

MUKUND S. CHORGHAE, *Ph. D., D. Sc.*

FAAS, FACS, FAIC, FICS, FISCB, FRACI, FRSC, C. Chem.

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HIGHLIGHTS

- Serial Entrepreneur. Experienced executive with multi-faceted skills, proven track record of innovation and exceeding organizational goals; Thirty-six years research leadership / accomplished project management / completion of multi-million-dollar projects.
- Creativity in problem solving: Discovery and Development of New Chemical Entities, innovative synthetic routes / processes/ formulations; successful implementation and transfer of technology in kilo-labs, pilot, and manufacturing plants. Demonstrated expertise / skills in management of academic collaborations. technology transfer, regulatory filings, and compliance audits.
- Expertise in diverse areas of organic synthesis (Discovery Research & Process Development): Carbohydrates, Enzymes, Heterocycles, Metalloporphyrins, Molecular Recognition, Natural Products. Research work with eminent chemists: Sir Richard Roberts, Robert Grubbs, Jean-Marie Lehn, Colin Suckling, Eric Jacobsen, Ron Raines, Marty Burke, Spencer Knapp, Ashok Vaidya, Jay Groves, Steven Ley, David Dolphin, Charles Hammer, Sidney Hecht, Yoshito Kishi, Bal Tilak, Murzban Wadia.
- Elected fellowships in prestigious academies and societies (AAAS, ACS, AIC, ICS, ISCB, Sigma Xi, RACI, and RSC). Scientific Advisory Board Member of Corporations and Foundations. Visiting Scholar / Distinguished Scientist at numerous academic institutions. Delivered seminars in international scientific conferences, academic/industrial laboratories in the U.S.A., Europe, and Asia. Chair, Princeton Section, ACS (2019), Chair RSC-Process Chemistry and Technology Group (2018-2020).
- Expert witness, depositions, expert reports in patent matters. cGLP/CGMP, Certified Professional in Current Good Laboratory Practices and Good Manufacturing Practices.
- **Fulbright Specialist Award (2015-2023), Sigma Xi Distinguished Lecturer July 1, 2022 -June 30, 2024.**

PROFESSIONAL AND BUSINESS EXPERIENCE: Founder / President / CSO/ Professor

Founder, President and CSO, THINQ PHARMA? MVRC Research (2012-2021)	2006-
Founder and CSO, APINOVO / Ayurvedya Healthcare Innovations	2020-
CSO, Chicago Discovery Solutions	2010-2020
CSO, Empiriko and AGN	2010-2015
CSO THINQ-CRO / D & O PHARMACHEM	2003-2006
Scientific Advisory Board Member, Empiriko	2021-
Scientific Advisory Board Member, YewSavin, (USA), Inc	2021--
Scientific Advisory Board Member, Cogent Biotech, LLC	2021--
Scientific Advisory Board Member, HSvj Health science Pvt Ltd	2021-
Scientific Advisory Board Member, American Pharmaceutical Services	2020--
Scientific Advisory Board Member, Nirvana Water Sciences	2020-
Scientific Advisory Board Member, Clearsynth	2020-
Scientific Advisory Board Member, Envision Biotech, Civent Chem, OrgSyn Laboratories, ROW2	2006-2018
International Brain Research Foundation, New Jersey Stem Cell Research Foundation	
Visiting Professor/Scholar/Fellow at Caltech, Harvard University, MIT, Princeton, Univ. Chicago, Northwestern, Northeastern Universities, Boston College, Cambridge, University of Strathclyde, ICT, NCL, IICT, ICT, KHRC, Savitribai Phule Pune University (India).	

- Designed, Developed, Directed Lead Chemistry and Formulations technologies for a variety of therapeutic and chemical applications. Invented new catalysts and innovative cost-effective process technologies.
- Invented the “Chemosynthetic Livers Biomimiks™” as powerful in-vitro and ex-vivo oxidation catalysts platforms for Drug Metabolism, Valorization of biomass and Environmental Remediation. Redesigned existing compounds to minimize toxicity and for screening of active, hidden inert, and toxic metabolites.
- Developed transformational product line of water-soluble HMB infused bottled spring water. Spurred commercial development of Anita-Mehta’s MCAT-53™ as a powerful catalyst for C-H activated C-C coupling reactions in water under environmentally benign condition, ambient temperatures, and pressures.

- Discovered Developed and Commercialized New Chemical Entities (NCEs) and Hybrid Molecules from Indian Traditional Medicines and Therapeutics via "Process Chemistry Driven Medicinal Chemistry., Observational Therapeutics / Reverse Pharmacology.
- Delivered sustained innovation with outstanding proven results for pharmaceutical / biopharmaceutical companies, academic / government laboratories (domestic and overseas) with refined skills in project management of technology transfer; process re-engineering; supply chain management and business development. Finessed and aligned drug discovery and development directions and investments. Devised and implemented pioneering strategies for reduction of drug development cycle times.
- Established strategic partnerships with chemistry-based companies Evaluated, selected, and qualified vendors, worldwide. Established productive partnerships.
- In and out-licensed pharmaceutically active moieties and technologies. Strategically aligned drug discovery and development directions and investments.

GENZYME CORPORATION, Inc., DRUG DISCOVERY AND DEVELOPMENT, WALTHAM, MA 2000-2003

Vice President, Pharmaceutical Development Sciences; Member, Corporate Steering Committee

- Innovated and directed chemical process and formulations research on pre-clinical and clinical candidates.
- Devised and implemented novel strategies for reduction of drug development cycle times. Shortened time to market by over 25%
- Established preferred supplier program: Evaluated, selected, and qualified vendors, worldwide, for deliveries of drug substance and product. Ensured (cGLP / cGMP) compliance for pre-clinical studies / clinical trials; Devised optimized and oversaw business processes for contract implementation and regulatory compliance.

CYTOMED, Inc., Cambridge, MA

1997-1999

Senior Director, Chemical Sciences Research and Development (1998-1999), Director (1997-98)

Awarded "Scientist of the Year" for contributions to drug development in 1997.

- Directed chemical process and formulation research, Led successful scaled-up synthesis. 80% cost reduction
- Developed benign, cost-efficient processes for drug candidates, effected seamless technology transfer
- Leveraged network of external vendors for dramatic significant lowering of costs.

ABBOTT LABORATORIES, Pharmaceutical Research, North Chicago, IL

1991 to 1995

Project Manager (1992-1995)

Research Investigator (1991-1992)

- **Awarded the divisional "Scientist of the Year" award for discovery research in June 1993.**
- Designed novel cost-effective synthetic processes for the preparation of multi-kilo quantities of anti-epilepsy, anti-convulsant, cholinergic channel activators, and anti-infectives reducing time to market 25%.
- Launched new programs on the biomimetic synthesis of drug metabolites via metalloporphyrin assisted epoxidation and hydroxylation. Elaborate multi-step syntheses were converted to one or two-step catalytic reactions thereby saving 75% of development time and 80% of costs.

COLLEGE DE FRANCE, Paris and Université Louis Pasteur, Strasbourg, France

1990 to 1991

Research Scientist / Assistant Director

- Researched, with Professor Jean-Marie Lehn (Nobel Laureate), the phenomena of designed self-assembly and molecular recognition. Designed and synthesized diversely substituted pyrimidines, triazines and porphyrins.

DOW CHEMICAL, U.S.A., Midland, MI

1985 to 1990

Project Leader (Freeport, TX) (1989-1990)

RAP Senior Research Chemist (1985-1989)

- Led teams of researchers on metalloporphyrin-assisted epoxidation of terminal alkenes, selective functionalization of carbohydrates. Awarded Scientist of the Year for propylene oxide project
- Initiated and directed projects related to (ii) bio rational design of environmentally benign herbicides (iii) Process Development for pharmaceuticals, epoxy resins / urethanes. Received several performance-based awards.

EDUCATION

UNIVERSITY of MUMBAI, Mumbai, India. D.Sc., Chemistry

2021

HARVARD UNIVERSITY, Cambridge, MA Postdoctoral Research Fellow

1984 to 1985

Designed procedures, under Professor Yoshito Kishi, on the synthesis of complex carbohydrates (potential new drugs and non-caloric sweeteners); novel C-C bond forming reactions.

UNIVERSITY OF VIRGINIA, Charlottesville, VA Postdoctoral Research Associate

1982 to 1984

Explored, under Professor Sidney Hecht, routes for the synthesis of the pyrimidine moiety of Bleomycin (drug for (treatment of carcinomas, melanomas, and Hodgkin's disease); 2' (3') -O- acylated pCpA derivatives.

GEORGETOWN UNIVERSITY, Washington, D. C. Ph.D. (Organic Chemistry), 1976-1982, Instructor (1981-1982)

Teaching and Research Fellow (1975-1981)

Research, under Professor Charles Hammer, the "Synthesis of selected saturated nitrogen heterocycles; kinetic and mechanistic studies on cyclic beta-chloro amines.". Received Sigma XI Graduate Student Research Prize, (1982).

NATIONAL CHEMICAL LABORATORY, Pune, India

1973 to 1975

Research Fellow: Under Dr. Bal D. Tilak, investigated the utility of N-aryl azetidines as anti-tumor drugs.
University of Poona, India, M. Sc., 1973, 1st Class (Honors), 1st Rank; B. Sc., 1971.

MEMBERSHIP OF ACADEMIC/PROFESSIONAL SOCIETIES

Fellow: American Association for the Advancement of Science; American Chemical Society, American Institute of Chemists (Life Fellow); Health Sciences Collegium; Indian Chemical Society (Life Fellow); Indian Society of Chemists and Biologists (Overseas Life Fellow); Indian Society of Bio-Organic Chemists; International Board for Education Research and Development; International Union of Pure and Applied Chemistry; Pharmaceutical Royal International Society PRISAL- Royal Society of Chemistry and Chartered Chemist; Royal Australian Chemical Institute; Sigma XI; World Innovation Foundation

Academies: Maharashtra Academy of Sciences (Overseas Fellow), Andhra Pradesh and Telengana Academy of Sciences (Foreign Fellow),

AWARDS AND DISTINCTIONS

Acharya J.C. Ghosh Memorial Award and Gold Medal, Indian Chemical Society, 2021

J. C. Bardhan Memorial Award and Gold Medal, Indian Chemical Society, 2020

Visiting Fellow "Shri D. M. Trivedi Lecture in Green Chemistry and Technology" 2020 -21. Professor V.M. Kulkarni Fellow under "Professor V. M. Kulkarni Endowment Fund" in Pharmaceutical Science and Technology" 2018-2019 tenable at Institute of Chemical Technology (ICT)

American Chemical Society: Henry Hill Awardee (NESACS-October 2014)

"Bharat Gaurav Award, Bharatiya Prawasi Diwas, January 2008

"Alkyl Amines Padma Bhushan Prof. B.D. Tilak Chemcon 2002 Distinguished Speaker Award" of the International Institute of Chemical Engineers.

"Diamond Jubilee Fellowship", University Department of Chemical Technology, Mumbai, India

"B. D. Tilak Distinguished Visiting Fellowship", University of Bombay.

Listed in "American Men and Women of Science", "Who's Who in Science and Engineering".

Research and Teaching Fellowships; Government of India National Merit Scholarships at college and university

LANGUAGE PROFICIENCY

Fluent in English, Hindi, and Marathi; excellent working knowledge of German, French, and several Indian languages

DISTINGUISHED SERVICE TO ACADEMIC/PROFESSIONAL SOCIETIES

American Chemical Society: **Henry Hill Awardee (NESACS-October 2014)**

- Chair (2019), Member at Large, Board of Directors, Princeton Section 2018-
- Chair, Executive Committee Member, Division of Small Chemicals Businesses 2006-
- Committee Member, Program Chair Subcommittee Chair,(Awards and Fellowships for National Medal of Science and Technology), Joint Board Council Committee on Science, ComSci, ,
- Committee Member, Joint Board Council Committee on International Activities; Distinguished Consultant - Career Consultant Program, Chemical Entrepreneurship Council
- Chair, Brazosport Section, 1990, Chair, Northeastern Section 2007
- Member, Board of Directors and Chairman of the Public Services / Public Affairs Committee, Member Publications Committee, Northeastern Section, 1997—2017. Editor, "The Nucleus", February 2004-July 2004 Member, Editorial Advisory Board for "Organic Process Research and Development" and "Chimica Oggi". Reviewer of manuscripts for numerous leading professional journals.
- Chair, US Organizing Committee, ACS-CSIR Symposium, Pune + Hyderabad, 2006-

International Union of Pure and Applied Chemistry:

- Member, US National Committee USNC (2010-7), Titular Member, IUPAC Division VII Committee on Chemistry and Human Health (2002-2004 term); Secretary of the Division-2005-, Medicinal Chemistry / Drug Discovery and Development Committee, Section Committee; Associate Member, IUPAC Commissions on Biotechnology, New Technologies, and Special Topics; Associate Member, Committee on Chemical Education. NR USA to Division VII (Chemistry and Human Health),
- Project Leader of "New Projects Teams" on Naturaceuticals, Glossaries of Terms used in Process Chemistry" and Training in Medicinal Chemistry in Southeast Asia.
- Chair, Scientific Program Committee, 20th IUPAC Conference on the Chemistry of Natural Products, Chicago, September 1996.

Other Organizations:

- Chair and US Representative, RSC-Process Chemistry and Technology Committee Group (2018-2020) Member-at-Large, Executive Committee of the Royal Society of Chemistry, US chapter
- Co-chair, Process Development Committee, Massachusetts Biotechnology Council.

- Director and Member, Committees on Advanced Professional Thinking, International Activities and Technology, American Institute of Chemists.
- Consultant, Transfer of Knowledge through Expatriate Nationals (TOKTEN) United Nations Development Program
- Board Member, Board of Studies, Institute of Science, Nagpur. GIAN Fellow Govt. of India (2019), Visiting scholar and adjunct faculty member, Caltech (2006-2007), Cambridge University (2006-2007 and 2012-), Harvard University (2005-2006, 2009-), Massachusetts Institute of Technology (2007-), University of Illinois(2018-) Princeton (2015-16), Rutgers (2017-) Strathclyde (2015-) Massachusetts College of Pharmacy (2005-2008), Tufts University, Wellesley College, University of Chicago, Northwestern University, University of British Columbia, University of Houston, Saginaw Valley College, Michigan, Shishubharati (2001-) Institute of Chemical Technology, Mumbai (2013-), Overseas Director, SP Mandali (2013-5)
- Course Director/ Faculty, CMC and cGLP / cGMP courses, The Center for Professional Innovation & Education (CFPIE)
- Actively involved with TIE. Leadership roles in several community groups. BMM , Marathi Vishwa

MUKUND S. CHORGHADE, Ph. D., D.Sc.

