# **CURRICULUM VITAE**



Prof. (DR.) PADMA V. DEVARAJAN, FMAS Dean Research and Innovation & Head, ICT Incubator (ICT-NICE), Member Board of Governors, TEQIP (World Bank Programme) Coordinator Professor in Pharmacy and former HOD, Department of Pharmaceutical Sciences and Technology Institute of Chemical Technology, (formerly UDCT)

Matunga, Mumbai-400019, India

Phone (O): 91-22-33612210 (Cell): 09820518009

Email: pvdevarajan@gmail.com, pv.devarajan@ictmumbai.edu.in

**DATE OF BIRTH:** April 9, 1960

#### **RESEARCH OBIECTIVE**

Integration of Science and Technology for the development of "Innovative and Affordable Excellence in Drug Delivery Platforms to address vital issues in healthcare" with National and Global outreach.

# **ACADEMIC QUALIFICATIONS**

Ph.D. (Tech), 1988, Pharmaceutics, University of Mumbai, India M. Pharm., 1983, Pharmaceutics, University of Mumbai, India B. Pharm, 1980, Pharmacy, University of Mumbai, India, Gold Medalist\*

## TEACHING AND RESEARCH EXPERIENCE (>36 years)

## **RESEARCH FOCUS**

- Targetted nanomedicine for therapy of cancer and infectious diseases, with a key focus on scale up and cost, which dictate commercialization, affordability and outreach
- Developing designer nanoparticles
- Veterinary Health care drug delivery systems, diagnostics and other interventions
- Bioenhanced delivery of peptides, proteins and nucleic acids
- Screening of new ligands for hepatic and lung targeting
- Nasal and sublingual drug delivery as an alternative to parenteral administration
- Controlled Release Drug Delivery Systems (NDA and ANDA)

The research is funded by projects sponsored by the Government of India and the national and international pharmaceutical industry. Expanding dimensions of research through collaborations is an area of strength

#### RESEARCH STUDENTS SUPERVISED

Completed M.Pharm / M. (Tech) - 77 PhD (Tech) - 46 PDF-02 Project Fellow-2

Current M.Pharm / M. (Tech) -12 PhD (Tech) -09 RA-03 UG-05

#### **AWARDS AND HONORS**

- Awarded Fellowship of Indian Chemical Society on December 24<sup>th</sup> 2020.
- Awarded as "PANJABRAO DESHMUKH OUTSTANDING WOMAN SCIENTIST AWARD 2019" of the Indian Council of Agricultural Research (ICAR) at the 92<sup>nd</sup> Annual Day celebration of ICAR on 16<sup>th</sup> July 2020.
- "PROF. N. R. KAMATH BOOK AWARD AS EDITOR" of Book titled "Intracellular Targetted Delivery" Edited by Padma V. Devarajan, Prajakta Dandekar, Published by Springer Publication, at Annual Day of Institute of Chemical Technology, Mumbai on 4<sup>th</sup> August 2020.
- Awarded as "OPPI SCIENTIST AWARD 2018" for contribution to research in Veterinary and human healthcare in infectious diseases & cancer, by Organization of Pharmaceutical Producers of India (OPPI), at OPPI's Annual day celebration on 11<sup>th</sup> October 2018 in the Ballroom of Hotel Taj Lands End, Bandra, Mumbai.
- "IPA ACG INNOVATIVE SOLID DOSAGE FORM Award 2017" at 4<sup>th</sup> IPA ACG SciTech Innovation Awards for "N'hance-SDF Bioenhanced Solid dispersion film-based technology" by Indian Pharmaceutical Association at Chandigarh on 23<sup>rd</sup> December 2017.
- "BENGALURU NANO INDIA INNOVATION AWARD 2017" for BU'ANTRAP In situ solid lipid nanoparticles for veterinary infection at the 9<sup>th</sup> Bengaluru India Nano, organized by Karnataka Science & Technology Promotion Society (KSTePS), DST-Nano Mission in association with Jawaharlal Nehru Centre for Advanced Scientific Research Centre (JNCASR) Bangalore, on 8<sup>th</sup> December 2017, at The Lalit Ashok, Bangalore, India.
- "EUDRAGIT AWARD 2015" for the research publication under the category of "best paper" title "Controlled release floating multiparticulates of metoprolol succinate by hot melt extrusion" published in International Journal of Pharmaceutics 2015;491(1):345-51 from Evonik India Pvt. Ltd. on 21st September 2016.
- "PROF. N. R. KAMATH BOOK AWARD AS EDITOR" of Book titled "Targeted Drug Delivery Concepts & Design" Edited by Padma V. Devarajan, Sanyog Jain, Published by Springer Publication on 5<sup>th</sup> April 2016 ICT Annual Day, at Institute of Chemical Technology, Mumbai.
- PROF.C.J. SHISHOO AWARD for Research in Pharmaceutical Sciences, conferred by the Association of Pharmaceutical Teachers of India (APTI), 2013.
- American Association of Indian Pharmaceutical Scientists (AAiPS) Distinguished Educator and Researcher Award conferred by AAiPS—2011.
- **2008 VASVIK AWARD** in the category of Smt. Chandaben Mohanbhai Patel Industrial Research Award for Women Scientists 2011.

- Best Teacher Award (ICT)
- G.P.Nair Gold Medal, J.G. Kane Memorial Medal, M.L.Khorana Memorial Prize, Pitre Memorial Prize(For First rank in B.Pharm)
- Pitre Memorial Prize for **standing first in B.Pharm** in Mumbai University
- Dr. John Kapoor Foundation Travel Award 2000.
- DST Travel Award and INSA Travel Award and ICT Golden Jubilee Travel Award 2011.
- UDCT Scholarship Award in Final B.Pharm.
- U.G.C. Junior Research Fellowship Award during M.Pharm & PhD (Tech).
- U.G.C Senior Research Fellowship Award during PhD (Tech).

# SPECIAL RESEARCH AWARDS (for supervised research)

- Sukhada Shevade, Saugandha Das, Esha Attar and Pooja Todke selected among Top 20 best teams from all over India for Innovation titled "INSTA-NANO-AmB A simple, affordable revolutionary technology for Amphotericin B nanotherapy" at National Bio entrepreneurship Competition on 8<sup>th</sup> December 2021.
- Smt. Leela Parshuram Agashe Vidnyan Sanshodhan Puraskar 2019 to Mr. Raaquib Memon\* (T. Y. B. Tech. Pharm) amongst the projects selected all over Maharashtra, Goa, Gujarat & Karnataka States for Research Project titled as "Point of Care Visual Serum Calcium Detection Test Kit for Livestock" from Marathi Vidnyan Parishad (MaViPa), Mumbai, project mentored by Mr. Amit S. Lokhande\* (PhD Tech Student) who awarded with SPECIAL RESEARCH MENTOR AWARD 2019 and guided by Prof. Padma V. Devarajan on 2<sup>nd</sup> February 2020.
- Awarded 1<sup>st</sup> Prize to Sukhada Shevade (PhD Tech student), under guidance of Prof.
  Padma V. Devarajan for the "e-IDEALOGY: Let your idea Speaks", A National level
  competition organized by Institution Innovation Council of Vivekannad Education
  Society's College of Pharmacy, Chembur, Mumbai on 16<sup>th</sup> May 2020.
- Amit S. Lokhande (PhD Tech student) Awarded as "INNOVATION AMBASSADOR", under guidance of Prof. Padma V. Devarajan, for the innovation titled "PREG-V-DET" A Kit for Visual Early Pregnancy Detection in Cattle from Urine", in AICTE & MHRD Innovation Cell, on 2<sup>nd</sup> February 2020, at AICTE Headquarters, New Delhi India.

