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

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HIGHLIGHTS

- Serial Entrepreneur. Experienced executive with multi-faceted skills, proven track record of achievement, innovation, and exceeding organizational goals. Thirty-nine years accomplished research leadership. 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 to kilo-labs, pilot, and manufacturing plants. Demonstrated expertise / skills in establishing and sustaining academic collaborations. technology transfer, regulatory filings, compliance audits.
- Expertise in diverse areas of Chemistry (Research & Development): Medicinal Chemistry, Drug Discovery and Process Chemistry, Carbohydrates, Enzymes, Heterocycles, Metalloporphyrins, Molecular Recognition, Natural Products.
- Research with eminent scientists: Sir Richard Roberts, Robert Grubbs, Jean-Marie Lehn, Sir Derek Barton, Colin Suckling, Eric Jacobsen, Ron Raines, Marty Burke, Spencer Knapp, Jay Groves, Ashok Vaidya, Steven Ley, David Dolphin, Yoshito Kishi, Sidney Hecht, Charles Hammer, Bal Tilak, Murzban Wadia.
- Elected fellowships in prestigious academies / societies (AAAS, ACS, AIC, ICS, ISCB, NASi, Sigma Xi, RACI, RSC, RSM).
- Scientific Advisory Board Member of Corporations and Foundations such as International Brain Research Foundation, New Jersey Stem Cell Research Foundation
- 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 on 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.
- Chief Scientific Advisor, Late Prin. B.V. Bhide Foundation, QualiSense (2024-), APT Research Foundation.

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

Founder, President and CSO, THINQ PHARMA/MVRC Research (2012-2021)	2006-
Founder and CSO, Ayurvidya Healthcare Innovations	2020-
Founder and CSO, APINOVO	2020-2023
CSO, Chicago Discovery Solutions	2010-2016
CSO, Empiriko and AGN	2010-2015
CSO THINQ-CRO / D & O PHARMACHEM	2003-2006
Co-Founder/Chief Scientific Advisor, QualiSense	2024-
Scientific Advisory Board Member, Empiriko	2021-
Scientific Advisory Board Member, YewSavin, (USA), Inc.: HSvj Healthscience Pvt. Ltd (2021-23).	2021-
Chair, International Advisory Committee - Health and Bio Sector, DY PATIL International University, Pune.	2024-
Member, Academic Board, Athena Foundation/Pangea Society.	2024 -
External Advisory Board Member, Molecular Maker Laboratory Institute	2021-
Member of Board, Mumbai University Center for International Students and Linkages	2022-
Education and Workforce Development Advisory Board (up to 2023), University of Illinois, Urbana-Champaign	
Scientific Advisory Board Member, American Pharmaceutical Services	2020-2023
Scientific Advisory Board Member, Nirvana Water Sciences (2019-2023); Clearsynth	2020-
Scientific Advisory Board Member, BVG Life Sciences	2023-
International Faculty of Eminence on the International Advisory Board of Studies	2023-
at Datta Meghe Institute of Higher Education and Research	
NSF Reviewer	2016-
Scientific Advisory Board Member, Envision Biotech, Civenti Chem, OrgSyn Laboratories, ROW2	2006-2018

Visiting Professor/Scholar/Fellow/Distinguished Faculty at Caltech, Harvard University, MIT, Princeton, Rutgers, Univ. Chicago, Northwestern, Northeastern Universities, Boston College, Cambridge, Leeds, University of Strathclyde, ICT, NCL, IICT, ICT, KHRC, Savitribai Phule Pune University, University of Mumbai, Dr. Reddy's Institute of Life Sciences (DRILS)

DY Patil International University, Pune (India).

- Designed, Developed, Directed and Elucidated Innovative Lead Chemistry and Formulations technologies for a variety of therapeutic and chemical applications. Invented new catalysts for cost-effective process technologies.
- Invented the "Chemosynthetic Livers BiomimiksTM" 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-53TM 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.
- Refined and strategically aligned drug discovery and development directions and investments. Devised and implemented pioneering strategies for reduction of drug development cycle times.
- Developed products with dramatic reduction in 50% costs, 25% shortened time and optimal yields. Established productive strategic partnerships with chemistry-based companies Evaluated, selected, qualified vendors, worldwide.
- Enriched portfolios by in and out-licensed pharmaceutically active moieties and technologies.

GENZYME CORPORATION, Inc., DRUG DISCOVERY AND DEVELOPMENT, WALTHAM, MA Vice President, Pharmaceutical Development Sciences; Member, Corporate Steering Committee

- Envisioned Innovated and directed chemical process /formulations research on pre-clinical / clinical candidates.
- Devised / implemented innovative strategies for reduction of drug development cycle times. Shortened time to market by over 25%.
- Established preferred supplier programs: Ensured (cGLP / cGMP) compliance for pre-clinical studies / clinical trials; 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 inventive chemical process/ formulation research. / Ensured successful optimized scaled-up synthesis.
- Achieved 80% cost reduction in API manufacture and Drug Product manufacture.
- Developed benign, cost-efficacious 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 Project Manager (1992-1995)

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 preparation of multi-kilo quantities of anti-epilepsy, anticonvulsant, 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 converted to one or two-step catalytic reactions saving 75% development time and 80% of costs.

COLLEGE DE FRANCE, Paris and Université Louis Pasteur, Strasbourg, France Research Scientist / Assistant Director

1990 to 1991

• 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, invented, and innovated (i) Industrial scale epoxidation (ii) bio rational design of environmentally benign herbicides (iii) Process Development for pharmaceuticals, epoxy resins / urethanes. Received several performance-based awards.

EDUCATION

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

UNIVERSITY OF VIRGINIA, Charlottesville, VA Postdoctoral Research Associate

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') -0- 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

American Association for the Advancement of Science (Fellow); American Chemical Society (Fellow); American Institute of Chemists (Life Fellow); Health Sciences Collegium(Life Fellow); Indian Chemical Society (Life Fellow); Indian Society of Chemists and Biologists (Overseas Life Fellow); Indian Society of Bio-Organic Chemists (Fellow); Industry Academy, International Artificial Intelligence Industry Alliance (Fellow); International Board for Education Research and Development -IBERD (Life Fellow); International Union of Pure and Applied Chemistry (Fellow); National Academy of Sciences, India, Prayagraj (Foreign Fellow); Pharmaceutical Royal International Society -PRISAL Fellow; Royal Society of Chemistry (Fellow and Chartered Chemist); Royal Society of Medicine (Fellow), Royal Australian Chemical Institute (Fellow and Chartered Chemist); Sigma XI (Fellow), World Innovation Foundation (Fellow).

