

**DIMRI Ashok Priyadarshan**

Aug 2017

Professor, School of Environmental Sciences, Jawaharlal Nehru University, New Delhi – 110067, India

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Indian Male Citizen, Married with one daughter and one son

DoB: 14 Nov 1970

**Education**

- Ph.D., 2004, Atmospheric Sciences, Indian Institute of Technology, New Delhi, India (*Thesis: **Winter Circulation Characteristics and Location Specific Forecast over Western Himalayas***) (*Supervisor: Prof. U. C. Mohanty*)
- M.Phil., 1994, Environmental Sciences, Jawaharlal Nehru University, New Delhi, India (*Dissertation: **Radiative Effects of Deserts Aerosols***) (*Supervisor: Prof. V. K. Jain*)
- M.Sc.(Tech), 1992, Geophysics (Meteorology), Banaras Hindu University, Varanasi, India (*Dissertation: **Some Studies on the Interaction between Aerosols and Clouds***) (*Supervisor: Prof. B. R. D. Gupta*)
- B.Sc.(Hons), 1989, Physics (HONS.), Banaras Hindu University, Varanasi, India

**Professional History**

- Professor, Dec 2011 – till date, School of Environmental Sciences, Jawaharlal Nehru University, New Delhi, India – 110067
- Associate Professor, Jan 2008 – Dec 2011, School of Environmental Sciences, Jawaharlal Nehru University, New Delhi, India – 110067
- Scientist, Apr 1994 - Jan 2008, Defense Research & Development Organization, Snow & Avalanche Study Estt., Him Parisar, Sector 37A, Chandigarh, India – 160036
- Visiting Faculty, 2009 – present, Doon University, Dehradun, Uttarakhand, India ([www.doonuniversity.ac.in](http://www.doonuniversity.ac.in))
- **Researcher**, Sep 2010 – Aug 2012, Hydrospheric Atmospheric Research Center (HyARC), Nagoya University, Nagoya, Japan
- **Associate Fellow**, Climate Research Unit, University of East Anglia, Norwich, United Kingdom
- **Associate Member** (2014 - ), India International Center, New Delhi, India
- **Associate (Junior)**, 2003 – 09, International Center for Theoretical Physics (ICTP), Trieste, Italy
- **Guest Scientist**, May - Jul 2013, Meteorological Institute, University of Bonn, Bonn, Germany
- **Visiting Academic**, Sep – Dec 2014, Climate Research Unit (CRU), University of East Anglia, Norwich, UK
- **Member, JNU Delegation** to visit University of Massachusetts, Amherst to deliberate of strategic partnership between the two universities
- **Review Editor, IPCC 2017**

**Research Interest**

- Regional climate dynamics, change and variability

- Climate modeling and numerical modeling
- Statistical and dynamical downscaling of numerical model outputs
- Science of climate and climate change
- Extreme events and their physical understanding
- Indian winter monsoon and Western Disturbances

## **Projects Undertaken**

### ***National***

#### ***Ongoing***

- Developing Climate Change Adaptation strategies for Sal and Teak dominated Landscape of Central India. *India's Third National Communication (TNC) to UNFCCC. Ministry for Environments Forests and Climate Change (MOEFCC), Govt of India, Co-PI with Indian Institute of Forest Management, Bhopal, India, 2016 – 2018, INR 20.05 lac.*
- Dynamics of Himalayan Ecosystem and its impact under changing climate scenario in western Himalaya, *Ministry for Environments Forests and Climate Change (MOEFCC), Govt of India, 2016 – 2019, INR 2.1 Cr.*
- Integrated hydrological studies for Upper Ganga Basin up to Rishikesh, *National mission for sustaining the Himalayan Ecosystem (NMSHE), Department of Science and Technology, Ministry of Science, Govt of India, Co-PI with National Institute of Hydrology, Roorkee, Uttarakhand, 2016 -2021, INR 13.04 Cr.*
- Measurements and modeling of evapotranspiration and other hydrological processes in the lesser Himalayas, *Ministry of Earth Sciences, Govt. of India, Co-PI with National Institute of Hydrology, Roorkee, Uttarakhand, 2015 – 2017, INR 94.19 lac.*
- Mass and Energy balance of Phuche and Khardung glaciers, Ladhak range, *Department of Science and Technology, Ministry of Science, Govt of India, Co-PI with National Institute of Hydrology, Roorkee, Uttarakhand, 2015 -2018, INR 23.92 lac.*
- Study of extreme precipitating events (cloudburst) leading to natural hazards and disasters, *Council of Scientific and Industrial Research, Human Resource Development Group, Extramural Research Division II, 2015 – 2018, INR 21.95 lac.*
- On the characterization of winter fog, *University with Potential for Excellence -II, Jawaharlal Nehru University, New Delhi, India, 2015 – 2018, INR 11.00 lac.*
- Development of Dynamical Mass Balance Model for Gangotri Glacier, *Department of Science and Technology, Ministry of Science, Govt of India, 2014 - 2017, INR 23.92 lac.*

#### ***Completed***

- Dendroclimatological Studies over High Altitude Sites of Western Himalaya to Understand the Long-Term Climate Variability in the Context of Recent Climate Change, 2009 – 2012, ISRO-GBP project, INR 14.9 lac.
- Snow-Ice And Atmospheric Studies In Antarctica And Its Long Term Impact On Global And Himalayan Climatic System And Development Of GIS Based Information Using Automated Scientific Observations And Satellite Remote Sensing, Aug 2007, Defense Research and Development Organization, INR 8.8 Crores.
- Role of Regional Processes and Climate Variability In Extended Range-Seasonal Prediction Over The Western Himalayas, Jul 2007, in collaboration with Centre for Atmospheric Sciences, Indian Institute of Technology, New Delhi, India, INR 49.5 lac.

- Estimation of Quantitative Precipitation and Temperature over different climatic zones of western Himalayas, Apr 2005, in collaboration with Institute of Armament Technology (Deemed University), Pune, India, INR 9.9 lac.
- To Study Characteristics of Weather Features and Associated Snowfall and Deterministic Prediction of Quantitative Precipitation, Jul 2001 - Jul 2003, in collaboration with Centre for Atmospheric Sciences, Indian Institute of Technology, New Delhi, India, INR 9.9 lac.
- To Study the Role of Himalayas in the Deterministic Prediction of Large Scale Weather Pattern over Northwest India with High Resolution Limited Area Model, Dec, 1994 - Dec, 1997, in collaboration with Centre for Atmospheric Sciences, Indian Institute of Technology, New Delhi, India, INR 7.19 lac.

### ***International Completed***

- Preparing for future mass movements triggered by earthquakes and monsoon events in Indian Himalayan Region (IHR) – learning from the 2015 Nepal event, *Funded by FLASH program of Switzerland*, Co-PI with University of Fribourg, Switzerland, 2016 -2017, CNF 37150.
- Adaptation to changing water resources availability in northern India with Himalayan glacier retreat and changing monsoon pattern, 2009 – 2012, EU-FP7 Project: <http://www.eu-highnoon.org/>.
- Young Scientists Networking Project, 2007, The UK India Education and Research Initiative (UKIERI).