- Pooja A. Todke (PhD Tech student) Awarded as "INNOVATION AMBASSADOR", under guidance of Prof. Padma V. Devarajan, for the innovation titled "Nano\_Gr\_Det- Point of Care Blood Group Detection Kit", in AICTE & MHRD Innovation Cell, on 2<sup>nd</sup> February 2020, at AICTE Headquarters, New Delhi India.
- Awarded 1<sup>st</sup> Prize amongst 43 best Proof Of Concept selected all over India, in MHRD Innovation Cell to Amit S. Lokhande (PhD Tech student), under guidance of Prof. Padma V. Devarajan, for a Innovation titled, "PREG-V-DET"A Kit for Visual Early Pregnancy Detection in Cattle from Urine", in Institution's Innovation Council National Exhibition, on 9-11<sup>th</sup> September 2019, at AICTE Headquarters, New Delhi India.
- Awarded 9<sup>th</sup> Rank amongst 43 best Proof Of Concept selected all over India, in MHRD Innovation Cell to Pooja Ashok Todke, Amit S. Lokhande and Shweta Chawla (PhD Tech student), under guidance of Prof. Padma V. Devarajan, for a Innovation titled, "Nano\_Gr\_Det- Point of Care Blood Group Detection Kit", in Institution's Innovation Council-National Exhibition, on 9-11<sup>th</sup> September 2019, at AICTE Headquarters, New Delhi India.
- Priyanka Jahagirdar (PhD Tech. student) and Prof. Padma Devarajan's research story titled as "Nanocurcumin: A point of care formulation to treat Tuberculosis" Selected amongst hundred BEST popular science stories under PhD category in Augmenting Writing Skills for Articulating Research (AWSAR) a new initiative conceptualized & supported by National Council for Science & Technology Communication (NCSTC) Division, Department of Science and Technology (DST), India.
- Awarded 1st Prize amongst 10 best nano innovations selected all over India, in Nano SparX competition-2018 to Shweta Chawla (PhD Tech student), under guidance of Prof. Padma V. Devarajan, for a Nano Innovation titled, "Nano Blood Group Detection Kit for Point of Care Detection of all major as well as Clinically Significant Blood Groups", in 10<sup>th</sup> Bengaluru India Nano event, organized by Karnataka Science & Technology Promotion Society (KSTPS), DST-Nano Mission in association with Jawaharlal Nehru Centre for Advanced Scientific Research Centre (JNCASR) Bangalore, on 7<sup>th</sup> December 2018, at The Lalit Ashok, Bangalore, India.
- YOUTH INSPIRATOR AWARD 2018 in category of Science, Technology & Engineering awarded to Amit S. Lokhande\* (PhD Tech Student) for the research work under the supervision of Prof. Padma V. Devarajan, from Young Inspirators Network (YIN) in association with Sakal Media group, Delivering Change foundation, Saam TV, Nilaya Education trust Pune & Hashtag Menwear, at YIN Summer Youth Summit 2018, organized at KBP Modern College, Vashi, Navi Mumbai on 17th May 2018.
- Sharad Naik Vidnyan Sanshodhan Puraskar 2017 to Ms. Shweta Sabu\* (T. Y. B. Pharm) & Mr. Keith D'souza\* (S. Y. Chem. Engg) amongst 70 projects all over Maharashtra, Goa, Gujarat & Karnataka States for Research Project titled as "Point of Care Simple Serum Phosphorous Detection Kit in Cattle" from Marathi Vidnyan Parishad (MaViPa), project mentored by Mr. Amit Lokhande\* (PhD Tech Student) who awarded with SPECIAL RESEARCH MENTOR AWARD 2017 and guided by Prof. Padma V. Devarajan on 29th April 2018.

- 3rd Prize at most prestigious internationally recognized competition FALLING WALLS LAB INDIA 2018 awarded to Amit S. Lokhande\* (PhD Tech Student) for innovation titled as "Breaking the Wall of Phosphorous Diagnosis in Cattle". Awarded 3rd Prize amongst TOP 16 best innovations selected out of 260 applications all over India, Nepal, Bhutan, Bangladesh and Sri Lanka in Falling Walls Lab India 2018, organized by DAAD (German Academic Exchange Service) and DWIH (German House for Research & Innovation) New Delhi, in partnership with the Jadavpur University Kolkata. This Initiative was supported by the Federal Foreign Office, Germany on 7<sup>th</sup> April 2018.
- Saugandha Das\* (PhD Tech Student) was selected for the Fifth batch of In-Residence Programme for Innovators at Rashtrapati Bhavan for her Innovation STERI-FREEZE-Flash Freeze Sterilization. The said Programme was launched by President of India during 19-23<sup>rd</sup> March 2018, organized in collaboration with National Innovation Foundation-India.
- "Special Honour for Research Performance" awarded to Amit S. Lokhande\* (PhD Tech Student) for the PhD research work under the supervision of Prof. Padma V. Devarajan, from Dr. Babasaheb Ambedkar Research & Training Institute (BARTI) Pune, at the hands of honorable union central ministers, in an auspicious occasion of Abhinandan sabha, Held at Bharataratna Dr. Babasaheb Ambedkar National Smarak, Mahad, Raigad, Maharashtra, India on 20<sup>th</sup> March 2018.
- Awarded 1<sup>st</sup> Prize amongst 10 best nano innovations selected all over India, in Nano SparX competition-2017 to a team of Three students namely, Saugandha Das (PhD Tech student), Darsheen Kotak (PhD Tech Student), Amit S. Lokhande (PhD Tech student), for a Nano Innovation titled, "Insta Nano of Primaquine Phosphate for Malarial Relapse: A Pioneering Nano Drug Delivery System", in 9<sup>th</sup> Bengaluru India Nano event, organized by Karnataka Science & Technology Promotion Society (KSTPS), DST-Nano Mission in association with Jawaharlal Nehru Centre for Advanced Scientific Research Centre (JNCASR) Bangalore, on 8<sup>th</sup> December 2017, at The Lalit Ashok, Bangalore, India.
- BIRAC-SRISTI Gandhian Young Technologist Innovation (GYTI) Award for SteriFreez, a green sterilizer with no energy input required. Saugandha Das, Archit Devarajan, & Padma V. Devarajan, March 2017.
- Dr. Bal G. Joshi Endowment for Recognition of Innovative Thinking, Creativity and Performance Award for Year 2016-2017 to Parth N Kadakia\* for UG summer internship project Titled, "Ophthalmic ATIS Gel of Curcumin" in Annual Day Celebration of ICT, 8<sup>th</sup> April 2017.The project was mentored by Amit S. Lokhande\* (PhD Tech Student) & guided by Prof. Padma V. Devarajan.
- 2<sup>nd</sup> prize at BEST -ABLE 2016 a business plan competition to Saugandha Das, Shilpa Dawre, Darsheen Kotak, Amit S. Lokhande and Suraj More for the idea titled 'A simple, rapid, ready to use, point of care, calcium detection strips for biological fluids', by, organised jointly by ABLE and DBT, held at Manesar, National Capital Region, India, from 19<sup>th</sup> to 23<sup>rd</sup> February, 2017.

- Budding Nanotechnologist Award to Benival D. M.\* for oral presentation "Modified nanoprecipitation approach for the design of polymer-lipid nanoparticles (Lipomer) of doxorubicin hydrochloride" at the Third Winter School on Nanotechnology in Advanced Drug Delivery, February 8<sup>th</sup>-12<sup>th</sup>, 2010, held at National Institute of Pharmaceutical Education and Research (NIPER), Mohali, Punjab.
- Budding Nanotechnologist Award to Shelke R. R.\* for oral presentation "Aqua Triggered In-Situ Gelling Microemulsion for Nasal Delivery" at First Winter School on Nanotechnology in Advanced Drug Delivery, December 2<sup>nd</sup> 6<sup>th</sup>, 2007, held at National Institute of Pharmaceutical Education and Research (NIPER), Chandigarh.
- Pamdal-Colorcon young Scientist award to Shah S.\*, for innovative research on PARA D-ZOLV, an innovative mouth dissolve DDS of Paracetamol for pediatric administration, 2000.

#### RESEARCH PRESENTATION AWARDS

- Saugandha Das awarded First Prize for research presented entitled as "INSTA-NANO-AmB- A Simple, Scalable In Situ Technique for Amphotericin B Solid Lipid Nanoparticle Preparation with High Safety and Efficacy" Students Research Paper Competition 2021, ISPE-India-2021 on June 1st 2021.
- Amit S. Lokhande (PhD Tech student), awarded 3<sup>rd</sup> Prize to under guidance of Prof. Padma V. Devarajan for the oral presentation entitled as "Discriminating dissolution rates Anti-tubercular drug microparticles in biorelevant lung media using USP I, USP II & USP IV apparatus" in Disso research presentations India (DRPI) 2020 Online organized by Society for Pharmaceutical Dissolution Science (SPDS) in collaboration with Association of Pharmaceutical Teachers of India (APTI), on 5<sup>th</sup> June 2020.
- Sukhada Shevade\* (PhD Tech student) and Padma V. Devarajan, reached to semi-final
  for the oral presentation entitles as "Evaluation of Controlled Release of Lumefantrine
  from Dual Drug Loaded Antimalarial In situ Implant using USP Paddle Over Disc
  Apparatus" in "Disso research presentations India (DRPI) 2020" Online organized by
  Society for Pharmaceutical Dissolution Science (SPDS) in collaboration with Association
  of Pharmaceutical Teachers of India (APTI), on 5<sup>th</sup> June 2020.
- Pradipkumar Wavhule\* (PhD Tech student) and Padma V. Devarajan, reached to semifinal for the oral presentation entitles as "Effects of Formulation Components on In-Vitro Dissolution of Baclofen from Microballoons assisted Gastro-retentive tablets" in "Disso research presentations India (DRPI) 2020" Online organized by Society for Pharmaceutical Dissolution Science (SPDS) in collaboration with Association of Pharmaceutical Teachers of India (APTI), on 5<sup>th</sup> June 2020.
- Best Poster Prize for the poster titled "In-situ solid lipid nanoparticles for improved oral efficacy and clinical translation of baicalein based radio-modifier", presented by

Harsh Joshi\*, Padma V. Devarajan, 17<sup>th</sup> Annual Meeting of the Society for Free Radical Research India (SFRR-INDIA-2020), International Conference on "Role and Management of Oxidative Stress in Human Disease" organised jointly by **SFRR-India and Bhabha Atomic Research Centre**, Mumbai from 12-15<sup>th</sup> February, 2020 at DAE-Convention centre, Mumbai.