2022

ORCID iD <https://orcid.org/0000-0002-9188-0626>**Publications:**

- 1) Thomas G. Heckler, Li-Ho Chang, Yoshiyuki Zama, Takehiko Naka, Mukund S. Chorghade and Sidney M. Hecht*, "T4 RNA Ligase Mediated Preparation of Novel Chemically Misacylated tRNA phe's", *Biochemistry*, **1984**, 23 (7), 1468.
- 2) James R. Roesser, Mukund S. Chorghade and Sidney M. Hecht*, "Ribosome Catalyzed Formation of an Abnormal Peptide Analogue", *Biochemistry*, **1986**, 25 (21), 6361.
- 3) Yoshiaki Aoyagi, Mukund S. Chorghade, Abeysinghe A. Padmapriya, Hosbett Suguna and Sidney M. Hecht*, "Synthesis of Pyrimidoblastic Acid and Epipyrimidoblastic Acid", *J. Org. Chem.*, **1990**, 55 (26), 6291.
- 4) Mukund S. Chorghade, David E. Basque, Dennis G. Lay* and Paul E. Cranley, "MDI Prepolymers Rival TDIs in PU Sealant Formulations", *Adhesives Age*, **1992**, 32.
- 5) M. Chorghade, D. G. Lay* and P. Cranley, "2, 4' MDI based Prepolymers: A Viable Alternative to TDI Prepolymers in Polyurethane Sealants", *Polyurethanes World Congr. Proc., SPI / ISOPA*, **1991**, 319
- 6) Knud E. Andersen, Mikael Begtrup, Mukund S. Chorghade, Jesper Lau, Elaine C. Lee, Behrend F. Lundt, Hans Petersen, Per O. Sorensen* and Henning Thogersen, "The Synthesis of Novel GABA Uptake Inhibitors, Part 2. Synthesis of 5-Hydroxytiagabine, a Human Metabolite of the GABA Reuptake Inhibitor Tiagabine", *Tetrahedron*, **1994**, 50 (29), 8699
Erratum cited in *Tetrahedron*, **1996**, 52 (10), 3375
- 7) Mukund S. Chorghade*, Peter Ellegaard, Elaine C. Lee, Hans Petersen and Per Olaf Sorensen, "Synthesis of Desmethyl Tiagabine", *Heterocycles (special issue honoring Alan Katritzky)*, **1994**, 37 (2), 783.
- 8) Jan V. Andersen, Mukund S. Chorghade*, Derek A. Dezero, David H. Dolphin, David R. Hill, Elaine C. Lee, Kristian T. Hansen and Richard J. Pariza, "Metalloporphyrins as Chemical Mimics of Cytochrome P-450 Systems", *Bioorganic and Medicinal Chemistry Letters*, **1994**, 4 (24), 2867.
- 9) Gary Callen, Mukund S. Chorghade*, Elaine C. Lee, Peter G. Nielsen, Hans Petersen, and Abu Rustum, "Identification and Synthesis of Major Oxidative Degradation Products of Tiagabine", *Heterocycles (special issue honoring Arnold Brossi)*, **1994**, 39 (1), 293.
- 10) Joseph E. Celebuski, Mukund S. Chorghade* and Elaine C. Lee, "Chemical Modification of Erythromycin: Novel Reaction Observed by Treatment with Metalloporphyrins", *Tetrahedron Lett.*, **1994**, 35 (23), 3837. Corrigendum published in *Tetrahedron Lett.*, **1995**, 36 (52), 9414.
- 11) Mukund S. Chorghade* and Elaine C. Lee, "Progress of an Anti-Convulsant Drug from Discovery to Manufacture", *J. Indian Inst. Sci.*, **1994**, 74, 231.
- 12) Mukund S. Chorghade* and Csaba Cseke, "Biorational Design of Herbicides: Synthesis of Inhibitors of the PFP Enzyme", *Pure and Appl. Chem.*, **1994**, 66 (10/11), 2211.
- 13) Mukund S. Chorghade*, Csaba T. Cseke and Paul S. Liu, "The Utility of 2,5-Dideoxy-2, 5-imino-D-mannitol as a PFP Enzyme Inhibitor", *Tetrahedron Asymmetry*, **1994**, 5 (11), 2251.
- 14) Mukund S. Chorghade* and Csaba T. Cseke, "Biorational Design of Herbicides: Synthesis of Inhibitors of the PFP Enzyme", *Heterocycles (special issue honoring Rolf Huisgen)*, **1995**, 40 (1), 213.
- 15) V. Rama Rao*, Mukund K. Gurjar, Shashwati Pal, Richard J. Pariza and Mukund S. Chorghade, "Synthesis of a Novel C2-Symmetrical (2S, 5S)-2,5-Bis-[(1,1-dimethyl-ethoxy) carbonylamino]-1,6-diphenylhex-3-ene: Applications in the Synthesis of Potential HIV Protease Inhibitors", *Tetrahedron Lett.*, **1995**, 36 (14), 2505.
- 16) M. S. Chorghade*, H. Petersen, E. C. Lee, and S. Bain, "Efficient Synthesis of Regioisomers of Tiagabine", *Pure and Appl. Chem.*, **1996**, 68 (3), 761.
- 17) Mukund S. Chorghade*, David H. Dolphin*, David R. Hill, Fumio Hino, Elaine C. Lee, Li-Ying Zhang, and Richard J. Pariza, "Metalloporphyrins as Chemical Mimics of Cytochrome P-450 Systems", *Pure and Appl. Chem.*, **1996**, 68 (3), 753.

- 18) David R. Hill, Joseph E. Celebuski, Richard J. Pariza, Mukund S. Chorghade*, Milton Levenberg, Thomas Pagano, George Cleary, Paul West, and David Whittern, "Novel Macrolides via meso-Tetraarylmetalloporphyrin Assisted Oxidations", *Tetrahedron Lett.*, **1996**, 37 (6), 787.
- 19) M. S. Chorghade*, D. H. Dolphin*, D. Dupre, D. R. Hill, E. C. Lee, and T. P. Wijesekara, "Improved Protocols for the Synthesis and Halogenation of Sterically Hindered Metalloporphyrins", *Synthesis*, **1996**, 1320.
- 20) M. K. Gurjar*, S. Pal, A. V. Rama Rao, R. J. Pariza, and M. S. Chorghade, "Synthesis of Novel C-2-symmetric and Pseudo C2-symmetric Based Diols, Epoxides and Dideoxy Derivatives of HIV Protease Inhibitors", *Tetrahedron*, **1997**, 53 (13), 4769.
- 21) B. Venkateswara Rao*, B. V. Sarma, S. V. Ravindranadh, M. K. Gurjar and M. S. Chorghade, "Selective Hydrolysis of Isopropylidene Group of Sugar Derivatives with Oxone in Aqueous Methanol", *Carbohydrate Lett.*, **1997**, 2, 377.
- 22) M. K. Gurjar*, K. Sadalapure, S. Adhikari, B. V. N. B. S. Sarma and M. S. Chorghade, "Kinetic Resolution of Aryl Glycidyl Ethers: A Practical Synthesis of Optically Pure *beta* -blocker-S-Metoprolol", *Heterocycles*, **1998**, 48 (7), 1471.
- 23) Mahendra N. Deshpande*, Jufang Barkalow, David Brown, Michael H. Cain, Gary Callen, Mukund Chorghade, Ashok Gupta, Roger Koops, Richard Pariza, Ketan Patel, Subhash R. Patel, and Pulla Reddy Singam, "A Scalable Process for a Novel Antidepressant (ABT-200)", *Org. Process Res. Dev.*, **1998**, 2 (6), 351
- 24) Mukund K. Gurjar*, L. Murali Krishna, Bugga V. N. B. S. Sarma and Mukund S. Chorghade, "A Practical Synthesis of (R)-(-)-Phenylephrine Hydrochloride", *Org. Process Res. Dev.*, **1998**, 2 (6), 422.
- 25) Mukund S. Chorghade*(Editor) and Elaine C. Lee (Associate Editor), *Pure and Appl. Chem.*, **1998**, 70 (2), Proceedings of the XXth IUPAC Symposium on the Chemistry of Natural Products, Chicago, September 1996, preface page vi
- 26) Mukund S. Chorghade*, Liang Guo, Robert M. Moriarty, Raju Penmasta, Munagala S. Rao, Rajesh K. Singhal, Zhengzhe Song, Sudersan M. Tuladhar, Sanmin Yang, T. V. Radhakrishnan and D. G. Sathe, "Industrial Synthesis of N-acetyl-5-methoxytryptamine (Melatonin)", *The Chemist*, **1998**, 75(4), 27
- 27) Mukund S. Chorghade*, Karen A. Jauregui, Sunil V. Mhaskar, Colin Scott and C. Grace Yeh, "Discovery and Development of an Anti-Inflammatory Medication", *The Chemist*, **1998**, 75 (5), 32.
- 28) Mukund S. Chorghade* and Veena M. Chorghade, "Promise and Potential of the Pharmaceutical Sector in India: Opportunities and Challenges for Strategic Collaboration", *Chimica Oggi*, **1998**, 10 (16), 33.
- 29) Mukund S. Chorghade*, "Metalloporphyrins as Synthetic Livers", published in "Drug Metabolism: Databases and High Throughput Testing During Drug Design and Development", *International Union of Pure and Applied Chemistry: DMDB Working Party*, Ed. Paul W. Erhardt, Blackwell (**1999**), pp.152-162.
- 30) S. Lahiri, C. Ramarao, A. V. Rama Rao, B.V. Rao*, and M. S. Chorghade, "A Facile Synthesis of 5, 6-dimethoxy-1-tetralone", *Org. Process Res.Dev.*, **1999**, 3 (1), 71.
- 31) Xiong Cai, Mukund S. Chorghade*, Aberra Fura, Gurmit S. Grewal, Karen A. Jauregui, Ralph T. Scannell, Michelle Young, C. Grace Yeh, Liang Guo, Robert M. Moriarty, Raju Penmasta, Munagala S. Rao, Rajesh K. Singhal, James P. Staszewski, Sudersan M. Tuladhar and Sanmin Yang, "Kilogram Scale Synthesis of a Potent 5-LO Inhibitor", *Org. Process Res. Dev.*, **1999**, 3 (1), 73.
- 32) M. S. Chorghade*, M. K. Gurjar, S. Adhikari, K. Sadalapure, S. V. S. Lalitha, A. M. S. Murugaiah and P. Radha Krishna, "Synthesis of (2S, 5S)-trans-5-(4-fluorophenoxymethyl)-2-(1-N-hydroxyureidyl-3-butyn-4-yl)-tetrahydrofuran-CMI-977", *Pure and Appl. Chem.*, **1999**, (6), 1071-74.
- 33) Mukund S. Chorghade*, "Professor Sir Derek Harold Richard Barton-In Memoriam", *Pure and Appl. Chem.*, **1999**, (6), 1075-77; reprinted in *The Nucleus*, **1999**, LXXVII, (10), 20
- 34) M. S. Chorghade*. K. Sadalapure, S. Adhikari, S. V. S. Lalitha, A. M. S. Murugiah, P. Radha Krishna, B. Sridhar Reddy, and M. K. Gurjar*, "Synthesis of (2S, 5S)-trans-5-(4-fluorophenoxymethyl)-2-(1-N-hydroxyureidyl-3-butyn-4-yl)-tetrahydrofuran (CMI-977): A Potent 5-Lipoxygenase Inhibitor", *Carbohydrate Lett*, **2000**, 3(6), 405-410.
- 35) Mukund K. Gurjar*, Andappan M. S. Murugaiah, Joseph Cherian and Mukund S. Chorghade, "Synthesis of (4R)-4-Benzyloxycyclopent-2-en-1-one and 1,9-Dioxabicyclo (4.3.0) non-3-enes by Ring Closing Metathesis of Carbohydrate Precursors", *Carbohydrate Lett*, **2000**, 3 (5), 343-348.
- 36) Darren J. Dixon, Steven V. Ley*, Dominic J. Reynolds, and Mukund S. Chorghade, "A Short and Efficient Stereoselective Synthesis of the Potent, 5-Lipoxygenase Inhibitor CMI-977", *Synthetic Communications*, **2000**, 30 (11), 1955
- 37) Mukund K. Gurjar*, L. Murali Krishna, B. Sridhar Reddy, and Mukund S. Chorghade*, "A Versatile Approach to an Anti-Asthmatic Compound LDP-977 and its Six Membered Analogue", **2000**, *Synthesis*, 557.
- 38) Mukund S. Chorghade*, Edwin D. Becker, John W. Jost, Edwin P. Przybylowicz, and Cynthia Friend, "IUPAC: A Glorious Past, Productive Present and Bright Future", *The Nucleus*, **2000**, LXXXVIII, No. 19, 10; Part II: *The Nucleus*, LXXXIX, 1, 16.
- 39) Ramesh A. Joshi, Mukund K. Gurjar*, Narendra K. Tripathy and Mukund S. Chorghade*, "A New and Improved Process for Celiprolol Hydrochloride", *Organic Process Research and Development*, **2001**, 5, (2), 176.
- 40) G.V. M. Sharma*, K. Raman Kumar, Punna Sreenivas, Palakodety Radha Krishna and Mukund S. Chorghade, "FeCl₃ Mediated Synthesis of 2-substituted and 2,5-disubstituted Tetrahydrofurans from 1,4-Diols", *Tetrahedron Asymm.*, **2002**, 13, 687-690
- 41) Mukund S. Chorghade*, Veena M. Chorghade and Mukund K. Gurjar, "Promise and Potential of the Pharmaceutical Sector in India: Opportunities and Challenges for Strategic Collaboration", *Chimica Oggi*, **2001**, *Outsourcing Compendium*, 45-51