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

AWARDS AND DISTINCTIONS

Doctor of Sciences (D.Sc., Honoris Causa), Datta Meghe Institute of Higher Education and Research	2024
Industry Academy, International Artificial Intelligence Industry Alliance (Fellow)	2024
Foreign Fellow, National Academy of Sciences, India, (Prayagraj)	2023
International Faculty of Eminence on the International Advisory Board of Studies	2023
Datta Meghe Institute of Higher Education and Research	
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
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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)

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, Alternate Councilor, Division of Small Chemicals Businesses 2001-2021
- Chair- International Chemists Subdivision of PROF (2024-25 term)
- 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

[&]quot;Bharat Gaurav Award, Bharatiya Prawasi Diwas, January 2008

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

[&]quot;Diamond Jubilee Fellowship", University Department of Chemical Technology, Mumbai, India

[&]quot;B. D. Tilak Distinguished Visiting Fellowship", University of Bombay. 1999

- Chair, Brazosport Section, (1990), Chair, Northeastern Section (2007) Chair, Princeton section (2019)
- 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.
- Sigma Xi, Advisor, Member of the Development Committee (2022-)
- 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. (2021-) GIAN Fellow Govt. of India (2019), Visiting Professor/Scholar/Fellow/Distinguished Faculty, 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, Boston College, Brown University, Saginaw Valley College, Michigan, Shishubharati (2001-) Institute of Chemical Technology, Mumbai (2013-), Dr. Reddy's Institute of Life Sciences (DRILS) "Visiting Distinguished Faculty" (2023-), Overseas Director, SP Mandali (2013-5) ICT, NCL, IICT, ICT, KHRC, Savitribai Phule Pune University, University of Mumbai, (India).
- 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

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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 Pyrimidoblamic Acid and Epipyrimidoblamic 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. Dezaro, 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.
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- 76) Mukund S. Chorghade *, W. Harry Mandeville, Amy E. Tapper, S. Randall Holmes-Farley, Mukund K. Gurjar, Ramesh A Joshi, Madhusudan N. Deshmukh, Jayant M. Gajbhiye, M. Muthukrishnan, Subhash Nerurkar, Kedar Sinari, Harshad