- Third Best Poster Prize for the poster titled "Flow through of Co-encapsulaed Anti-Tubercular Drug Microparticles in Biorelevant Lung Media", presented by Amit S. Lokhande\*, Padma V. Devarajan, at DISSO-INDIA Chandigarh 2019 International Annual Symposium organized by Society for Pharmaceutical Dissolution Science (SPDS) in association with SOTAX AG, on 12<sup>th</sup> & 13<sup>th</sup> September 2019, at Hotel Radisson, Zirakpur, Chandigarh, India.
- Third Best Poster Prize for the poster titled "Comparative Evaluation of Anti-Tubercular Drug Combination Microparticles for Pulmonary Delivery in Biorelevant Dissolution Media", presented by Amit S. Lokhande\*, Padma V. Devarajan, at DISSO-INDIA HYDERABAD 2018 International Annual Symposium organized by Society for Pharmaceutical Dissolution Science (SPDS) in association with SOTAX AG, on 28th & 29th June 2018, at Hotel Avasa, Madhapur, Hyderabad, India.
- Third Best poster Prize for the poster titled, "Discriminating Dissolution Rates of Intranasal Curcumin Microemulsion and Curcumin Solution Using USP I and USP IV Apparatus", presented by Rijo John\*, Padma V. Devarajan, at DISSO-INDIA HYDERABAD 2018 International Annual Symposium organized by Society for Pharmaceutical Dissolution Science (SPDS) in association with SOTAX AG, on 28th & 29<sup>th</sup> June 2018, at Hotel Avasa, Madhapur, Hyderabad, India.
- Dr. R S Satoskar Award as 2<sup>nd</sup> Best Preclinical poster for the poster titled "Silver Nanoparticles enabled Instantaneous Cost effective and Multiplexed Rare Blood Groups Identification System", presented by Shweta Chawla\*, Ajit Gorakshkar, Manisha mandkaikar, Kinjaksha Ghosh, Padma V. Devarajan, at South Asian College an Affiliate of American College of Clinical Pharmacology (SAC-ACCP) 11th Annual International Conference on "Clinical Pharmacology for healthy ageing" on 1<sup>st</sup> & 2<sup>nd</sup> May 2018, held at Nehru Centre, Worli, Mumbai, India.
- Dr. B. K. Bachawat Award as 3<sup>rd</sup> Best Preclinical Poster for the poster titled "Sublingual Film of Salmon Calcitonin Loaded Hydroxyapatite Nanoparticles as Non Invasive Approach for the Treatment of Osteoporosis", presented by Darsheen J Kotak\*, Padma V. Devarajan, at South Asian College an Affiliate of American College of Clinical Pharmacology (SAC-ACCP) 11th Annual International Conference on "Clinical Pharmacology for healthy ageing" on 1<sup>st</sup> & 2<sup>nd</sup> May 2018, held at Nehru Centre, Worli, Mumbai, India.
- Certificate of Recognition for being among top ten best posters for the poster titled
  "Demonstrating Insulin Dissociation for Enhanced Sublingual Permeation from
  Microemulsion", presented by Amit S. Lokhande\*, Arundhati Lele, Mariam S. Degani,
  Padma V. Devarajan, at World Congress on Pharmaceutical Sciences (WCPS) 2017,
  organized by Conference Era, media partner HTO CLUB, on 5<sup>th</sup> to 7<sup>th</sup> October 2017, at
  Palmarinha Resort & Suites, Goa, India.

- Second Best Poster Prize for the poster titled "In Vitro Release Testing of Microparticles Co-encapsulated with Anti-Tubercular Three Drug Combination", presented by Amit S. Lokhande\*, Padma V. Devarajan, at Disso India Mumbai-an International Annual Symposium on Dissolution Science, Organized by SPDS (Society for Pharmaceutical Dissolution Science) in association with SOTAX AG, on 8<sup>th</sup> & 9<sup>th</sup> June 2017, at The Leela, Mumbai, India.
- Dr. K.G. Nair award as first prize for Poster titled "Nanocurcumin Mediated Autophagy Modulation in M.tuberculosis infected Murine Macrophages", presented by Priyanka Jahagirdar, Pramod Kumar Gupta, Savita Kulkarni and Padma V. Devarajan, at South Asian College an Affiliate of American College of Clinical Pharmacology (SAC-ACCP) 10<sup>th</sup> Annual International Conference on "Clinical Pharmacology for healthy ageing" on 30<sup>th</sup> April- 1<sup>st</sup> May 2017, held at Nehru Centre, Worli, Mumbai, India.
- Second prize for Oral presentation titled "Rifampicin Nanoparticles for Oral to Lung Delivery", presented by Sagar Bachhav\* and Padma V. Devarajan, at South Asian College an Affiliate of American College of Clinical Pharmacology (SAC-ACCP) 10th Annual International Conference on "Clinical Pharmacology for healthy ageing" on 30<sup>th</sup> April-1<sup>st</sup> May 2017, held at Nehru Centre, Worli, Mumbai, India.
- ISVIB-IVRI-Mukteshwar Albert Linghard Memorial Award-2016 for Contribution in commercialization of the Technology titled as "Solid lipid Nanocarriers a Revolutionary Approach for targeted therapy in Theileriosis", presented by Heena V. Maithania\*, Abdul Samad, and Padma V. Devarajan, at XXIII Annual Convention of Indian Society for Veterinary Immunology & Biotechnology National conference on Challenges in Livestock and Poultry Production-solutions with Biotechnology, on 19<sup>th</sup> April 2017, held at Krantisinh Nana Patil College of Veterinary Sciences, Shirval, Pune, India.
- First Best Poster Prize for the Poster titled "Role of Oils on Enhanced Solubility of Curcumin in Microemulsion", presented by Suraj K. More\*, Amit S. Lokhande, Padma V. Devarajan, at Savitribai Phule sponsored two days National Conference on "Opportunities and Challenges in Development of Herbal Formulation", organized by Amrutvahini College of pharmacy, Sangamner, Ahmednagar, Maharashtra, India from 10<sup>th</sup> to 11<sup>th</sup> February 2017.
- First Best Poster Prize for the Poster titled "Insulin Dissociation: Strategy for Enhanced Sublingual Permeation from Microemulsion", presented by Amit S. Lokhande\*, Padma V. Devarajan, at 2<sup>nd</sup> National Conference of Institute of pharmacy, NCIP 2017, on "Emerging Trends in Drug Delivery, Development and Molecular Targets for Cancer Research" Organized by Nirma University, Ahemdabad&supported by SERB, DRDO and ICMR, India, from 24<sup>th</sup> to 25<sup>th</sup> January 2017 at Nirma University, Ahemdabad, Gujarat, India.
- Best Research Poster & Travel award for the poster titled "Simultaneous Incorporation of Multiple Drugs in Polymeric Microparticles by Precipitation in a Single Step" Presented by Amit S. Lokhande\*, Padma V. Devarajan, at "Nanobioteck-2016 1st Annual Meeting of Indian Society of Nanomedicine" organized jointly by DBT, Govt. of India & AIIMS, New Delhi, from 24th to 26th November, 2016 at AIIMS, New Delhi.

- Dr. B. K. Bachawat award as Third prize for Poster Presentation in preclinical section for the poster titled "Ophthalmic Azithromycin ATIS (Aqua Triggered In Situ) Gel for treatment of Bacterial Keratitis" Presented by Amit S. Lokhande\*, Rahul M. Lalge, Padma V. Devarajan, at South Asian Chapter of American College of Clinical Pharmacology 9<sup>th</sup> International Annual Conference on "Clinical Pharmacology in Maternal and Child Care" on 29<sup>th</sup>-30<sup>th</sup> April 2016, held at Nehru Centre, Worli, Mumbai, India.
- Best poster award for the poster titled "Characterizing Monomeric Amphotericin B in Lipidic Nanoformulations" Presented by Saugandha Das\*, Padma V. Devarajan, at NanoSciTech 2016 Conference organized by Panjab University, Chandigarh, India, from 18<sup>th</sup>-20<sup>th</sup> February, 2016.
- **First Best Poster Prize** for the poster titled "In-Situ Nanoprecipitation: a Revolutionary Approach for Design of Solid Lipid Nanoparticles of Etravirine", Presented by Satish V. Rojekar, Sagar S. Bachhav\*, Padma V. Devarajan, at **NIPiCON-2016** 3<sup>rd</sup> Nirma Institute of Pharmacy International Conference on "Global Challenges in Drug Discovery, Development and Regulatory Affairs" on 21-23<sup>rd</sup> January 2016, Organized by Institute of Pharmacy, Nirma University, Gujarat, India.
- Best international poster award for 'Development of surface anchored silver nanoparticles: A Novel and easy blood detection system based on nanotechnology, S.S. Chawla\*, A.C. Gorakhshakar, K.Ghosh, P.V.Devarajan, at Biomaterials International Conference, Taiwan, June 2015.
- Best poster award for poster titled 'Nanotoxicity: Interaction of Doxorubicin Lipomer with innate immune system' presented by R.R. Joshi\*, D.M. Benival, Priyanka Singh, Vandana Pradhan, Geetanjali Sachdeva, K. Ghosh, P.V. Devarajan at 14<sup>th</sup> International Symposium on 'Advances in Technology and Business Potential on New Drug Delivery Systems' organized by Controlled Release Society Indian Chapter, held at Institute of Chemical Technology, Mumbai, 23<sup>rd</sup>-24<sup>th</sup> Feb, 2015.
- **Second prize** for poster presentation- Pranatharthiharan S.\*; Devarajan P.V. Asialoglycoprotein receptor mediated hepatocyte targeted delivery of polymeric nanoparticles of Doxorubicin in **NIPICON 2014**, Jan 23<sup>rd</sup>-25<sup>th</sup> 2014 at Nirma University, Ahmedabad.
- **First prize** for poster presentation- Dalvi B.\*; Devarajan P.V, Design of surface functionalized nanoparticles with a novel targeting ligand (TL) for macrophage targeting in **Rasayanam 2014**, 3<sup>rd</sup>-4<sup>th</sup> March 2014 held at ICT, Mumbai.
- Second prize for poster-Chawla S.\*; Devarajan P.V. Nano diagnostic approach for blood group detection in 7<sup>th</sup> International Conference organized by South Asian Chapter of American College of Clinical Pharmacology on "Clinical Pharmacology-Translational Research: Patient to Public Health", 17-20<sup>th</sup> April 2014, held at Nehru Centre, Worli, Mumbai.