- 42) Monge, M. Chorghade, P.W. Erhardt, C.R. Ganellin, N.Koga, P. Lindberg, T.J. Perun, J.G. Topliss, B.K. Trivedi & C.G. Wermuth, "Medicinal Chemistry in the Development of Societies. Biodiversity and Natural Products", *Eur. J. Med. Chem.*, **2000**, 35 (12), 1121-1125; *Acta Farmacéutica Bonaerense*, **2000**, 9 (4), 309-313; *Boletín de la Sociedad Química del Perú*, **2000**, LXVI, 210-217; *Ingeniería y Ciencia Química*, **2000**, 19, 2; *Quim Nova (Brazil)*, **2001**, 24 (1), 153-155; *Chemistry International*, **2001**, 23 (2), 39-42; *Anales de la Real Academia De Farmacia (Spain)*, **2001**, 67, 5-14; *Anales de la Real Sociedad Española de Química (Spain)*, **2001**, 1, 26-31.
- 43) Mukund S. Chorghade*, Veena M. Chorghade and Mukund K. Gurjar, "Pharmaceutical Industry in India", *The Nucleus*, **2001**, LXXX, No. 3, 12
- 44) Darren J. Dixon, Steven V. Ley*, Dominic J. Reynolds, and Mukund S. Chorghade, "A Short and Efficient Stereoselective Synthesis of the Potent, 5-Lipoxygenase Inhibitor CMI-977", *Indian Journal of Chemistry*, **2001**, 39, 1043
- 45) Mukund S. Chorghade*, Mukund K. Gurjar* and Arindam Talukdar, "Fascinating Excursions into Chiral Chemistry: An Insider's Perspective", *Chimica Oggi*, **2002**, October 2002, 20-26
- 46) Mukund K. Gurjar*, A. M. S. Murugaiah, Dandepally Srinivas Reddy and Mukund S. Chorghade, "A New Route to Prepare 6-Chloro-5-(2-chloroethyl)-oxindole", *Organic Process Research and Development*, **2003**, 7, (3), 309
- 47) Mukund K. Gurjar*, Somu V. Ravindranadh, Kuppuswamy Sankar, Sukhen Karmakar, Joseph Cherian, and Mukund S. Chorghade, "A New Protocol to Install Geminal Diallyl Functionality via Radical Mediated Ring Opening Reaction of Cyclopropyl methyl halide/xanthate with allyl tri-n-butyltin", *Organic and Biomolecular Chemistry*, **2003**, 14 (10), 1363-1370.
- 48) Mukund K. Gurjar*, A. M. S. Murugaiah, P. Radhakrishna, C. V. Ramana and Mukund S. Chorghade*, "A Novel and Simple Asymmetric Synthesis of CMI-977 (LDP-977): A potent Anti-Asthmatic Drug Lead", *Tetrahedron Asymmetry*, **2003**, 14 (10), 1363-1370
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- 97) Mukund S. Chorghade*, Mukund K. Gurjar, Debendra K. Mohapatra, "Route Selection and Process Development for a Magnetic Resonance Imaging (MRI) Contrast Agent", Advances in Synthetic and Medicinal Chemistry Symposium, St. Petersburg, Russia, August 2007
- 98) Mukund S. Chorghade*, "The Chemistry is Right", ACS Symposium on "Connections to Chemistry", Burlington, MA, October 2007
- 99) Mukund S. Chorghade*, "Progression of a drug from test tube to clinic: A personal adventure", NESACS, Henry Hill Award Meeting, October 2007
- 100) Mukund S. Chorghade*, Mukund K. Gurjar, Debendra K. Mohapatra, Ramesh Dhondi, Diego Benitez, Ekaterina Tkatchouk, William A. Goddard, III, and Robert H. Grubbs, "Stitching and Bonding Pune and Pasadena Together: Olefin Metatheses in the Synthesis of Natural Products", Indian Society for Chemistry and Biology, Symposium, Bits-Pilani, February 2008
- 101) Mukund S. Chorghade*, "Fascinating Adventures in Industrial Chemistry: A Personal Perspective", OrCheMEd 2008 Conference, Moscow, Russia, September 2008
- 102) Mukund S. Chorghade*, "Reinvigorating drug research by open-source R&D: Value Creation and New Opportunities in Medicinal Chemistry, Drug Discovery and Development", 13th ISCB International Conference on Interplay of Chemical and Biological Sciences: Impact on Health and Environment, New Delhi, India, February-March 2009
- 103) Mukund S. Chorghade*, "Reverse Pharmacology and Systems Approaches for Chemical Biology, Drug Discovery and Development", Indo-US Symposium, 13th ISCB International Conference on Interplay of Chemical and Biological Sciences: Impact on Health and Environment, New Delhi, India, February-March 2009
- 104) Mukund S. Chorghade* and Anjali M. Rahatgaonkar, "Value Creation and New Opportunities in Medicinal Chemistry, Drug Discovery, Process Development and Project Management of Technology Transfer", 13th ISCB International Conference on Interplay of Chemical and Biological Sciences: Impact on Health and Environment, New Delhi, India, February-March 2009
- 105) Mukund S. Chorghade*, "Bridging the Innovation Deficit by using Natural Products as an Inspiration: Reverse Pharmacology and Systems Approaches for Drug Discovery", National Workshop on "Perspectives in Medicinal & Process Chemistry", Rajkot, India, March 2009
- 106) Mukund S. Chorghade*, "Fascinating Adventures in Chiral Chemistry for Development of Optimal Processes: An Insider's Personal Perspective", National Workshop on "Perspectives in Medicinal & Process Chemistry", Rajkot, India, March 2009
- 107) Naziyanaz Pathan, Nitin Longadge, A. M. Rahatgaonkar* & Mukund Chorghade, " Chemoselective asymmetric C & N – alkylation of pyrimidine scaffolds in tert butyl ammonium bromide", 13th International ISCB Conference 26th Feb to 1st March 2009, New Delhi, India.
- 108) Shikha Dave, A. M. Rahatgaonkar* & Mukund S. Chorghade, "Synthesis of a novel series of differently substituted 2-[2-amino-6-(2-chloroquinolin-3-yl)-5, 6-dihydropyrimidin-4-yl]phenol." in 13th International ISCEB Conference 26th Feb to 1st March 2009, New Delhi, India
- 109) Mukund S. Chorghade* and Anjali M. Rahatgaonkar, "Value Creation and New Opportunities in Medicinal Chemistry, Drug Discovery, Process Development and Project Management of Technology Transfer", 13th ISCB International Conference on Interplay of Chemical and Biological Sciences: Impact on Health and Environment, New Delhi, India, February-March 2009.
- 110) Mukund S. Chorghade, Shikha S. Dave and Anjali M. Rahatgaonkar*, "Syntheses & evaluation of a library of 2-[5-(2-chloroquinolin-3-yl)-4, 5-dihydroisoxazol-3-yl] phenol and 2-(5-(2-chloroquinolin-3-yl)-4, 5-dihydro-1H-pyrazol-3-yl) phenols as potential anti-tumour agents", IUPAC 42nd Congress, Glasgow, August 2009
- 111) Anjali M. Rahatgaonkar*, Mukund S. Chorghade, Niharika R. Mahore, Kushal R. Lanjewar and Binda D. Saraf, "Organic Syntheses in Ionic Liquids: A Comparative Study with Green Chemistry Protocol", IUPAC 42nd Congress, Glasgow, August 2009

- 112) Anjali M. Rahatgaonkar, Mukund S. Chorghade*, “Development of a Cost-Efficient Synthesis for a Novel, Orally Available Iron Chelator”, IUPAC 42nd Congress, Glasgow, August 2009
- 113) Anjali M. Rahatgaonkar, Mukund S. Chorghade*, “Stereoselective Synthesis of Aza CMI-977, a potential lead candidate for chronic asthma”, IUPAC 42nd Congress, Glasgow, August 2009
- 114) Mukund S. Chorghade*, “Reverse Pharmacology and Systems Approaches for Chemical Biology, Drug Discovery and Development”, IUPAC 42nd Congress, Glasgow, August 2009
- 115) Mukund S. Chorghade*, “The Drug Discovery / Development Process from Conception to Commercialization: Two valuable courses developed”, to be presented at the IUPAC 42nd Congress, Glasgow, August 2009
- 116) Mukund S. Chorghade*, Research and Training in Medicinal Chemistry in India, Pakistan and Sri Lanka: A comprehensive survey to ascertain status and sophistication of faculties and doctorate programs: Recommendations for a standardized curriculum”, IUPAC 42nd Congress, Glasgow, August 2009
- 117) Mukund S. Chorghade, Shikha S. Dave and Anjali M. Rahatgaonkar*, “Syntheses & evaluation of a library of 2-[5-(2-chloroquinolin-3-yl)-4, 5-dihydroisoxazol-3-yl] phenol and 2-(5-(2-chloroquinolin-3-yl)-4, 5-dihydro-1H-pyrazol-3-yl) phenols as potential anti-tumour agents”, Division of Organic Chemistry symposium, 238th ACS National Meeting, Washington, DC, August 16-20, 2009
- 118) Mukund S. Chorghade, Shikha S. Dave and Anjali M. Rahatgaonkar*, "Synthesis of a novel series of differently substituted 2-[2-amino-6-(2-chloroquinolin -3-yl) - 5, 6-dihydropyrimidin-4-yl]phenol", Division of Organic Chemistry, 238th ACS National Meeting, Washington, DC, August 16-20, 2009
- 119) Anjali M. Rahatgaonkar*, Mukund S. Chorghade, Niharika R. Mahore, Kushal R. Lanjewar and Binda D. Saraf, “Organic Syntheses in Ionic Liquids: A Comparative Study with Green Chemistry Protocol”, Division of Organic Chemistry, 238th ACS National Meeting, Washington, DC, August 16-20, 2009
- 120) Mukund S. Chorghade*, “Reverse Pharmacology and Systems Approaches for Chemical Biology, Drug Discovery and Development Division of Organic Chemistry, 238th ACS National Meeting, Washington, DC, August 16-20, 2009
- 121) Mukund S. Chorghade*, “Globalization and the worldwide chemical enterprise: Promise, potential and challenges for strategic collaboration”, Division of Organic Chemistry, 238th ACS National Meeting, Washington, DC, August 16-20, 2009
- 122) Anjali M. Rahatgaonkar*, Mahesh K. Gaidhane and Mukund S. Chorghade “Facile polymer supported synthesis of N-PEGylated Quinoline scaffolds: A convenient drug delivery technique”, 14th ISCB Lucknow, 15th-18th Jan 2010.
- 123) Raksha P. Dhankar and Anjali M. Rahatgaonkar*, “Docking simulations of dihydropyrimidine acid CDRI derivatives as potent COX-1 and COX-2 inhibitors and their anti-inflammatory evaluation.” 14th ISCB Lucknow 15th-18th Jan 2010.
- 124) Vibha M. Nikose, Anjali M. Rahatgaonkar* and Mukund S. Chorghade, “Docking simulation and antifungal evaluation of imidazoles as Potential Cytochrome P450 dependent 14 α -Sterol demethylase CPY51 Inhibitors”, 14th ISCB Lucknow 15th-18th Jan 2010
- 125) Vibha M. Nikose, Anjali M. Rahatgaonkar* and Mukund S. Chorghade, “Antifungal Evaluation of Imidazoles as Potential Cytochrome P450 14 α -Sterol Demethylase CPY51 Inhibitors”, National Conference on Chemistry for Health, January 28th-29th 2010, Institute of Science, Nagpur.
- 126) Kushal R. Lanjewar, Anjali M. Rahatgaonkar*, Mukund S. Chorghade and Binda D. Saraf, “Facile Synthesis of Pyrimidine-Isoxazoline Hybrids in [bmim][PF₆]-Water Biphasic System”, 240th ACS National Meeting & Exposition, -22-26 August 2010, Boston, Massachusetts.
- 127) Ajay M. Ghatole, Anjali M. Rahatgaonkar*, Mukund S. Chorghade, “Synthesis of 3-azido azetidinone in [bmim][PF₆]: A comparative study”, 240th ACS National Meeting & Exposition - 22-26 August 2010, Boston, Massachusetts.
- 128) Raksha Dhankar, Anjali Rahatgaonkar and Mukund Chorghade*, “Pyrimidine derivatives as COX-1 and COX-2 inhibitors” 240th ACS National Meeting & Exposition - 22-26 August 2010, Boston, Massachusetts.
- 129) Nitin K. Longadge, Anjali M. Rahatgaonkar* and Mukund S. Chorghade*, “Pyrimidine-Mannich base hybrids as antitubercular agents: Facile synthesis with ZnBF₄ in THF/Water biphasic system”, 240th ACS National Meeting & Exposition - 22-26 August 2010, Boston, Massachusetts.
- 130) Mukund S. Chorghade*, “Fascinating adventures in development of a drug from conception to commercialization: A personal perspective”, plenary lecture at SCHB symposium on “Combating Disease: The Role of Biotechnology-based Small Businesses” 240th ACS National Meeting & Exposition - 22-26 August 2010, Boston, Massachusetts.
- 131) Mukund S. Chorghade*, “Building contract research businesses based on integration of basic and applied research: Value creation and new opportunities in medicinal chemistry and drug discovery”, plenary lecture at SCHB symposium on “Building Businesses Based on the Integration of Basic & Applied Research”, 240th ACS National Meeting & Exposition - 22-26 August 2010, Boston, Massachusetts.
- 132) Nitin K. Longadge, Anjali M. Rahatgaonkar*, Mukund S. Chorghade and Manivasakam D. Palaniyandi, “Nanoparticle Conjugated PEGylated Aminopyrimidines for Targeted Biomedical Applications”, International Conference on Chemistry for Mankind: Innovative Ideas in Life Sciences, Dept. of Chemistry, RTMNU, Institute of Science and SFS College, Nagpur, 9th- 11th February 2011. Won an RSC award from the Process Technologies Group
- 133) Varsha Shewte^a, Anjali M. Rahatgaonkar^a, Ashutosh Tiwari^b, Raksha P. Dhankar^a, Mukund S. Chorghade, “ ‘On/Off’-Switchable Enzyme Analog Catalysis Using Smart Imprinted Polymer”, International Conference on “Chemistry For Mankind: Innovative Ideas in Life Sciences”, Dept. of Chemistry, RTMNU, Institute of Science and SFS College, Nagpur, 9th- 11th February 2011