- Gogte, "GT 389-255-A New Pharmaceutical Product for The Treatment of Obesity: Development, Scale-Up and Human Clinical Trial Results, ACS-CSIR symposia in Pune and Hyderabad, India, January 7, and January 12, 2006.
- 77) Mukund S. Chorghade*, "To Ph. D. or not to Ph. D.-A Guide to the Perplexed Student?", American Chemical Society, Division of Professional Relations, 231st National Meeting, Abstract # 8667, Atlanta, March 2006
- 78) Mukund S. Chorghade*, "What does it take to succeed in the Pharmaceutical Industry?", American Chemical Society, Division of Professional Relations, 231st National Meeting, Abstract # 8668, Atlanta, March 2006
- 79) Mukund S. Chorghade*, "Careers in Chemistry: Are there alternatives to working at a laboratory bench?", American Chemical Society, Division of Professional Relations, 231st National Meeting, Abstract # 8669, Atlanta, March 2006
- 80) Mukund S. Chorghade*, "Careers in Chemistry: Are there alternatives to working at a laboratory bench?", American Chemical Society, Division of Professional Relations, 231st National Meeting, Abstract # 8669, Atlanta, March 2006
- 81) Mukund S. Chorghade*, "New Career Success Stories Beyond 45 Diverse Paths", American Chemical Society, Division of Professional Relations, 231st National Meeting, Special interest group symposium, Atlanta, March 2006
- 82) Mukund S Chorghade*, "Documentation and Safety in Academic Laboratories", Cambridge University, England, December 2006
- 83) Mukund S Chorghade*, "Value Creation: Collaboration with worldwide laboratories: Process Development and Project management of technology transfer", Swami Vivekananda Birthday Symposium, Saurashtra University, Rajkot, January 11, 2007
- 84) Mukund S. Chorghade*, "Value Creation and Opportunities in Medicinal Chemistry: Collaborations in Drug Discovery, Process Development and Project Management of Technology Transfer ", Indian Society for Chemistry and Biology, Symposium, Aurangabad, February 2007
- 85) Mukund S. Chorghade*, Mukund K. Gurjar, Debendra K. Mohapatra, Ramesh Dhondi, Robert H. Grubbs, and Michael Giardello, "Protecting Group Directed Ring Closing Metatheses (RCM): First Total Synthesis of the Anti-Malarial Nonenolide", International Symposium on Olefin Metatheses, Pasadena, CA, July 2007
- 86) Mukund S. Chorghade, Paul Erhardt*, and Thomas Perun. "IUPAC Division VII: Chemistry and Human Health." IUPAC symposium on Chemistry Development and Human Health, 44th IUPAC General Assembly, Torino, Italy, August 2007
- 87) Robin Ganellin*, John Proudfoot and <u>Mukund Chorghade.</u> "IUPAC Division VII Subcommittee on Medicinal Chemistry and Drug Development", IUPAC symposium on Chemistry Development and Human Health, 44th IUPAC General Assembly, Torino, Italy, August 2007
- 88) Francoise Pontet* and Mukund Chorghade. "IUPAC Division VII Subcommittee on Nomenclature, Properties and Units in Laboratory Medicine", IUPAC symposium on Chemistry Development and Human Health, 44th IUPAC General Assembly, Torino, Italy, August 2007
- 89) John Duffus* and Mukund Chorghade. "IUPAC Division VII Subcommittee on Toxicology and Risk Assessment", IUPAC symposium on Chemistry Development and Human Health, 44th IUPAC General Assembly, Torino, Italy, August 2007
- 90) Mukund S. Chorghade*, "The Role of Cultural Diversity on Global Teams", symposium on "The Role of Cultural Diversity on Global Teams", American Chemical Society, Division of Professional Relations, CEPA and Small Chemical Businesses, SIG Session, 234th National Meeting, Abstract # 1122034, Boston, August 2007
- 91) Mukund S. Chorghade*, "Globalization in the Progression of a Drug from Conception to Commercialization: Opportunities and Challenges for Strategic Collaboration", ACS Speaker's Bureau, American Chemical Society, 234th National Meeting, Boston, August 2007
- 92) Mukund S. Chorghade*, "Changing Landscapes of the Biopharma Industry: Multidisciplinary Nature of Biotech and How That Affects the Job Market", symposium on the "Changing Landscapes of the Bio-Pharma Industry", Younger Chemists Committee, American Chemical Society, 234th National Meeting, Abstract # 1089182, Boston, August 2007
- 93) Mukund S. Chorghade*, "Ted and Arlene Light: Careers of Service to the Profession", symposium on "Henry Hill Award to Ted and Arlene Light", American Chemical Society, Division of Professional Relations, 234th National Meeting, Boston, August 2007
- 94) Mukund S. Chorghade*, Mukund K. Gurjar, Debendra K. Mohapatra and Chinmoy Pramanik, "A Short and Efficient Synthetic Strategy for (S)- and (R)-Plakolide A", symposium on "The Total Synthesis of Complex Molecules", American Chemical Society, Division of Organic Chemistry, 234th National Meeting, Abstract # 1089736, Boston, August 2007
- 95) Mukund S. Chorghade*, Mukund K. Gurjar, Debendra K. Mohapatra, Ramesh Dhondi, Robert H. Grubbs, and Michael Giardello, "Protecting Group Directed Ring Closing Metatheses (RCM): First Total Synthesis of the Anti-Malarial Nonenolide", symposium on "Asymmetric Reactions and Synthesis", American Chemical Society, Division of Organic Chemistry, 234th National Meeting, Abstract # 1089662, Boston, August 2007
- 96) Mukund S. Chorghade*, Mukund K. Gurjar, Debendra K. Mohapatra, Ramesh Dhondi, Robert H. Grubbs, and Michael Giardello, "Protecting Group Directed Ring Closing Metatheses (RCM): First Total Synthesis of the Anti-Malarial Nonenolide", Advances in Synthetic and Medicinal Chemistry Symposium, St. Petersburg, Russia, August 2007
- 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) <u>Mukund S. Chorghade*</u>, "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", 13 th 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 13 th 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*, <u>Mukund S. Chorghade</u>, 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, <u>Mukund S. Chorghade</u>*, "Development of a Cost-Efficient Synthesis for a Novel, Orally Available Iron Chelator", IUPAC 42nd Congress, Glasgow, August 2009
- 113) Anjali M. Rahatgaonkar, <u>Mukund S. Chorghade</u>*, "Stereoselective Synthesis of Aza CMI-977, a potential lead candidate for chronic asthma", IUPAC 42nd Congress, Glasgow, August 2009
- 114) <u>Mukund S. Chorghade*</u>, "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) <u>Mukund S. Chorghade</u>, 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*, <u>Mukund S. Chorghade</u>, 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) <u>Mukund S. Chorghade</u>*, "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) <u>Raksha P. Dhankar</u> 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) <u>Vibha M. Nikose</u>, Anjali M. Rahatgaonkar* and Mukund S. Chorghade, "Docking simulation and antifungal evaluation of imidazoles as Potential Cytochrome P450 dependent 14α-Sterol demethylase CPY51 Inhibitors", 14th ISCB Lucknow 15th-18th Jan 2010
- 125) <u>Vibha M. Nikose</u>, Anjali M. Rahatgaonkar* and Mukund S. Chorghade, "Antifungal Evaluation of Imidazoles as Potential Cytochrome P450 14α-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*, <u>Mukund S. Chorghade</u> 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*, <u>Mukund S. Chorghade</u>, "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 <u>Mukund S. Chorghade*</u>, "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) <u>Mukund S. Chorghade</u>*, "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, <u>Ashutosh Tiwari</u>^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) <u>Mukund S. Chorghade</u>*, "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) <u>Mukund S. Chorghade</u>*, "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, 9^{th-}11th February 2011.
- 136) Mukund S. Chorghade*, "SCHB: Where all the elements come together for a successful chemical business", SCHE 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) <u>Mukund Chorghade</u>*, "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) <u>Mukund S. Chorghade*</u>, "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
- Mukund Chorghade, Anjali M. Rahatgaonkar* and Raksha P. Dhankar, "Phase transfer catalysed synthesis of bisisoxazoles: 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*, <u>Chiara M. Chapman</u>, Graham B. Jones, James Glick, and Anjali M. Rahatgaonkar, "Metalloporphyrins as Cytochrome P-450 Mimics", ACS Medichem 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*, <u>Chiara M. Chapman</u>, 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*, <u>Rajeev S. Chorghade</u>, 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, BiomimiksTM 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 BiomimiksTM, 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*, "BiomimiksTM 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*, "BiomimiksTM 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*, "BiomimiksTM 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*, "BiomimiksTM 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*, "BiomimiksTM as Chemosynthetic Livers: Predict, Prepare and Prove the Structure, Activity and Toxicity of Drug Metabolites", Seminar at the Alabama Section, Birmingham, Jefferrson 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
- 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*, <u>R. Chorghade</u>, "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) <u>Jennifer Maclachlan</u>, 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) <u>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.</u>
- 192) <u>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.</u>
- 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 macrocycycles (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*, <u>Rajeev Chorghade</u>, "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*, <u>Rajeev Chorghade</u>, "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*, <u>Rajeev Chorghade</u>," Exemplifying green chemistry with sterically protected and electronically activated azamacrocycle 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 azamacrocycle 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) <u>Mukund S. Chorghade*</u>, "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 azamacrocycle 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, <u>M. Chorghade</u>, "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, <u>M. Chorghade</u>" "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 (ISCBC-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.
- 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/ecdlic/videos/281097349599278/?sfnsn=wiwspwa&extid=DTFAxKVd3kihWE4i&d=w &vh=e
- 239) <u>Mukund S. Chorghade</u>*, 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) <u>Mukund S.Chorghade</u>*, <u>https://www.linkedin.com/posts/precision-evolution-global-inc_reducing-the-risk-in-drug-discovery-attaining-activity-6716415062619291648-ptSw</u>
- 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-2020I UPAC 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 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 Bhubaneshwar 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) <u>Mukund S. Chorghade</u>*, "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) <u>Mukund S. Chorghade</u>*, "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) <u>Mukund S. Chorghade</u>*, "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) <u>Mukund S. Chorghade</u>*, "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) <u>Mukund S. Chorghade</u>*, "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) <u>Mukund S. Chorghade</u>*, "Sterically protected and electronically activated azamacrocycle 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) <u>James Skinner</u>, 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) <u>Mukund S. Chorghade</u>*, "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) <u>Mukund S. Chorghade</u>*, "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) <u>Mukund S. Chorghade</u>*, "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) <u>Mukund S. Chorghade</u>*, "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) <u>Mukund S. Chorghade</u>*,"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, Pacifichem, 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, Pacifichem, 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, Pacifichem, 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, Pacifichem, 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. Raisoni 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", Inte4rnational 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
- 290) Mukund S. Chorghade*, "Metalloporphyrin catalyzed Magic: Chemosynthetic Liver", "Motivating for Educational Excellence" Award Lecture. Virtual International conference: Empirical and Theoretical Research, International Board for Education Research and Development; January 28, 2022
- 291) Mukund S. Chorghade*, "Integration of Traditional Knowledge with Innovations in Pharma- Applying the Transforming Power of Chemistry to Reverse Pharmacology / Observational Therapeutics for Naturals Products Drug Discovery/ Development", Special Lecture, SVKM's Dr. Bhanuben Nanavati College of Pharmacy (BNCP) Azadi Amrit Mahotsav University of Mumbai India conference, February 11, 2022.
- 292) Mukund S. Chorghade*, "The Fun and Joy of Chemistry, and Science Entrepreneurship: An Insider's Perspective", Keynote Lecture HSNC Univ.,33rd Research Scholar's Meet –RSM 2022, Indian Chemical Society Mumbai Branch, India, February 18, 2022
- 293) <u>Mukund S. Chorghade</u>*, "The Indian Pharmaceutical Industry: Developing a conducive Ecosystem", Panel Lecture econference of Indian Pharma Post, February 18, 2022.
- 294) Mukund S. Chorghade*, "Bridging the Gap from Medicinal Chemistry to Scale-up: The Fun and Joy of Process Chemistry", Royal Society of Chemistry, Process Chemistry and Technologies Group, Webinar, February 22, 2022.
- 295) Mukund S. Chorghade*, " Creating an efficient and agile model for R&D in Pharma", Panel Lecture e-conference of Indian Pharma Post, April 15, 2022.
- 296) Mukund S. Chorghade*, "The Fun and Joy of Chemistry, and Science Entrepreneurship: An Insider's Perspective", D.Sc. award lectures at Wilson College, CKT College, Fergusson College, Modern College, Wadia College and University of Pune in Mumbai and Pune, India, May 13-20, 2022.
- 297) <u>Mukund S. Chorghade</u>*, "The Fun and Joy of Chemistry, and Science Entrepreneurship: An Insider's Perspective", Keynote Lecture 50th MARM meeting, College of New Jersey, June 3, 2022.
- 298) <u>Mukund S. Chorghade</u>*,"Reverse Pharmacology and Systems Approaches for Chemical Biology, Drug Discovery and Development: Inspiration from the Wisdom of Mother Nature", Keynote Lecture, 50th MARM meeting, College of New Jersey, June 4, 2022.
- 299) <u>Mukund S. Chorghade</u>*, "The Fun and Joy of Chemistry, and Science Entrepreneurship: An Insider's Perspective", Keynote Lecture at Marwadi University, Rajkot INDO-US workshop on "Next Generation of STEM Scientists: Building Skills, Collaborations and Networks with Global Leaders" June 4, 2022. The lecture was repeated on August 4.