- Consolation prize for poster- Sandhya Pranatharthiharan\*; Padma.V. Devarajan, 'Carbohydrate anchored stealth doxorubicin nanoformulations with improved efficacy in fibrosarcoma mouse model' in Indo-US Workshop on nanoengineering in medicine, Dec 17-19<sup>th</sup>, 2014 at AIIMS, Delhi.
- Dr. R. S. Satoskar Award for second prize for poster in preclinical section -Prashant Mande\*, Sagar Bachhav, Padma V. Devarajan, 'Curcumin ESA-SMEDDS Bioenhanced response in CFA-induced arthritis' 8<sup>th</sup> International Conference organized by South Asian Chapter of American College of Clinical Pharmacology on "Clinical Pharmacology-Translational Research: Patient to Public Health", 24-25 April 2014, held at Nehru Centre, Worli, Mumbai.
- Certificate of merit was awarded to Sandhya Pranatharthiharan\*, Mitesh D. Patel and Padma V. Devarajan for poster titled: Efficacy study of pullulan anchored stealth DOX nanoformulations in fibrocarcinoma mouse model at Controlled Release Society Symposium - 2013, Mumbai.
- Second prize for oral presentation in preclinical section for presentation titled "Role of Carbohydrate based Ligands on the cytotoxicity and cell uptake of Doxorubicin nanoformulations", Sandhya Pranatharthiharan\*, Mitesh D. Patel, Prof. Padma V. Devarajan at 6<sup>th</sup> International annual conference South Asian Chapter of American College of Clinical Pharmacology, 21<sup>st</sup> -22<sup>nd</sup> April, 2013 Mumbai.
- Second prize for poster presentation in preclinical section for presentation titled "PES Lopinavir nanoparticles: A promising approach to target multiple HIV reservoirs", Bhagyashree Dalvi\*, Derajram Benival and Prof. Padma V. Devarajan at 6<sup>th</sup> International annual conference South Asian Chapter of American College of Clinical Pharmacology, 21<sup>st</sup> -22<sup>nd</sup> April, 2013 Mumbai.
- Second prize for poster presentation in preclinical section for presentation titled
  "Genotoxicity and Mutagenicity evaluation of Buparvaquone Solid Lipid Nanoparticles"
  Mahesh kumar Soni\*, Shelkar Nilakash, Bhagat Sharad, Gaikwad Rajiv, Samad Abdul,
  Prof. Padma V. Devarajan, Vanage Geetaat at 6<sup>th</sup> International annual conference
  South Asian Chapter of American College of Clinical Pharmacology, 21<sup>st</sup> -22<sup>nd</sup> April,
  2013 Mumbai.
- **Second prize** for poster presentation in first International Conference, **Disso India 2013** for poster titled "Modified USP Dissolution Apparatus II for Dissolution Testing of Buccal Tablets of Rivastigmine Hydrogen Tartrate" Vilas Malode\*, Prof. Padma V. Devarajan at the Lalit, 3<sup>rd</sup>-4<sup>th</sup> May 2013, Mumbai.
- Best Oral Presentation for the presentation titled "Scavenger Receptors and Their Role in Drug Delivery", presented by Deepali Magadum, Padma V. Devarajan, in National Conference on Biotechnology, Bioinformatics and Bioengineering, Tamilnadu December 2010.
- First prize for poster presentation titled "Role of lipid in the design of polymer-lipid nanoparticles (LIPOMER) of doxorubicin hydrochloride by modified nanoprecipitation method" D. M. Benival\*and Padma. V. Devarajan at 10<sup>th</sup> International Symposium on

Advances in Technology and Business Potential of New Drug Delivery Systems Organized by Controlled Release Society – Indian Chapter held at Mumbai, 17<sup>th</sup>-18<sup>th</sup> February, 2010.

- First prize for poster presentation titled "Design and optimization of targeted biodegradable nanoparticles of doxorubicin for hepatic cancer," Swati A Guhagarkar\*, V. C Malshe, Padma V Devarajan presented at 9<sup>th</sup> International Symposium on "Advances in Technology and Business Potential of New Drug Delivery Systems" organized by the Controlled Release Society- Indian Chapter, at Mumbai, February 25-26<sup>th</sup>, 2009.
- First prize for poster presentation titled "Biodistribution of rifampicin ethambutol nanoparticulate—pulmonary targeted drug in tuberculosis positive monkey", N. Kulkarni\*, R. V. Gaikwad, Padma .V. Devarajan and A. Samad at Third International Conference on "Drug discovery and development- Challenges in partnership" 2<sup>nd</sup> to 4<sup>th</sup> October 2009, Mumbai, (India) organized by South Asian Chapter (SAC) of American College of Clinical Pharmacology (ACCP) and Department of Clinical Pharmacology, Seth G.S. Medical College and KEM Hospital, Mumbai.
- First prize for poster presentation titled "Mucoadhesive microemulsion based buccal spray of Tamoxifen citrate" P.S Saraf\* and Padma V. Devarajan presented at 8th International Symposium on "Advances in Technology and Business Potential of New Drug Delivery Systems" organized by the Controlled Release Society- Indian Chapter, at Ahmedabad, February 26-27<sup>th</sup>, 2008.
- **Best Review Article award** of Indian Drugs for the article titled "Non-viral Gene Delivery" to A. Solanki, Padma V. Devarajan 2006.
- First prize for poster presentation titled "Maxitarg-A Novel Targeting Approach For Hepatitis", G.S. Sonavane\*, R.R. Patil and Padma V. Devarajan presented at International Conference on 'Nanotechnology in Advanced Drug Delivery', held NIPER, Chandigarh from Nov. 17-19<sup>th</sup>, 2006.
- First prize for poster presentation titled "LIPOMERS: Novel drug delivery system for spleen targeting", R.R. Patil\*, A. Samad, R. V. Gaikwad, and Padma V. Devarajan, presented at Indo-US symposium on Nanotechnology in Advanced Drug Delivery, NIPER, Chandigarh Oct, 2006.
- First prize for poster presentation titled "SPHERULITES<sup>TM</sup> of sumatriptan succinate", M.R. Redkar\*, and Padma V. Devarajan, presented at 1<sup>st</sup> Indo-Japanese International Conference on 'Advances in Pharmaceutical Research and Technology', held in Mumbai from Nov. 28-29, 2005.
- Second prize for poster presentation titled "Rapscreen- a novel model for screening of anticancer drugs", G.S. Sonavane\* and Padma V. Devarajan presented at 1<sup>st</sup> Indo-Japanese International Conference on 'Advances in Pharmaceutical Research and Technology', held in Mumbai from Nov. 28-29<sup>th</sup>, 2005.

- First prize for poster presentation "Surfactants-Tool to Optimize Nanoparticulate Drug Delivery System" G.S. Sonavane\* and Padma V. Devarajan at the XI<sup>th</sup> National Conference on Surfactants and Biocolloids held in Mumbai, Dec. 2003.
- First prize for poster presentation "In vivo pharmacokinetic study of oral mucosal drug delivery system (OMDDS) of Tramadol hydrochloride", A. S. Gandhi\*, and Padma V. Devarajan, 4th International Symposium on Advances in Technology and Business Potential of New Drug Delivery Systems, Mumbai Feb 2002.
- Research article published by Padma V. Devarajan, Poonam Sule, D.V. Parmar in Drug Development and Industrial Pharmacy, Communication 25(4), 529-534, 1999 was one of 70 titles to be selected from 2500 journals for Current Awareness in Biomedicine Bibliography.
- First prize for poster presentation in Pharm. Technology," Compressibility and Plastoelasticity of a Directly Compressible Ibuprofen-Paracetamol blend", Umesh Pai\*and Padma V. Devarajan presented at the International Seminar on Recent Trends in Pharm. Sciences, 1995, Ooty.

