CURRICULUM VITAE - V.S. Mandrekar

Home Address: 6101 Skyline Drive
                              East Lansing, Michigan 48823

Office Address: Department of Statistics & Probability
                              Michigan State University
                              East Lansing, Michigan 48824
                              Citizenship US

Education: B.A., Elphinstone College, Bombay, 1959
                              Ph. D., Michigan State University, 1964

Professional Experience: Research Assistant, Indiana University, 1960-61.

                              Research Assistant, Michigan State University, 1961-64.

                              Research Associate, University of Minnesota, 1964-65.

                              Assistant Professor, University of Minnesota, 1965-67.

                              Research Member, Mathematics Research Center,
                              University of Wisconsin, 1967-68.

                              Associate Professor, Michigan State University, 1968-72.

                              Professor, Michigan State University, 1972-present.

Administrative Experience: Chairperson, Department of Statistics and Probability,
                              Michigan State University, for the ten year period of
                              1975-85.

Award: Distinguished Faculty Award 1990

Professional Societies: American Mathematical Society, Sigma XI
                              Mentioned in Who's Who 41st Edition

Invited Presentations:

1. Kent University Conference on Probability, 1966

2. Vector and Operator-Valued Measures and Applications, Utah, 1972

3. Stainaire des Probabilities, Strassbourg, France, March 1975.

4. Symposium on Measures on Groups and Vector Spaces, Rome, Italy, June 1975.

5. First conference on Probability Theory on Banach Spaces, Oberwolfach, Germany, July 1975.

6. Special session on vector measures and their applications, AMS meeting.San Antonio, January 1976.

7. Conference on vector space measures and their applications, Trinity College, Dublin, June 1977.

8. Conference on Measure Theory-Stochastic analysis filtering and control, Oberwolfach, Germany, July 1977.

9. Institute of Mathematical Statistics, New Delhi, India, December 1977.

10. Informal Probability Seminar Kent State University, March 1978.

11. Organizer, Special Session on Limit Theorems and geometry of Banach spaces, American Math. Society, April 1978.

12. Probability Theory on Banach spaces II, OBERWOLFACH, 1978.

13. Special session on measures on vector spaces, Iowa City; Iowa American Math. Society, May 1979.

14. Conference on Probability on vector spaces, Blazejewko. Poland, September 1979.

15. Probability on Banach Spaces III, Tuffs University, August 1980.

16. European Meeting of Statisticians, August 1981, Wroclaw, Poland.

17. IFIP-ISI Conference on Random fields: Bangalore, India, January 1982.

18. Probability on Banach spaces IV OBERWOLFACH, Germany, 1982.

19. Measure Theory, OBERWOLFACH, June 1983.

20. Inference in Stochastic Processes, July 1984.   Johns Hopkins University.

21. Probability on Banach space, V, Tufts University, July 1984.

22. Stochastic Processes and Applications, Nagoya, Japan, July 1985.

23. Informal Functional Analysis Seminar, Kent State University, March 1986.

24. Workshop on Signal Processing, IMA, Minnesota, June 27-July 18, 1988.

25. R. C. Bose Symposium on Probability, Statistics, and Design of Experiments, New Delhi, India.

26. Workshop on Stable Processes and related topics, Mathematical Sciences Institute, Cornell University; January 1990.

27. Semester on Probability Theory Banach Center, Warsaw, Poland; May 1990.

28. International symposium on recent progress in Probability and Statistics held at Delhi University, India, Dec. 1990.

29. Probability on Banach space, Bowdown College, Maine, July 1991.

30. Workshop on Wiener-Ito multiple integrals CIMAT, Guanajuato, Mexico, June 1992.

31. Special Session Stochastic Processes, Amer. Mathematics Society, Knoxville, TN March 1993