- 134) Mukund S. Chorghade*, “Reverse pharmacology and systems approaches for chemical biology, drug discovery and development: Inspiration from Mother Nature and the Wisdom of the Rishis”, Plenary Lecture at 15th ISCB Rajkot , February 4-7, 2011
- 135) Mukund S. Chorghade*, “Reverse pharmacology and systems approaches for chemical biology, drug discovery and development: Inspiration from Mother Nature and the Wisdom of the Rishis”, Plenary Lecture at International Conference on Chemistry for Mankind: Innovative Ideas in Life Sciences, Dept. of Chemistry, RTMNU, Institute of Science and SFS College, Nagpur, 9th- 11th February 2011.
- 136) Mukund S. Chorghade*, “SCHB: Where all the elements come together for a successful chemical business”, SCHB Symposium at SciMix, 241 ACS National Meeting & Exposition, 27-30 March, 2011 Anaheim, California.
- 137) Mukund Chorghade*, “Aging as a sterling opportunity: benefitting from the experience and wisdom of senior chemists”, in the Aging: A Trend and An Opportunity for ACS, PROF symposium, 241 ACS National Meeting & Exposition, 27-30 March, 2011, Anaheim, California.
- 138) Mukund Chorghade*, “Building Businesses Based on Integration of Basic and Applied Research: Value Creation and New Opportunities for Chemists”, SCHB symposium, 241 ACS National Meeting & Exposition, 27-30 March, 2011, Anaheim, California.
- 139) Mukund Chorghade*, “STEM Education Pipeline to Innovation & Entrepreneurship”, ComSci symposium, 241 ACS National Meeting & Exposition, 27-30 March, 2011, Anaheim, California
- 140) Mukund S. Chorghade*, “Chemists' Employability and Professional Development”, IUPAC 43rd Congress, San Juan, Puerto Rico, August 2011.
- 141) Mukund S. Chorghade*, “Reverse pharmacology and systems approaches for chemical biology, drug discovery and development: Inspiration from Mother Nature and the Wisdom of the Rishis”, Chemistry and Health: Discovery and Development of Drugs Symposium, IUPAC 43rd Congress, San Juan, Puerto Rico, August 2011
- 142) Mukund S. Chorghade* and SCHB colleagues, “SCHB: The future of the chemical enterprise”, Sci-Mix for 242nd ACS National Meeting, August 28 – September 1, 2011, Denver, Colorado,
- 143) Mukund S. Chorghade*, “Value Creation and Career Advancement: A Word for the Worldly Wise”, Special Invited Lecture given at Nagpur (Koradi) training Institute of the MSEB, February 28, 2012.
- 144) Mukund S. Chorghade*, “Communications, Career Advancement and Entrepreneurship: A Word for the Worldly Wise”, NESACS Workshop on Careers, Brookline, MA, April 14, 2012
- 145) Mukund S. Chorghade*, “Education, Career Advancement and Entrepreneurship: A Word for the Worldly Wise”, MOHOR Workshop on Careers, Mumbai, India, May 3, 2012
- 146) Mukund S. Chorghade*, "A new approach to Biofuels: Cost effective pre-treatment", Global Cleantech Meet-Up 2012, Boston, MA, October 16, 2012
- 147) Mukund S. Chorghade*, “A New Pharmaceutical Product for the Treatment of Obesity”, Reactions in Lipid and Lipid-Like Environments and Applications of the Chemistry Symposium, RMRM ACS, Westminster, Colorado, October 17, 2012
- 148) Mukund S. Chorghade*, "A new approach to Biofuels: Cost effective pre-treatment", Biofuels Symposium, RMRM ACS, Westminster, Colorado, October 18, 2012
- 149) Mukund S. Chorghade*, “Innovation, Chemistry, and Jobs: Entrepreneurship Shapes Our Tomorrow”, Special Workshop, RMRM ACS, Westminster, Colorado, October 18, 2012
- 150) Mukund S. Chorghade*, “A new approach to Biofuels”, Special Seminar delivered at Chemical and Biological Engineering, the Clean Energy Supercluster, and the Sustainable Bioenergy Development Center, Colorado State University, Fort Collins, Colorado, October 19, 2012
- 151) Mukund S. Chorghade*, “Fascinating Personal Adventures in the Progress of a Drug from Bench to Bedside”, Millersville University, Millersville, PA, November 19, 2012.
- 152) Mukund S. Chorghade*, "Innovation, Entrepreneurship and Chemistry: support from SCHB / ACS", Entrepreneurial Chemistry: Academic/Industry Interactions I, Assistance for Entrepreneurs Session, SERMACS meeting, Raleigh, North Carolina, November 16, 2012.
- 153) Mukund S. Chorghade, Jack Driscoll, and Jennifer L. Maclachlan, “Entrepreneurial career cravings? Learn how to satisfy them” , Careers and Entrepreneurship Workshop, 2013 AAAS National Meeting, Boston, MA, 14-18 February, 2013
- 153) Mukund S. Chorghade*, “A new approach to Biofuels”, Special Seminar delivered at ACS Entrepreneurship Summit, Philadelphia, March 27, 2013
- 154) Mukund Chorghade, Anjali M. Rahatgaonkar* and Raksha P. Dhankar, “Phase transfer catalysed synthesis of bis-isoxazoles: 1, 3 Dipolar cycloadditions of isoxazole-4-carbaldehyde oximes and alkyne in toluene-water biphasic system”, ACS Division of Organic Chemistry Symposium on Heterocycles and Aromatics, 245th ACS National Meeting & Exposition, 7-11 April 2013, New Orleans, Louisiana

- 155) Mukund Chorghade* and Anjali M. Rahatgaonkar, "Pre-treatment of bagasse: A chemist's approach to lignin depolymerization", ACS SCHB Symposium on "Algae, Biofuels and CO₂" symposium, 245th ACS National Meeting & Exposition, 7-11 April 2013, New Orleans, Louisiana
- 156) Mukund Chorghade*, "Building Businesses Based on Integration of Basic and Applied Research: Value Creation and New Opportunities for Chemists", ACS Presidential Event Symposium on "How to Succeed in the Global Chemical Enterprise" symposium, 245th ACS National Meeting & Exposition, 7-11 April 2013, New Orleans, Louisiana.
- 157) Mukund Chorghade*, "Vision 2025: Helping ACS Members Thrive in the Global Chemistry Enterprise", ACS Presidential Event Symposium on "How to Succeed in the Global Chemical Enterprise" symposium, 245th ACS National Meeting & Exposition, 7-11 April 2013, New Orleans, Louisiana.
- 158) Mukund S. Chorghade*, Chiara M. Chapman, Graham B. Jones, James Glick and Anjali M. Rahatgaonkar, "Metalloporphyrins as Cytochrome P-450 Mimics", ACS Medicchem Poster Session", 245th ACS National Meeting & Exposition, 7-11 April 2013, New Orleans, Louisiana.
- 159) Mukund Chorghade*, "When is a good time to start a business?", ACS SCHB Symposium on "True Stories of Success from Chemical Entrepreneurs" symposium, 245th ACS National Meeting & Exposition, 7-11 April 2013, New Orleans, Louisiana
- 160) Mukund S. Chorghade*, Chiara M. Chapman, Graham B. Jones, James Glick and Anjali M. Rahatgaonkar, "evaluating plausible drug-drug-interactions relating to metabolite suppression or attenuation", ISSX Poster Session", ISSX Conference in Toronto, Canada, September 29-October 3, 2013
- 161) Mukund S.Chorghade*, Rajeev S. Chorghade, Margarita Charnis, Chiara M. Chapman, Graham Jones, Anjali M. Rahatgaonkar, Ingolfur Agustsson, James Glick, "Chemosynthetic Livers: Evaluating plausible drug-drug interactions relating to metabolite suppression or attenuation", ACS SCHB Symposium on "True Stories of Success from Chemical Entrepreneurs" symposium, RM-NERM Meeting & Exposition, October 23-26, 2013, New Haven, CT
- 162) Rajeev S. Chorghade*, Mukund S. Chorghade, Jack Driscoll, Peter J. Bonk and Jennifer L. Maclachlan, "Discover the entrepreneurial resources available to ACS Division of Small Chemical Businesses members" , ACS SCHB Panel Symposium on "Best Practices for Entrepreneurs", RM-NERM Meeting & Exposition, October 23-26, 2013, New Haven, CT.
- 163) Mukund S. Chorghade, "Innovation, Entrepreneurship and Chemistry: support from SCHB / ACS", ACS SCHB Symposium on "Small Chemical Businesses-Resources for Startups" symposium, RM-NERM Meeting & Exposition, October 23-26, 2013, New Haven, CT
- 164) Mukund S. Chorghade, "Pre-treatment of bagasse: A chemists' approach to lignin depolymerization", ACS SCHB Symposium on "Small Chemical Businesses-Resources for Startups" symposium, RM-NERM Meeting & Exposition, October 23-26, 2013, New Haven, CT
- 165) Rajeev S. Chorghade, Mahesh K. Gaidhane, Anjali M. Rahatgaonkar and Mukund S. Chorghade*, "Facile Polymer Supported Synthesis of N-Pegylated Quinoline Scaffolds", 247th ACS National Meeting and Exposition, March 16-20, 2014, Dallas, TX
- 166) Mukund S. Chorghade*, Rajeev S. Chorghade, Margarita Charnis, Chiara M. Chapman, Graham Jones, Anjali M. Rahatgaonkar, Ingolfur Agustsson, James Glick, "Chemosynthetic Livers: Evaluating plausible drug-drug interactions relating to metabolite suppression or attenuation", 247th ACS National Meeting and Exposition, March 16-20, 2014, Dallas, TX
- 167) Mukund S. Chorghade, Rajeev S. Chorghade, Margarita Charnis, Chiara M. Chapman, Graham Jones, Anjali M. Rahatgaonkar, Ingolfur Agustsson, James Glick, "Chemosynthetic Livers: a new paradigm for drug discovery", 247th ACS National Meeting and Exposition, March 16-20, 2014, Dallas, TX
- 168) Mukund S. Chorghade*, "Fascinating Adventures in Chiral Chemistry-An Insider's Perspective", Special Symposium Honoring Paul Erhardt, University of Toledo, Ohio, June 2014
- 169) Mukund S. Chorghade*, Rajeev S. Chorghade, Natural Products for Drug Discovery and Development: Inspiration from the "Ancient Wisdom of Mother Nature", ACS Division of Organic Chemistry Symposium on New Reactions and Methodology, 248th ACS National Meeting & Exposition - August 10-14, 2014, San Francisco, CA
- 170) Mukund S. Chorghade*, Rajeev S. Chorghade, Chiara M. Chapman, Graham Jones, Anjali M. Rahatgaonkar, Rita Charnis and Marek Domin, Biomimiks™ as Chemosynthetic Livers: Predict, Prepare and Prove the Structure, Activity and Toxicity of Drug Metabolites, ACS Division of Organic Chemistry Symposium on New Reactions and Methodology, 248th ACS National Meeting & Exposition - August 10-14, 2014, San Francisco, CA
- 171) Mukund S. Chorghade*, Rajeev S. Chorghade, Chiara M. Chapman, Graham Jones, Anjali M. Rahatgaonkar, Rita Charnis and Marek Domin, Chemosynthetic Livers: Evaluating plausible drug-drug interactions relating to metabolite suppression or attenuation with Biomimiks™, Division of Organic Chemistry Symposium on Biologically Related Molecules and Processes, 248th ACS National Meeting & Exposition - August 10-14, 2014, San Francisco, CA
- 172) Mukund S. Chorghade*, "Biomimiks™ as Chemosynthetic Livers: Predict, Prepare and Prove the Structure, Activity and Toxicity of Drug Metabolites", Drug Discovery India and ADMET 2014, Mumbai, India, September 10-11, 2014
- 173) Mukund S. Chorghade*, "Reverse Pharmacology for NCE Development", Drug Discovery India and ADMET 2014, Mumbai, India, September 10-11, 2014
- 174) Mukund S. Chorghade*, "Biomimiks™ as Chemosynthetic Livers: Predict, Prepare and Prove the Structure, Activity and Toxicity of Drug Metabolites", ICT Lecture, Mumbai, India, September 16, 2014