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- 1. Ipar V, Singhal R, Devarajan PV., An innovative approach using microencapsulated turmeric oleoresin to develop ready-to-use turmeric milk powder with enhanced oral bioavailability, Food Chemistry. Accepted Manuscript (Impact factor: 7.51).
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- 3. Dawre S, Devarajan PV, Samad A. Enhanced Antibacterial Activity Of Doxycycline And Rifampicin Combination Loaded In Nanoparticles Against Intracellular Brucella Abortus. Current Drug Delivery. 2021. (Impact factor: 2.565)
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- 11. Chapter titled "In vitro and in vivo models for oral transmucosal drug delivery, **Devarajan P.V.** and Gandhi A.S., Advances in Controlled and Novel drug delivery, Pg. 70-88, Editor: Dr. N. K. Jain, Pub: CBS Publishers and Distributors, New Delhi, 2000

- 12. Chapter titled "Oral Transmucosal Drug Delivery Systems", **Devarajan P.V.**, Adani M.H., in Controlled and Novel Drug Delivery, Pg. 52-81, Editor: Dr. N.K. Jain, Pub: CBS Publishers and Distributors, New Delhi, 1997
- 13. Chapter titled "Novel Drug Delivery Systems", **Devarajan P.V.**, Parmar D.V., Kulkarni V.M., in Post Graduate Medicine, Vol 9, Proceedings of the Continuing Medical Education APICON 95, Pg. 425-434, Editor: Dr. Lekha Pathak, Pub: The Association of Physicians of India, Mumbai, 1995
- 14. Chapter titled "Targeting the tumor environment", D'Souza A. A, Chaturvedi A., and **Devarajan P.V.**; in Encycopedia of Nanoscience and Nanotechnology (25 volume series), American Scientific Publishers, 2017 (in press)

# **CHAPTERS CONTRIBUTED TO BOOKS (IN PRESS)**

15. Chapter titled "Nano Drug Delivery Systems - Concepts to Commercialization" D'Souza A. A, and **Devarajan P.V.** in Pharmaceutical Handbook, Indian publisher, 2017 (in press) (copy not available)

# b) BOOKS (EDITED and AUTHORED)

- **1.** Editor for a Book titled **Targeted Drug Delivery-Concepts and Design**, published by **Springer Publications**, (BY INVITATION) 2015, co-editor: Dr. Sanyog Jain.
- 2. Editor and Author for a book titled Targeted Intracellular drug delivery by Receptor Mediated Endocytosis, Springer Publications 2019, Editors and Authors: Padma V. Devarajan, Prajakta Dandekar Jain, Co-editor: Anisha A. D'souza. Publisher: Springer Nature (BY INVITATION); Under the Advances in Pharmaceutical Sciences Series of the American Association of Pharmaceutical Scientists (AAPS) Volume 39.

#### c) OTHER PUBLICATIONS/REPORTS

- 1. Kotak D., Devarajan P.V., Dissolution Testing for Nanopharmaceuticals: A Continuing Challenge. e-Disso Newsletters, 2015.
- 2. Kotak D., D'souza A.A., Devarajan P.V., Nasal Calcitonin A boon for Osteoporosis. Chronicle Pharmabiz, Nov 27, 2014.
- 3. Pranatharthiharan S., Devarajan P.V., siRNA holds huge potential for eradicating diseases. Pharmabiz, Nov 24, 2011.
- 4. D'souza A.A., Devarajan P.V., Nano delivery strategies for curcumin. Pharmabiz, Nov 25, 2010

## **PATENTS** National/international

## **GRANTED PATENTS**

1. IN325008, 2020 Bioadhesive barrier films and spontaneous plug forming teat dips Inventors: Devarajan Padma Venkitachalam, Sandhya Pranatharthiharan Applicant: Devarajan Padma Venkitachalam Licensed to SaifeVetmed Ltd., Delhi. Product NOVADIP<sup>TM</sup> launched in the Indian Market.

2. IN224226, 2004 Palatable oral compositions and process thereof

Inventors: Devarajan Padma Venkitachalam, Sonavane Ganesh, Patel Jitendra

Applicant: Devarajan Padma Venkitachalam

3. **IN233413, 2004** Oil in water microemulsion compositions for transmucosal administration of proteins and peptides and process thereof

Inventors: Devarajan Padma Venkitachalam, Sonavane Ganeshchandra, Gala Hetal

Applicant: Devarajan Padma Venkitachalam

4. **EP1667681, 2003** A novel transmucosal delivery system

Inventors: Mandal Jayanta Kumar, Devarajan Padma Venkitachalam, Patel Shashank

Babubhai, Maheshwari Kirti Bansidhar

Applicant: Astron Research Pvt Ltd

5. **IN224114, 2003** Novel biodegradable aliphatic polyesters and pharmaceutical compositions and applications thereof

Inventors: Devarajan Padma Venkitachalam, Malshe Vinod Chintamani, Shastri

Sayalee Ranjan

Applicant: Devarajan Padma Venkitachalam, Malshe Vinod Chintamani

6. **IN206334, 2003** A process for preparing Bioadhesive polymer composition for transmucosal drug delivery systems with enhanced bioadhesion

Inventors: Devarajan Padma Venkitachalam, Gore Subhash, Gandhi Anil

**Applicant: Devarajan Padma Venkitachalam** 

Licensed to Alkem Phytoceuticals Delhi.

7. **IN192518, 2001** Process for the preparation of transmucosal formulations with improved bioadhesive properties

Inventors: Devarajan Padma Venkitachalam, Gore Subhash Pandurang, Gandhi

Anilkumar Surendrakumar, Mukherjee Gour S.

**Applicant: Ranbaxy Laboratories** 

8. **IN188854, 2000** A process for the preparation of palatable oral composition of active basic medicaments

Inventors: Devarajan Padma Venkitachalam, Gore Subhash Pandurang, Gandhi

Anilkumar Surendrakumar

Applicant: Devarajan Padma Venkitachalam

Licensed to Alkem Phytoceuticals Delhi. Liverubin™ Oral taste masked Silymarin

tablets marketed in India

#### **PATENT APPLICATIONS**

 202021002147-A Kit for Visual Pregnancy Diagnosis in Livestock and method of detection thereof

Inventors: Devarajan Padma Venkitachalam,, Lokhande Amit Sanjay, Jadhav Pramod

Applicant: Devarajan Padma Venkitachalam

2. 201821012126 Kit for Visual Detection of Calcium in Biological Fluids

**Inventors: Devarajan Padma Venkitachalam**, Das Saugandha, Kotak Darsheen, Lokhande Amit Sanjay

Applicant: Devarajan Padma Venkitachalam.

3. 201821012134 Kit for Visual Detection of Phosphorous in Biological Fluids

Inventors: Devarajan Padma Venkitachalam, Lokhande Amit Sanjay, Sabu Shweta

Venugopal, D'souza Keith Anthony

Applicant: Devarajan Padma Venkitachalam.

**4. 201721018468** Device for conserving low temperatures

Inventors: Devarajan Padma Venkitachalam, Das Saugandha, Devarajan Archit

Applicant: Devarajan Padma Venkitachalam.

5. 201721011288 Dialysis assembly for dissolution testing

Inventors: Devarajan Padma Venkitachalam, Lokhande Amit Sanjay

Applicant: Devarajan Padma Venkitachalam.

6. 201721046817 A Kit for Extended Blood Group Determination and Method Thereof

Inventors: Devarajan Padma Venkitachalam, Chawla Shweta, Gorakshakar Ajit,

Madkaikar Manisha, Ghosh K.

Applicant: Devarajan Padma Venkitachalam and NIRRH.

7. 201821041493- A liquid injectable composition

**Inventors:** Devarajan Padma Venkitachalam, Dawre Shilpa S.

Applicant: Devarajan Padma Venkitachalam.

Licensed to Amaterasu Lifesciences LLP, Mumbai.

**8. 202021046731-**A liquid injectable composition containing done pezil

Inventors: Devarajan Padma Venkitachalam, Sukhada satish Shevade, and Maharukh

T Rustomiee.

**Applicant:** Amaterasu Lifesciences LLP.

9. 201621024980 Pharmaceutical compositions that spontaneously form lipidic

particulate dispersions

PRODUCT NAME: **BU'ANTRAP**<sup>TM</sup> - Technology transferred,

Inventors: Devarajan Padma Venkitachalam, Maithania Heena

Applicant: Devarajan Padma Venkitachalam

Licensed to SaifeVetmed Ltd., Delhi.

10. 2166/MUM/2012 – Nanocarriers for targeted delivery of active agents

PRODUCT NAME: BUTALEXTM

Inventors: Devarajan Padma Venkitachalam, Soni Mahesh

Applicant: Devarajan Padma Venkitachalam

Licensed to SaifeVetmed Ltd., Delhi.

