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BIO-DATA

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Name	:	**DR. UMA CHARAN MOHANTY**
Nationality	:	Indian
Institution with designation	:	Visiting Professor

School of Earth Ocean and Climate Sciences (SEOCS),
Indian Institute of Technology, Bhubaneswar
Bhubaneswar-751007, Odisha, India
and
President
Odisha Bigyan Academy
Science and Technology Dept., Govt. of Odisha
Bhubaneswar-751007, Odisha, India

Educational Qualification :

Degree	Year	Univ./Institute	Remarks
B.Sc.(Hons.)	1969	Utkal University	Ist Class with Distinction
M.Sc. (Physics)	1971	Utkal University	Ist Class
Ph.D. (Tropical Meteorology)	1978	Odessa Hydro-Meteorological Institute, USSR	

Fields of Specialisation	:	Tropical Meteorology, Numerical Weather Prediction, Monsoon Dynamics, Regional Climate Studies and Meso-scale Modelling.
Experience	:	**About 42 years of teaching and research experience in Atmospheric Sciences with 18 years as Professor at Centre for Atmospheric Sciences, IIT Delhi and about 45 ex-India visits to leading international institutions/organizations like ECMWF, NCAR, NCEP, University of Reading, FSU, NCSU, NRL, Purdue University, UNU etc. for collaborative R&D work and scientific interaction.**

Ph.D./ M. Tech. Supervision	:	**Ph.D. Degree awarded**	**-**	**31**
	:	**Currently registered for Ph.D.**	**-**	**07**
	:	**M.Tech. awarded**	**-**	**10**

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Research Publications

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Reviewed Journals	:	International	:	151
	:	National	:	87

Total	**:**	**237**
Other reviewed Publications	:	58
Published in Proc. Con./Symp.	:	37
Presented in Con./Symp.	:	157
Technical Reports	:	25

For Details Refer to Enclosure-I

Awards and Honours

Award	*Year*
Shanti Swarup Bhatnagar Prize	1993
National Award in Atmospheric Sciences and Technology	2013
Sir Gilbert Walker Gold Medal	2009
Fellow, Indian Academy of Sciences	1993
Fellow, National Academy of Sciences	1997
Fellow, Indian Meteorological Society	1999
Fellow, Indian National Academy of Engineering	2010
Fellow, Indian Geophysical Union	2010
Samanta Chandra Sekhar Award	1999
AR & DB Silver Jubilee Award	1996
12th MAUSAM Award	1989
Prof. M.G. Deshpande Award	1984
Elected as Senior Associateship, ICTP, Trieste, Italy	2002-2009

Sponsored / Consultancy projects

Projects	No. of Projects	Funding Agency	Total Budget
Sponsored (completed)	**45**	**AR&DB (Min. of Defence); CSIR; DAC; DOD [INCOIS]; DRDO; SASE; DST; Indo-US – USIF; ISRO; NAL; NIOT, IIT-Madras; SAC; SASE; Naval Research, USA. Dept. of Agriculture and Cooperation, Ministry of Agriculture**	**20,21,03,224.00**
Sponsored (on going)	**4**	**Dept. of Agriculture and Cooperation, Ministry of Agriculture ; INCOIS, MoES, Govt. of India**	**5,67,00,000.00**
Consultancy	**3**	**CDOT, Bangalore; Progressive enterprises; SASE HQ**	**13,54,750.00**
Total Number of workshops /conference/ symposia organised (Details in Enclosure-III)			**14**

MEMBERSHIP AND POSITION OF RESPONSIBILITY IN PROFESSIONAL SOCIETIES/COMMITTEES/PANELS
(Prof. U.C. Mohanty)

I. Professional / Scientific Societies / Organizations

1. Life Member, Indian Meteorological Society
2. Member, American Meteorological Society
3. Life Member, Indian Society for Mathematical Modelling and Computer Simulation
4. Life Member, Indian Science Congress Association
5. Life Member, Orissa Vigyan Academy
6. Life Member, Society for Scientific Values