### **Honors/Distinctions**

- **Member**, Global Technology Watch Group (GTWG) for Water sector under GTWG project supported by Dept. of Science & Technology, Govt. of India
- **Associate Fellow**, Climate Research Unit (CRU), University of East Anglia, Norwich, United Kingdom
- **Commonwealth Academic Fellowship**, 2014 - 2015 (funded by Commonwealth Scholarship Commission in The United Kingdom)
- **Elected Council Member**, Indian Geophysical Union (IGU), 2014 - 2016
- **Elected Council Member**, Indian Meteorological Society (IMS), 2014 – 2016
- **Guest Scientist**, DAAD, May – Jul 2013
- **Fellow**, Commonwealth Commission United Kingdom
- **Fellow**, Japan Society for the Promotion of Science (JSPS) (2010 – 2012)
- **Fellow**, Indian Geophysical Union (IGU)
- **Associate** (Junior:2003-09), International Center for Theoretical Physics (ICTP), Trieste, Italy
- **Technology Award 2006**, Defense Research and Development Organization, Govt. of India
- **Siachen medal**, Ministry of Defense, Govt. of India
- Member, Working Group –III Modeling, Assimilation and Data Management for conducting Forecast Demonstration Project on “**Nowcast system for Commonwealth Games 2010 New Delhi (CWG2010)**”, Govt of India
- Member, Implementation of “**Fog Forecasting System**” during winter at Indian Airports, **Govt. of India**
- Recommended *Young Scientist Award 2003*, Defense Research and Development Organization, Govt. of India

- *Best paper presentation award* at “International Symposium on Snow Monitoring and Avalanches (ISSMA)” organized by Snow and Avalanche Study Estt., Manali from 12-16 Apr 2004
- *Best paper presentation award* in Scientific and Engineering Research Council (SERC), Department of Science and Technology (DST), Govt. of India, school on “Cloud Physics and Atmospheric Electricity – Fundamentals” organized at Indian Institute of Tropical Meteorology, Pune, India, from 13 Jun – 14 Jul 2000
- University Grant Commission – Council of Scientific and Industrial Research (UGC-CSIR), *National Eligibility Test (NET)* for Junior Research Fellow (JRF) cum lectureship
- Jawaharlal Nehru University, New Delhi – University Grant Commission National test for *Junior Research Fellow/Senior Research Fellow (JRF/SRF)*
- *Student representative, Councilor*, School of Environmental Sciences, Jawaharlal Nehru University, New Delhi for the year 1993-94
- University Grant Commission, Govt. of India, *student fellowship* in M.Sc.(Tech) III year

### Memberships

- Member, Academic Council, Raman Research Institute (RRI), Bangalore, India
- Member, Academic Council, National Defense Academy (NDA), Pune, India
- Member, Academic Council, Lal Bahadur Sastri National Administrative Academy (LBSNAA), Mussoorie, India
- Member, **International Union of Geodesy and Geophysics - Indian Geophysical Union (IUGG-IGU) National Committee**, 2016 – 19 (INSA nominated)
- Member (Life), European Geosciences Union (EGU)
- Member (Life), American Geophysical Union (AGU)
- Member (Life), Indian Meteorological Society (IMS)
- Member, Asia Oceania Geosciences Society (AOGS) (2009 – 2014)
- Member, Indian Science Congress Association
- Member, C.S.I.R.’s Screening Committee of Earth Sciences for selection of SRF/RA (2009 - )
- Member, C.S.I.R.’s committee on National Eligibility Test (NET) formulation and evaluation (2008 - )
- Member, Defense Research and Development Organization "Project Monitoring and Review Committee (PMRC) : PARWAT CENTRAL"
- Member, Defense Research and Development Organization “Mountain Meteorology Project : PARWAT” – a joint collaborative project between India Meteorological Department (IMD), National Center for Medium Range Weather Forecast (NCMRWF), Indian Army and Defense Research and Development Organization
- Expert, 3<sup>rd</sup> Uttarakhand State Science and Technology Congress 2008
- Resource Person, International Human Dimension Programme (IHDP) of Global Environment Change on “Sustainable Adaptation on Climate Change”, at School of Environmental Sciences, Jawaharlal Nehru University, New Delhi, India, 11 – 18 Oct 2008

### Visits in National/International Institutes

- Hainan University, Haikou, China, Jan 2017.
- Swedish Meteorological and Hydrological Institute (SMHI), Stockholm, Sweden, May 2016.
- University of Massachusetts, Amherst, US, Jun 2015.
- Climate Research Unit (CRU), University of East Anglia, Norwich, UK, Sep – Dec 2014.
- Institute of Mathematical Sciences, Chennai, India, Mar 2014, Feb 2015.
- International Centre for Integrated Mountain Development (ICIMOD), Kathmandu, Nepal, Sep 2013.
- Meteorological Institute, University of Bonn, Bonn, Germany, May- Jul 2013.
- Sun Yat-Sen University, Guangzhou, China, Apr 2012.
- University of California, Berkeley, US, Dec 2011.
- Wageningen University, Wageningen, The Netherlands, Nov 2011.
- International Centre for Integrated Mountain Development (ICIMOD), Kathmandu, Nepal, Aug 2011.
- Research Institute for Global Change (RIGC), Japan Agency for Marine-Earth Science and Technology (JAMSTEC), Yokohama, Japan, Feb 2011.
- Nagoya University, Japan (Sep 2010 – Aug 2012).
- The Abdus Salam International Centre for Theoretical Physics, Trieste, Italy (Aug – Oct 2009; Jul – Sep 2006; Aug – Oct 2004).
- University of East Anglia, Norwich, UK, Jan 2009.
- Physical Research Laboratory, Ahmadabad, India, May 2007.
- Center for Atmospheric and Oceanic Sciences, Indian Institute of Sciences, Bangalore, India, Jul 2005.
- Institut d’Astronomie et de Geophysique Georges Lemaitre, Universite Catholique de Louvain, Louvain-la-Neuve, Belgium, Oct 2004.
- Swiss Federal Institute for Snow and Avalanche Research, Davosdorf, Switzerland, Oct 2004.
- University of Trento, Trento, Italy, Aug 2003

### List of Publications

#### (a) Papers published in reviewed and referred international/national journals

Total Publication: 77 (*As on Jul 2017 in Google scholar*)

Total Citations: 794

h-index: 17

i10-index: 27

#### 2017

77. A. Choudhary and A. P. Dimri. Assessment of the performance of CORDEX-South Asia experiments for monsoonal precipitation over the Himalayan region during future climate. *Climate Dynamics*. DOI 10.1007/s00382-017-3789-4.
76. M. M. Nageswararao, U. C. Mohanty and A. P. Dimri. Probability of occurrence of Monthly and Seasonal winter Precipitation over Northwest India based on Antecedent-monthly Precipitation. *Theoretical and Applied Climatology*. DOI 10.1007/s00704-017-2171-0.
75. A. P. Dimri, A. Chevuturi, D. Niyogi, R. J. Thayyen, K. Ray, S. N. Tripathi, A. K. Pandey and U. C. Mohanty. Cloudbursts in Indian Himalayas: A Review. *Earth-Science Reviews*, 168, 1–23, 2017.

74. T. Nengker, A. Choudhary and A. P. Dimri. Assessment of the performance of CORDEX-SA experiments in simulating seasonal mean temperature over the Himalayan region for the present climate: Part I. *Climate Dynamics*. DOI:10.1007/s00382-017-3597-x.
73. M. M. Nageswararao, U. C. Mohanty, S. S. V. S. Ramakrishna and A. P. Dimri. An inter-comparison of observational precipitation datasets over Northwest India during winter. *Theoretical and Applied Climatology*. DOI 10.1007/s00704-017-2083-z.
72. C. Xu, M. Sano, A. Dimri, R. Ramesh, T. Nakatsuka, F. Shi and Z. Guo. Decreasing Indian summer monsoon in northern Indian sub-continent during the last 180 years: evidence from five tree cellulose oxygen isotope chronologies, *Clim. Past Discuss.*, DOI: 10.5194/cp-2016-132.
71. P. Rai and A. P. Dimri. Effect of Changing Tropical Easterly Jet, Low Level Jet and Quasi-Biennial Oscillation Phases on Indian Summer Monsoon. *Atmos. Sci. Lett.* DOI: 10.1002/asl.723.