# SPONSORED PROJECTS

Sr. No	Title of the project	Sanction No.	Grant Amount	Agency	Present status	Role PI/ CI
GO	VERNMENT		•	-		
1.	A Multi-Scale Approach to Combat the Mechanisms of Antimicrobial Resistance through PPEF a known Bacterial topoisomerase IA Inhibitor – Co-PI	DBT- 1867	₹ 7,59,51,240	DBT - BIRAC	Ongoing	Co- PI
2.	Bioenhanced & Targeted drug delivery system of deuterated Mitocurcumin-PI	DAE- ICT/106 0	₹ 60,20,000	DAE-ICT	Ongoing	PI
3.	Long Acting Parenteral Depot Systems for Alzheimer's Disease	SERB/P MFELL OW/CII- FICCI/M EETING /2018	₹ 31,20,000	DST Prime Ministers Fellowship with Amaterasu Lifesciences	Ongoing	PI
4.	STERI-FREEZ: Flash Freeze Sterilization	BIRAC/ SRISTI/ PMU201 7/007	₹ 15,00,000	BIRAC-SRISTI	Ongoing	Men tor
5.	Innovative formulations of Radioprotectors and Immunomolators developed in BARC	35/14/04 /2015- BRNS/3 015	Rs. 32,52,400	DAE-BRNS	Complete d	PI
6.	Artificial Sensory systems for optimizing palatability of Paediatric Pharmaceutical formulations. Taste masking enabled by computer aided modelling and use of artificial sensory systems	INT/RU S/RFBR/ P-195	Rs. 25,27,360	DST-RFBR	Complete d	PI
7.	Preclinical testing for safety of synthetic peptide 1 of 80kDa HAS for development of antifertility vaccine.	5/10/FR/ 10/2013- RHN	Rs. 12,00,000	ICMR	Complete d	PI
8.	Design & Development of Non-invasive drug delivery system for large molecules		Rs. 24,00,000	DST-PM Fellowship with ZIM laboratories	Complete d	PI

9.	Early Translational Study Of Orally Administered Nanoparticulate Carriers For Pulmonary Targeting Of Anti-Tubercular Drug Combinations	BT/PR6 736/NN T/28/652 /2013	Rs. 101,49,680	Department of Biotechnology (DBT)	Complete d	PI
10.	Process technology enabled green technologies for processing poorly soluble drugs		Rs. 40,00,000	INDO UKIERI	Complete d	Co- PI
11.	Evaluation of Targeted Nanoparticulate Drug Delivery System in Clinical Cases of Tuberculosis in Non- Human Primates	ECD/Ad hoc/6/20 12-13	Rs. 12,27,000	ICMR	Complete d	PI
12.	Development of Nasal Drug Delivery System of Antiepileptic Drugs for Emergency Therapy	DHR/Pla n Scheme/ GIA/8/2 012	Rs. 10,08,000	Department of Health Research	Complete d	PI
13.	Custom design efficient safe intracellular targeted nanoparticulate veterinary drug delivery system	BT/PR9 908/NN T/28/66/ 2007	Rs. 63,60,000	Department of Biotechnology (DBT)	Complete d	Co- PI
14.	Targetted Nanoparticulate Drug Delivery System of Doxorubicin for hepatic cancer using asialoglycoprotein receptor mediated approach	BT/PR8 484/NN T/28/01/ 06	Rs. 48,82,000	Department of Biotechnology (DBT)	Complete d	PI
15.	Stimuli sensitive polymeric nanoparticle based advanced DDS for cancer, diabetes and antibacterial.	5/258/9/ 2000	Rs. 31,64,000	Council of Scientific and Industrial Research, Govt. of India Under the NMITLI programme	Complete	PI
16.	Transmucosal Drug Delivery Systems	8018/RI D/TAP- 410/99- 2000	Rs. 16,00,000	AICTE- TAPTEC	Complete d	PI
17.	Development of a Novel DDS.	VI- D&P/27/ 97-TT	Rs. 28,00,000	DST, Government of India and Ranbaxy Research	Complete d	PI

18.	Radiation Effects on a	25/2/24	Rs. 4,57,580	Laboratories, India. Under the Drugs and Pharmaceutical Sciences Programme Department of	Complete	PI
	Controlled Release Ophthalmic Drug Delivery System.	35/2/94- R&D- II/2292		Atomic Energy, Govt. of India	d	
IND	OUSTRY					
1.	Innovative Parenteral Formulation		₹ 24, 80,000	Amaterasu Lifesciences	Ongoing	PI
2.	Innovative Parenteral Formulation		₹ 24, 80,000	Amaterasu Lifesciences	Ongoing	PI
3.	Controlled drug delivery systems		US\$ 33,848	Phoenix Pharmaceuticals , LLC, USA	Complete d	PI
4.	Formulation of Controlled and Novel Drug Delivery System		US\$ 33,848	Phoenix Pharmaceuticals LLC, USA	Complete d	PI
5.	SMMEDS for Parenteral applications		US\$ 15,316	Pfizer Pharmaceutical USA	Complete d	PI
6.	Validation of HPLC method for simultaneous detection of two drugs in marketed formulation		Rs. 10,00,000	Abbott Healthcare Ltd., India	Complete d	PI
7.	Development of Drug Delivery Systems		Rs. 10,00,000	Sekhsaria Chemicals Ltd., India	Complete d	PI

# CONSULTANT TO THE PHARMACEUTICAL INDUSTRY

Сотрапу	Country
Pfizer Ltd	USA
Phoenix Pharmaceuticals LLC	USA
Abbott	India
Emcure Pharmaceuticals	India
Novartis Enterprises Pvt. Ltd	India
Astron Research Pvt. Ltd	India
Universal Capsules Ltd	India
Mahaan Proteins Ltd.	India
Wintac Laboratories	India
Patani Scientific and Industrial Research	India
Industrial Aromatics Ltd	India
Saife VetMed	India

Zim Laboratories Ltd.	India
Amaterasu Lifesciences LLP	India

#### FELLOWSHIPS & PROFESSIONAL RECOGNITION

- Invited as Life Fellow of the Indian Chemical Society
- Fellow of the Maharashtra Academy of Sciences, India 2006
- Board Member of the Controlled Release Society, (CRS) Inc. USA 2011-12
- Member of the Board of Scientific Advisors of the CRS, Inc. USA 2012-13
- Chair -Young Scientist Mentor Protégé Committee, of the CRS, Inc. USA 2010-12
- President- UDCT Alumni Association (UAA) 2017-2019
- Program co-chair at "Disso-Europe 2016: Advances and applications in Dissolution science" organized by SPDS in association with Romanian Academy Section of Medical Sciences and Romanian Society for Pharmaceutical Sciences & delivered a lecture on topic titled, "Drug release Methodologies for nanomedicines, addressing challenges", held at Bucharest, Romania, 19th to 22nd October 2016.
- Program co-chair at "Disso India Ahmedabad 2016: International Annual Symposium on Dissolution Science", organized by SPDS at Courtyard by Marriot, Ahmedabad, Gujarat, India, on 26th to 27th July 2016 and delivered a lecture on topic titled, "Dissolution Testing During Product Development".
- Chairperson Scientific Programmes of Society for Pharmaceutical Dissolution science (SPDS) (2015-2018)
- Chair Scientific Committee for the 10<sup>th</sup> and 11<sup>th</sup> International Symposium on Advances in Technology and Business Potential of new Drug Delivery Systems, organized by the Controlled Release Society, Indian Chapter, 2010 and 2011.
- Editorial Board member of the European Journal of Drug Metabolism and Pharmacokinetics, Springer publication.
- Editorial Board member of the Asian Journal of Pharmaceutical Sciences, Elsevier Publication.
- Guest of Honor and Keynote Speaker at the State Level Seminar on 'Cancer Biology and Therapy, organized by SIES College and Mumbai Immunology Group, Mumbai, 27<sup>th</sup> February 2017
- **Programme chair** for 'A Professional Development Certification Course Series arranged in five modules' 2015, -2018titled 'PHARMACEUTICAL DRUG DEVELOPMENT PROCESS-Role Of Dissolution Testing' by ICT and Society for Pharmaceutical Dissolution Science.
- Co Chair scientific committee at 9<sup>th</sup>International Symposium on "Advances in Technology and Business Potential of New Drug Delivery Systems" organized by the Controlled Release Society- Indian Chapter, at Mumbai February 25-26, 2008
- International Advisory board member and member scientific committee at 8<sup>th</sup>International Symposium on "Advances in Technology and Business Potential of New Drug Delivery Systems" organized by the Controlled Release Society- Indian Chapter, at Mumbai February 25-26, 2007
- **Member scientific committee** at 1<sup>st</sup> -7<sup>th</sup>International Symposium on "Advances in Technology and Business Potential of New Drug Delivery Systems" organized by the Controlled Release Society- Indian Chapter, at Mumbai February 25-26, 1999-2006