II. Editorial Board / Guest Editors

1. Guest editor, Special issue on "Tropical Cyclones of 21st Century" of "Journal of International Society for the Prevention and Mitigation of Natural Hazards (Natural Hazards)", Vol. 63, 3, 1281-1620, 2012.
2. Guest editor, Special issue on "Monsoons-Understanding and Prediction" of "Journal of International Society for the Prevention and Mitigation of Natural Hazards (Natural Hazards)", Vol. 42, 2, 253-454, 2007.
3. Guest editor, Special issue on "Tropical Cyclones: Observations, Modeling and Disaster Management" of "Journal of International Society for the Prevention and Mitigation of Natural Hazards (Natural Hazards)", Vol. 41, 3, 379-562, 2007.
4. Guest Editor, Special Issue on Air Sea Interaction Studies, Indian Journal of Marine Sciences, Vol. 35, 2, 61-173, 2006
5. Guest editor, Special Issue on 'Natural Hazards in South and Southeast Asia' Natural Hazards (Journal of International Society for the Prevention and Mitigation of Natural Hazards), Vol. 31, 2, 317-584, 2004.
6. Guest editor, Proc. of TROPMET-2002 on "Tropical Cyclones, Floods and Droughts", Indian Meteorological Society, 193-201, 2003.
7. Member, Editorial Board for the Quarterly Journal, Proceedings of the National Academy of Sciences, India (Section A-Physical Sciences).
8. Member, Editorial Board of Journal Vayu Mandal (Proceeding of Indian Meteorological Society).
9. Member, Editorial Board of Journal Mausam.

III. Scientific Committees (Ongoing)

1. Chairman, Programme Advisory Committee on Atmospheric Sciences (PAC-AS), Scientific and Engineering Research Board (SERB), Dept. of Science and Technology (DST), Govt. of India, 2012-
2. Chairman, Fund for Improvement of S&T Infrastructure (FIST) in Earth and Atmospheric Sciences, DST, 2009-
3. Chairman, Programme Implementation Committee (PIC) for Severe Thunderstorms Observations and Regional Modeling (STORM) programme, Ministry of Earth Sciences (MoES), Govt. of India, 2008-
4. Member, International Advisory Panel (IAP) for Weather and Climate, MoES, Govt. of India, 2008-2015
5. Member, International Programme Committee (IPC), SAARC, Storm Programme, SAARC Meteorological Research Centre (SMRC), Dhaka, Bangladesh, 2009-
6. Member, Governing Council, Indian Institute of Tropical Meteorology (IITM), Pune 2006-2017.
7. Member, Governing Body, Wadia Institute of Himalayan Geology (WIHG), Dehradun, 2011-
8. Member, Project Appraisal and Monitoring Committee (PAMC) on Atmospheric Sciences including Climate Science, MoES, 2012-2017.
9. Member, FIST Board, DST, Govt. of India,
10. Member, Scientific Review and Monitoring Committee (SRMC), Monsoon Mission Programme, 2012-2017.
11. Member, Research Council of Snow and Avalanche Study Establishment (SASE), Govt. of India, 2012 -
12. Member, Research Advisory committee (RAC), NCMRWF, 2011-.
13. Member, Programme Advisory Committee (PAC) for International Cooperation in the area of Earth, Atmospheric and Environmental Sciences, DST, 2012-2015.

14. Member, Partial Financial Assistant Committee (PFAC), Council of Scientific and Industrial Research (CSIR), 2011-
15. Member, High Power Committee for Review of India Meteorological Department (IMD) Projects during 11th 5-year plan, MoES, 2012-
16. Member, Sectional Committee-X (Interdisciplinary Engineering and Special Fields), Indian National Academy of Engineering (INAE), 2012-
17. Member, Sectoral Monitoring Committee on Physical Science Cluster Group II- Innovative Physics and Advanced Electronics, CSIR,2010-
18. Member, Asia Oceania Geosciences Society (AOGS), 2009-
19. Member, International Coordinating Committee (ICC), UN-CECAR, UNU, Tokyo, Japan, 2009-
20. Member, Academic Advisory Committee (AAC) of School of Environmental and Natural Resources (SENR), Doon University, Dehradun, 2012-
21. Member, Forecast Demonstration Project on "Bay of Bengal Tropical Cyclones", IMD, 2008-