## 2016

70. A. Chevuturi, A. P. Dimri and R. J. Thayyen. Climate Change over Leh (Ladakh), India. *Theoretical and Applied Climatology*, DOI 10.1007/s00704-016-1989-1, 2016.
69. A. P. Dimri, T. Yasunari, B. S. Kotlia, U.C. Mohanty and D. R. Sikka. Indian Winter Monsoon: Present and Past. *Earth-Science Reviews*, 163, 297–322. 2016.
68. R. Agnihotri, A. P. Dimri, H. M. Joshi, N. K. Verma, C. Sharma, J. Singh and Y. P. Sundriyal. Assessing operative natural and anthropogenic forcing factors from long-term climate time series of Uttarakhand (India) in the backdrop of recurring extreme rainfall events over Northwest Himalaya. *Geomorphology*. <http://dx.doi.org/10.1016/j.geomorph.2016.10.024>, 2016.
67. R. J. Thayyen and A. P. Dimri. Modeling Slope Environmental Lapse Rate (SELR) of temperature in the monsoon glacio-hydrological regime of the Himalaya. *The Cryosphere Discuss.*, DOI: 10.5194/tc-2016-152, 2016.
66. A. P. Dimri. Warm pool/cold tongue El-Nino and Indian winter Monsoon. *Meteorology and Atmospheric Physics*, DOI: 10.1007/s00703-016-0476-7, 2016.
65. S. Schauwecker, M. Rohrer, M. Schwarb, C. Huggel, A. P. Dimri and N. Salzmann. Estimation of snowfall limit for the Kashmir Valley, Indian Himalaya, with TRMM PR Bright Band information. *Meteorologische Zeitschrift*. DOI: 10.1127/metz/2016/0738, 2016.
64. M. Jain, A. P. Dimri and D. Niyogi. Urban sprawl patterns and processes in Delhi from 1977-2014 based on remote sensing and spatial metrics approaches. *Earth Interactions*, 20 (14), 1-29, 2016.
63. A. P. Dimri, R. J. Thayyen, K. Kibler, A. Stanton, D. Tullos and V. P. Singh. A review of atmospheric and land surface processes with emphasis on flood generation along the southern rim of the Himalayas. *Science of Total Environment*, 556, 98 – 115, 2016.
62. A. Chevuturi and A.P. Dimri. Investigation of Uttarakhand (India) disaster- 2013 using Weather Research and Forecasting model. *Natural Hazards*, 82(3), 1703-1726, 2016.
61. A. P. Dimri. Spring “predictability barrier” and Indian summer monsoon. *Journal of Climate Change*, 2(1), 53–60, DOI 10.3233/JCC-160006, 2016.
60. M. Jain, D. Dawa, R. Mehta, A. P. Dimri and M. K. Pandit. Application of Remote Sensing and GIS tools for Land Use/ Land Cover Mapping and Change Detection: A Case study of Delhi, India. *Modeling Earth Systems and Environment*, 2 (1), 1-14, 2016.

## 2015

59. K. Saurabh and A. P. Dimri. Non-linearity explanation in Artificial Neural Network application with a case study of Fog forecast over Delhi region. *PAGEOPH*, 173(5), 1765-1781, 2015.
58. S. Ghimire, A. Choudhary and A. P. Dimri. Assessment of the performance of CORDEX-South Asia experiments for monsoonal precipitation over the Himalayan region during present climate: Part I. *Climate Dynamics*, DOI:10.1007/s00382-015-2747-2, 2015.
57. A. Chevuturi, A. P. Dimri, S. Das, A. Kumar and D. Niyogi. Numerical simulation of an intense precipitation event over Rudraprayag in the Central Himalayas during 13-14 September 2012. *Journal of Earth System Sciences*, 124(7), 1545-1561, 2015.
56. A. Chevuturi and A. P. Dimri, Inter-comparison of physical processes associated with winter and non-winter hailstorms using the Weather Research and Forecasting (WRF) model. *Modeling Earth Systems and Environment*, 1:9, DOI: 10.1007/s40808-015-0014-5, 2015.
55. P. Shrestha, A. P. Dimri, A. Schomburg and C. Simmer. Improved understanding of extreme rainfall event in Uttarakhand state of the India: A case study using COSMO. *Tellus A*, 67 (26031), 1 - 13. DOI: 10.3402/tellusa.v67.26031, 2015.
54. G. Agnihotri and A. P. Dimri. Vertical Structure of atmosphere in pre-monsoon season over Bangalore. *Journal of Earth System Sciences*, 124(7), 1563-1572, 2015.
53. P. Maharana and A. P. Dimri. Study of intraseasonal variability of Indian summer monsoon using a regional climate model. *Climate Dynamics*, DOI 10.1007/s00382-015-2631-0, 2015.
52. A. P. Dimri, D. Niyogi, A. P. Barros, J. Ridley, U. C. Mohanty, T. Yasunari and D. R. Sikka. Western Disturbance: A Review. *Reviews of Geophysics*, 53, doi:10.1002/2014RG000460, 2015.
51. P. Maharana and A. P. Dimri. Effect of dust on the Indian summer monsoon. *Geophysical Research Abstracts*, Vol. 17, EGU2015-13927, 2015.

## 2014

50. R. M. Devi, A. P. Dimri and J. Dutta. Uttarakhand disaster: Natural or Man-made?-A Meteorological Investigation. *eJournal of Applied Forest Ecology (eJAFE)*, Vol. 2, No. 2, 32-38, 2014.
49. A. P. Dimri. How much robust and (un)certain regional climate models over the Himalayas? *The Cryosphere Discuss.*, 8, 1-20, 2014.
48. R. J. Thayyen and A. P. Dimri. Factors controlling Slope Environmental Lapse Rate (SELR) of temperature in the monsoon and cold-arid glacio-hydrological regimes of the Himalaya. *The Cryosphere Discuss.*, 8, 5645-5686, 2014.
47. A. Chevuturi, A.P. Dimri and U.B. Guntru. Numerical Simulation of a rare winter Hailstorm Event over Delhi, India on 17Jan2013. *Nat. Hazards Earth Syst. Sci.*, 14, 3331-3344, 2014.
46. A. Chevuturi, A.P. Dimri and U.B. Guntru. Numerical Simulation of a 'Winter' Hailstorm Event over Delhi, India on 17Jan2013. *Nat. Hazards Earth Syst. Sci. Discuss.*, 2, 6033-6067, 2014.
45. G. Agnihotri and A. P. Dimri. Simulation Study of Heavy Rainfall Episodes over southern Indian Peninsula. *Meteorological Applications*, 2014, DOI: 10.1002/met.1446.
44. P. Maharana and A. P. Dimri. Study of seasonal climatology and interannual variability over India and its sub-regions using a regional climate model (RegCM3). *J. of Earth System Science*. 2014, 123(5), 1147-1169.

43. A. P. Dimri. Sub-seasonal interannual variability associated with the excess and deficit Indian winter monsoon over the Western Himalayas. *Climate Dynamics*, 2014, 42 (7-8), 1793-1805.
42. P. Maharana and A. P. Dimri. Impact of initial and boundary condition on regional winter climate over the western Himalayas: A fixed domain size experiment. *Global and Planetary Change*, 2014, 114, 1-3.
41. A. P. Dimri and A. Chevuturi. Model sensitivity analysis study for Western Disturbances over the Himalayas. *Meteorology and Atmospheric Physics*, 2014, 123(3-4), 155-180.
- 2013**
40. A. P. Dimri, T. Yasunari, A. Wiltshire, P. Kumar, C. Mathison, J. Ridley and D. Jacob. Application of regional climate models to the Indian winter monsoon over the western Himalayas. *Science of Total Environment*, 2013, 468, S36-S47.
39. C. Mathison, A. Wiltshire, A. P. Dimri, P. Fallon, D. Jacob, P. Kumar, E. Moors, J. Ridley, C. Siderius, M. Stoffel and T. Yasunari. Regional Projections of North Indian Climate for Adaptation Studies. *Science of Total Environment*, 2013, 468, S4-S17.
38. R. K. Yadav, A. R. Dandi and A P Dimri. On the relationship between ENSO patterns and winter precipitation over North and Central India. *Global and Planetary Change*, 2013, 107, 50-58.
37. A. P. Dimri. Interannual variability of Indian Winter Monsoon over the Western Himalaya. *Global and Planetary Change*, 2013, 106, 39-50.
36. A. P. Dimri and D. Niyogi. Regional climate model application at subgrid scale on Indian winter monsoon over the western Himalayas. *Int. J. of Climatol.*, 2013, 33(9), 2185-2205.
35. A. P. Dimri. Relationship between ENSO Phases with the Northwest India Winter Precipitation. *Int. J. of Climatol.*, 2013, 33(8), 1917-1923.
34. A. P. Dimri. Intraseasonal oscillation associated with Indian Winter Monsoon. *Journal of Geophysical Research – Atmosphere*, 2013, 118(3), 1189-1198.
33. R. J. Thayyen, A. P. Dimri, P. Kumar and G. Agnihotri. Study of cloudburst and flash floods around Leh, India during August 4-6, 2010. *Natural Hazards*, 2013, 65(3), 2175-2204.
32. A. Chevuturi and A. P. Dimri. Rudraprayag Cloudburst 13-14 Sep 2012. *Vayu Mandal*, 2013, 39(1-2), 25-34.
- 2012**
31. G. Semwal and A. P. Dimri. Impact of initial and boundary conditions on Simulations of Western Disturbances and associated Precipitation. *Natural Hazards*, 2012, 64(2), 1405-1424.
30. A. P. Dimri. Atmospheric Water Budget over the Western Himalayas in a Regional Climate Model. *Journal of Earth System Sciences*, 2012, 121(4), 963-973.
29. A. P. Dimri. Wintertime Land Surface Characteristics in climatic Simulations over the Western Himalayas. *Journal of Earth System Sciences*, 2012, 121(2), 329-344.
28. A. P. Dimri and S.K. Dash. Wintertime Climatic Trends in the Western Himalayas. *Climatic Change*, 2012, 111(3-4), 775-800.
27. A. P. Dimri and P. Maharana. Inter-annual variability of precipitation simulated by RegCM3 over India and Indian Himalayas. *Vayu Mandal*, 2012, 38(1-4), 70-80.
- 2011**
26. G. Semwal and A. P. Dimri. Diagnostic Study and Numerical Simulation of the Bombay (INDIA) Deluge. *Natural Hazards*, 2011, 59(1), 17-31.
- 2010**
25. A. P. Dimri and S.K. Dash. Winter Temperature and Precipitation changes in the Siachen Glacier. *Current Science*, 2010, 98(12), 1620 – 1625.