- Chairperson of scientific session, INDO-US Summit On Cancer Nanotechnology, 4-6<sup>th</sup> February 2009, Sponsored by Indo-US Science & Technology Forum, organized by JamiaHamdard University, Delhi, India
- Member, Ad hoc Board of Studies in Pharmacy, University of Mumbai
- Member, Research Recognition Committee, University of Mumbai
- Member, Board of Studies, SASTRA University, Tamil Nadu
- Member- Local Governing Body of the SVKM Dr. Bhanuben Nanavati COP, Mumbai
- Member Board of Studies Shobhaben Prataphhai Patel School of Pharmacy & Technology Management, NMIMS University, Mumbai
- Referee for Nature Chemical Biology, International J. Pharmaceutics, J. of Pharmaceutical Sciences, AAPS PharmaSciTech, Molecular Pharmaceutics, Expert opinion on Drug Delivery, European J. of Pharmaceutics and Biopharmaceutics, Drug Delivery and Translational Research, Current Nanoscience, J. of Biomedical Nanotechnology, J. of Pharmaceutical and Biomedical Analysis, Indian J. of Pharmaceutical Sciences and Indian Drugs
- Editorial Board Member, Indian Drugs, Bio-nano Frontiers and Bombay Technologist
- Referee for selection of Best research paper in Pharmaceutics published in Indian Drugs and Indian J. Pharmaceutical Sciences, OPPI young scientist award
- Chairman, LIC for affiliation of Pharmacy Colleges, University of Mumbai
- Referee for PhD thesis other Universities, IIT, etc.
- Screening/ Expert Committee Member/ Reviewer for projects submitted to DST, CSIR, DBT, DBT-SIBRI, ICMR, Govt. of India.

# **INVITED LECTURES (>50)**

- Delivered Invited lecture on "Drug Delivery Systems for Cancer", at AICTE'S Training and Learning Academy (ATAL) sponsored one week Faculty Development Programme on Drug Engineering on 4-8<sup>th</sup> October 2021.
- Delivered a Invited Lecture "Dissolution Testing of Nanoformulations on USP –IV, at User Group Meeting on 26<sup>th</sup> June 2021.
- Delivered a Invited Lecture on "Nanosystems: Dissolution Methodologies and Biorelevant Media, Online platform, Organized by 10<sup>th</sup> Annual International Conference on Dissolution science and Application on 25<sup>th</sup> June 2021.
- Delivered invited Lecture on "Nanotechnology in Drug Delivery" at PMMMNMT Programme, conducted Online, organized by Institute of Chemical Technology, Mumbai on 1st April 2021.
- Delivered invited Lecture on "Innovative Approach in Nanotechnology" for Nanomedicine PMMMNMT Programme, on 24th April 2021, Online Platform, Institute of Chemical Technology, Mumbai.
- Delivered a talk on "Career in Science: Catalyzing the Potential Energy" at Global women's Breakfast on 9th February 2021, Online Platform, National Applied Chemistry, Academy of Scientific Research and Technology, Egypt & ICT, Mumbai.
- Delivered a talk on "Intellectual Property Rights", Online short course under RUSA, 11-16th January 2021, Online platform, UGC Human Resource Development Centre, University of Mumbai.
- Delivered a talk on "Orientation Session on National Innovation and Startup Policy (NISP): Implications on Academic Institutions", January 9, 2021 at 3.00 pm on an on-

- line platform, Sinhgad Technical Education Society's, Smt. Kashibai Navale College of Pharmacy, Kondhwa ,Pune.
- Invited talk on \*NISP Orientation Session and Formulation of ICT I&S Policy A Case Study\*, Government college of Engineering, Nagpur, 29<sup>th</sup> December 2020.
- Lecture talk on "Brain Targeted Nano Delivery System for Neurocysticercosis A Neglected Infectious Disease" at International virtual conference on Drug Discovery and Delivery, Organized by Department of Pharmacy BITS Pilani on 16th November 2020.
- Lecture on Industry Institute Interaction- The Institute of Chemical Technology Story, webinar organized by the DST-Centre of Policy Research, Panjab University, Chandigarh, August 14, 200
- Invited as speaker in exclusive webinar featuring a panel discussion on "From Research Bench to Commercialization" organized by XLPAT Labs on 31st July 2020.
- Lecture on Quality Improvement Programme (QIP) on "Innovative Teaching Learning Methodologies in Pharmacy education" at BVP, Pune, sponsored by A.I.C.T.E. New Delhi from 4th to 15th February 2020.
- Lecture on "Dissolution Testing Methodologies for Nanomedicines" in DISSO INDIA 2020, International Online Symposium, on 14thMay 2020.
- Lecture on "Innovative Drug Delivery Strategy to tackle Malaria" at the National Conference on "Innovative Approaches and Emerging Issues in Pharmaceutical and Food Microbiology" at National Conference on 2nd and 3rd March 2020.
- Lecture on "Exploiting Natural Products Curcumin through Bioenhanced and Targeted Delivery Systems" at 17th Annual Meeting (SFRR-INDIA-2020) and International Conference on "Role and Management of Oxidative Stress in Human Disease" at Mumbai, India during February 12-15th, 2020.
- Invited as Chief Guest and Key Note Speaker for 14th Inter-Collegiate/Institute/Department Avishkar Research Convention: 2019-20 (Final Round) on Monday, 6th January 2020.
- Keynote speaker at DISSO-INDIA Chandigarh 2019on 'Practical approaches for dissolution testing of nano formulations' delivered in International Annual Symposium organized by Society for Pharmaceutical Dissolution Science (SPDS) in association with SOTAX AG, on 12th & 13th September 2019, at Hotel Radisson, Zirakpur, Chandigarh, India
- Lecture talk on 'Intelligent Strategies to Circumvent the Blood Brain Barrier' delivered in AAPS NIPER Student Chapter, National Institute of Pharmaceutical Education and Research, SAS Nagar, Mohali, Punjab, on 3rd June 2019.
- Delivered a lecture on topic title "In situ Nanotechnology Expanding Horizons of Nanomedicine", in Women Empowerment in Science and Technology of the National Academy of science India, Mumbai chapter, Institute of Chemical Technology, Mumbai on 13th May 2019.
- Delivered a lecture on topic title "INNOVATIONS IN NANOCARRIERS", in Savitribai Phule Pune University Sponsored National Level Seminar at Maharashtra Cosmopolitan Education Society's Allana College of College of Pharmacy, on 8th March, 2019.
- Lecture talk on "Mega Challenges for Materials in Nanomedicine" delivered in international seminar titled Materials for Advanced Technologies, held at GCE Keonjhar, Bhubaneswar on 6th March, 2019.
- Delivered a lecture on topic titled "Bioenhancement strategies and Lipid drug delivery systems", at Gattefosse, Mumbai, on 13th February, 2019

- Delivered a lecture on topic titled "In situ Nanotechnology Revolutionizing Nanomedicine", at Reliance Lifesciences Retreat, on 7th January, 2019
- Lecture talk on "Receptor Mediated Targeted Drug Delivery System for Hepatocellular Carcinoma" delivered in ACDSF Workshop 2018 Program, held at ACTREC, Navi Mumbai on 8th October, 2018.
- Chairing a session on "Infectious disease" at 1st Controlled release Asia meeting, Singapore on 24th-25th September 2018.
- Delivered a Lecture on "Hepatocytes targeted primaquine Nanocarboplex Nano Facile In situ method for Malaria Relapse" 1st Controlled release Asia meeting, Singapore on 24th-25th September 2018.
- Delivered a talk on "IN SITU NANOTECHNOLOGY ENABLING POINT OF CARE NANOMEDICINE" in National Symposium on Materials in Healthcare at GITAM, Hyderabad on 6-8th September 2018.
- Seminar on recent trends in Advanced chemical biology organized by Society for Chemical Biology SBCat University of Mumbai, Kalina. Drug Delivery strategies to surmount BBB, 19th August 2017.
- Guest of Honor and Keynote Speaker at the National Workshop on 'Advances in Drug Delivery' organized by Ramanbhai Patel College of Pharmacy, CHARUSAT, and delivered a talk on Drug Delivery – Current Scenario and Future Directions, Gujarat, February 2013
- Key Note Speaker at the DBT- JRF Regional Meet (Western Region) organized at ICT, delivered a talk on Pharmaceutical Biotechnology- Opportunities and Challenges, Mumbai, November 2013.
- Chief guest and Keynote speaker at SVKM's Dr. Bhanuben Nanavati College of Pharmacy for the graduation ceremony and delivered a talk on "Designer Nanoparticles for Splenotropic Drug Delivery", Mumbai, July 2013.
- Delivered a lecture on topic titled "In situ nanosystem: A revolutionary approach in drug delivery", at Free University of Berlin, Germany, on 17th October, 2016.
- Delivered a lecture on topic titled "In situ systems for infectious diseases", at University of Hannover, Germany on 18th October, 2016
- Delivered lectures at St. Petersburg ITMO University, Russia under the DST- Russian Federation for Basic Research grant, titled, "Taste masking Technologies for the Design of Palatable Drug Formulations". September 2016
- Lecture talk on 'Surmounting the BBB- Synergistic approaches' delivered in seminar titled Exploring the Opportunities and Challenges in Drug Delivery Technology and its Pharmacokinetics, held at VES College of Pharmacy on 13th Feb, 2016
- "QbD enabled formulation Development- The relevance" at Emcure Pharmaceuticals, Pune, May 12, 2015
- "QbD-Driven R&D in Universities: Addressing Global Requirements"; at a seminar on 'Meeting Challenges from Changing Regulations: Formulation Development to Commercial Manufacturing', SciTech Centre, April 17 2015, Mumbai.
- "Targeted Drug Delivery-an expedition GUJCOST Sponsored One Day National Seminar On Challenges and Opportunities on Nanotechnology Based Drug Delivery System, Saurashtra university, Rajkot, February 2015.
- Delivered a keynote address "Advances in Drug Delivery Strategies Addressing Convenience and Compliance" for Training School on "Attaining Excellence and Compliance Through Drug Delivery and Pharmaceutical Technology",2nd to 7th February 2015; Panjab University, Chandigarh.