IV. Scientific Committees (Past)
1. Member, International Advisory Panel (IAP) on Atmospheric Science of MoES, 2009-2011.
2. Chairman, Sub-Group for STORM Programme on Data Assimilation and Modeling, DST, Gov. of India, 2006
3. Member, Governing Body of Maitreyi College, University of Delhi, New Delhi,2006
4. Member, Scientific Advisory Committee, National Atmospheric Research Laboratory (NARL), Gadanki 2004-2009
5. Member, Scientific Advisory Committee, National Physical Laboratory (NPL), Delhi, 2007-2009.
6. Member, Committee for Establishment of National Marine Meteorological Forecasting Centre (NMMFC), IMD, New Delhi, 2004
7. Member, Climate Mission Committee of ISRO, 2003
8. Member, Expert Group of Scientific Advisory committee of National Centre for Medium Range Weather Forecasting ((NCMRWF) 2002
9. Member, Expert Group to prepare DPR to set up Experimental / Observational Facilities for R&D of Atmospheric Sciences in Aryabhata Research Institute of Observational Science (ARIES), Nainital
10. Member, ARMEX-II Science Team of DST, 2003
11. Member, CSIR, Earth and Environmental Sciences Research Committee (2001-2004).
12. Member, Project Committee for UGC-SVU Centre for MST Radar Applications, Sri Venkateswara University, Tirupathi, Andhra Pradesh.
13. Member, Special Committee of the School of Environmental Sciences, Jawaharlal Nehru University (JNU)
14. Member, Expert Group on Miscellaneous of the New Millennium Indian Technology Leadership Initiative (NMITLI), CSIR
15. Member, Technical Advisory and Review Committee (TARC) of Central Water Commission for preparation of Generalised Probable Maximum Precipitation (PMP) Atlas for different River Basins, CWC, New Delhi.
16. Member, Working Group-I on Climate and Modeling of Geosphere-Biosphere Programme of ISRO (GBP), Dept. of Space.
17. Chairman, Working Group of data processing and analysis of ARMEX DST under Indian Climate Research Programme (ICRP), DST, Govt. of India.
18. Chairman, Working Group on Climate Modeling under Indian Climate Programme of DST, Govt. of India.
19. Member, Working group on Ocean-Atmospheric Field Experiment under Indian Climate Research Programme (ICRP),DST, Govt. of India.
20. Member, Working Group on Data Requirement, Indian Climate Research Programme, DST, Govt. of India.
21. Member, Working Group on Retrieval of Oceanic Parameters from Microwave Satellite Data, Department of Space.
22. Member, Advisory Committee for UGC Special Assistance Program, Department of Atmospheric Sciences, Cochin University of Science & Technology (2002-2007).

23. Member, Board of Studies in Geophysics, Banaras Hindu University (2002-2004).
24. Vice-President, Indian Meteorological Society (2002-2004), India.
25. Member, Executive Committee of Mathematics, Berhampur University, Odisha, India.
26. Member, Scientific Committee of Department of Meteorology and Oceanography, Andhra University, Andhra Pradesh, India.
27. Member, Programme Advisory and Monitoring Committee Committee (PAMC) on Weather and Climate Research (WCRP) , DST, Govt. of India,2006-
28. Member, Academic Programme Committee of K. Banerjee Centre for Atmospheric and Ocean Studies (KBCAOS), University of Allahabad, 2002-
29. Coordinator, Climate Modeling including Mesoscale and Paleoclimatic of India Program on Climate and Weather of Sun-Earth System (CAWSES), 2003 -
30. Member, Core Group on Role of Scientific and Technical Institutions in Disaster Management, National Disaster Management Authority (NDMA), Govt. of India, 2006-
31. Member, Project Execution Committee (PEC), Prediction of Regional Weather with Observational Meso-Network and Atmospheric Modeling (PRWONAM), ISRO, Govt. of India, 2006-
32. Member, Core Group on Floods, NDMA, Govt. of India, 2006-
33. Member and Convener ,Core Group on Tropical Cyclone, NDMA, Gov. of India,2005-
34. Member, Working Group on Disaster Management, Planning Commission, Govt. of India, 2006-