**2009**

24. A. P. Dimri and U.C. Mohanty. Simulation of Mesoscale Features Associated With Intense Western Disturbances over Western Himalayas. *Meteorological Application*, 2009, 16(3), 289 – 308.
23. A. P. Dimri. Impact of Subgrid Scale Scheme on Topography and Landuse for better regional scale simulation of meteorological variables over Western Himalayas. *Climate Dynamics*, 2009, 32(4), 565–574.

**2008**

22. D. Singh, A. P. Dimri and A. Ganju. Analog Method for Simultaneous Prediction of Surface Weather Parameters at Specific Location in the Western Himalaya (India). *Meteorological Application*, 2008, 15(4), 491-496.
21. A. P. Dimri, P. Joshi and A. Ganju. Precipitation Forecast over Western Himalayas using k - Nearest Neighbor Method. *International Journal of Climatology*, 2008, 28(14),1921-1931.
20. A. P. Dimri. Diagnostic Studies of an Active Western Disturbance over Western Himalaya. *Mausam*, 2008, 59(2), 227 - 236.

**2007**

19. A. P. Dimri. The Transport of Mass, Heat and Moisture over Western Himalayas during Winter Season. *Theoretical and Applied Climatology*, 2007, 90 (1-2), 49-63.
18. A. P. Dimri and A. Ganju. Wintertime Seasonal scale Simulation over Western Himalayas using RegCM3. *PAGEOPH*, 2007, 164(8-9), 1733-1746.
17. A. P. Dimri. A Study of Mean Winter Circulation Characteristics and Energetics over Southeastern Asia. *PAGEOPH*, 2007, 164(5), 1081 - 1106.
16. A. P. Dimri and U.C. Mohanty. Location Specific Prediction of Maximum and Minimum Temperature over Western Himalayas. *Meteorological Application*, 2007, 14(1), 79-93.

**2006**

15. A. P. Dimri. Surface and Upper Air Fields during Extreme Winter Precipitation over Western Himalayas. *PAGEOPH*, 2006, 163( 8), 1679 – 1698.
14. A. P. Dimri, U.C. Mohanty, M. Azadi and L.S. Rathore. Numerical Study of Western Disturbances over Western Himalayas using Mesoscale Model. *Mausam*, 2006, 57(4), 579 – 590.

**2005**

13. A. P. Dimri. The Contrasting Features of Winter Circulation during Surplus and Deficient Precipitation over Western Himalayas. *PAGEOPH*, 2005, 162(11), 2215 – 2237.
12. A. P. Dimri, U.C. Mohanty and L.S. Rathore. Minimum Temperature Forecast at Manali, India. *Current Science*, 2005, 88(6), 927 – 934.
11. A. P. Dimri, U.C. Mohanty and L.S. Rathore. Point Probabilistic Prediction of Precipitation and Quantitative Precipitation Forecast in western Himalayas. *Mausam*, 2005, 56(3), 535 – 542.

**2004**

10. A. P. Dimri. Models to Improve Winter Minimum Temperature Forecasts, Delhi, India. *Meteorological Application*, 2004, 11(2), 129 – 139.
9. A. P. Dimri. Impact of Horizontal Model Resolution and Orography on the Simulation of a Western Disturbance and its Associated Precipitation. *Meteorological Application*, 2004, 11(2), 115 – 127.
8. A. P. Dimri, U.C. Mohanty and M. Mandal. Simulation of Heavy Precipitation Associated with an Intense Western Disturbance over Northwest Himalayas. *Natural Hazards*, 2004, 31(2), 499 - 519.

7. A. Ganju and A. P. Dimri. Prevention and Mitigation of Avalanche Disasters in Western Himalayan Region. *Natural Hazards*, 2004, 31(2), 357 – 371.
6. U.C. Mohanty and A. P. Dimri. Location Specific Prediction of Probability of Occurrence and Quantity of Precipitation over Western Himalayas. *Weather and Forecasting*, 2004, 19(3), 520 – 533.

## 2002

5. A. P. Dimri, U.C. Mohanty, O. P. Madan and N. Ravi. Statistical model based forecast of minimum and maximum temperature at Manali. *Current Science*, 2002, 82(8), 997 – 1003.
4. A. P. Dimri, V.K. Jain and B.B. Dash. Effect of Dust Aerosol Layer on Vertical Temperature Profile. *Mausam*, 2002, 4(53), 539 – 541.

## 2001

3. A. P. Dimri, U.C. Mohanty and P Naresh. Estimation of Minimum Surface Temperature at StageII. *Defense Science Journal*, 2001, 51(2), 171-174.

## 1999

2. A. P. Dimri and U.C. Mohanty. Snowfall Statistics of Some Snow and Avalanche Study Estt. Field Stations In J&K and A Case Study of Western Disturbance. *Defense Science Journal*, 1999, 49(5), 437 - 445.
1. A. P. Dimri and V.K. Jain. Radiative Effects of Desert Aerosols. *Current Science*, 1999, 77(1), 163-166.

## (b) Books/Chapters in books

13. A. Agrawal, A. P. Dimri and R. J. Thayyen. Mass balance modeling of Gangotri glacier. *Geological Society of London, Special Publication Himalayan Cryosphere: Present and Past (accepted)*.
12. A. P. Dimri, D. Kumar and M. Srivastava. Regional climate changes over northeast India: Present and Future (*Submitted to Development Through Disaster Management: Studies from the North Eastern Region of India*. Singh et al. (Eds), 2017. Palgrave-Springer publisher).
11. D. Kumar, A. Choudhary and A. P. Dimri. Regional climate changes over Hindukush-Karakoram-Himalaya region. *Science and Geopolitics of The White World*. Goel et al. (Eds), 2017, 978-3-319-57764-7, 440797\_1\_En, (11).
10. A. P. Dimri and A. Chevuturi. “**Western Disturbances-An Indian Meteorological Perspective**”, Springer, The Netherlands.
9. A. Chevuturi, R. M. Devi and A. P. Dimri. Study of Kedarnath disaster, 2013. *Lessons From Nepal's Earthquake For The Indian Himalayas And The Gangetic Plains*. Singh et al. (Eds.), 2016, 140p.
8. P. Maharana, A. P. Dimri and A. Choudhary. Effect of Dust on the Indian Summer Monsoon. *Geostatistical and Geospatial Approaches for the Characterization of Natural Resources in the Environment*. Raju et al. (Eds), 2015, 969p. ISBN 978-3-319-18663-4.
7. A. Chevuturi, A.P. Dimri, and U.B. Gunturu. Winter Hailstorm over New Delhi, India. *Geostatistical and Geospatial Approaches for the Characterization of Natural Resources in the Environment*. Raju et al. (Eds.), 2015, 969p. ISBN 978-3-319-18663-4.
6. A. Chevuturi and A. P. Dimri. Numerical Simulation of a Hailstorm event over Delhi, India on 28Mar2013. *High Impact Weather Events over the SAARC Region*. Ray et al. (Eds.), 2014, 393p. ISBN:978-93-81891-12-4.
5. A. P. Dimri and P. Maharana. Regional Climate Modeling over the Himalayas. *Management of Water Energy and Bio-resources in the Era of Climate Change*:

- Emerging Issues and Challenges*. Raju et al. (Eds.), 2013, 372p. ISBN:978-93-81891-06-3.
4. A. P. Dimri. Relationship of ENSO phases and wintertime precipitation over western Himalayas. *Global Change, Biodiversity and livelihood in Cold Desert Region of Asia*. Saxena et al. (Eds.), 2011, 322p. ISBN: 978-81-211-0780-8.
  3. A. P. Dimri and A. Ganju. Wintertime Seasonal Scale Simulation over Western Himalaya using RegCM3. *Atmospheric and Oceanic Mesoscale Processes. Series: Pageoph Topical Volumes*. Sharan and Raman (Eds.), 2007, 430p. ISBN: 978-3-7643-8492-0.
  2. U. C. Mohanty, M. Mandal, A.K. Das and A. P. Dimri. Mesoscale modeling of convective systems over India: Status and Scope. *Weather and Climate modeling*. Singh et al. (Eds.), 2003, 231p. ISBN: 81-224-1456-7.
  1. A. P. Dimri. Avalanche: A Hazard in Mountainous Terrain. *Bioresource and Environment*. Tripathi and Tripathi (Eds.), 2002, 408p. ISBN: 81-8030-008-0.

### (c) Technical Reports

10. U. C. Mohanty and A. P. Dimri. Atmospheric Sciences: A report to IAMAS 2014. Indian National Report for IUGG 2015. Published from INSA New Delhi. [file:///C:/Documents%20and%20Settings/Administrator/My%20Documents/Downloads/INSA\\_mod.pdf](file:///C:/Documents%20and%20Settings/Administrator/My%20Documents/Downloads/INSA_mod.pdf)
9. A. P. Dimri. Roof of the world: The world's highest mountain range has a huge effect on regional climate. *Meteorological Technology International*, April 2013, 50 - 53. <http://viewer.zmags.com/publication/2b71d0a9#/2b71d0a9/52>
8. T. Yasunari, AP Dimri, A Wiltshire, P Kumar, C Mathison, J Ridley. Role of topography on winter precipitation over the western Himalayas. Highnoon Delivery Report, 2012.
7. A Science and Policy Brief. Adaptation to climate change in the Ganges Basin, Northern India. EU-FP7 HighNoon Project Report, Alterra, Wageningen UR, Wageningen, The Netherlands. (<http://www.eu-highnoon.org/>).
6. Climate Change in the Hindu Kush-Himalayas : The State of Current Knowledge. Singh, SP; Bassignana-Khadka, I; Karky, BS; Sharma, E (2011), Kathmandu: ICIMOD. (<http://books.icimod.org/index.php/downloads/pd/773>).
5. Climate Change and India : A 4X4 Assessment – A Sectorial and Regional Analysis for 2030s, Indian Network for Climate Change Assessment (INCCA), United Nations Framework Convention on Climate Change (UNFCCC), Ministry of Environment and Forest (MoEF), Govt of India (GoI), Nov 2010, 164pp (<http://www.indiaenvironmentportal.org.in/files/fin-rpt-incca.pdf>).
4. A. P. Dimri, R.N. Sarwade and A. Kumar. Wintertime Climatic Extreme Analysis over the Western Himalayas. Snow and Avalanche Study Establishment, Defense Research and Development Organization, Him Parisar, Sector 37A, Chandigarh, India, Nov 2007, *Technical Report*.
3. A. P. Dimri and U. C. Mohanty. Statistical Model Development for Weather Prediction in Tropics. Snow and Avalanche Study Establishment, Defense Research and Development Organization, Him Parisar, Sector 37A, Chandigarh, India, Feb 2006, *Technical Report*.
2. U. C. Mohanty, A. P. Dimri, M.C. Pant, P.L.S. Rao and O.P. Madan. To study the role of Himalayas in the Deterministic prediction of large scale weather pattern over northwest India with high resolution limited area model. Centre for Atmospheric Sciences, Indian Institute of Technology, Hauz Khas, New Delhi - 110016, INDIA, *Technical Report*.
1. A. P. Dimri, U.C. Mohanty and M.C. Pant. Snowfall climatology over western Himalayas (Based on winter data of 1985 – 1994 over Jammu & Kashmir, India). Centre for

Atmospheric Sciences, Indian Institute of Technology, Hauz Khas, New Delhi - 110016, INDIA, *Technical Report*.

**(d) Papers/reports/chapters communicated to reviewed/referred international/national journals/books**

- S. K. Jain, P. Mani, S. K. Jain, P. Prakash, V. P. Singh, S. Kumar, S. P. Agarwal, and A. P. Dimri. A Review of Flood Forecasting Techniques and Applications. *The International Journal of River Basin Management (revision submitted)*.
- R. M. Devi, M. K. Patasaraiya, B. Sinha, S. Saran, A. P. Dimri and R. Jaiswal. Scientific Approaches in Understanding the Linkages between Climate Change and Forest: A review. *Current Science (revision submitted)*.
- C. Xu, M. Sano, A. P. Dimri, R. Ramesh, T. Nakatsuka, F. Shi and Z. Guo. Decreasing Indian summer monsoon in northern Indian sub-continent during the last 180 years: evidence from five tree cellulose oxygen isotope chronologies. *Climate of the Past (PAGES2k special issue) (revision submitted)*.
- R. J. Thayyen and A. P. Dimri. Modeling Slope Environmental Lapse Rate (SELR) of temperature in the monsoon glacio-hydrological regime of the Himalaya. *The Cryosphere, (revision submitted)*.
- P. Rai, M. Joshi, A. P. Dimri and A. G. Turner. The role of potential vorticity anomalies in the Somali Jet on Indian Summer Monsoon Intraseasonal Variability. *Climate Dynamics (revision submitted)*.
- Madhavi Jain and A. P. Dimri. Efficacy of Filtering Techniques in Improving Landsat SLC-off Thermal Infra-Red Data. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing (revision submitted)*.
- A. Choudhary, A. P. Dimri and P. Maharana. Assessment of CORDEX-SA experiments in representing Summer Monsoon over India. *Theoretical and Applied Climatology (revision submitted)*.
- A. P. Dimri, W.W. Immerzeel, N. Salzmann and R. J. Thayyen. Comparison of climatic trends and variability among glacierized environments in the western Himalayas. *Theoretical and Applied Climatology (revision submitted)*.
- P. Kumar and A. P. Dimri. Energetics of Indian winter monsoon using Mesoscale Model. *Journal of Earth System Sciences, (in revision)*.
- M. Sano, A. P. Dimri, R. Ramesh, C. Xu, Z. Li and T. Nakatsuka. Moisture source signals preserved in a 242-year tree-ring  $\delta^{18}\text{O}$  chronology in the western Himalaya. *Global and Planetary Change (in revision)*.
- D. Kumar and A. P. Dimri. Regional Climate projections for Northeast India: An Appraisal from CORDEX South Asia Experiment. *Theoretical and Applied Climatology (in revision)*.
- A. Choudhary and A. P. Dimri. Assessment of the performance of CORDEX-SA experiments in simulating seasonal maximum and minimum temperature over the Himalayan region for the present climate: Part II. *Climate Dynamics*.
- A. P. Dimri. Comparison of changes and trends in daily surface temperature extremes over India. *Theoretical and applied Climatology*.
- T. M. Midhuna and A. P. Dimri. Impact of Arctic Oscillation on Indian Winter Monsoon. *Meteorology and Atmospheric Physics*.
- G. Agnihotri, A. P. Dimri and M. Ranalkar. Observed structure of convective echoes over southern Indian peninsula during pre- monsoon using TRMM Precipitation Radar. *Mausam*.