- 175) Mukund S. Chorghade*, “ A Career in NCE Discovery and Development “, ICT Lecture, Mumbai, India, September 17, 2014
- 176) Mukund S. Chorghade*, “ Fascinating Adventures in Chiral Chemistry-An Insider’s Perspective: The Fun and Joy of Process Chemistry”, Chemical Society Inaugural Lecture, SP College, Pune, September 18, 2014
- 177) Mukund S. Chorghade*, “Biomimiks as Chemosynthetic Livers”, Cambridge Healthtech Institute's Inaugural Organotypic Culture Models for Toxicology Symposium on “Liver and Gut –Hepatotoxicity and Gastrointestinal Toxicity Testing Regimes”, Boston, November 17, 18 2014
- 178) Mukund S. Chorghade*, “New Catalysts for Environmental Remediation,” Special Symposium for Bharatiya Prawasi Diwas, Ahmedabad, India, January 10, 2015
- 179) Mukund S. Chorghade*, “New Chemical Entities based on Reverse Pharmacology and Hybrid Molecules,” Special Symposium for Bharatiya Prawasi Diwas, Ahmedabad, India, January 10, 2015.
- 180) Mukund S. Chorghade*, “Azamacrocycles Mediated Oxidation: A Versatile Platform Technology” , International Conference on Futuristic Materials and Emerging trends in Forensic and Life Sciences(ICFM-2015), Nagpur, India., February 6,7, 2015,
- 181) Mukund S. Chorghade*, “Biomimiks™ as Chemosynthetic Livers: Predict, Prepare and Prove the Structure, Activity and Toxicity of Drug Metabolites leads”, 21st ISCB International Conference (ISCBC-2015), “ Current Trends in Drug Discovery and Development” February 25 -28, 2015, Lucknow, India
- 182) Mukund S. Chorghade*, “Biomimiks™ as Chemosynthetic Livers: Predict, Prepare and Prove the Structure, Activity and Toxicity of Drug Metabolites”, Seminar at the University of Alabama, Tuscaloosa, AL, March 12, 2015.
- 183) Mukund S. Chorghade*, “Biomimiks™ as Chemosynthetic Livers: Predict, Prepare and Prove the Structure, Activity and Toxicity of Drug Metabolites”, Seminar at the Alabama Section, Birmingham, Jefferson Southern College, AL, March 12, 2015.
- 184) Mukund S. Chorghade*, “Fascinating Excursions into Pharmaceutical Chemistry-An Insider’s Perspective”, Forum lecture First Parish Church, Concord, MA, March 15, 2015
- 185) M. Chorghade, A. Rahman, S. Seelig, P. Kearney, D. Deutsch, S. Vercellotti, J. Sabol, J. Maclachlan, C. Burton, K. Hylton-Rodic, G. Ruger, N. Vaidya, “Thirty-five years and going strong: SCHB offers resources and networking opportunities for small and growing chemical businesses”, SCHB poster, 249th ACS National Meeting, Denver, Colorado, March 22-26, 2015.
- 186) M. Chorghade*, J.L. Maclachlan, J.E. Sabol, G.W. Ruger, S.V. Vercellotti, C.A. Burton, A. Rahman, K. Hylton-Rodic, D.J. Deutsch, “SCHB is your link to ACS networks and resources”. Entrepreneurs' Poster Session, 250th ACS National Meeting, Boston, MA, August 15-19, 2015
- 187) A. Mehta*, M. Chorghade, “Expanding chemistry frontiers: Efficient air-stable catalysts for aqueous chemistry water and chemosynthesis using “synthetic livers”, True Stories from Entrepreneurs: BRIC Edition symposium, 250th ACS National Meeting, Boston, MA, August 15-19, 2015
- 188) M. Chorghade*, R. Chorghade, “Chemosynthetic livers: Predict, prepare, and prove the structure, activity, and toxicity of drug metabolites”, Professional Legacy of Henry Hill Symposium, 250th ACS National Meeting, Boston, MA, August 15-19, 2015
- 189) M. Chorghade*, R. Chorghade, “Reverse pharmacology and systems approaches for chemical biology, drug discovery, and development: Inspiration from the wisdom of Mother Nature”, Professional Legacy of Henry Hill Symposium, 250th ACS National Meeting, Boston, MA, August 15-19, 2015
- 190) Jennifer Maclachlan, Anis Rahman*, Joseph Sabol, Mukund Chorghade, “SCHB experience helps you meet the challenges of employment in the chemical sciences sector (PRES 16), 251st ACS National Meeting & Exposition, San Diego, California, March 13-17, 2016.
- 191) Mukund Chorghade*, “Fascinating Excursions into Chiral Chemistry: An Insider’s Perspective “, Non-Academic Careers Symposium, Graduate Student and Postdoc Council, Department of Chemistry and Chemical Biology, Harvard University, March 30, 2016.
- 192) Mukund S. Chorghade*, “Fascinating Personal Adventures in Chemistry R& D: Value Creation and New Opportunities for Chemists “, Non-Academic Careers Symposium, Graduate Student and Postdoc Council, Department of Chemistry and Chemical Biology, Princeton University, May 4, 2016.
- 193) Mukund S. Chorghade*, “Working in Industry, what it takes to succeed?”, Careers Program, Cambridge, England, June 6, 2016
- 194) M. Chorghade*, R. Chorghade, “Chemosynthetic livers: Predict, prepare, and prove the structure, activity, and toxicity of drug metabolites”, 252nd ACS National Meeting, Philadelphia, PA, August 21-25, 2016
- 195) Mukund Chorghade*, Rajeev Chorghade, “Polypharmacy and chemosynthetic livers: Predict, prepare and prove the structure, activity and toxicity of drug metabolites”, 252nd ACS National Meeting, Philadelphia, PA, August 21-25, 2016
- 196) Mukund Chorghade*, “ Sterically protected and electronically activated azamacrocyclic catalysts for lignin depolymerization: a new approach to biomass valorization”, 252nd ACS National Meeting, Philadelphia, PA, August 21-25, 2016
- 197) Mukund Chorghade*, Rajeev Chorghade, “ Building international drug discovery and development businesses based on integration of basic and applied research: Value creation and new opportunities”, SCHB Symposium on International Drug Discovery & Development Collaborations 252nd ACS National Meeting, Philadelphia, PA, August 21-25, 2016

- 198) Mukund Chorghade*, "Metalloporphyrins and salens as mimics of the cytochrome p-450 mixed oxidase systems to evaluate toxicity of drug metabolites", 252nd ACS National Meeting, Philadelphia, PA, August 21-25, 2016
- 199) Mukund Chorghade*: **Aza macrocycles (metalloporphyrins and salens) that are sterically protected and electronically activated to provide optimal catalysis**, 252nd ACS National Meeting, Philadelphia, PA, August 21-25, 2016", 252nd ACS National Meeting, Philadelphia, PA, August 21-25, 2016
- 200) Mukund Chorghade*, "Fascinating Excursions into Drug Development: An Insider's Perspective", Princeton ACS Meeting, March 23, 2017
- 201) Mukund Chorghade*, Rajeev Chorghade, "Chemosynthetic livers: Predict, prepare, and prove the structure, activity, and toxicity of drug metabolites", Biologically Related Molecules & Processes Symposium, 253rd ACS National Meeting, San Francisco, California, April 2-6, 2017.
- 202) Mukund Chorghade*, Rajeev Chorghade, "Polypharmacy and chemosynthetic livers: Predict, prepare and prove the structure, activity and toxicity of drug metabolites", Biologically Related Molecules & Processes Symposium 253rd ACS National Meeting, San Francisco, California, April 2-6, 2017.
- 203) Mukund Chorghade*, Rajeev Chorghade, "Exemplifying green chemistry with sterically protected and electronically activated azamacrocyclic catalysts", Green Chemistry Adoption: Progressive Changes by Different Industry Sectors Symposium, 253rd ACS National Meeting, San Francisco, California, April 2-6, 2017.
- 204) Mukund Chorghade*, "Sterically protected and electronically activated azamacrocyclic catalysts for lignin depolymerization: a new approach to biomass valorization", Advances in Chemistry of Energy & Fuels Symposium, 253rd ACS National Meeting, San Francisco, California, April 2-6, 2017.
- 205) Mukund Chorghade*, "Global Collaborations in Asymmetric Synthesis to catalyze Discovery and Development", Asymmetric Reactions & Syntheses Symposium, 253rd ACS National Meeting, San Francisco, California, April 2-6, 2017.
- 206) Mukund S. Chorghade*, "Chemosynthetic Livers: Predict, Prepare and Prove the Structure, Activity and Toxicity of Drug Metabolites", Seminar at Northwestern University, May 23, 2017
- 207) Mukund S. Chorghade*, "Career Path: From Academic Research to Big Pharma to Consulting", Workshop at Northwestern University, May 23, 2017
- 208) Mukund S. Chorghade*, "Working with Industry: Discovery and Development", Workshop at Northwestern University, May 24, 2017
- 209) Mukund S. Chorghade*, Reverse Pharmacology and Systems Approaches for Drug Discovery and Development: Inspiration from Mother Nature and the Wisdom of the Sages", Seminar at Northwestern University, May 24, 2017
- 210) Mukund S. Chorghade*, "Chemosynthetic Livers: Predict, Prepare and Prove the Structure, Activity and Toxicity of Drug Metabolites", Seminar at Loyola University, May 25, 2017
- 211) Mukund S. Chorghade*, "Reverse pharmacology and systems approaches for chemical biology, drug discovery and development: Inspiration from Mother Nature and the wisdom of the Rishis", SCHB symposium, 2017 Middle Atlantic Regional Meeting (MARM) Hershey, PA, June 4-6, 2017.
- 212) Mukund S. Chorghade*, "Building international businesses based on integration of basic and applied research: Value creation by collaboration", 254th ACS National Meeting, Washington D.C., August 20-24, 2017
- 213) Mukund S. Chorghade*, "Sterically protected and electronically activated azamacrocyclic catalysts for lignin depolymerization: A new approach to biomass valorization", Biomass to Fuels & Chemicals: Research, Innovation & Commercialization Symposium, ENFL, 254th ACS National Meeting, Washington D.C., August 20-24, 2017
- 214) Mukund S. Chorghade*, "Fascinating Excursions into Drug Development: An Insider's Perspective", Drug Discovery India 2017 conference, Bengaluru, India 14-15th Sept 2017.
- 215) Mukund S. Chorghade*, "Process Chemistry Driven Drug Discovery: An Insider's Perspective", Keynote Presentation MedChem India 2017 conference, Bengaluru, India 14-15th Sept 2017.
- 216) Mukund S. Chorghade*, "Reverse Pharmacology and Systems Approaches for Drug Discovery and Development: Inspiration from Mother Nature and the Wisdom of the Sages", Drug Discovery India 2017, Bengaluru, India 14-15th Sept 2017.
- 217) Mukund S. Chorghade*, "Chemosynthetic Livers: Predict, Prepare and Prove the Structure, Activity and Toxicity of Drug Metabolites" Metabolomics India 2017 conference, Bengaluru, India 14-15th Sept 2017.
- 218) Mukund S. Chorghade*, Rajeev S. Chorghade and SCHB Executive Committee, "Learn How SCHB assists Innovators and Entrepreneurs in the Chemistry Enterprise" Poster, SCHB section, 255th ACS National Meeting, New Orleans, LA, March 18-22, 2018
- 219) Mukund S. Chorghade*, "Fascinating Excursions into Chiral Chemistry: An Insider's Perspective. The Fun and Joy of Process Chemistry", Strathclyde and Cambridge Universities, March 2018
- 220) Mukund S. Chorghade*, "Reverse Pharmacology / Observational Therapeutics for Active Naturals / Rx candidates – A Personal Perspective", Invited Lecture at Johnson and Johnson, Skillman Facility, July 2018
- 221) A. Mehta*, B. Saha, A. Koohang, M. Chorghade, "Choosing the right solvent for organic reactions! MCAT-53TM as a novel and first of its class water friendly catalyst", Green Chemistry Symposium, 256th ACS National Meeting, Boston, MA August 19-23, 2018
- 222) A. Mehta*, B. Saha, A. Koohang, M. Chorghade "MCAT-53TM as a novel and first of its class Ru catalyst :Synthesis of intermediate of Anacetrapib (a CETP inhibitor) in water instead of organic solvents", SCHB Innovations Symposium, 256th ACS National Meeting, Boston, MA August 19-23, 2018

- 223) Mukund S. Chorghade*, “Chemosynthetic Livers: Predict, Prepare and Prove the Structure, Activity and the Tyranny of Reactive and Toxic Drug Metabolites”, SCHB Innovations Symposium, 256th ACS National Meeting, Boston, MA August 19-23, 2018
- 224) Mukund S. Chorghade*, “Arthur Sinsheimer Obermayer: A gentleman and a scholar of credit and renown”, Symposium honoring Art Obermeyer, 256th ACS National Meeting, Boston, MA August 19-23, 2018
- 225) Mukund S. Chorghade*, “Chemosynthetic Livers: Predict, Prepare and Prove the Structure, Activity and the Tyranny of Reactive and Toxic Drug Metabolites”, RSC Process Chemistry and Technologies Group Launch Symposium, Webinar, August 2018
- 226) Mukund S. Chorghade*, “Résumé Development: Marketing Your Brand for an Industrial Chemistry Position”, ACS Workshops presented at Strathclyde (February), Cambridge (March), Princeton (July and September), 2018
- 227) Mukund S. Chorghade*, “Fascinating Excursions into Chiral Chemistry: An Insider’s Perspective. The Fun and Joy of Process Chemistry”, RSC Process Chemistry and Technologies Group Launch Symposium, Burlington House, London, November 2018
- 228) Mukund S. Chorghade*, “Innovation, Chemistry, and Jobs: Entrepreneurship Shapes Our Tomorrow”, Joint Symposium SCHB-PACS, for Innovative Project Grant, Princeton University, December 2018 Mukund S. Chorghade*, “Fascinating Excursions into Chemistry: An Insider’s Perspective”, THINQ International Symposium on Biotechnology and Chemical Innovations for Societal Benefits, University of Mumbai, January 9, 2019
- 229) Mukund S. Chorghade*, “Fascinating Excursions into Chiral Chemistry: An Insider’s Perspective”, Professor V.M. Kulkarni Oration in Pharmaceutical Sciences and Technology for the Year 2018-2019, ICT, Mumbai, January 11, 2019
- 230) Mukund S. Chorghade*, “Fascinating Excursions into Chemistry: An Insider’s Perspective”, Silver Jubilee Celebration, 25th ISCB International Conference (ISCB-2019), Trends in Chemical and Biological Sciences: Impact on Health and Environment 12th - 14th January 2019 Lucknow, India
- 231) Mukund S. Chorghade*, “Mirror, Mirror on the wall, we may have the best Porphyrin of them all” Frontiers in Green Chemistry for Small Businesses Symposium, 257th ACS National Meeting, Orlando, FL, March 31-April 4, 2019
- 232) Mukund S. Chorghade*, “Fascinating adventures in observational therapeutics: A personal perspective”, Global Entrepreneurship: Business at the Frontiers of Chemistry, 257th ACS National Meeting, Orlando, FL, March 31-April 4, 2019
- 233) Mukund S. Chorghade*, “Fascinating adventures in development of a drug from conception to commercialization: Personal perspective”, Org.Div. Symposium, 258th ACS National Meeting, San Diego, CA, August 25-29, 2019
- 234) Mukund S. Chorghade*, “Entrepreneurship creates Jobs”, SCHB. Symposium, 258th ACS National Meeting, San Diego, CA, August 25-29, 2019
- 235) Mukund S. Chorghade*, “Magic of the chemosynthetic livers which is the best porphyrin”, Org.Div. Symposium, 258th ACS National Meeting, San Diego, CA, August 25-29, 2019
- 236) Mukund S. Chorghade*, “Chemosynthetic livers: Predict, prepare and prove the structure, activity and toxicity of drug metabolites”, Org.Div. Symposium, 258th ACS National Meeting, San Diego, CA, August 25-29, 2019.
- 237) Mukund S. Chorghade*, “Fascinating Excursions into Entrepreneurship: An Insider’s Perspective The Fun and Joy of Chemistry” Webinar Pharmaceutical Royal International Society (PRISAL), April 30, 2020
<https://youtu.be/EI66oaj9Rw4>
https://m.facebook.com/story.php?story_fbid=3695718373788352&id=2323710884572948&sfnsn=wiwspmo&extid=T87EXgIB7jvcaAFk&d=n&vh=e April 30, 2020
- 238) Mukund S. Chorghade*, “The Fun and Joy of Science Entrepreneurship” Webinar, University of Pune, COVID-19 lecture series, May 29, 2020, Host Professor Avinash Kumbhar May 29 Fun and Joy of Science Entrepreneurship University of Pune.
<https://www.facebook.com/ecdlc/videos/281097349599278/?sfnsn=wiwspwa&extid=DTFAxKVd3kihWE4i&d=w&vh=e>
- 239) Mukund S. Chorghade*, “The Fun and Joy of Science Entrepreneurship”, Online International conference for Empirical Theoretical Research International Board for Education Research and Development Valedictory Function address June 5, 2020, <https://youtu.be/K5sCiwd9A-o>
- 240) Mukund S. Chorghade*, “Fascinating Excursions into Chiral Chemistry, “An Insider’s Perspective: Fun and Joy of Process Chemistry” Webinar Pharmaceutical Royal International Society (PRISAL), July 1, 2020
- 241) Mukund S. Chorghade*, “Reducing the Risk in Drug Discovery: Attaining Precision in Drug Discovery by Using Innovative Tech”, Lecture at Precision in Drug Discovery virtual conference, July 23, 2020 Youtube Link: https://www.youtube.com/watch?v=_k_7i6NM9Gg&feature=youtu.be
- 242) Mukund S. Chorghade*, https://www.linkedin.com/posts/precision-evolution-global-inc_reducing-the-risk-in-drug-discovery-attaining-activity-6716415062619291648-ptSw
- 243) Mukund S. Chorghade*, “Reverse Pharmacology for Chemical Biology, Drug Discovery and Development: Inspiration from Wisdom of Mother Nature”. Webinar presented at “RESEARCH AND INNOVATIONS IN CHEMICAL SCIENCES: PAVING THE WAY FORWARD” VCCA-2020 Mauritius, August-2020 IUPAC co-sponsored.
- 244) Mukund S. Chorghade*, “Chemosynthetic Livers: Predict, Prepare and Prove the Structure, Activity and the Tyranny of Reactive and Toxic Drug Metabolites”. Webinar presented at “RESEARCH AND INNOVATIONS IN CHEMICAL SCIENCES: PAVING THE WAY FORWARD” VCCA-2020 Mauritius, August 2020, IUPAC co-sponsored.