Professional Experience:

Post held	Exact dates to be given		Nature of duties
	From	To	
President, Odisha Bigyan Academy, Bhubaneswar	July 2013	To date	Scientific administration and popularization of science
Visiting Professor, IIT BBS	July 2013	To date	Teaching and Research
Professor - Higher Academic Grade (HAG)	August 2009	June 2013	Teaching and Research
Professor	May 1995	August 2009	Teaching and Research
Head, Centre for Atmospheric Sciences, IIT Delhi	Sept. 1998	Aug. 2001	Teaching and Research with administrative work
Jt. Advisor/Jt. Director & Head, Research Division, Dept. of Science & Technology (DST), Govt. of India	Jan. 1993	May 1995	On deputation to lead research work of NCMRWF
Principal Scientific Officer (PSO)	1987	1992	Teaching and Research
Senior Scientific Officer (SSO-I)	1985	1987	Teaching and Research
Lecturer	1982	1985	Teaching and Research
Senior Scientific Officer (SSO-I)	1979	1982	Research

PAPERS PUBLISHED IN REVIEWED JOURNALS
(Prof. U.C. Mohanty)

1. Kivganov A.F. and Mohanty U.C., (1977): The computation of stream function with various boundary conditions. Meteorology, Climatology and Hydrology, 14, 3-9.

2. Kivganov A.F. and Mohanty U.C., (1978): On the physical statistical method for forecasting the movement of tropical storms in the Bay of Bengal Meteorology and Hydrology, 5, 19-25.

3. Kivganov A.F. and Mohanty U.C., (1978): On dynamical initialization of geopotential and wind fields in the lower latitudes. Meteorology and Hydrology, 8, 40-48.

4. Kivganov A.F. and Mohanty U.C., (1979): On the application of non-linear regression analysis to forecast the movement of tropical cyclones in the Bay of Bengal. Trudi Hydrometeorological Centre, USSR, 125, 47-58.

5. Kivganov A.F. and Mohanty U.C., (1978): Hydro-dynamical method of forecasting the trajectories of tropical cyclones in the Indian Seas. Meteorology, Climatology and Hydrology, 15, 9-15.

6. Mohanty U.C. and Kivganov A.F. (1978): Statistical method of forecasting tropical cyclones. Meteorology, Climatology and Hydrology, 15, 15-22.

7. Kivganov A.F. and Mohanty U.C. (1979): Some results of the dynamical initialization of geopotential and wind fields in the lower latitudes. Meteorology, Climatology and Hydrology, 16, 94-101.

8. Kivganov A.F. and Mohanty U.C. (1980): On the problem of obtaining initial data in the lower latitudes for hydrodynamical forecast with primitive equations. Meteorology, Climatology and Hydrology, 17, 61-66.

9. Kivganov A.F., Mohanty U.C., and Thui C.K. (1981): Evaluation of statistical methods of forecasting trajectories of tropical cyclones. Meteorology, Climatology and Hydrology 18, 91-96.

10. Johns B., Dube S.K., Mohanty U.C. and Sinha P.C. (1981): Numerical simulation of surge generated by the 1977 Andhra Cyclone. Quart. J. Roy. Met. Soc. 107, 919-934.

11. Mohanty U.C. and Dube S.K. (1981): Statistical structure of the meteorological parameters over the Bay of Bengal during Monsoon-77 Experiments. Mausam 32, 315-320.

12. Mohanty U.C. (1981): Estimates of effective long-wave radiation from the Bay of Bengal. Mausam, 32, 1, 11-16.

13. Mohanty U.C. (1981): Spectral studies of total cloud cover and effective long-wave radiation over the Bay of Bengal during MONEX-79. Mausam 32,133-138.

14. Johns B., Dube S.K., Sinha P.C., Mohanty U.C. and Rao A.D. (1982): The simulation of a continuously deforming lateral boundary in problems involving the shallow water equations. Computers and Fluids. 10, 105-116.

15. Mohanty U.C. (1982): Some characteristics of dynamical initialization of mass and velocity fields in the lower latitudes. Mausam, 33, 29-34.