- Mifta ul Shafi, Rehana Rasool, Pervez Ahmed and A. P. Dimri. Temperature and Precipitation trends in Kashmir Valley, North Western Himalayas. *Theoretical and Applied Climatology*.
- A. P. Dimri, A. Choudhary and R. J. Thayyen. Decoding the Karakoram anomaly. *Nature*.
- A. P. Dimri, D. Kumar, A. Choudhary and P. Maharana. Future changes over the Himalayas: Mean temperature. *Global and Planetary Change*.
- A. P. Dimri, D. Kumar, A. Choudhary and P. Maharana. Future changes over the Himalayas: Maximum and minimum temperature. *Global and Planetary Change*.
- P. Maharana, A. P. Dimri and A. Choudhary. Redistribution of Indian Summer Monsoon by dust aerosols forcing. *Climate Dynamics*.
- A. P. Dimri, C. Huggel, S. Allen, A. Shukla, P. Tiwari, P. Maharana, T. Bolch, S. Mal, M. Stoffel, M. Rohrer, J. A. Ballesteros, R. J. Thayyen. Climate change and related impacts in the Indian Himalayan Region: From the high mountain cryosphere to downstream communities. *Regional Environmental Change*.
- D. R. Pattnaik and A. P. Dimri. Climate Change over the Indian sub-continent (*Submitted in Geodynamics of the Indian Plate: Evolutionary Perspectives for book Chapter*).
- A. P. Dimri and W. Imeerzeel. Comparison of climatic trends and variability in glacierized regions across the western Himalayas (*Submitted to Hanns Seidel Foundation for book chapter*).
- A. Chevuturi and A. P. Dimri. Climate and Climate Change of the Cold-Arid System of Ladakh (*Submitted for book chapter*).

#### **(f) Papers presented in Conferences**

- A. P. Dimri. State-of-the-art with climate models over the Himalayan region. National Science Day Symposium 2017, Organized by Dept. of Science and Technology and Jawaharlal Nehru University, New Delhi, India, 21 -23 Feb 2017.
- A. P. Dimri. Floods in the southern rim of the Himalayas. TROPMET 2016, 18 -21 Dec 2016, Indian Meteorological Society, Bhubaneswar, Orissa.
- S. Ghimire, A. Choudhary and A. P. Dimri. Assessment of the performance of CORDEX-South Asia experiments for monsoonal precipitation over the Himalayan region during present climate. CORDEX-2016 Conference, 17 – 20 May 2016, SMHI, Stockholm, Sweden.
- A. Choudhary, A. P. Dimri and P. Maharana. Performance of CORDEX Regional Climate Models in Simulating Precipitation Climatology of Indian Summer Monsoon. CORDEX-2016 Conference, 17 – 20 May 2016, SMHI, Stockholm, Sweden.
- A. Choudhary and A. P. Dimri. Recent climatic changes over Himalayan region: Previous studies and CORDEX-South Asia experiments. CORDEX-2016 Conference, 17 – 20 May 2016, SMHI, Stockholm, Sweden.
- R. M. Devi, A. P. Dimri and J. Dutta. An investigation into Uttarakhand disaster: a natural phenomenon or a result of multitude factors? 30<sup>th</sup> Himalaya-Karakoram-Tibet Workshop, 6 – 8 Oct 2015, WIHG, Dehradun, India.
- A. P. Dimri. 'Regional Climate modeling over the Himalayan glacier'. XII International Symposium on Antarctic Earth Sciences, 13 – 17 Jul 2015, NCAOR, Goa.
- A. Agarwal, S. Tayal and A. P. Dimri. Estimation of volume of Sikkim Himalayan glaciers using remote sensing methods. GLACINDIA Stakeholder Workshop on Identifying Climate Change Information Needs and Training on Climate Modeling and Climate Change Research, Innovation and Services, Organized by The Research Council of Norway, Federal Ministry of Education and Research, Germany and DST, GoI, 08 – 10, Apr 2015.

- A. Agarwal, A. P. Dimri and R. J. Thayyen. Mass balance and runoff from Gangotri glacier using remote sensing methods. **International Symposium on Glaciology in High-Mountain Asia**. Kathmandu, Nepal, 2–6 Mar 2015.
- A. Chaudhary P. Maharana and A. P. Dimri. Performance of CORDEX Regional Climate Models in Simulating Precipitation Climatology of Indian Summer Monsoon. Monsoon workshop, Indian Institute of Tropical Meteorology, Pune, Maharashtra, India, 2 – 3 Mar, 2015.
- A. P. Dimri and A. Chevuturi. Cloudburst in the southern flank of the Himalyas. TROPMET 2015 (Category: Vulnerability and Risk Assessment), IMS and Panjab University, Chandigarh, 15 – 18 Feb, 2015.
- A. Chevuturi, A.P. Dimri and U.B. Gunturu. Numerical simulation of a winter hailstorm event over Delhi, India. **16<sup>th</sup> Annual Conference of the International Association for Mathematical Geosciences**, Jawaharlal Nehru University, New Delhi, India, 17-20 Oct, 2014.
- P. Maharana and A. P. Dimri. The intercomparision of variability of monsoon in a dust and no-dust experiment. **16<sup>th</sup> Annual Conference of the International Association for Mathematical Geosciences**, Jawaharlal Nehru University, New Delhi, India, 17-20 Oct, 2014.
- A. Chevuturi and A. P. Dimri. Numerical simulation of hail storm event over Delhi, India on 28 Mar 2013. **50<sup>th</sup> Annual Convention and meeting of “Sustainability of Earth Systyem- The Future Challenge” Organised by Indian Geophysical Union**, at National Geophysical Research Institute, Hyderabad, India, 08 – 12 Jan 2014.
- A. Chevuturi and A. P. Dimri. Numerical simulation of hail storm event over Delhi, India on 28 Mar 2013. **‘High impact weather events and their prediction over the SAARC region’**, India Habitat Center, New Delhi, India, 2 -4 Dec 2013.
- P. Maharana and A. P. Dimri. Effect of changing initial and boundary conditions over regional winter climate over the western Himalayas. **International Humboldt Kolleg**, Jawaharlal Nehru University, New Delhi, India, 8-9 Feb 2013.
- A. Chevuturi and A. P. Dimri. Rudraprayag Cloudburst 12-13 Sep 2012, **TROPMET2012**, Indian Institute of Remote Sensing, Dehradun, Uttarakhand, India, 20 -22 Nov 2012.
- P. Maharana and A. P. Dimri. Interannual variability of precipitation simulated by RegCM3 over Indian Himalayas. **TROPMET2012**, Indian Institute of Remote Sensing, Dehradun, Uttarakhand, India, 20 -22 Nov 2012.
- I. Pal and A. P. Dimri. Detecting the Shift in Timing of Hydrological Cycle in India and Understanding the Dynamical Association, **AGU Chapman Conference on Water Management**, Portland, Oregon, 28-31 Jul 2013.
- A. P. Dimri. Uncertainties in Regional Climate Models. **International Humboldt Kolleg**, Jawaharlal Nehru University, New Delhi, 110067, India, 08-09 Feb 2013.
- A. P. Dimri. Uncertainties in Regional Climate Model simulations of Indian Winter Monsoon over the Western Himalayas. **AGU2012**, 03-07 Dec 2012.
- A. P. Dimri and T. Yasunari. Regional simulation of winter precipitation over the western Indian Himalayas. **AOGS2012**, Singapore, 13 – 17 Aug 2012.
- A. P. Dimri and T. Yasunari. Diagnostics of winter precipitation over the western Himalayas. **AGU2011**, 05-09, Dec 2011.
- A. P. Dimri, T. Yasunari and H. Fujinami. Role of topography on winter precipitation over the western Himalayas. **Meteorological Society of Japan (MSJ)**, Nagoya University, Nagoya, 16-18 Nov 2011.
- A. P. Dimri and D. Niyogi. Role of fine scale land surface representation on the wintertime climatic simulations over the western Himalayas, **AOGS2011**, Taipei, Taiwan, 08 – 12 Aug 2011.