- 245) Mukund S. Chorghade*, “Chemosynthetic Livers: Predict, Prepare and Prove the Structure, Activity and the Tyranny of Reactive and Toxic Drug Metabolites”, Virtual talk presented at ACS Fall Meeting August 2020. Presentation on Demand
- 246) Mukund S. Chorghade*, “Magic of the chemosynthetic livers: which is the best porphyrin (final paper number: TOXI 98), Mirror, Mirror on the wall, we have the best Porphyrin of all”, Virtual talk presented at ACS Fall Meeting August 2020. Presentation on Demand
- 247) Mukund S. Chorghade*, “Fascinating Excursions into Chiral Chemistry, “An Insider’s Perspective: Fun and Joy of Process Chemistry”, Virtual talk presented at ACS Fall Meeting August 2020. Presentation on Demand
- 248) Mukund S. Chorghade*, “The "India Experience" in building capacity to make APIs through Public Private Partnerships, Centers of Excellence, Academia- Government and Industry collaborations”, Association of Industrial Pharmacists of Nigeria (NAIP), Conference Keynote Lecture, Nigeria, September 23, 2020
- 249) Mukund S. Chorghade*, “THINQ’s Process Chemistry Catalysing a Renaissance in API manufacturing”, Virtual lecture presented at Harvard Faculty Research Showcase Event, September 25, 2020, and November 20, 2020
- 250) Mukund S. Chorghade*, “The Fun and Joy of Science Entrepreneurship: An Insider’s Perspective”, Virtual talk presented at National Virtual Conference on Frontiers in Chemical Sciences and Technologies ICT –IOC Bhubaneswar Plenary Lecture September 26, 2020
- 251) Mukund S. Chorghade*, ACING THE INTERVIEW Setting Yourself Up for Success in an Interview Participant Guide”, Virtual talk presented at ACS India Outreach conference, October 2020. Presentation on Demand
- 252) Mukund S. Chorghade*, “The Fun and Joy of Process Chemistry: An Insider’s Perspective”, Virtual lecture presented at Young Chemist in Industry SOCI event Society of Chemical Industry Keynote lecture November 2, 2020.
- 253) Mukund S. Chorghade*, “Fascinating Excursions into Industrial Chemistry: An Insider’s Perspective”, Seminar: University of Texas at Austin Wednesday November 4
- 254) Mukund S. Chorghade*, “Innovation and Invention”, Coffee Talk University of Texas at Austin Wednesday November 4
- 255) Mukund S. Chorghade*, “The Fun and Joy of Process Chemistry and Science Entrepreneurship: An Insider’s Perspective”, Virtual lecture presented at PRINCETON ACS Section Entrepreneurship Symposium November 19, 2020
- 256) Mukund S. Chorghade*, “Fascinating Excursions into Industrial Chemistry: An Insider’s Perspective, The Fun and Joy of Process Chemistry”, Lecture in Class Rutgers-Knapp Course December 7, 2020, and December 9, 2020
- 257) Mukund S. Chorghade*, “CAREERS IN INDUSTRIAL CHEMISTRY: Finding Your Link in the Industry Value Chain”, Virtual talk presented at ACS India Outreach conference, December 2020. Presentation on Demand
- 258) Mukund S. Chorghade*, “The Fun and Joy of Process Chemistry and Science Entrepreneurship: An Insider’s Perspective”, Virtual lecture presented at Indian Chemical Society, Evening Keynote Lecture, December 27, 2020
- 259) Mukund S. Chorghade*, “The Fun and Joy of Process Chemistry and Science Entrepreneurship: An Insider’s Perspective”, Royal Society of Chemistry, Process Chemistry and Technologies Group, Webinar January 26, 2021
- 260) Mukund S. Chorghade*, "Reverse Pharmacology / Observational Therapeutics for Active Naturals / Rx candidates – A Personal Perspective”, Lecture delivered in Professor Ruby Mendenhall’s Class, University of Illinois, Urbana-Champaign, March 18, 2021
- 261) Mukund S. Chorghade*, "Reverse Pharmacology and Systems Approaches for Chemical Biology, Drug Discovery and Development: Inspiration from the Wisdom of Mother Nature”, Division of Medicinal Chemistry New Methods in Drug Discovery Symposium , ACS Spring Meeting, April 5-30, 2021
- 262) Mukund S. Chorghade*, "Innovation-driven pharmaceutical process chemistry for rebuilding API manufacturing”, Division of Small Chemical Businesses, Building Small Chemicals Businesses Symposium , ACS Spring Meeting, April 5-30, 2021
- 263) Mukund S. Chorghade*, "Building businesses based on integration of basic and applied research: Value creation and new opportunities for chemists”, Division of Small Chemical Businesses, Building International Small Chemicals Businesses Symposium , ACS Spring Meeting, April 5-30, 2021
- 264) Mukund S. Chorghade*, "Chemosynthetic livers: Predict, Prepare and Prove the Structure, Activity and Toxicity of Drug Metabolites”, New Methods for Synthesis Symposium, Division of Organic Chemistry, ACS Spring Meeting, April 5-30, 2021
- 265) Mukund S. Chorghade*, "Sterically protected and electronically activated azamacrocyclic catalysts for lignin depolymerization: a new approach to biomass valorization”, Division of Energy and Fuels Chemistry Special Symposium , ACS Spring Meeting, April 5-30, 2021
- 266) James Skinner, David Deutsch, Dr. Abhishek Kantak, Joseph Sabol, Mukund Chorghade, and Jennifer Maclachlan, “SCHB rises to the call: Members-helping-members during the coronavirus pandemic”, Division of Small Chemicals Businesses , Poster Session, ACS Spring Meeting, April 5-30, 2021
- 267) Mukund S. Chorghade*, "The Fun and Joy of Process Chemistry and Science Entrepreneurship: An Insider’s Perspective”, Six Lectures at the Department of Chemistry and Chemical Engineering, Cambridge, England, May-June 2021
- 268) Mukund S. Chorghade*, "The Fun and Joy of Chemistry and Science Entrepreneurship: An Insider’s Perspective Innovation, Chemistry, and Jobs: Entrepreneurship Shapes Our Tomorrow”, Three Lectures at the Department of Chemistry and Chemical Engineering, Cambridge, England, May-June 2021

- 269) Mukund S. Chorghade*, "Reverse Pharmacology / Observational Therapeutics for Active Naturals / Rx candidates – A Personal Perspective Global Acceptance of Reverse Pharmacology and its Applications by Medicinal Chemists for Drug Discovery and Development" Special Lecture delivered for Kasturba Health Research Center, , June 22, 2021
- 270) Mukund S. Chorghade*, "Reverse Pharmacology and Systems Approaches for Chemical Biology, Drug Discovery and Development: Inspiration from the Wisdom of Mother Nature", GLOSTEM Pharma Experts Forum, August 5-6 , 2021
- 271) Mukund S. Chorghade*, "Reverse Pharmacology and Systems Approaches for Chemical Biology, Drug Discovery and Development: Inspiration from the Wisdom of Mother Nature", Keynote Lecture at the Virtual Conference on Chemistry and its applications: Chemical Sciences for the New Decade, VCCA-2021, Mauritius, August 9-13, 2021
- 272) Mukund S. Chorghade*, "Fascinating Adventures in Science Entrepreneurship: A Personal Perspective", Keynote Lecture at the Virtual Conference on Chemistry and its applications: Chemical Sciences for the New Decade, VCCA-2021, Mauritius, August 9-13, 2021
- 273) Mukund S. Chorghade*, "THINQ pharmaceuticals: A new paradigm for drug discovery and development", Advancing Small Businesses Session, SCHB, ACS Fall Meeting 2021, Atlanta, GA, August 22 - 26, 2021.
- 274) Mukund S. Chorghade*, "Wit and humor associated with famous chemists", Division of the History of Chemistry, ACS Fall Meeting 2021, Atlanta, GA, August 22 - 26, 2021.
- 275) Mukund S. Chorghade*, "Chemosynthetic livers: Predict, Prepare and Prove the Structure, Activity and Toxicity of Drug Metabolites", Green Methods of Synthesis Symposium, Division of Organic Chemistry, ACS Fall Meeting 2021, Atlanta, GA, August 22 - 26, 2021.
- 276) Mukund S. Chorghade*, " Global innovation and entrepreneurship create jobs in the chemical sector", Innovation, Entrepreneurship, and Collaborations Session, Presidential Event Symposium ACS Fall Meeting 2021, Atlanta, GA, August 22 - 26, 2021.
- 277) Mukund S. Chorghade*, " Drug Discovery and Development: A personal perspective," Special Lecture, Council for Ayurveda Research, Global Consortium for Collaborative Research, September 16, 2021
- 278) Mukund S. Chorghade*, "Drug Discovery and Development: A personal perspective," Special Lecture, IIT Alumni Group, Palo Alto, CA, September 17, 2021
- 279) Mukund S. Chorghade*, " Global innovation and entrepreneurship create jobs in the chemical sector", Abstract Accepted, Chemical Businesses Best Practices for Global Challenges Symposium SCHB , Pacificchem, Hawaii, December 2021
- 280) Mukund S. Chorghade*, "Reverse Pharmacology and Systems Approaches for Chemical Biology, Drug Discovery and Development: Inspiration from the Wisdom of Mother Nature", Abstract Accepted, Making Smart Drugs Smarter through Innovative Chemistry Symposium , Pacificchem, Hawaii, December 2021
- 281) Mukund S. Chorghade*, "Chemosynthetic livers: Predict, Prepare and Prove the Structure, Activity and Toxicity of Drug Metabolites", Abstract Accepted, New Frontier of Chemical Probes exploring Biology and Medicine, Symposium, Pacificchem, Hawaii, December 2021
- 282) Mukund S. Chorghade*, "Fascinating Adventures in Development of a Drug from Conception to Commercialization: A Personal Perspective," Abstract Accepted, Development of New Reactions and Technologies Adaptable to Process Chemistry Symposium SCHB , Pacificchem, Hawaii, December 2021
- 283) Mukund S. Chorghade*, "The Fun and Joy of Chemistry, Engineering and Science Entrepreneurship: An Insider's Perspective" and "Engineering Your Way to Successful Product Discovery and Development" Entrepreneurship Shapes Our Tomorrow, Special Lectures at, G.H. Rasoni College of Engineering(GHRCE), Nagpur, India, October 9, 2021
- 284) Mukund S. Chorghade*, "Bridging the Gap from Med. Chem to Scale-up: Impurities Profile and Judicious Solvents“, Special Lecture and Workshop at, Department of Chemistry, Leeds, UK, November 16, 2021
- 285) Mukund S. Chorghade*, " How can Process Chemistry and Technology Enable Sustainability?" Royal Society of Chemistry, Process Chemistry and Technologies Group, Annual Symposium, November 19, 2021
- 286) Mukund S. Chorghade*, "Fond Memories of a Superlative Department leads to Fruition of Dreams for a Chemist / Seasoned Entrepreneur" Inaugural Lecture, Lecture series on "Dreams and Memories", S.P. University of Pune, November 20, 2021
- 287) Mukund S. Chorghade*, "Bridging the Gap from Med. Chem to Scale-up: Impurities Profile and Judicious Solvents“, Special Lecture and Workshop at, Department of Chemistry, Rutgers University, December 9, 2021
- 288) Mukund S. Chorghade*, "Chemosynthetic livers: Predict, Prepare and Prove the Structure, Activity and Toxicity of Drug Metabolites“, International Conference on Recent Trends in Chemical Sciences (RTCS), Acharya J. C. Ghosh Award lecture, Indian Chemical Society, December 21, 2021.
- 289) Mukund S. Chorghade*, "Wit and humor associated with famous chemists“, Division of Small Chemicals Business, ACS Friday Talks December 2021