16. Mohanty U.C., Dube S.K. and Sinha P.C. (1982): On the role of large scale energetics in the onset and maintenance of summer monsoon I; Heat Budget. Mausam 33,139-152.

17. Mohanty U.C., Dube S.K. and Sinha P.C. (1982): On the role of large scale energetics in the onset and maintenance of summer monsoon II: Moisture Budget. Mausam 33, 285-294.

18. Mohanty U.C., Dube S.K. and Singh M.P. (1983): A study of heat and moisture budget over the Arabian Sea and their role in the onset and maintenance of summer monsoon. J. Met. Soc. Japan 61, 208-221.

19. Johns B., Sinha P.C., Dube S.K., Mohanty U.C. and Rao A.D. (1983): On the effect of bathymetry in numerical storm surge simulation experiments. Computers and Fluids, 11, 161-174.

20. Johns B., Sinha P.C., Dube S.K., Mohanty U.C. and Rao A.D. (1983): Simulation of storm surges using a three-dimensional numerical model: An application to the 1977 Andhra Cyclone. Quart. J. Roy. Met. Soc. 109,211-224.

21. Mohanty U.C. (1982): Parameterization of the planetary boundary layer for use in the primitive equations forecasting models. Mausam, 34, 131-138.

22. Das P.K., Dube S.K, Mohanty U.C., Sinha P.C. and Rao A.D. (1983): Numerical simulation of the surge generated by the June 1982 Orissa Cyclone, Mausam, 34, 359-366.

23. Mohanty U.C. and Madan S.C. (1983): A numerical method for computing stream function and velocity potential. Mausam 34, 375-382.

24. Pearce R.P. and Mohanty U.C. (1984): Onsets of the Asian Summer Monsoon 1979-82. J. Atmos. Sc. 41, 1620 - 1639.

25. Johns B., Sinha P.C., Dube S.K., Mohanty U.C. and Rao A.D. (1985): On the effect of bathymetry in numerical storm surge simulation experiments, Mathematical Modelling, 6, 1, 79.

26. Mohanty U.C. and Madan S.C. (1985): Certain aspects on the realization of primitive equations forecasting model in the low latitudes. Mausam 36, 127-134.

27. Ghosh S., Singh M.P. and Mohanty U.C. (1986): Use of Lennard Jones calculation for estimating the molecular diffusivity of pollutant gases in the PBL and its bearing on scavenging models. Boundary Layer Meteorology 34, 311-316.

28. Mohanty U.C. and Das S. (1986): On the structure of atmosphere during suppressed and disturbed period of convection over the Bay of Bengal, Proc. Ind. Nat. Sc. Acad. 52, 625 - 640.

29. Mohanty U.C., Kasahara A. and Errico R. (1986): The impact of diabatic heating on the initialization of divergent circulation in a global forecast model. J. Met. Soc. Japan, 64,805-817.

30. Mohanty U.C., Dash S.K. and Ramesh K.J. (1987): Studies on the mean circulation characteristics in the tropics using FGGE December 1978 analysis. Proc. Ind. Nat. Sc. Acad. 53,232-240.

31. Das S., Mohanty U.C. and Sharma O.P. (1987): Semi-prognostic test of Arakawa-Schubert cumulus parameterization during different phases of the summer monsoon. Cont. Atmos. Phys. 60,225-275.

32. Kasahara A., Mizzi A.P., and Mohanty U.C., (1987): Comparison of global diabatic heating rates from FGGE Level-IIIb analyses with satellite radiation imagery data. Mon. Wea. Rev. 115, 2904-2935.

33. Slingo J.M., Mohanty U.C., Tiedtke M and Pearce R.P., (1988): Prediction of the 1979 summer monsoon onset with modified parameterization schemes. Mon. Wea. Rev. 116, 328-346.

34. Das S., Mohanty U.C. and Sharma O.P. (1988): Study of Kuo-type cumulus parameterization during different epochs of the Asian summer monsoon. Mon. Wea. Rev. 116, 715-729.

35. Mohanty U.C., Paliwal R.K., Tyagi A. and Sarin V.B., (1988): A suitable scheme of dynamic initialization for a multi-level primitive equations model in tropics. Mausam 39, 139-148.