- 300) Mukund S. Chorghade*, "The Fun and Joy of Chemistry, and Science Entrepreneurship: An Insider's Perspective", Keynote lecture International E-Conference on Sustainability: Integrated and Scientific Approach (ICS-2022), June 6, 2022. The lecture was repeated on August 5.
- 301) <u>Mukund S. Chorghade</u>*, "The Fun and Joy of Chemistry, and Science Entrepreneurship: An Insider's Perspective", Lecture at BMM Education Summit for Indo-US collaborations, Rutgers University, August 8, 2022.
- 302) <u>Mukund S. Chorghade</u>*, "The Fun and Joy of Innovation and Invention Entrepreneurship: An Insider's Perspective", Lecture at BMM Education Summit for Indo-US collaborations, Rutgers University, August 8, 2022.
- 303) Mukund S. Chorghade*, "The Fun and Joy of Process Chemistry and Science Entrepreneurship: An Insider's Perspective", Lecture Tufts University, October 12, 2022
- 304) <u>Mukund S. Chorghade</u>*, "The Fun and Joy of Process Chemistry and Science Entrepreneurship: An Insider's Perspective Innovation, Chemistry, and Jobs: Entrepreneurship Shapes Our Tomorrow", Lecture Tufts University, October 12, 2022.
- 305) <u>Mukund S. Chorghade*, "</u>Adventures in Drug Discovery and Development: An Insider's Perspective Global Acceptance of Reverse Pharmacology and its Applications by Medicinal Chemists for Drug Discovery and Development", Webinar, Datta Meghe Institute of Higher Education and Research, India, November 10, 2022.
- 306) Mukund S. Chorghade*, "The Magical Metalloporphyrins as Chemosynthetic Livers: Predict, Prepare and Prove Metabolite Structure, Activity and Toxicity", Lecture presented at Hypha Discovery, Abingdon, Oxford, UK, November 14, 2022.
- 307) Mukund S. Chorghade*, "Bridging the Gap from Medicinal Chemistry to Scale-up: Impurities Profile and Judicious Use of Solvents", Lecture Department of Chemistry, University of Leeds, November 17,2022.
- 308) Mukund S. Chorghade*, "Bridging the Gap from Medicinal Chemistry to Scale-up: Impurities Profile and Judicious Use of Solvents", Lecture Department of Chemistry, Rutgers University, December 8,2022.
- 309) <u>Mukund S. Chorghade</u>*, The Magical Metalloporphyrins as Chemosynthetic Livers: Predict, Prepare and Prove Metabolite Structure, Activity and Toxicity", Lecture presented at Indian Institute of Science, Bangalore, India January 17, 2023.
- 310) <u>Mukund S. Chorghade</u>*, "The Magical Metalloporphyrins as Chemosynthetic Livers: Predict, Prepare and Prove Metabolite Structure, Activity and Toxicity", Lecture presented at Indian Institute of Chemical Technology, Hyderabad, India, January 23, 2023.
- 311) Mukund S. Chorghade*, "The Fun and Joy of Chemistry, and Science Entrepreneurship: An Insider's Perspective", Virtual Lecture, University of Strathclyde, January 25, 2023.
- 312) <u>Mukund S. Chorghade*</u>, "Effective Communication Enhances Science Entrepreneurship and Success", Lecture presented at the University of Pune, January 31, 2023.
- 313) <u>Mukund S. Chorghade</u>*, "The Fun and Joy of Chemistry, and Science Entrepreneurship: An Insider's Perspective", Lecture presented at University of Pune, February 4, 2023.
- 314) <u>Mukund S. Chorghade</u>*, "The Fun and Joy of Chemistry, and Science Entrepreneurship: An Insider's Perspective", Virtual Lecture presented to Sigma Xi, Benares Chapter, February 4, 2023.
- 315) Mukund S. Chorghade*, "The Magical Metalloporphyrins as Chemosynthetic Livers: Predict, Prepare and Prove Metabolite Structure, Activity and Toxicity", Lecture presented at University of Mumbai, Kalina campus, February7, 2023.
- 316) Mukund S. Chorghade*, "The Magical Metalloporphyrins as Chemosynthetic Livers: Predict, Prepare and Prove Metabolite Structure, Activity and Toxicity", Lecture presented at Institute of Chemical Technology, Mumbai and Bhubaneswar, February 8, 2023.
- 317) <u>Mukund S. Chorghade</u>*, "The Fun and Joy of Chemistry, and Science Entrepreneurship: An Insider's Perspective", Lecture presented at D.G. Ruparel College of Arts and Science, Mumbai, February 8, 2023.
- 318) Mukund S. Chorghade*, "The Fun and Joy of Chemistry, and Science Entrepreneurship: An Insider's Perspective", Lecture presented to the Scientific Advisory Board and Staff at Bharat Vikas Group meetings in Pune and Satara, February 10-11, 2023.
- 319) Mukund S. Chorghade*, "Adventures in Drug Discovery and Development: An Insider's Perspective Global Acceptance of Reverse Pharmacology and its Applications by Medicinal Chemists for Drug Discovery and Development", Lecture presented at the Maharashtra University of Health Sciences, Nashik, February 16, 2023. Lecture was repeated in Marathi at Ayurveda College in Nashik on February 17,2023.
- 320) Mukund S. Chorghade*, "Adventures in Drug Discovery and Development: An Insider's Perspective Global Acceptance of Reverse Pharmacology and its Applications by Medicinal Chemists for Drug Discovery and Development", Lecture presented at Datta Meghe Institute of Higher Education and Research, Wardha, India, February 22, 2023.
- 321) <u>Mukund S. Chorghade*, "Adventures in Drug Discovery and Development: An Insider's Perspective Global Acceptance of Reverse Pharmacology and its Applications by Medicinal Chemists for Drug Discovery and Development", Conference Oration and Keynote Speech at Indian Stem Cell Study Group Association Conference, Nagpur, India November 24, 2023.</u>
- 322) <u>Mukund S. Chorghade</u>*, "The Fun and Joy of Chemistry, and Science Entrepreneurship: An Insider's Perspective", Virtual Lecture presented to Institute of Chemical Technology, Mumbai and Bhubaneshwar, February 27, 2023.
- 323) Mukund S. Chorghade* and Rachel Bijoy, "The Magical Metalloporphyrins as Chemosynthetic Livers: Predict, Prepare and Prove Metabolite Structure, Activity and Toxicity", Lecture presented at ACS Spring 2023 meeting, Division of Organic Chemistry session on Green Methods in Synthesis, Indianapolis, March 27, 2023.