32. NAT-ASI on Stochastic Analysis in Physics, Madeira, Portugal, July 1993

33. Probability on Banach spaces: Aarhus, Denmark, July 1993

34. Indian Society for Probability & Statistics, Poona, India, December 1993

35. Japan-U.S. Bilateral Seminar, January 1994

36. Lucac Conference on perturbed dynamical systems, March 1994

37. Workshop on "Mathematical Work of Norbert Wiener", December 1995

38. All India Science Congress, Delhi, January 1997

39. IFIP, Detroit, July 1997

40. Golden Jubilee, Univ. of N.C. (Dept of Statistics), 1998

41. Workshop on Probability, ISI, Bangalore, December 1998

42. Probability Workshop, Indian Acad. Sci, Coorg., (Dept. of Statistics), December 1998

43. Golden Anniversary of Poona University, India, 2003.

44. Recent advances in Statistics, (Dec, 2009)

45. Stochastic Analysis, Random Fields and Applications, May 23-27, Ascona, Switzerland.

46. International Conference on Statistics, Kettering Univ. June 24-28, 2014.

47. Conference of IISA at Pune. Presidential invited speaker, December 2015.

Invited/Not Attended:

1. Workshop on Non-Stationary Prediction Theory: Leon, Mexico, July 1982.

2. Stochastic Processes and its applications: Clermont-Ferrand, France.

3. Vilnus Conference, June 1985.

4. Conference on Probability and Information Theory, August 1985, McMasters University.

5. Probability of Banach Space, Aarhus, Denmark, June 1986.

6. Colloque Paul Levy Sur les processus stochastic, Ecole Polytechnique, France, 1987.

7. Fourth International Conference on Probability Theory on Vector Spaces, Lancut, Poland, 1987.

8. Probability on Banach Spaces, OBERWOLFACH, 1988.

Visiting Scholar:

1. Department of Statistics, U.C., Berkeley, Summer, 1965

2. Department of Mathematics, Stanford University, Summer, 1970

3. Ecole Polytechnique Federale, Lausanne, Switzerland, October 1974 - June 1975.

4. Ecole Polytechnique, Centre de Mathematiques Appliques, Paris, November 1977.

5. While in Paris author also visited Laboratory of Probability, Paris VI. November 1977.

6. Indian Statistical Institute, December 15 - December 31, 1977.

7. Visitor, Wroclaw Technical University Poland, 1979.

8. Visiting Professor, Center for Stochastic Processes, University of North Carolina, Chapel Hill, July 1981 - March 1982.

9. Visiting Professor, Department of Math. University of Strasbourg, Strasbourg, France, March 1982 - July 1982.

10. Visiting Professor, Indian Statistical Institute, Calcutta and Bangalore, India, September 1985 - January 1986.

11. Visiting Professor, Center for Stochastic Processes, University of North Carolina, Chapel Hill, February 1-March 7, 1986.

12. Visiting Scholar, Department of Statistics, University of Melbourne, Melbourne, Australia June 15-August 15, 1989.

13. Visiting Professor, Department of Statistics, University of Michigan, Sept. 1, 1989 – Dec. 21, 1989.

14. Visiting Professor, Center for Stochastic Processes, University of North Carolina, Chapel Hill, N.C., Jan. 7, 1991 to July 31, 1991.

15. Visiting Professor, CIMAT, Guanajuato Mexico, Jan. 14, 1992 - Jan. 30, 1992.

16. Faculty of Science, Scoula Normale Superiore, University of Pisa, Italy, 1999.

17. Visiting Professor, Department of Math-University of Mannheim Germany, 1999.

18. Visiting Professor, Inst. Angw. Math. University- Bonn, Germany, 1999.

19. Distinguished Guest, Peking University, Beijing China, 1999.

20. Visiting Scholar, Japan (Tokyo, Nagoya, Hiroshima, and Kyushu Universities, July, 1999

21. Visiting Professor, Institute of Applied Math, University of Bonn, for one month each year 2000-2004.

22. University of Otega, Dunnedin, New Zealand, July 2006 (two weeks)

23. Victoria University, Wellington, New Zealand, August 2006 (one week)

24. Monash University, Australia, August 2006 (one week)

25. Science University of Hanoi and Vietnamese Academy of Science (Hanoi), August 2006 (one week)

26. Center for Excellence, University of Pune Sept 1-Dec 15, 1005 (During this time Distinguished Visitor to ISI – Delhi (ten days) and ISI, Kolkutta (four days)