Invited Lectures Delivered: (Faculty Host indicated in Parentheses)

- 1998** Tokyo Institute of Technology (January 18, Takeshi Endo).
Johns Hopkins University, School of Public Health (April 22, Hamilton Smith)
Hindustan Antibiotics, Pune, India (June 22, Shrikant Kulkarni)
University of Poona, Pune, India (June 23, Murzban Wadia)
University of British Columbia, Vancouver, Canada (September 4, David Dolphin)

- 1990** Eastern Illinois University, Charleston (April 20, Mark McGuire).
- 1991** University of Paris, France (January 25, Doris Lexa).
ETH, Zurich, Switzerland (February 8, Albert Eschenmoser)
Loughborough University of Technology, England (February 11, Mark Mascal)
University of Nottingham, England (February 12, Gerald Pattenden)
University of Bath, England (February 18, Timothy Gallagher)
Imperial College, London, England (February 19, Steven Ley)
University of Sheffield, England (February 20, Fraser Stoddart)
University of Leuven, Belgium (April 12, Andre Persoons)
Universite' Louis Pasteur, Strasbourg, France (April 19, Guy Ourisson)
State Univ. of New York, Stony Brook (May 7, Cynthia Burrows)
Institute Curie, Center University, Orsay, France (June 10, Michael Momenteau)
Institute Le Bel, Strasbourg, France (July 3, Jean-Marie Lehn).
- 1992** Novo-Nordisk, Copenhagen, Denmark (June 15, Henning Petersen).
Texas A & M University, College Station (December 3, Sir Derek H. R. Barton)
- 1993** Indian Institute of Chemical Technology, Hyderabad, India (March 18, Rama Rao)
National Chemical Laboratory, Pune, India (March 26, Raghunath Mashelkar)
Georgetown University, Washington D. C. (July 17, Charles F. Hammer)
University of Birmingham, England (November 2, J. Fraser Stoddart)
University of Chicago (December 2, Philip Eaton)
Columbia University, New York (December 9, Koji Nakanishi)
- 1994** University of Texas, Austin (March 11, Philip Magnus).
Northwestern University, Evanston (May 16, Frank McDonald).
University of Minnesota, Minneapolis (May 20, Craig Forsyth).
- 1995** Searle (India), New Mumbai, India (September 6, T. V. Radhakrishnan).
University Department of Chemical Technology, Mumbai, India (September 7, Man Mohan Sharma) UDCT
Golden Jubilee Fellowship Lecture
Reddy Research Foundation, Miyapur, India (September 14, Bhushan Lohray)
Ranbaxy Laboratories, Gurgaon, India (September 18, Naresh Kumar)
Roche Biosciences, Palo Alto (October 5, 1995, Deborah Reuter)
- 1996** Sandoz (Agro), Des Plaines, IL (March 22, Patrick Lira)
University of Illinois at Chicago Circle (March 26, Robert M. Moriarty)
Loyola University, Chicago (September 26, James Babler)
Oxford University, Oxford, England (December 4, George Fleet)
- 1997** Stieffel Company, Maidenhead, England (March 26, Jackie Slipper).
Hoffmann-La-Roche, Basel, Switzerland (August 29, Bruno Lohri)
Mississippi State University, Oxford, Mississippi (October 9, Peter Goekjian)
University of Memphis, Memphis (October 10, Partha S. Ray)
- 1998** Georgetown University, Washington D. C. (January 29, Vaclav Horak)
Indian Institute of Chemical Biology, Calcutta, India (March 10, Anup Bhattacharya)
Regional Research Laboratory, Trivandrum, India (March 11, Vijay Nair)
Wellesley College, Wellesley (September 18, Michael Hearn)
Smith Kline Beecham, Harlow England (November 11, Martin Voyle)
- 1999** University of Poona, Pune, India, (January 25, Murzban S. Wadia).
University of Vermont, Burlington, Vermont (April 7, A. Paul Krapcho)
Astra Biochemicals (India), Bangalore, India (April 21, Kumud Sampath)
University of North Texas, Denton, Texas (May 7, Alan Marchand).
Wyeth-Ayerst Pharmaceuticals, Pearl River, New Jersey (June 22, John Primeau, David Blum)
Dupont Pharmaceuticals, Deepwater, New Jersey (June 23, Steven Moje)
Astra -Zeneca, Charnwood, England (August 18, David Haywood)
Medivir, Huddinge, Sweden (August 19, Nils Gunnar Johansson)
University of Delhi, New Delhi, India (October 9, Virender Parmar, Subhash Jain)

Avra Laboratories, Hyderabad, India (October 11, A. V. Rama Rao)
Indian Institute of Chemical Technology, Hyderabad, India (October 11, J. S. Yadav)
University Dept. of Chemical Technology, Mumbai, India (October 12, V. M. Kulkarni)
E. Merck (India), Taloja, Mumbai, India (October 15, Anand Apte).
Indian Institute of Technology, Kanpur (November 5, Vinod K. Singh)

- 2000** Astra Zeneca, Lund, Sweden (January 24, Mark Divers)
Bulkdrugs.com, Parsippany, New Jersey (March 9, Nailesh Bhatt).
Protarga, Philadelphia, Pennsylvania (March 10, Richard Pariza).
Pfizer, Groton, Connecticut (March 15, Chandra Prakash).
Sepracor, Marlboro, Massachusetts (March 16, Thomas Wagler).
Wellesley College, Wellesley, Massachusetts (April 26, May 1 and May 9, Michael Hearn)
Dartmouth College, Hanover, New Hampshire (May 3, David Lemal).
Geltex Pharmaceuticals, Waltham, Massachusetts (June 21, Edmund Sybertz)
Indian Institute of Science, Bangalore, India (July 26, J. Chandrasekaran)
Reddy Research Foundation, Miyapur, India (November 10, Om Reddy)
- 2001** Boehringer-Ingelheim, Ridgefield, Connecticut (January 22, Vittorio Farina)
Brown University, Providence, Rhode Island (May 8, Patricia Hamm)
Australian National University, Canberra, Australia (June 27, Chris Easton)
- 2002** Brown University, Providence, Rhode Island (February 8, Dwight Sweigart)
Tufts University, Medford, Massachusetts (February 21, Sarah Iacobucci)
Cellgate Pharma, San Jose, California (April 12, Paul Wender)
Boehringer-Ingelheim, Montreal, Canada (May 17, Pierre Beaulieu)
Virginia Technical Institute, Blacksburg (September 13, David Kingston)
Zydus Cadilla Pharmaceuticals, Ahmedabad, India (December 27, Braj Lohray)
Emcure Pharmaceuticals, Pune, India (December 28, Satish Mehta)
- 2003** Alkyl Amines, Inc., Pune, India (January 2, Anil Kothari)
University of New Hampshire, Durham (April 8, Gary Weisman)
DSM Pharmaceuticals, Greenville, North Carolina (June 17, Erik Rutten)
Epix Medical, Cambridge, Massachusetts (June 26, John Amedio)
Alembic / BioArc Laboratories (July 11, H. T. Patel)
Epix Medical, Cambridge, Massachusetts (August 4, John Amedio)
Vicuron Pharmaceuticals, Fremont, California (October 2, Michael Gordeev)
University of Massachusetts, Lowell (October 7, Virinder Parmar)
Altana Pharma, Konstanz, Germany (October 30, Joerg Senn-Bilfinger)
- 2004** Nicholas Piramal, Mulund, Mumbai, India (February 8, Bansi Lal)
AstraZeneca, Waltham, MA (April 4, John Primeau, Gurmit Grewal)
Metabasis Therapeutics, San Diego, California, (April 20, Bheemrao Ugarkar)
CovX Pharmaceuticals, San Diego, California (April 20, Curt Bradshaw)
La Jolla Pharmaceuticals, San Diego, California (April 21, Keith Cockerill)
Vicuron Pharmaceuticals, Fremont, California (April 22, Michael Gordeev)
Roche Biosciences, Palo Alto, California (April 22, Hans Maag)
Anacor Therapeutics, Palo Alto, California (April 23, Jake Plattner)
Schering AG, Berlin Germany, (May 6, Stefan Jaroch, Heidrun Dorsch)
Gideon Richter, Budapest, Hungary (May 7, Janos Fischer)
Peptimmune, Cambridge, Massachusetts (May 17, Harry Mandeville)
Johnson and Johnson, Spring House, Pennsylvania (Bruce Maryanoff, May 18)
Wyeth, Pearl River, New York (May 19, Michael Kolb)
West Pharma Drug Delivery, Lionville, Pennsylvania (May 20, Thomas Edkins)
Dupont Agrochemicals, Newark, Delaware (May 21, Roger Drewes)
Bayer Pharmaceuticals, West Haven, Connecticut (June 10, Uday Khire, Jill Wood)
Incyte, Wilmington, Delaware (June 14, Brian Metcalf)
Pfizer, New London, Connecticut (June 18, Makarand Jawadekar)
Novartis, Cambridge, Massachusetts (June 28, Scott Biller)
Persistent Systems, Pune, India (July 22, Prashant Lele)
Enanta Pharma, Watertown, Massachusetts (December 21, Yat Sun Or)
- 2005** Nuvios, Cambridge, Massachusetts (February 10, Richard Lyttle)

- Rhodia, Lyon, France (March 3, Jean-Pierre Corbet)
Ruia College, Mumbai, India (February 6, Suhas Pednekar)
Entremed, Rockville, Maryland (April 28, Tony Treston)
Sigma Aldrich, Natick, Massachusetts (May 2, Keith Wattling)
Dov Pharmaceuticals, Hackensack, New Jersey (May 11, Kevin Halloran)
Scynexis, Raleigh, North Carolina (May 17, Scot Huber)
Progenics, Tarrytown, New York (October 3, Nitya Ray)
Array Biopharma, Denver, Colorado (October 10, Conrad Hummel)
Exelixis, San Francisco, California (October 13, Sriram Naganathan, Joanne Wilson)
Theravance, San Francisco, California (October 14, Arthur Campbell)
Mass College of Pharmacy, Boston, Massachusetts (October 25, Barbara LeDuc)
- 2006** Caltech, Pasadena, California (March 1, Robert Grubbs)
Materia, Pasadena, California (March 1, Michael Giardello)
Wyeth, Collegeville, Pennsylvania (March 7, Robert Mills, Robert Nisch)
Cetek, Marlboro, Massachusetts (March 31, Gerhard Sperl)
Boehringer-Ingelheim, Ridgebury, Connecticut (April 20, Chris Senanayake, Terence Kelly)
Dow-Chirotech, Cambridge, England (August 16, Nick Johnson)
Oxford University, Oxford, England (October 10, Mark Moloney, Steve Davies)
Astex Pharma, Cambridge, England (November 28, David Rees)
Oxygen Healthcare, Cambridge, England (December 4, Sunil Shah)
- 2007** Pune University, Pune, India (January 16, Dilip Dhavale)
Pfizer, Cambridge, Massachusetts (January 29, Michael Polastri)
University of Toledo, Ohio (April 19, Paul Erhardt)
Schering-Plough, Kenilworth, New Jersey (July 17, William Greenlee)
University of Wisconsin, Madison (September 21, Laura Kiessling, Ron Raines)
Palatin Technologies, New Jersey (October 29, Jagdish Parasrampur)
Entremed, Maryland (October 31, Tony Treston)
Amulet Pharmaceuticals, Maryland (October 31, Ralph Scannell)
Howard University, Washington D.C. (October 31, Joseph Fortunak)
Indoco Remedies, Mumbai, India (December 7, Vidyadhar Jadhav)
- 2008** Schering-Plough, Cambridge, MA (February 7, Satish Jindal)
Curis, Cambridge MA (June 6, Xiong Cai)
Caltech, Pasadena, CA (July 28, Peter Dervan)
U. Mass, Boston (September 24, Marietta Schwartz)
IICT, Hyderabad (November 1, J.S. Yadav)
IIT, Chennai (November 3, Indrapal Singh)
University of Pondicherry, Poducherry (November 4, Surya Prakash)
Schering-Plough, Kenilworth, NJ (December 4, William Greenlee)
- 2009** Schering-Plough, Kenilworth, NJ (July 23, William Greenlee, Malcolm McCoss)
Sequella, Rockville, Maryland (September 28, Leo Einck)
Boehringer-Ingelheim (October 6, John Proudfoot)
Miami Gardens University, Miami Gardens, Florida (November 9, Rose Mary Stiffin)
Nova Southeastern University, Ft. Lauderdale, Florida (November 9, K. Venkatachalam)
Florida Southern College, Lakeland, Florida (November 10, Carmen Valdez Gauthier)
University of Tampa, Tampa, Florida (November 11, Eric Ballard)
Eckerd College, St. Petersburg, Florida (November 12, Holger Mauch)
- 2010 Institute of Science, Nagpur, India (January 8, 9, 12, Anjali Rahatgaonkar)
RTM University of Nagpur, India (January 10, 11, Harjeet Juneja)
Stanford University, Palo Alto, CA (March 24, Dick Zare, Paul Wender)
- Northeastern University, MBA Program, Boston, MA (July 17, Ramaiya Balachandra)
- 2011 Northeastern University, MBA Program, Boston, MA (July 16, Ramaiya Balachandra)
Griffith University, Brisbane, Australia (August 22, Mark Coster)
Queensland University, Brisbane, Australia (August 23, James DeVoss)
Monash University, Melbourne, Australia (August 24, Kei Saito, and Milton Hearne)
Univ. of Melbourne, Melbourne, Australia (August 25, George Khairallah)

