drug Delivery* 2022; 19 (4): 451- 465 <https://doi.org/10.2174/1567201818666211021160441> [Bentham Sciences, Impact factor 3.758]
- Nilesh Mahajan, Monika Nimbalkar, Mrunal Yawalkar, Sanjay Dhoble, “Potential of luminescent material in Phototherapy”, *Photodiagnosis and Photodynamic Therapy*, 2021; 33: 102082 DOI: <https://doi.org/10.1016/j.pdpdt.2020.102082> [Elsevier, Impact factor 3.631]
- Nilesh Mahajan, Rohini Kharwade, Sachin More, Pratibha Agrawal, Amol Warokar, “Stratburst PAMAM Dendrimers: Synthetic Approaches, Surface Modifications, and Biomedical Applications”, *Arabian Journal of Chemistry*: 2020; 13 (7): 6009-6039 <https://doi.org/10.1016/j.arabjc.2020.05.002> [Elsevier, Impact factor 6.212]
- Nilesh Mahajan, Rohini Kharwade, Sachin More, Pratibha Agrawal, “Functionalized Dendrimers: Potential Tool for Anti-retroviral Therapy”. *Current Nanosciences* 2020; 16 (5): 708-722 DOI : [10.2174/1573413716666200213114836](https://doi.org/10.2174/1573413716666200213114836) [Bentham Sciences, Impact factor 1.83]