27. University of Trento, Trento, Italy, Jan 2006

28. University of Koblenz, Koblenz, Germany, Feb 2006

29. University of Bonn, Germany, March-April, 2006

30. Oslo University, Norway, May, 2006

31. Visitor, HMC, Uni-Bonn 2007

32. Visitor, University of Bonn, Germany, 2008

33. Visitor Hausdorff Math Center, 2009

34. University of Wuppertal (Germany), 2010

35. Visitor, IMPA, Rio, Brazil, Oct. 1-21, 2010

36. University of Wuppertal, 2011, and Hausdorff Math Center (1 month summer visitor)

37. University of Wuppertal 2012 (1 month summer visitor) HMS (one week)

38. University of Wuppertal 2013 (1 month summer visitor) HMS (one week)

39. University of Wuppertal 2014 (1 month summer visitor)

40. University of Tunisia (Tunis) (3 week visitor November 14 – December 7, 2014)

41. University of Wuppertal 2016 (1 month summer visitor)

42. City University of Hong Kong, October 26 – November 1, 2016

Grants:

1969 - 1973 National Science Foundation ($74,000)
1978 - 1981 National Science Foundation ($27,600)
1985 - 1991 Office of Naval Research ($500,000)
1990 - 1993 Office of Naval Research ($426,983)
1993 - 1994 Office of Naval Research ($80,001)
1998 - 2000 NSF, ARO, CACF, etc. ($75,000)
1998 - 2000 Supported by Grants in Germany, (SFB 56)
2000 - 2001 Greenfield Coalition at Focus: HOPE, NSF ($100,000)
2001 - 2006 Supported by SFB611, University of Bonn.
2008 - 2011 National Science Foundation ($300,000)
2013 August 19-23, NSF – CBMS Conference in Math Sciences

Ph.D. Students

1971   G. G. Hamedani, Inversion Formulae for the Probability Measures on Banach Spaces.

1972   Kumar, Certain Subclass of Infinitely Divisible Probability Measures on Banach Spaces.

1972   A. Kara, Wide-Sense Martingale Approach to Linear Discrete-Time Optimal Estimation. (Electrical Engineering).

1974   J. Mathieson, Probability Measures on Real Separable Banach Spaces.

1974   J. Boyett, The Realization of Orlicz Sequence Spaces and Harmonic Analysis.

1979   U. Naik-Nimbalkar, Bochner Property in Banach Spaces (Mathematics).

1981   T. Wittig, Space time Langevin Equation and applications to Chemical reaction equations.

1981   R. Geetha, Asymptotic theory of Pattern Recognition for Markov field models.

1982   E. Pasha, Structure of germ-field Markov on finite intervals.

1984   Ravi Chari, Weak convergence of distribution valued martingales and Associated SDE's.

1984   Milan Merkle, Infinitely divisible measures on multi-Hilbertien spaces and a Levy- Ito decomposition.

1986   Brian J. Thelen, Fisher Information and dichotomies in contiguity/asymptotic separation.

1988   Arnavaz Taraporevala, Series representation for processes with infinite energy and
         their prediction.

1990   Philip Richard, Dilation of operator valued measures in Banach spaces and
         harmonizable Banach space valued processes.

1991   Sixiang Zhang, Markov properties of measure-indexed Gaussian random fields.

1991   Kimberly Kinateder, Strong Markov properties for Markov random fields.

1994   Leszek P. Gawarecki, Anticipative stochastic calculus with respect to Gaussian
         processes, stochastic kinematics in Hilbert space and time reversal problem.

1995   Hao Zhang, On periodic autoregression: maximum entropy modeling and
          parameter estimation.

1997 R. Liu, Asymptotic Behaviour of Stochastic Evolution Equations 1996. (Mathematics).

1998 Phillip Gerrish (Jt. With R. Lenski), Dynamics of mutation and selection in asexual
         populations (Zoology) 1998.