- Australian National University, Canberra, Australia (August 26, Lew Mander and Malcolm McLeod)
 Southern Highlands Conference, Moss Vale, Australia (August 30, Roger Reid, and Jason Smith)
 University of Sydney, Sydney, Australia (August 31, Kate Jolliffe)
 University of New South Wales, Sydney, Australia (September 1, David St. Black)
 Strathclyde University, Glasgow, UK (December 7, Colin Suckling)
- 2012 Millersville University, Millersville, PA (November 19, Steven Bonser)
- 2014 Boehringer-Ingelheim, Ridgefield, Connecticut (April 3, Chris Senanayake)
 University of Toledo, Ohio (June 24, Paul Erhardt)
 ICT, Mumbai (September 16, 17, Bhalchandra Bhanage)
 SP College, Pune (September 18, Rajashree Kashalkar)
- 2015 University of Alabama, Tuscaloosa (March 12, Kevin Shaughnessy)
 Jefferson Southern College, Alabama Section (March 12, Pat Balakrishnan)
 Mclean Hospital / Harvard Medical School (September 18, David Lee)
 Drexel University College of Medicine (October 20, Jim Barrett)
 Georgetown University (November 6, Richard Weiss)
 Howard University (November 7, Joseph Fortunak)
- 2016 Harvard University (March 30, Eric Jacobsen, and students)
 Princeton University (May 4, John Groves, and students)
 Cambridge University (June 6, Deborah Longbottom, and students)
 Rutgers University (October 11, Spencer Knapp)
- 2017 Strathclyde University (Feb 28-March 4, Craig Jamieson, and students)
 Northwestern University (May 23-24, Rick Silverman, and students)
 Loyola University, (May 25, David Crumrine, and students)
 National Chemical Laboratory, Pune (September 18, Subhash Chavan)
 Indian Institute of Chemical Technology, Hyderabad (September 19, Srivari Chandrasekhar)
- 2018 Nil
 2019 Nil
 2020 University of Texas at Austin (virtual)
 2021 Nil

Courses taught at Universities / Industrial Institutions: *Adjunct Research Professor / Visiting Scholar appointments obtained at universities*

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|-------------|---|--|
| 1982 | Georgetown University, Washington, D. C. | Organic Chemistry |
| 1986 | Saginaw Valley College, Bay City, Michigan | Introductory Organic Chemistry |
| 1988 | University of Houston, Clear Lake, Texas | Advanced Organic Chemistry/Reaction Mechanisms |
| 1989 | University of Houston, Clear Lake, Texas | Properties / Synthesis of Polymers |
| 1990 | University of Houston, Clear Lake, Texas | Physical Organic Chemistry |
| 1995 | University of Chicago, Chicago, Illinois | Industrial Chemistry |
| | National Chemical Laboratory, Pune, India | Good Manufacturing and Laboratory |
| | Practices (Two Day Workshop) | |
| | Reddy Research Foundation | cGLP (One Day) |
| | Ranbaxy Laboratories, Gurgaon, India | Focus on cGLP / cGMP (two days) |
| | G. D. Searle, Evanston, Illinois | Organic Chemistry for Engineers |
| 1996 | Northwestern University, Evanston, Illinois | Industrial Chemistry. |
| | Lupin Laboratories, Bhopal, India | Aspects of cGLP/ cGMP (two days) |
| | Council of Scientific and Industrial Research | Aspects cGLP/ cGMP (two days) |
| | Courses at Central Drug Research Institute | |
| | Lucknow and Center for Biotechnology, Delhi | |
| 1997 | Central Drug Research Institute, Lucknow | Aspects of cGLP / cGMP (three days) |
| 1999 | AVRA Laboratories, Hyderabad, India | Aspects of cGLP/ cGMP (two days) |
| | Merck Development Laboratories, Mumbai | cGLP / cGMP: A Basic Primer (three days) |
| 2000 | Wellesley College, Dartmouth College and | Resume and Cover Letter Workshops |
| | Brown University | |
| | RPG Life Sciences, Mumbai, India | cGLP / cGMP: A Basic Primer (three days) |
| | ACS National Meeting: Washington D.C. | Nine Steps to Career Success: an ACS workshop |
| | Georgetown University, Suffolk University | Conducting a Successful job search? -An ACS workshop |
| 2001 | ACS National Meeting: San Diego, March 2001 | Resume and Cover Letter Writing, Working on Cross-
Functional Teams, Conducting a Successful Jobs Search, |

	ACS National Meeting, Chicago, August 2001 the Institute for Applied Pharmaceutical Sciences	Seeking Jobs in Biotechnology, Ask the Expert: Workshops at Crossing the Barriers-A Guide for Foreign Born Scientists
2002	New Brunswick, New Jersey, December 2001 ACS National Meeting: Orlando, April 2002 ACS National Meeting Boston, August 2002 Virginia Polytechnic and Technical Institute Center for Professional Advancement New Brunswick, New Jersey, September 2002 Center for Professional Advancement Amsterdam, Holland, January 2003 ACS Maryland Section, Baltimore, Maryland March 2003 ACS National Meeting New Orleans, March 2003 and New York, September 2003 Center for Professional Advancement Boca Rotan, Florida, CIMA Labs, Minnesota, June 2003, New Brunswick, New Jersey, October 2003	Chemistry, Manufacturing and Controls in New Drug Applications Resume and Cover Letter Writing, Working on Cross- Functional Teams, Conducting a Successful Jobs Search, Crossing the Barriers-A Guide for Foreign Born Scientists Resume and Cover Letter Writing, Conducting a Successful Jobs Search, Crossing the Barriers-A Guide for Foreign Born Scientists Managing an Effective Job Search Chemistry, Manufacturing and Controls in New Drug Applications Chemistry, Manufacturing and Controls in New Drug Applications Managing an Effective Job Search Resume and Cover Letter Writing, Conducting a Successful Jobs Search, How to find jobs in the Biotechnology Sector Chemistry, Manufacturing and Controls in New Drug Applications (CTD Format)
2004	Center for Professional Innovation Education Philadelphia, PA, February 2004, October 2004 ACS National Meeting Anaheim, CA March 2004 Center for Professional Advancement Amsterdam, Holland, April 2004, Boca Rotan Florida, May 2004, New Brunswick, New Jersey, October 2004, at Schwarz Pharma, December 2004 ACS National Meeting Philadelphia, PA August 2004 Rhode Island Local ACS Section-Rhode Island College December 2004	cGLP / cGMP: A Basic Primer (3 days) Resume and Cover Letter Writing, Conducting a Successful Jobs Search, How to find jobs in the Biotechnology Sector, Interviewing Chemistry, Manufacturing and Controls in New Drug Applications Resume and Cover Letter Writing, Conducting a successful Jobs Search, How to find jobs in the Biotechnology Sector, Interviewing, Employment Trends Resume and Cover Letter Writing, Conducting a successful Jobs Search, How to find jobs in the Biotechnology Sector, Interviewing, Employment Trends
2005	Center for Professional Innovation Education Philadelphia, PA, February 2005, September 2005 Molecular Insight Pharmaceuticals, Cambridge, MA ACS National Meeting Anaheim, CA March 2004 Tengion Pharmaceuticals, Greensboro, North Carolina May 2005 Penwest Pharmaceuticals, Danbury, Connecticut ACS National Meeting Washington D.C. August 2005	cGLP / cGMP: A Basic Primer (3 days) cGLP / cGMP: A Basic Primer (2 days) Conducting a Successful Jobs Search in a Volatile market, How to find jobs in the Biotechnology Sector cGLP / cGMP: A Basic Primer (3 days) Chemistry, Manufacturing and Controls (1 day) Conducting a Successful Jobs Search in a Volatile market, How to find jobs in the Biotechnology Sector, Working in Cross Functional Teams
2006	Center for Professional Innovation Education Philadelphia, PA, March, April, November Mass College of Pharmacy, Boston, MA Denmark Technical University (June 2006) Nastech Pharmaceuticals, Bothell, Washington, WA	cGLP / cGMP: A Basic Primer (3 days) cGLP: Pre-Clinical-Audit cGLP / cGMP: A Basic Primer (Spring Semester, 2 credits) cGLP / cGMP: A Basic Primer CTD / CMC

	December 2006	
2007	Center for Professional Innovation Education Philadelphia, PA, Irvine, CA and Dublin, Ireland February, March, April, June, October, November Mass College of Pharmacy, Boston, MA Mount Sinai School of Medicine Cambridge University, UK Wyeth, Rouses Point, NY Dai Sumitomo-Woburn	cGLP / cGMP: A Basic Primer (3 days) cGLP: Pre-Clinical-Audit Drug Discovery cGLP (one day) Process Chemistry-6 hours cGLP (two days) CTD-CMC (8 days) cGLP / cGMP: A Basic Primer (3 days)
2008	Center for Professional Innovation Education Philadelphia, PA, Irvine, CA, Berlin, Germany and Dublin, Ireland January, March, April, May, June, July, September, October, December Mass College of Pharmacy, Boston, MA	cGLP: Pre-Clinical-Audit cGLP/GMP cGLP / cGMP: A Basic Primer (3 days)
2009	Center for Professional Innovation Education Philadelphia, PA, Irvine, CA, January, May, September, December CTD Northeastern University	cGLP: Pre-Clinical-Audit Alkermes Drug Discovery and Development (Spring and Fall) cGLP / cGMP: A Basic Primer (3 days)
2010	Center for Professional Innovation Education Philadelphia, PA, Irvine, CA, January, May, September, December CTD Northeastern University	cGLP: Pre-Clinical-Audit Alkermes Drug Discovery and Development (Spring and Fall) cGLP / cGMP: A Basic Primer (3 days)
2011	Center for Professional Innovation Education Philadelphia, PA, Irvine, CA, April Northeastern University	cGLP: Pre-Clinical-Audit API / Stability Drug Discovery and Development (Spring and Fall)
2012	Northeastern University	Drug Discovery and Development (Spring and Fall)
2013	Northeastern University	Drug Discovery and Development (Spring and Fall)
	Cambridge, University, UK	Drug Discovery and Development (Spring and Fall)
2014	Northeastern University	Fundamentals of Route Selection / Process Chemistry
	Cambridge, University, UK	Drug Discovery and Development (Fall 2014)
2015	Boston College	Fundamentals of Route Selection / Process Chemistry
	Northeastern University	Drug Discovery and Development (Spring)
2016	Cambridge University	Drug Discovery and Development (Fall)
2017	Strathclyde University	Process Chemistry May
	Northwestern University	Process Chemistry Feb-March
	Cambridge University	Career Workshops and Entrepreneurship May
	Rutgers University	Process Chemistry June
2018	Strathclyde University	Process Chemistry October, November
	Rutgers University	Process Chemistry, February.
2019	GIAN Course on Drug Discovery and Development	Process Chemistry December
	Rutgers University	University of Mumbai October 2019
2020	Cambridge University	Process Chemistry December
	Rutgers University	Process Chemistry January
2021	Cambridge University	Process Chemistry December
	University of Leeds	Process Chemistry / Entrepreneurship
	Rutgers University	Process Chemistry
	ACS Careers	Process Chemistry Building your own businesses

Global Initiative of Academic Networks (GIAN)

Mukund S. Chorghade

<https://mu.ac.in/gian#1574408405562-b379b407-370a>

<https://mu.ac.in/gian#1574408405562-b379b407-370a>

GIAN Inauguration	https://youtu.be/aSIQs9pNVRc	Ambuja, Varsha, Mukund
Day 1 Session 1	https://youtu.be/MyV8M875gQ0	Introduction to the Course
Day 1 Session 2	https://youtu.be/4IJNyXI3gUo	Accessing Materials Onkar Barve
Day 1 Session 2	https://youtu.be/RVX5167BZTw	Need for Drug Discovery
Day 2 Session 1	https://youtu.be/gdMaiPhB5ag	Reverse Pharmacology

Day 2 Session 2	https://youtu.be/f7pp2ATzI3Y	Professor Ambuja Salgaonkar
Day 3 Session 1	https://youtu.be/tmp3eVzCqXs	Drug Development/ Process
Day 3 Session 2	https://youtu.be/Q1384QaUThg	Pharm Toxicology
Day 4 Session 1	https://youtu.be/IZApfonIy2E	Metabolism Porphyrins
Day 5 Session 1	https://youtu.be/9wP5YT0s548	Anti-Obesity
Day 6 Session !.	https://youtu.be/11rq_qbvZpg	Professor Sujata Bhat
Day 9 Session 2	https://youtu.be/0agg4EpRcXs	Resume Development
AY 9 End Gian Course	https://youtu.be/5McZHmZcvQA	General Comments

Lecture on Process Chemistry Facebook and You Tube

[May 29 Fun and Joy of Science Entrepreneurship University of Pune](https://www.facebook.com/ecdlc/videos/281097349599278/?sfnsn=wiwspwa&extid=DTFAxKVd3kihWE4i&d=w&vh=e)

<https://www.facebook.com/ecdlc/videos/281097349599278/?sfnsn=wiwspwa&extid=DTFAxKVd3kihWE4i&d=w&vh=e>

June 5, 2020, Mukund S.Chorghade*,“The Fun and Joy of Science Entrepreneurship”, Online International conference for Empirical Theoretical Research International Board for Education Research and Development Valedictory Function address <https://youtu.be/K5sCiwd9A-o>

An Insider’s Perspective: Fun and Joy of Process Chemistry PRISAL

July 1 <https://youtu.be/El66oaj9Rw4>

https://m.facebook.com/story.php?story_fbid=3695718373788352&id=2323710884572948&sfnsn=wiwspmo&extid=T87EXgIB7jvcaAFk&d=n&vh=e

July 23 Reducing the Risk in Drug Discovery: Attaining Precision in Drug Discovery by Using Innovative Tech

YouTube Link: https://www.youtube.com/watch?v=k_7i6NM9Gg&feature=youtu.be

We also shared it on LinkedIn for you to like and share with your network :

https://www.linkedin.com/posts/precision-evolution-global-inc_reducing-the-risk-in-drug-discovery-attaining-activity-6716415062619291648-ptSw

September 25 Harvard Faculty Research Showcase Event. Meeting Recording:

<https://harvard.zoom.us/rec/share/D6X-r26GlrMr05z8Ex0XZqqp5RuoKgNwvBmu7fXcwlqeEQcksTebZ9NHRe-uInj9.8x3B737W-FYcOr3j>

Access Passcode: 9_25SHOWCASE