- 324) Mukund S. Chorghade* and Midhuna Subash, "The Magical Metalloporphyrins as Chemosynthetic Livers: Predict, Prepare and Prove Metabolite Structure, Activity and Toxicity: New results", Lecture presented at ACS Spring 2023 meeting, Division of Organic Chemistry session on Green Methods in Synthesis, Indianapolis, March 27, 2023.
- 325) Mukund S. Chorghade*, "Innovation-driven pharmaceutical process chemistry for rebuilding API manufacturing", Lecture presented at ACS Spring 2023 meeting, Division of Industrial and Engineering Chemistry Session on Future Chemical Manufacturing, Indianapolis, March 28, 2023.
- 326) Mukund S. Chorghade*, "Reverse Pharmacology and Systems Approaches for Chemical Biology, Drug Discovery and Development: Inspiration from the Wisdom of Mother Nature", Lecture presented at ACS Spring 2023 meeting, Division of Medicinal Chemistry, Indianapolis, March 29, 2023.
- 327) <u>Mukund S. Chorghade</u>*, "Science Communication: Wit and Humor have a dramatic impact", Lecture presented at ACS Spring 2023 meeting, Division of the History of Chemistry Indianapolis, March 29, 2023.
- 328) Mukund S. Chorghade*, "Resume Development: Marketing your brand for an industrial position", lecture presented at ACS MARM meeting, New York, June 9, 2023
- 329) Mukund S. Chorghade*, "Chemosynthetic livers: Predict, Prepare and Prove the Structure, Activity and Toxicity of Drug Metabolites", Lecture presented at ACS NERM 2023 meeting, Northeastern University, Boston, June 15, 2023.
- 330) <u>Mukund S. Chorghade</u>*, "Reverse Pharmacology and Systems Approaches for Chemical Biology, Drug Discovery and Development: Inspiration from the Wisdom of Mother Nature", Lecture presented at ACS NERM 2023 meeting, Northeastern University, Boston, June 16, 2023.
- 331) Mukund S. Chorghade*, "Henry Hill: A prince among men whose legacy endures and inspires" Lecture presented at ACS NERM 2023 meeting, Northeastern University, Boston, June 16, 2023.
- 332) Mukund S. Chorghade* and Midhuna Subash, "The Magical Metalloporphyrins as Chemosynthetic Livers: Predict, Prepare and Prove Metabolite Structure, Activity and Toxicity: New results", Lecture at The Virtual Conference on Chemistry and its Applications (VCCA-2023) held from 7 to 11 August 2023.
- 333) Rachel Bijoy, Mukund Chorghade*, "The magical azamacrocycles: Mirror, Mirror on the Wall; Which is the Best Catalyst of them all?", Lecture at. The Virtual Conference on Chemistry and its Applications (VCCA-2023) held from 7 to 11 August 2023
- 334) Rachel Bijoy, Mukund Chorghade*, "The magical azamacrocycles: Mirror, Mirror on the Wall; Which is the Best Catalyst of them all?", ACS Fall 2023, San Francisco, Division of Organic Chemistry, August 13-17, 2023. This work was earlier presented at RTCS 2022 of the Indian Chemical Society.
- 335) Mukund S. Chorghade*, "The Pride and Joy, Trials, and Tribulations of Science Entrepreneurship: An Insider's Perspective", ACS Fall 2023, San Francisco, August 13-17, 2023
- 336) Mukund S. Chorghade* and Midhuna Subash, "The Magical Metalloporphyrins as Chemosynthetic Livers: Predict, Prepare and Prove Metabolite Structure, Activity and Toxicity: New results", Lecture at ACS Fall 2023, San Francisco, Division of Organic Chemistry, August 13-17, 2023. This work was earlier presented at RTCS 2022 of the Indian Chemical Society.
- 337) Mukund S.Chorghade*, "Mentoring and Professional Development in a Research Setting", Keynote Lecture, Molecular Maker Lab Institute Retreat, University of Illinois, Urbana Champaign, September 2023
- 338) Mukund S.Chorghade*, "Mentoring and Professional Development in a Research Setting", Keynote Lecture delivered for the faculty of Prajnanbodhini School, Pune, November 1, 2023
- 339) Mukund S. Chorghade*, "The Fun and Joy of Chemistry, and Science Entrepreneurship: An Insider's Perspective", Lecture presented to Binghampton University, November 17, 2023.
- 340) <u>Mukund S. Chorghade</u>*, "Bridging the Gap from Medicinal Chemistry to Scale-up: Impurities Profile and Judicious Use of Solvents", Lecture, Department of Chemistry, University of Leeds, November 30, 2023.
- 341) <u>Mukund S. Chorghade</u>*, "Bridging the Gap from Medicinal Chemistry to Scale-up: Impurities Profile and Judicious Use of Solvents", Lecture Department of Chemistry, Rutgers University, November 30, 2023.
- 342) <u>Mukund S. Chorghade*</u>, "Chemosynthetic livers: the magical azamacrocycles for ID of Metabolites". Virtual Lecture presented for IUPAC subcommittee for Drug Discovery and Development, December 8, 2023.
- 343) Mukund S. Chorghade*, "Inspired, Inspiring and Inspirational Science: Pride and Joy, Trials, and Tribulations of Science Entrepreneurship", Podcast, Interview done for Athena Foundation / Sigma Xi January 2, 2024. https://www.youtube.com/watch?v=oGBRToaOQzs
- 344) Mukund S. Chorghade*, "The Magical Metalloporphyrins as Chemosynthetic Livers: Predict, Prepare and Prove Metabolite Structure, Activity and Toxicity", Lecture, Institute of Chemical Technology, Mumbai, January 16, 2024.
- 345) Mukund S. Chorghade*, "The Magical Metalloporphyrins as Chemosynthetic Livers: Predict, Prepare and Prove Metabolite Structure, Activity and Toxicity", Lecture, Institute of Chemical Technology, Bhubaneswar, February 7, 2024.
- 346) Mukund S. Chorghade*, "The Pride and Joy, Trials, and Tribulations of Science Entrepreneurship: An Insider's Perspective", Lecture, CSIR-Institute of Minerals and Materials Technology, Bhubaneswar, February 7, 2024.
- 347) <u>Mukund S. Chorghade*</u>, "The Magical Metalloporphyrins as Chemosynthetic Livers: Predict, Prepare and Prove Metabolite Structure, Activity and Toxicity", Lecture, National Institute of Science Education and Research (NISER), Jatni Campus, Bhubaneswar, February 8, 2024.