36. Mohanty U.C., Paliwal R.K., Tyagi A. and John A., (1989): Evaluation of a multi-level primitive equations limited area model for short range prediction over Indian region. Mausam 40, 29-36.

37. Mohanty U.C., Ramesh K.J. and Dash S.K., (1989): Energy transformations in the tropical circulation during the FGGE Winter, J. Met. Soc. Japan, 691-704.

38. Mohanty U.C. and Mohan Kumar N., (1990): A study on energy fluxes in the surface boundary layer of the Indian Seas during different epoches of the Asian summer monsoon, Atmospheric Environment, 24, 823-828.

39. Mohanty U.C., Paliwal R.K., Tyagi A.and John A., (1990): Evaluation of a limited area model for

short range prediction over Indian region. Sensitivity Studies, Mausam, 41, 251-256.

40. Mohanty U.C., Paliwal R.K., Tyagi A. and Madan S.C., (1990): Application of split-explicit time integration scheme to a multi-level limited area model and forecast performance over Indian region, Mausam, 41, 531-540.

41. Mohanty U.C., and Mohan Kumar N., (1991): A method of estimating longwave radiation over the Indian seas based on surface synoptic observation, Mausam, 42, 4, 375-380.

42. Mohanty U.C., and Ramesh K.J., (1993): Characteristics of certain surface meteorological parameters in relation to the interannual variability of Indian summer monsoon, Proc. of Ind. Acad. of Sci. (Earth & Plan. Sci), 102, 1, 73-87.

43. Mohanty U.C. and Ramesh K.J. (1994): A study on the dynamics and energetics of the Indian summer monsoon, Proc. Ind. Natn. Sci. Acad., 60A, 1, 23-55.

44. Gamo M., Goyal P., Kumari Manju, Mohanty U.C., and Singh M.P. (1994): Mixed layer characteristics as related to the monsoon climate of New Delhi, India, Boundary-Layer Meteorology, 67, 213-227.

45. Alapaty K., Raman S., Madala R.V. and Mohanty U.C. (1994): Monsoon rainfall simulations with Kuo and Betts-Miller Schemes, Meteoro. Atmos. Phys., 53, 33-49.

46. Parashuram, V. T. and Mohanty, U.C. (1994): Simulation of the thermodynamic structure of atmospheric boundary layer over Calcutta with a one-dimensional TKE closure PBL model, Mausam, 45, 2, 107-114.

47. Mohanty U.C., Ramesh K.J., Mohan Kumar N. and Potty K.V.J. (1994): Variability of the Indian summer monsoon in relation to oceanic heat budget over the Indian seas, Dynamics of Atmospheres and Oceans, 21, 1-22.

48. Tyagi A., Mohanty U.C., and Ramesh K.J. (1994): Planetary boundary layer structure in the monsoon trough region. Mausam, 45, 3, 213-222.

49. Mohanty U.C. (1994): Tropical cyclones in the Bay of Bengal and deterministic methods for prediction of their trajectories, SADHANA, 19, 4, 567-582.

50. Mohanty U.C., Heckley W.A. and Ramesh K.J. (1995): A study on the systematic errors of the tropical forecasts: Influence of physical processes, Meteorol. Atomos. Phys., 55, 151-166.

51. Alapaty K., Raman S., Mohanty U.C. and Madala R.V. (1995): Sensitivity of monsoon circulations to changes in sea surface temperatures, Atmosphere Environment, 29, 116, 2139-2155.

52. Mohanty U.C., and Ramesh K.J. (1995): Systematic errors in the medium range prediction of the Asian summer monsoon circulation, - Proc. Indian Acad. Sci. (Earth Planet. Sci.), 104, 1, 49-77.

53. Mohanty U.C., Parihar P.S., Venugopal T. and Parashuram (1995): Estimation of drag coefficient over the western desert sector of the Indian summer monsoon trough, Proc. Indian Acad. Sci. (Earth Planet. Sci.), 104, 2, 273-287.

54. Abraham K.R., Mohanty U.C. and Dash S.K., (1995): Simulation of cyclones using synthetic data, Proc. Indian Acad. Sci. (Earth Planet. Sci.), 104, 4, 635-666.