2003 David Redett (Mathematics), Invariant vector subspaces of L^P with applications.

2005 Wang Li, Semi linear SDE's in Hilbert-spaces driven by non-Gaussian noise and their
         Asymptotics

2007 Alexander Chobanyan (Computer Engineering), End to end Bandwidth
          (jt. with M. Matka)

2009 Paramita Chakraborty, Particle tracking using stochastic differential equation driven by
          pure jump Le'vy Processes

2009 Juan Du, Asymptotic and computational methods in spatial statistics
         Paramita Chakraborty: Stochastic Differential Equations driven by stable noise in
         Hydrology

2010   Chandni Bhan, Asymptotics properties of spot rate models and their control

Public Service:

1.   School Safety Committee for Mayor, East Lansing, 1975-76.

2.   Secretary, India Cultural Society, Lansing Area, 1983-85.

3.   President, MSU-India Scope, 1984-86.

4.   Member Advisory Board to the Vice-President of Student Affairs for Asian-Pacific Affairs 1988-89

5.   Associate Member, Asian Studies Center International Programs, MSU. 1988-

6.   Member, Founding Board of India Council at MSU 1989-

7.   Member, President's Committee on Faculty Awards, 1991-1994

8.   Chair, Selection board of governing body, Bharatiya Temple of Lansing

9.   Bharatiya Temple Constitutional Committee

Professional Services:

Proposal evaluations
Journal refereeing
Promotion and Tenure recommendations
Review of Articles and books

Synopsis of Professional Activities

- Participated in more than 40 International Conferences as an invited speaker at prestigious places such as Strasbourg, Oberwolfach, Banach Center, Trinity College, Johns Hopkins, Nagoya, IMA, Math. Sci. Inst. (Cornell), CIMAT (Mexico), ISI (Delhi, Calcutta), NATO-ASI, LUCAC Conference, IFIP and All India Science Congress.

- Visiting Scholar and Professor at places like MRC (Madison), Ecole Polytechnique (Laussanne, Paris), Center for Stochastic Proc. (UNC, Chapel Hill), University Louis Pasteur (Strassbourg), University of Melbourne (Australia), ISI (Calcutta, Bangalone), CIMAT (Mexico), Banach Center, (Warsaw) and Tech. Univ. of Wroclaw, Poland.

- Have had grants from NSF, ONR, ARO etc.

- At least 20 Ph.D students

- Proposal evaluations, Journal Refereeing (both Math and Stat.)

- Reviewer

- Letters for promotion and tenure

- Public service for City of East Lansing, India Cultural Society, India Council, Bharatiya Temple etc.

Measure Theory and Ergodic Theory

1. 1967 with Nadkarni
2. 1969 with Nadkarni
3. 1976 with S.D. Chatterji

Prediction Theory

1. 1965
2. 1970 with Salehi
3. 1971 with G. Kallianpur
4. 1972. A Characterization..
5. 1983 with G. Kallianpur. Non-deterministic

Operator Theory

1. 1966 with Kallianpur
2. 1972 joint with Salehi
3. 1988 with Ghatage
4. 1989 with Makagon
5. 1990 with P. Richard

Prob. on Vector Spaces

1. 1970 with J. Kuelbs
2. 1972 with J. Kuelbs. Harmonic Analysis..
3. 1973 with Hamedani
4. 1974 with Kuelbs
5. 1976 On Bochner-Levy
6. 1978 with Hamedani
7. 1979 with E. Gine and Zinn
8. 1980 with Zinn
9. 1981 with Araujo, Gine and Zinn
10. 1983 Central Limit Problem..

Gaussian & Stalile Proc.

1. 1972 with A. Kumar
2. 1978 with S.D. Chatterji
3. 1980 with Linde and Weron
4. 1982 with Linde and Weron
5. 1990 with Makagon
6. 1991 with Thelen
7. 1992 with Surgailis, Rosinski and Cambanis
8. 1994 with Makagon

Stochastic Analysis

1. 1969 with H. Becker
2. 1992 with Khasminski
3. 1993 with L. Gawarecki
4. 1994 Lyapounov type theorem …
5. 1994 with L. Gawarecki
6. 1995 with R. Liu
7. 1995 with R. Liu
8. 1997 Existence of weak solutions of stochastic differential equation in Hilbert space to appear in Proc. of IFIP Conference in Detroit (1997).

Random Fields

1. 1974 with G. Kallianpur
2. 1976 Germ-field Markov…
3. 1983 Markov properties for…
4. 1992 Markov properties… (S. Zhang)
5. 1996 with H. Zhang

Statistics

1. 1989 with Rao
2. 1990 with Thelen
3. 1992 with Patterson
4. 1994 with Meerschaert