- 348) Mukund S. Chorghade*, "The Magical Metalloporphyrins as Chemosynthetic Livers: Predict, Prepare and Prove Metabolite Structure, Activity and Toxicity", Lecture, Indian Institute of Technology, Jatni Campus, Bhubaneswar, February 8, 2024.
- 349) Mukund S. Chorghade*, "The Magical Metalloporphyrins as Chemosynthetic Livers: Predict, Prepare and Prove Metabolite Structure, Activity and Toxicity", Lecture, Indian Institutes of Science Education and Research Berhampur, Odisha, February 9, 2024,
- 350) Mukund S. Chorghade*, "Inspired, Inspiring and Inspirational Science: The Pride and Joy, Trials, and Tribulations of Science Entrepreneurship", Lectures presented at schools in Chikhali, Shirgaon, Parshuram, SP College (Pune) and DY Patil University (Pune), January-February 2024.
- 351) Mukund S. Chorghade*, "Inspired, Inspiring and Inspirational Science: The Pride and Joy, Trials, and Tribulations of Science Entrepreneurship", Lecture presented at DY Patil University (Pune), Degree Convocation -February 2024
- 352) Midhuna Subash, Rachel Bijoy, Mukund S. Chorghade*, "Chemosynthetic livers: Predict, Prepare and Prove the Structure, Activity and Toxicity of Drug Metabolites Part I", Lecture presented at ACS Spring 2024 meeting, New Orleans, LA, March 17, 2024.
- 353) <u>Rachel Bijoy</u>, Midhuna Subash, Mukund S. Chorghade*, "Chemosynthetic livers: Predict, Prepare and Prove the Structure, Activity and Toxicity of Drug Metabolites Part II". Lecture presented at ACS Spring 2024 meeting, New Orleans, LA, March 17, 2024.
- 354) Mukund S. Chorghade*, "The Pride and Joy, Trials, and Tribulations of Science Entrepreneurship: An Insider's Perspective", Lecture presented at ACS Spring 2024 meeting, New Orleans, LA, March 17, 2024.
- 355) Rachel Bijoy, Midhuna Subash, <u>Mukund S. Chorghade</u>*, "Chemosynthetic livers: Predict, Prepare and Prove the Structure, Activity and Toxicity of Drug Metabolites". Lecture presented at ACS Middle Atlantic Regional Meeting, State College, PA, June 5-8, 2024.
- 356) Midhuna Subash, Rachel Bijoy, and Mukund S. Chorghade*, "Biomimetic Oxidation of pharmaceuticals; a catalytic approach for the identification of metabolites", Lecture at the IUPAC endorsed Virtual Conference on Chemistry and its Applications (VCCA-2024),-Transforming Chemistry and Interdisciplinary Research to Innovation-12 -16 August 2024.
- 357) <u>Rachel Bijoy</u>, Midhuna Subash, and Mukund Chorghade*, "Chemosynthetic Livers: Suppression or Attenuation of Drug Metabolites Study of Drug- Drug Interactions", Lecture at the IUPAC endorsed Virtual Conference on Chemistry and its Applications (VCCA-2024), Transforming Chemistry and Interdisciplinary Research to Innovation-12 -16 August 2024.
- 358) Midhuna Subash, Rachel Bijoy, Mukund S. Chorghade*, "Chemosynthetic livers: Predict, Prepare and Prove the Structure, Activity and Toxicity of Drug Metabolites Part I", Lecture presented at ACS Fall 2024 meeting, Denver, CO, August 18-22, 2024.
- 359) <u>Rachel Bijoy</u>, Midhuna Subash, Mukund S. Chorghade*, "Chemosynthetic livers: Predict, Prepare and Prove the Structure, Activity and Toxicity of Drug Metabolites Part II". Lecture presented at ACS Fall 2024 meeting, Denver, CO, August 18-22, 2024.
- 360) Mukund S. Chorghade*, "Reverse Pharmacology and Systems Approaches for Chemical Biology, Drug Discovery and Development: Inspiration from the Wisdom of Mother Nature", Lecture presented at ACS Fall 2024 meeting, Denver, CO, August 18-22, 2024.
- 361) Mukund S. Chorghade* "Fascinating Excursions into Drug Discovery and Development: An Insider's Perspective "; Lecture delivered to Chemistry and Biology students at Landmark College, Putney, VT 05346. September 4, 2024. Host Christin Monroe.
- 362) Mukund S. Chorghade*, "If you do not take Food as Medicine, you will take Medicine as Food: Inspiration from the Wisdom of Mother Nature" Let Us Talk /Fireside Chat, Gateway at Royce Brook, Public Lecture, September 18, 2024.
- 363) Mukund S. Chorghade*, "The Pride and Joy, Trials, and Tribulations of Science Entrepreneurship: An Insider's Perspective", Lecture presented at ACS University of Nevada, Las Vegas and Nevada Section, ACS, October 4, 2024
- 364) Mukund S. Chorghade*, "Fascinating Journey in Chemistry for Students, Researchers and Entrepreneurs", Lecture for the Vidhathri Academy, India, October 15, 2024. Host Madhu Ganesh.
- 365) Mukund S. Chorghade*, "Chemistry Creates a New World" Let Us Talk /Fireside Chat, Gateway at Royce Brook, Public Lecture, November 11, 2024.
- 366) Mukund S. Chorghade*, "The New Elements of the Modern Alchemy" Let Us Talk /Fireside Chat, Gateway at Royce Brook, Public Lecture, December 10, 2024.
- 367) Mukund S. Chorghade*, "Key aspects of Scientific Entrepreneurship" a six-lecture course on Entrepreneurship, October-November 2024, Athena Foundation, Host Mritunjay Sharma.
- 368) <u>Mukund S.Chorghade*</u>, "Magical Metalloporphyrins as Chemosynthetic Livers", Lecture delivered, Molecular Maker Lab Institute Retreat, December 5, 2024.
- 369) Mukund S. Chorghade*, "Chemosynthetic livers: Predict, Prepare and Prove the Structure, Activity and Toxicity of Drug Metabolites". Eminent Speaker Keynote Lecture presented at the International Symposium on Interfacial Areas of Chemistry and Biology, (IACB-2025), Amity Institute of Click Chemistry Research & Studies, Amity University, Noida, Delhi NCR on January 24, 2025.