55. Potty K.V.J., Mohanty U.C., Nandi B. and Ramesh K.J., (1996): Planetary boundary layer over monsoon trough region in a high resolution primitive equation model. Proc. Indian Acad. Sci. (Earth Planet. Sci.), 105, 1, 81-100.

56. Ramesh K.J., Mohanty U.C. and Rao P.L.S. (1996): A study on the distinct features of the Asian summer monsoon during the years of extreme monsoon activity over India, Meteorol. Atmos. Phys., 59, 173-183.

57. Mohanty U.C., Ramesh K.J. and Pant M.C., (1996): Certain seasonal characteristic features of oceanic heat budget components over the Indian seas in relation to the summer monsoon activity over India, International. Journal of Climatology, 16, 3, 243-264.

58. Abraham K.R., Dash S.K. and Mohanty U.C., (1996): Simulation of monsoon circulation and cyclones with different types of orography; Mausam, 47, 235-248.

59. Mohanty U.C., Ravi N., Madan O.P., and Paliwal R.K. (1997): Forecasting minimum temperature during winter and maximum temperature during summer Delhi, Meteorol. Appl. 4, 37-48.

60. Leach M., Raman S., Mohanty U.C. and Madala R.V. (1997): The role of radiative transfer in maintaining the Indian summer monsoon circulation, Pure and Applied Geophysics, 149, 601-622.

61. Potty K.V.J., Mohanty U.C. and Raman S. (1997): Effects of three different boundary layer parameterisations in a regional atmospheric model for the simulation of summer monsoon circulation. Boundary - Layer Meteorology, 84, 363-381.

62. Gupta A. and Mohanty U.C. (1997): Secondary convective rings in an intense asymmetric cyclone in the Bay of Bengal, Mausam, 48, 2, 273-282.

63. Mohanty U.C. and Gupta A. (1997): Deterministic methods for prediction of tropical cyclone tracks, Mausam, 48, 2, 257-272.

64. Singh K.K., Kalra Naveen, Mohanty U.C. (1997): Performance evaluation of medium-range weather forecast using crop growth simulator, Jour. of Environmental Systems, 25, 4, 397-406.

65. Krishnamurti T.N., Sinha M.C., Jha B., and Mohanty U.C. (1998): A study of South Asian monsoon energetics, Journal of Atmospheric Sciences, U.S.A., 55, 2530-2548.

66. Mohanty U.C. and Mohan Kumar N. (1998): A method for estimation of net surface shortwave radiation over the Bay of Bengal, Ind. Jour. Marine. Sciences, 27, 60-65.

67. Gupta A.K., Ramesh K.J. and Mohanty U.C. (1998): Medium range prediction of tropical cyclogenesis of intense vortices over Indian seas by a global spectral model, Mausam, 49, 3, 331-344.

68. Nandi B., Mohanty U.C. and Paliwal R.K. (1997): Certain impact of lateral boundary schemes used in regional NWP models, Vatavaran, 20, 12-25.

69. Rao P.L.S., Mohanty U.C. and Ramesh K.J. (1998): Mean dynamical characteristics of the Asian summer monsoon with a global analysis – Forecast system, Meteorol. Atmos. Phys., 68, 57-77.

70. Raman S., Mohanty U.C., Reddy N.C., Alapaty K. and Madala R.V. (1998): Numerical simulation of the sensitivity of summer monsoon circulation and rainfall over India to land surface processes, Pure and Applied Geophysics, 152, 4, 781-809

71. Ramesh K.J., Rao P.L.S. and Mohanty U.C. (1998): A study of the performance of the NCMRWF analysis and forecasting system during Asian summer monsoon – thermodynamic aspects, Pure and Applied Geophysics, 154, 1, 141-162.

72. Ravi N., Mohanty U.C. and Paliwal R.K., (1999): Forecasting of thunderstorms in the pre-monsoon season at Delhi, Meteorological Applications, U.K., 6, 29-38.

73. Wu Y., Raman S. and Mohanty U.C., (1999): Numerical investigation of the Somali Jet Interaction with the Western Ghat Mountains, Pure and Applied Geophysics, 154, 365-396.