- A. P. Dimri. Wintertime Climatic Analysis over the western Himalayas, under session "Extreme Weather Events in the changing climate, **AOGS2010**, Hyderabad, India, 05 – 09 Jul 2010.
- P. Maharana, K.C. Pattnayak, S.K. Dash and A.P. Dimri. Comparison of RegCM3 simulated rainfall and temperature with station data over Western Himalayas, **ICTP, Miramare, Trieste, Italy**, 16-20 May 2011.
- A. P. Dimri. Wintertime Climatic Analysis over the western Himalayas. **National Research Conference on Climate Change**, IIT Delhi, organized by IIT Delhi, IIT Madras, CSE Delhi, 5 – 6 Mar 2010.
- A. P. Dimri. Wintertime Climatic Analysis over the western Himalayas, **AGU's Chapman Conference** on Complexity and Extreme Events in Geosciences, N.G.R.I., Hyderabad, India, 15 – 19, Feb 2010.
- A. P. Dimri and S.K. Dash. Wintertime Climatic Trend Analysis over the Siachen Glacier. **AOGS2009**, Singapore, 11 – 15 Aug 2009.
- A. P. Dimri. Wintertime Climatic Extreme Analysis over the western Himalayas. Young Scientists Networking Conference on Extreme Weather Events (**Organized by the British Council, the IIT Delhi and University of East Anglia, Norwich, UK**), New Delhi, India. 26 - 29 Nov 2007.
- A. P. Dimri. Relationship between ENSO phases and wintertime precipitation over Northern India, **TROPMET 2006**, Golden Jubilee Symposium, Role of Meteorology In National Development, Pune, India, 21 – 23 Nov 2006.
- A. P. Dimri. Regional Scale Simulation with Subgrid Scale Topography and Landuse Scheme over Western Himalayas. **International Conference on Mesoscale Processes in Atmosphere, Ocean and Environmental Systems (IMPA 2006)**, Centre for Atmospheric Sciences, Indian Institute of Technology, Delhi, India, 14 - 17 Feb 2006.
- A. P. Dimri, K. Srinivasan and D.K. Prashar. Site Specific prediction of precipitation (PoP) and Probabilistic Quantitative Precipitation Forecast (PrQPF). **International Symposium on Snow Monitoring and Avalanches, (ISSMA – 2004: organized by International Glaciological Society (IGS) and Snow and Avalanche Study Estt.** (Defense Research and Development Organization), Manali, India, 12 -16 Apr 2004.
- K. Srinivasan, A. P. Dimri and C.S. Pandey. Prediction of severe snow storm events over western Himalayas using MM5 model. **International Symposium on Snow Monitoring and Avalanches, (ISSMA – 2004: organized by International Glaciological Society (IGS) and Snow and Avalanche Study Estt.** (Defense Research and Development Organization), Manali, India, 12 -16 Apr 2004.
- A. P. Dimri and U.C. Mohanty. Simulation of mesoscale features associated with intense western disturbances over western Himalayas. **International symposium on "Natural Hazards" (INTROPMET – 2004)**, Hyderabad, India (organized by Indian Meteorological Society), 24 -27 Feb 2004.
- A. P. Dimri. Predictions of wintertime weather over western Himalayas using MM5 model. A national symposium on **"Developments In Geophysical Sciences In India"**, Department of Geophysics, Banaras Hindu University, Varanasi, India, 05 -08 Nov 2003.
- U.C. Mohanty and A. P. Dimri. Simulation of snowfall over western Himalayas with a high resolution regional model. Conference on **Mathematical modeling and Computer Simulation**, NAL Bangalore, India (organized by ISMMACS and C-MMACS), 14 – 15 Nov, 2002.
- S. Bist, O.P. Madan, U.C. Mohanty and A. P. Dimri. Contrast in meteorological fields of surplus and significant winter seasonal precipitation over western Himalayas.

- Workshop on “Mesoscale modeling with special emphasis on Mountain Weather Forecasting”**, NCMRWF, DST, New Delhi, India, 29 - 30 Jul 2002.
- A. P. Dimri, U.C. Mohanty and L.S. Rathore. Point probabilistic prediction of precipitation (PoP) and quantitative precipitation forecasting (QPF) in northwest Himalaya. **Workshop on “Mesoscale modeling with special emphasis on Mountain Weather Forecasting”**, NCMRWF, DST, New Delhi, India, 29 - 30 Jul 2002.
- A. P. Dimri. Mountain weather interactions and energy exchange, **Indo - Central Asian Republics’ Glaciologists’ workshop**, School of Environmental Sciences, Jawaharlal Nehru University, New Delhi, India, 13 – 15 Mar 2002.
- U.C. Mohanty, S. Das, E.N. Rajgopal, G.R. Iyengar, H.R. Hatwar, Roy Bhowmik, Rama Rao, M. Mandal, A. Das, A. P. Dimri, S.S. Vaidya, D. K. Trivedi, P. K. Pal, P.C. Joshi, C. M. Kistwal, R. Singh and V. Sathiamoorthy. Simulation of intense convective activities over India using Mesoscale models. **Indo-US workshop on Weather and Climate Modeling (sponsored by Indo US S & T Forum)**, NCMRWF, DST, India, 7 – 9 Feb 2002.
- A. P. Dimri. Prediction of Minimum Surface Temperature in Glacial Environment Using a Statistical Dynamical Model. **National symposium on Snow, ice and glaciers - A Himalayan perspective**, GSI, Lucknow, India, 09 - 11 Mar 1999.
- A. P. Dimri, U.C. Mohanty and M.C. Pant. A Study on Snowfall Climatology over Western Himalayas. **National symposium on Himalayan Glaciers and snow cover**, SES, Jawaharlal Nehru University, New Delhi, India, 03 - 04 Mar 1997.
- B. De and A. P. Dimri. A Statistical Approach to Quantitative Precipitation Forecasting. **International symposium on snow and related manifestations organized by International Glaciological Society (IGS)**, at Snow and Avalanche Study Estt. (Defense Research and Development Organization), Manali (HP), India, 26 - 28 Sep 1994.

**(g) Papers in workshops/brainstorming meetings**

- A. P. Dimri. State-of-the-art with climate models over the Himalayan region. International Brainstorming on Quaternary Environments and Climates: Focus on Holocene and Anthropocene. Birbal Sahni Institute of Palaeosciences, Lucknow, UP, 21 -23 Feb 2017.
- Workshop on ‘Mountain Specific Research in the Context of Himalaya’ Indian National Science Academy, New Delhi, 19-20 Nov 2013.
- A. P. Dimri. Indian Winter Monsoon. Indo- French Brainstorming Seminar on Atmospheric Sciences, New Delhi, India, 3 -5 Oct 2013.
- A. P. Dimri. Climate Change of Cold arid region systems and Future Projections, Climate Change, Cryosphere, Habitat and Changing Livelihood Pattern of Ladhak Region: An interdisciplinary approach towards Developing Adaptive strategies at Leh, 17 - 26 Sep 2013 (as a **Resource Person**).
- A. P. Dimri. Workshop on Health Impacts of air quality and Climate in Asia, Sun Yat-Sen University, Guangzhou, China, 09-11 Apr 2012.
- K. Fujita, Y. Matsuda, A. P. Dimri, A. Sakai and T. Yasunari. Mass balance and discharge of Siachen Glacier, Karakorum: Tentative results. *EU-FP7 Highnoon Project*, Wageningen University, Wageningen, The Netherlands, 10-11 Nov 2011.
- A. P. Dimri, T. Yasunari and Y. Matsuda. Role of topography on winter precipitation over the western Himalayas. *EU-FP7 Highnoon Project*, Wageningen University, Wageningen, The Netherlands, 10-11 Nov 2011.
- R. J. Thayyen, A. P. Dimri, P. Kumar and G. Agnihotri. Study of cloudburst and Flash floods around Leh during August 4-6, 2010. *Brainstorming session on Glaciers and water*