- 370) Mukund S. Chorghade*, "Pride and Joy, Trials, and Tribulations of Science Entrepreneurship: An Insiders Perspective". Plenary Lecture delivered at the 30th ISCB International Conference (ISCBC-2025), University of Lucknow, Lucknow, January 27, 2025
- 371) Mukund S. Chorghade*, "Invent, Innovate, Inspire", Public Lecture, SPM English Medium CBSE School, Chiplun, February 17, 2025.
- 372) Mukund S. Chorghade*, "Chemistry Creates a New World", Public Oration, at Inauguration of Laboratories for the Professor B.V. Foundation, SP Mandali Campus, February 20, 2025.
- 373) Mukund S. Chorghade*, "Podcast on the Future of Education Interview with Dr. Mukund Chorghade" A Dialogue with Mukund Chorghade"_in series "Understanding Education and Beyond: Dialogues on Education." YouTube, hosted by Amrutha Langs, 24 Feb. 2024, https://youtu.be/p_dCQZf0hvk...
- 374) Mukund S. Chorghade*, "Marketing Your Brand for Academia and Industry", Public Lecture, : Interdisciplinary School of Science, Savitribai Phule Pune University, February 24, 2025.
- 375) Mukund S. Chorghade*, "Ask Me Anything", Talk delivered to Athena Foundation and Pangea Society scholars, New Delhi, February 26, 2025.
- 376) Rachel Bijoy, Midhuna Subash, and Mukund Chorghade*, "Chemosynthetic livers: Predict, prepare and prove the structure, activity and toxicity of drug metabolites-Results on polypharmacy Lecture at the Digital Session-Digital Meeting, Division of Organic Chemistry ACS Spring 2025, March 23-27, 2025, San Diego, CA March23.
- 377) Mukund S. Chorghade*, "The Fun and Joy of Chemistry and Science Entrepreneurship: An Insider's Perspective" Royal Society of Chemistry, PC&T Webinar: on "Why Choose a Career in Process Chemistry", March 25, 2025.
- 378) Mukund S. Chorghade*, "The Fun and Joy of Chemistry and Science Entrepreneurship: An Insider's Perspective", Rutgers University, April 29, 2025.
- 379) Mukund S. Chorghade*. "Early Innovators Program EIP Personal Branding: Pride and Joy, Trials, and Tribulations of Science Entrepreneurship". Lecture at the University of Illinois, Carle School of Medicine, June 18, 2025.
- 380) Mukund Chorghade, Theresa DeAngelo, Madalyn Howard, Dr. Samuel Brunclik, Jillian Malbrough, Susan Schelble, "Activities for chemists in an ACS division: Educate, Communicate, and Translate" Poster to be presented at the symposium on "Ethics That Impact the Global Chemical Enterprise in a World Needing International Standards", Pacifichem 2025 conference, Honolulu, Hawaii, December 2025. PROF Division Poster.
- 381) Mukund S. Chorghade and Uday Ohale et.al, Participants in panel discussion on "Skin Soothe: Bridging Ayurveda, Eczema, and Allergies to explore how chronic skin conditions like eczema are treated, understood, and lived with across traditional (Ayurvedic) and modern (nutritional/allergy-focused) frameworks and how families navigate these realities daily". Panel for the Athena Foundation and Pangea Society, Organizer Vedika "Pia" Agrawal, August 7, 2025.

Invited Lectures Delivered: (Faculty Host indicated in Parentheses)

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)

AstraZeneca, 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, Massachussetts (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)

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)

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 Parasrampuria) 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. Petersburgh, 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) University of Alabama, Tuscaloosa (March 12, Kevin Shaughnessy) 2015 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)

2016 Harvard University (March 30, Eric Jacobsen, and students) Princeton University (May 4, John Groves, and students)

Howard University (November 7, Joseph Fortunak)

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 Ni

2022 D.Sc. Award lectures (8) at several colleges in Mumbai and Pune (Sunil Patil and Avinash Kumbhar)

2023 Lectures at several colleges in India.

Binghamton University (November 17, Benjamin Williamson).

2024 Lectures (12) at several colleges and universities in India (Debendra Mohapatra, Bhaskar Thorat, Rajendra Patwardhan) University of Las Vegas, Nevada (Rampur Viswanath).