74. Basu S., Raman S., Mohanty, U.C. and Rajagopal E.N. (1999): Influence of the planetary Boundary Layer Physics on Medium-Range prediction of Monsoon over India. Pure and Applied Geophysics, 155, 1, 33-56.

75. Satyanarayana A.N.V., Mohanty U.C. and Sam N.V. (1999): A study on the characteristics of the marine boundary layer over Indian Ocean with ORV Sagar Kanya Cruise # 120 during 1997: Current Science, 76, 7, 898-902.

76. Dimri A.P., and Mohanty U.C. (1999): Snowfall statistics of some SASE field stations in J&K, Defence Science Journal, 49, 5, 437-445.

77. Singh K.K., Kalra N, Mohanty U.C., Rathore, L.S. (1999): Performance evaluation of medium-range weather forecast using crop growth simulator, Journal of Environmental Systems 25, 4, 397-408.

78. Potty K.V.J., Mohanty U.C. and Raman S. (2000): Numerical simulation of monsoon depressions over India with a high-resolution nested regional model, vol.7, No.1, Met. Applications, 45-60.

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TRAINING/WORKSHOPS /CONFERENCE/ SYMPOSIA ORGANISED by Prof. U.C. Mohanty

1. Training programme on "**Use of statistical methods in weather analysis and prediction**" from **2nd -21st December, 1996** sponsored by Department of Science and Technology, Govt. of India.

2. **First SERC School** on "**Numerical Weather Prediction – Dynamics and Numerical Methods**" from **29th November to 28th December, 1999** sponsored by Department of Science and Technology, Govt. of India.**.**

3. **Second SERC School** on **"Numerical Weather Prediction – Data Processing, Assimilation and Initialisation"** from **12th March, 2001 to 7th April, 2001** sponsored by Department of Science and Technology, Govt. of India.

4. **Third SERC School** on **"Numerical Weather Prediction – Parameterisation of Physical Processes"** during **8th April to 4th May, 2002** sponsored by Department of Science and Technology, Govt. of India.

5. **Fourth SERC School** on "**Numerical Weather Prediction – Process Modeling**" from **14th April, 2003 to 10th May, 2003** sponsored by Department of Science and Technology, Govt. of India.

6. **Indo-US Bilateral Interactions** on the "WRF Modeling System for weather and climate studies in tropics: Advanced Training Program" and Tutorial on "WRF model system", and Joint WRF Development *Sponsored by DST, Govt. of India and Indo-US S & T Forum* **from 18th February– 1st March, 2006**.

7. **Advanced Training Program and Tutorial** on "Hurricane-WRF modeling system of Environmental Modeling Center NCEP, USA", from **1st January – 12th January, 2007**, *Jointly sponsored by , NOAA* NOAA Climate Forecast System, Funded under USAID, New Delhi, *DST, Govt. of India*

8. **International Training cum workshop on** "Climate risk management in agriculture" from **27th April, 2009 to 30 April, 2009** sponsored by DAC, Min. of Agriculture, Govt. of India .

9. **Annual review meeting and Training workshop programme** on "Use of Crop simulation modeling for climate risk Management" from **26th October 2009 3rd November 2009** sponsored by DAC, Min. of Agriculture, Govt. of India.

10. **Training programme** on "WRF-ARW modeling system" from **24th November to 4th December, 2010** sponsored by Weather Modification Technical Services Unit, Jakarta.

11. **Training** on Use of Crop Simulation Models and DSS in ERFS project During **26 Oct – 03 Nov 2009** at Centre for Atmospheric Science, IIT Delhi

12. **Workshop** on Climate Risk management in Agriculture (O.U.A.&T. Bhubaneswar) during **April 12-17, 2010** at OUA&T, Bhunabeswar

13. **SERC School** on "Dynamics and Forecasting of the Indian Summer Monsoon 27th June to 20th July, 2011 sponsored by Department of Science and Technology, Govt. of India.

14. **Advanced Indo-US Training Workshop and Colloquium** on "Modeling and Data Assimilation for Tropical Cyclone Predictions" during 9-14 July, 2012, at Bhubaneswar, Odisha.