- "Targeted Drug Delivery-a journey" in National Level Workshop sponsored by University of Pune on the theme, 'Emerging trends in Pharmaceutical R&D and Drug Discovery', Allana College of Pharmacy, Pune, January 2015
- "Tackling Intractable Infections: Homing Nanocarriers to the Reticuloendothelial System"National Conference on Nanopharmacology on 19th to 20th December 2014 (NCNP2014) with a thrust on "Nanoparticles: A new paradigm in Innovative pharmacology", D Y Patil University, Kolhapur
- "The Stealth Strategy- Altering the Pk-Pd and Safety Profile of Oncology Drugs" at 7th International Conference organized by South Asian Chapter of American College of Clinical Pharmacology on "Clinical Pharmacology-Translational Research: Patient to Public Health",17-20 April 2014, held at Nehru Centre, Worli, Mumbai.
- "Technologies for polymer based solid dispersion"; organized by Shinetsu Singapore
   Pvt. Ltd. at Cyberabad Convention Centre, Hyderabad, 13 March, 2014
- "Pulmonary Targeting Using Orally Administered Nanocarriers- A
  RevolutionaryApproach in Tuberculosis Therapy" in 2nd Nirma Institute of Pharmacy
  International Conference, January 23 25, 2014 "Fostering Innovation in Drug
  Discovery & Development"
- "Drug Delivery: a Journey" with Nanotechnology MET-IOP, 2013
- "Serendipitous FindingsIn Targetted Drug Delivery", University of Bradford, September 2013
- "Chronotherapy, Continuing Medical Education on Human Circadian Rhythym and its Clinical Applications" Topiwala National Medical College and BYL Nair Charitable Hospital, Mumbai, September 25, 2013
- "Nano Particle Shape and Splenotropy- A Serendipitous Discovery", AICTE sponsored three days National Level seminar on FRONTIERS OF FORMULATION AND DEVELOMENT TECHNOLOGY, Allana College of Pharmacy, Pune, August 22, 2013
- "The Science and Technology of Dissolution Testing: An Overview", Disso India 2013, Pre-Conference Workshop, Pharmaceutical Dissolution Technology A Review, ICT May 2013
- "POLYMERS IN DRUG DELIVERY Macro to Nano application", Workshop on Modern Trends In Polymer Science And Technology, ICT, April 3-4, 2013
- "Serendipitous Discoveries In Nanocarrier Based Targetted Drug Delivery", IPER, Wardha March 22, 2013
- "Technology for polymer based solid dispersion-current state of art", Technical Seminar on SOLID DISPERSIONS by Shinetsu, 20 Feb 2013 -22nd Feb 2013 at Mumbai.
- "Drug Delivery Current Scenario and Future Directions", Key Note Speaker and Guest of Honour, Recent Advances in Drug Delivery, Charusat University, 21st - 23rdFeb, 2013
- "A New Ligand for Targeted Drug Delivery In Pulmonary Tuberculosis", The Fourth Indo-Japan International Symposium for Overcoming Chronic Intractable Infectious Diseases, Tokyo university, Japan, 2012
- "Aqua-Triggered In-Situ (ATIS) Gel: An Innovative Nasal Delivery System, Nanotechnology - A Current Update" C.U. Shah College of Pharmacy, S.N.D.T University February 22, 2011
- "Nanotechnoogy in Drug Delivery When and How?", Oriental College of Pharmacy Seminar feb 12, 2011
- "Aqua-Triggered In-Situ (Atis) Gelling System An Innovative Gelling Microemulsion"
   62nd Indian Pharmaceutical Congress 2010, Manipal, December 17 19, 2010

- "Biodegradable Periodontal Implants for Site Specific Delivery A Strategy To Reduce Toxicity" at AAPS Scitech Center September 2010
- "Nanocarrier shape and Splenotropy" at the third winter school on Nanotechnology in Advanced Drug Delivery, Feb 8-12, 2010
- "Nanotech in Drug Delivery"At Jhunjhunwala College, Mumbai, 2010
- "Particle Shape and Splenotropy" at 1st CDRI-NIPER (RLB) National Symposium on Medicinal Chemistry and Pharmaceutical Sciences, organized by CDRI, Lucknow, India, March 24-26, 2009.
- "LIPOMER of GlycerylMonostearate: Shape and Splenotropy" at 9th International Symposium on "Advances in Technology and Business Potential of New Drug Delivery Systems" organized by the Controlled Release Society- Indian Chapter, at Mumbai, February 25-26, 2009.
- "Controlled and targeted delivery for infectious diseases" at 9th Indian veterinary congress organized by Bombay Veterinary college (MAFSU, Nagpur) Mumbai, February 21-22, 2009
- "Lipomer of Glycerylmonostearate Innovative Splenotropic Drug Delivery System" at Indo-Japanese International Joint Symposium on Overcoming Intractable Infectious Diseases Prevalent in Asian Countries. December 23-24, 2008 held at Tokyo, Japan.
- "Nanotech and drug delivery" at IITB DST SERC Nanoschool on synthesis, characterization and application of nanoparticles. IIT Mumbai, December 18, 2008.
- "Lipomer-Novel splenotropic drug delivery system" at Nanocolloidal Carriers: Site specific and Controlled Drug Delivery, I.S.F. College of Pharmacy, Moga, Punjab October 10-11, 2008
- "Designing Delivery Systems for New Drugs", at 1st Indo-Japanese International Conference on "Advances in Pharmaceutical Research and Technology" held in Mumbai from Nov. 28-29, 2005.
- "Transmucosal Drug delivery systems", at Dr. Reddy's Laboratories, Hyderabad., 2005.
- "Transmucosal Drug Delivery Systems" organized by Spire Corporation, Boston, USA, Sep, 2004.
- "Strategies in Pharmaceutical Excipients" Organized by Eastman Chemical Company, Tennessee, USA, Aug 2004.
- "Transmucosal DDS: An overview of Research Focus" Organized by Eastman Chemical Company, Tennessee, USA, Aug 2004.
- "Role of Solubilizers in Drug Delivery Systems" organized by BASF Ltd, Mumbai, July 2004.
- "Surfactants in Drug Delivery System, Trends, Challenges, and Opportunities", at Surfactant Industry in India- Challenges and Opportunities in the Coming Decades, UICT, Mumbai in Apr 2004
- "Drug Delivery Systems- Challenges Ahead" at SVBCP, Mumbai in Sept 2003
- "Novel Drug Delivery Systems", at ICMR Workshop, Sheth G. S.MedicalCollege, Mumbai in Jan 2003.
- "Raw material and Formulation- Effect on Bioequivalance Designing Good SR Tablet", in Intermed Seminar on Towards Better Generic Drugs, at Kuala Lumpur, Malaysia, in Sept 2002.
- "Recent Trends in Drug Delivery Systems at the M. L. Khorana Memorial John Kapoor Seminar, Dec. 1999.
- "Application of Interfacial Science In Pharmaceutical Formulations" at workshop organized by ISSST, Western Region, UICT, Mumbai, 1999.

- "Eudragit The Ubiquitous Polymer", at a Seminar organised by S.Zaveri& Co. in Nov. 1998, at Mumbai.
- "Transmucosal Drug Delivery Systems" at the International Conference on "Drug Delivery Techniques and their Testing" organised by the Department of Clinical Pharmacology, G.S. Medical College, Department of Biochemistry, Delhi, and The University of Illinois, Chicago, U.S.A. in December, 1995, at Mumbai.
- Faculty for a refresher course in "Basic Principles and Applications of Chromatographic Separations" organized by Pharmaceutical Division, UDCT, October, 1993.
- "Transmucosal Drug Delivery Systems", at Sandoz India Ltd., Mumbai, Feb., 1993.
- "Buccoadhesives Breaking New Grounds" at a seminar on "Emerging Frontiers in Pharmaceutical Technology, organized by the Pharm. Divn, at UDCT, April, 1992.
- "Sustained Release Formulations", at FDC Ltd., Mumbai, Jan. 1983.

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