2025 Public Lectures at several institutions in India.

Virginia Polytechnic and Technical Institute

New Brunswick, New Jersey, September 2002

Center for Professional Advancement

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

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,
		Crossing the Barriers-A Guide for Foreign Born Scientists
	ACS National Meeting, Chicago, August 2001	Seeking Jobs in Biotechnology, Ask the Expert:
	Institute for Applied Pharmaceutical Sciences	Chemistry, Manufacturing and Controls in
	New Brunswick, New Jersey, December 2001	New Drug Applications
2002	ACS National Meeting: Orlando, April 2002	Resume and Cover Letter Writing, Working on Cross-
		Functional Teams, conducting a Successful Jobs Search,
		Crossing the Barriers-A Guide for Foreign Born Scientists
	ACS National Meeting Boston, August 2002	Resume and Cover Letter Writing, conducting a
		Successful Jobs Search, Crossing the Barriers-A

Guide for Foreign Born Scientists Managing an Effective Job Search

New Drug Applications

Chemistry, Manufacturing and Controls in

2005

2007

2008

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 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

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

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 December 2006

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, Rousses Point, NY
Dai Sumitomo-Woburn
Center for Professional Innovation Education

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 / 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

cGLP / cGMP: A Basic Primer (3 days)

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

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

cGLP / cGMP: A Basic Primer (3 days) cGLP: Pre-Clinical Audit

cGLP / cGMP: A Basic Primer (Spring Semester, 2credits)

cGLP / cGMP: A Basic Primer CTD / CMC

Cross Functional Teams

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)

cGLP: Pre-Clinical-Audit

cGLP/GMP

2009	Center for Professional Innovation Education	cGLP / cGMP: A Basic Primer (3 days)
	Philadelphia, PA, Irvine, CA,	, ,
	January, May, September, December	cGLP: Pre-Clinical-Audit
	CTD	Alkermes
	Northeastern University	Drug Discovery and Development (Spring and Fall)
2010	Center for Professional Innovation Education	cGLP / cGMP: A Basic Primer (3 days)
	Philadelphia, PA, Irvine, CA,	• • •
	January, May, September, December	cGLP: Pre-Clinical-Audit
	CTD	Alkermes
	Northeastern University	Drug Discovery and Development (Spring and Fall)
2011	Center for Professional Innovation Education	cGLP / cGMP: A Basic Primer (3 days)
	Philadelphia, PA, Irvine, CA,	cGLP: Pre-Clinical-Audit
	April	API / Stability
	Northeastern University	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	Fundamentals of Route Selection / Process Chemistry
2014	Northeastern University	Drug Discovery and Development (Fall 2014)
	Cambridge, University, UK	Fundamentals of Route Selection / Process Chemistry
2015	Boston College	Drug Discovery and Development (Spring)
	Northeastern University	Drug Discovery and Development (Fall)
2016	Cambridge University	Process Chemistry May
2017	Strathclyde University	Process Chemistry Feb-March
	Northwestern University	Career Workshops and Entrepreneurship May
	Cambridge University	Process Chemistry June
	Rutgers University	Process Chemistry October, November
2018	Strathclyde University	Process Chemistry, February.
	Rutgers University	Process Chemistry December
2019	GIAN Course on Drug Discovery and Development	University of Mumbai October 2019
	Rutgers University	Process Chemistry December
2020	Cambridge University	Process Chemistry January
	Rutgers University	Process Chemistry December
2021	Cambridge University	Process Chemistry / Entrepreneurship
	University of Leeds	Process Chemistry
	Rutgers University	Process Chemistry
	ACS Careers	Building your own businesses.
2022	ACS Careers	Finding Yourself; Networking How to Get Started
		Your Idea Your Business and Your Sales and Marketing
		Strategy Your Financing Plan
	University of Leeds	Process Chemistry
	Rutgers University	Process Chemistry
2023	University of Leeds	Process Chemistry
	Rutgers University	Process Chemistry
	University of Strathclyde	Process Chemistry
2024	Athena Foundation	Key Aspects of Entrepreneurship
2025	Rutgers	Process Chemistry
	Athena Foundation	Chemistry, Drug Discovery and Development.

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

/youtu.be/aSIQs9pNVRc	Ambuja, Varsha, Mukund
youtu.be/MyV8M875gQ0	Introduction to the Course
/youtu.be/4IJNyXI3gUo	Accessing Materials Onkar Barve
/youtu.be/RVX5I67BZTw	Need for Drug Discovery
/youtu.be/gdMaiPhB5ag	Reverse Pharmacology
/youtu.be/f7pp2ATzI3Y	Professor Ambuja Salgaonkar
/youtu.be/tmp3cVzCqXs	Drug Development/ Process
	youtu.be/MyV8M875gQ0 youtu.be/4IJNyXI3gUo youtu.be/RVX5I67BZTw youtu.be/gdMaiPhB5ag youtu.be/f7pp2ATzI3Y

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 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/ecdlic/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

 $\frac{\text{https://m.facebook.com/story.php?story_fbid=3695718373788352\&id=2323710884572948\&sfnsn=wiwspmo\&extid=T87EXg}{\text{IB7jvcaAFk\&d=n\&vh=e}}$

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-r26GIrMr05z8Ex0XZqqp5RuoKgNwvBmu7fXcwLqeEQcksTebZ9NHRe-uIni9.8x3B737W-FYcOr3i

Access Passcode: 9 25SHOWCASE

https://www.indianpharmapost.com/webinar/indian-pharma-industry-developing-a-conducive-ecosystem-1

January 2, 2024, Which chemical reaction makes cooked basmati rice so fragrant? How can plants like tulsi, turmeric, and bitter gourd be used to prevent and even cure disease?

In this highly anticipated Chat Masala with Dr. Mukund Chorghade, distinguished professor of Organic Chemistry, we dig into topics like what differentiates Nobel Laureates from the rest of us, the ethical consequences of making drugs, and a chemist's favorite jokes!

We also talk some crazy stories of how witnessing a border skirmish on the Indo-Chinese border sparked his love of chemistry, his hilarious interactions with Nobel Laureates, and even weighs in on the existence of inorganic lifeforms. https://www.youtube.com/watch?v=oGBRToaOQzs

<u>Mukund S. Chorghade*, "Podcast on the Future of Education – Interview with Dr. Mukund Chorghade" A Dialogue with Mukund Chorghade" in series "Understanding Education and Beyond: Dialogues on Education." YouTube, hosted by Amrutha Langs, 24 Feb. 2024, https://youtu.be/p_dCQZf0hvk.</u>