- resources in the Cold-Arid systems of Ladakh region, Leh (Ladakh), Jammu, India, 27 Sep 2011.*
- D. Niyogi, A. P. Dimri and R. Pielke. Improving Model Projections and Vulnerability Assessments by Adapting Land Surface Feedback within Regional Climate Studies over the Western Himalayas. *Authors' workshop on Climate Change in the HKH – State of Current Knowledge*, ICIMOD, Kathmandu, Nepal, 18-19 Aug 2011.
- A. P. Dimri and A. Chevuturi. 'Wintertime Climatic Trends Analysis over glaciers in the Himalayas', *Brainstorming meeting on Himalayan Climate and Glaciers*, IIT Delhi, 15 -16 Feb 2010.
- A. P. Dimri. 'Wintertime Climatic trend analysis over the Siachen Glacier', *UNEP Sponsored International Expert workshop on Emerging Issues in Climate Change*, TERI University, New Delhi, 28 – 29 Dec 2009.
- A. P. Dimri. National Workshop on 'Review of Environmental Sciences Curriculum at M.Sc. level'. School of Environmental Sciences, Jawaharlal Nehru University, New Delhi, India, 27 – 28 Feb 2008.
- A. P. Dimri. 'Climate variability and climate change over western Himalayas using RCM', Meeting on Climate Change Studies, SAC, Ahmedabad, India, 19 -21 Aug 2008.
- A. P. Dimri. Workshop on 'Modeling the land surface and climate change in India', Indian Institute of Tropical Meteorology, Pune, India. 25 – 28 Mar 2008.
- A. P. Dimri. 'Wintertime climate variability and climate change over the western Himalayas', Contemporary Environmental Problems and Biotechnological Applications in their management, School of Environmental Sciences, Jawaharlal Nehru University, New Delhi, India. 7 – 8 Mar 2008.
- A. P. Dimri. *Brainstorming meeting for Improved Weather Forecasting*. WWF-India, 172-B, Lodi Estate, New Delhi, India. 26-28 Feb 2008.
- A. P. Dimri. Eight expert group meeting for the coordinated program on "Bio-Geo database and Ecological Modeling for the Himalayas- Uttaranchal transect", Center for Social Rural Development, Jawaharlal Nehru University, New Delhi. 18-19 Feb 2008.
- A. P. Dimri. NCMRWF's 2<sup>nd</sup> annual workshop on 'Model performance for 2007 weather systems'. National Centre for Medium range Weather Forecasting (NCMRWF), NOIDA, India. 31 Jan - 01 Feb 2008.
- A. P. Dimri. Climate change over the western Himalayas. *Brainstorming session on the receding of the Himalayan glaciers*. Vigyan Bhawan, Delhi, India. 10 Sep 2007.
- A. P. Dimri, P.K. Srivastava and A. Chaudhary. Inter-comparison of snow and blue ice sensitivities to climate change/impact in Antarctica. National Workshop on Assessment of research programs of XXVI Indian Antarctic Expedition and Planning of XXVII IAE, National Centre for Antarctic and Ocean Research, Goa, India, 27 – 28 Jun 2007.
- A. P. Dimri. Performance of Numerical models in relation to mountain weather forecasting. *Brainstorming meeting for Improved Weather Forecasting*, NAAS, NASC Complex, Pusa, Delhi, 06 - 08 Feb 2007.
- A. P. Dimri. Study of Regional Precipitation and Temperature Variability over Western Himalayas using RCM. *Brainstorming on Model Performances during Monsoon 2006 Period*, National Centre for Medium range Weather Forecasting (NCMRWF), NOIDA, India, 19 Dec 2006.
- A. P. Dimri. Study of regional Climate Variability over Indo-Gangetic Plain: A Perspective. *Brainstorming Workshop on Aerosols and Its Impact on Climate with Special Reference to Indo-Gangetic Plains*, Indian Institute of Technology, Kanpur, India, 10 -11 Nov 2006.

- U. C. Mohanty, A. P. Dimri and O. P. Madan. Meso Scale Models on Simulation of Weather Systems over Western Himalaya: A Historical Review. National workshop on “Mesoscale modeling for mountain weather forecast and its usefulness for improving avalanche forecasting”, Snow and Avalanche Study Estt., Defense Research and Development Organization, Manali (HP), India, 07 – 08 Nov 2001.
- A. P. Dimri, A. Ganju and T. Sunil. Study of Significant Winter Weather Events over Northwest Himalaya. National Snow Science Workshop (NSSW-99), at Snow and Avalanche Study Estt., Defense Research and Development Organization, Manali (HP), India, 29 – 30 Oct 1999.

### Invited Talks

- Lead Talk on ‘Himalayan Climate: Present and Future’, in International Conference on ‘The rational Utilization of the water Resources of the International Rivers in China and South Asia: A Pathway to Disputes Settlement’, Organized by Guangdong Institute for Indo-Pacific Peace and Development Studies, Hainan University, Haikou, China, 11 – 13 Jan 2017.
- Lead talk on ‘Floods in the southern rim of the Himalayas’, TROPMET-2016, Indian Meteorological Society, Bhubaneswar, Orissa, 18 -21 Dec 2016.
- Key note address on ‘Dynamical Understanding of Natural Hazards over Southern rim of the Himalayas’, in National Geo-Research Scholars Meet 2016, Wadia Institute of Himalayan Geology, Dehradun, India, 1 – 4 Jun 2016.
- ‘Himalayan Climate: Present and Future’, International Conference on Global Environment Change in the Himalayan Region: Controversies, Impacts, Futures, Organized by Heidelberg Center South Asia, India, 6 – 8 Nov 2015.
- ‘Comparison of Climatic trends and variability among glacierized environments in the western Himalayas’, Conference on Climate Change, Glaciers and Hydroelectricity in South Asia, Comprehensive Security Dialogue (CSD) 2015, Organized by Hans Seidel Foundation, India at Colombo, Srilanka, 5 – 6 Nov 2015.
- ‘Climate Change and Impacts over the Himalayas’, International Workshop on Climate Change and Impact and Adaptation in Himalaya: Science and Policy Interference, Organized by DST and IHCAP at Kumaon University, Nainital, India, 2 – 3 Nov 2015.
- ‘Impact on Himalayan climate: Recent and Future’, Workshop on Climate change Projections, Impacts, Vulnerability and Adaptation under the aegis of Third National Communication, Organized by Ministry of Environment, Forest and Climate Change, Govt. of India, 28 – 29 Oct 2015.
- ‘Himalayan Cryosphere and its role in defining Indian weather’, International conference on Science & Geopolitics of Artic-Antarctic-Himalaya, Organized by Lights Research Foundation, New Delhi, India, 29 -30 Sep 2015.
- Deliberated in National workshop on ‘Exploring Social sciences tools in teaching disaster research’, JNU, New Delhi, India, 21 Sep 2015.
- ‘Extremes in southern rim of the Himalayas’, in GLACINDIA Stakeholder Workshop on Identifying Climate Change Information Needs and Training on Climate Modeling and Climate Change Research, Innovation and Services, Organized by The Research Council of Norway, Federal Ministry of Education and Research, Germany and DST, GoI, 08 – 10 Apr 2015.
- ‘Atmospheric processes leading to extreme flood events’, in workshop Modeling and Managing Flood Risk in Mountain Areas at Sacramento, California, Organized under **Indo – US Science and Technology Forum (IUSSTF)**, 17 – 19 Feb 2015.

- ‘Climate Change as a driver of change’, Hindukush Himalayan Monitoring and Assessment Program (HIMAP), Organized by ICIMOD, Nepal, Thimpu, Bhutan, 4 - 6 Feb 2015.
- ‘Role of the Himalayas in defining Indian weather and climate’, **Climate Research Unit (CRU), University of East Anglia, Norwich, UK**, 27 Nov 2014.
- ‘Atmospheric processes associated with disasters in and around southern rim of the Himalayas’, **National Institute of Hydrology, Roorkee, Uttarakhand, India**, 10 Sep 2014.
- ‘Role of the Himalayas in defining Indian weather and climate’, **Institute of Mathematical Sciences, Chennai, India**, 27 Mar 2014.
- ‘Regional Climate Models’, Department of Zoology and Environmental Science Gurukula Kangri University, Haridwar 249 404, Uttarakhand, India, 21 Feb 2014.
- **Key note speaker** ‘Role of Himalayas in defining Indian weather and climate’, National Conference on Climate Change and social vulnerability Assessment, HNB Garhwal Central University, Srinagar-Garhwal, 19- 20 Feb 2014.
- Silver Jubilee International Conference on “**Prediction of weather and climate systems seamlessly**”, National Center for Medium Range Weather Forecasting, Ministry of Earth Sciences, 17 – 19 Feb 2014.
- ‘Numerical simulation of hail storm event over Delhi, India on 28 Mar 2013’. 50<sup>th</sup> Annual Convention and meeting of “Sustainability of Earth System- The Future Challenge” Organized by Indian Geophysical Union, at National Geophysical Research Institute, Hyderabad, India, 08 – 12 Jan 2014.
- **Key note speaker** of National Science Center, New Delhi, India during “Year of Mathematics of Planet Earth”, 17 Dec 2013.
- ‘Numerical modeling for climate studies’, Indian Institute for Remote Sensing, Dehradun, Uttarakhand, India, 08 Nov 2013.
- ‘Role of the Himalayas in defining Indian weather and climate’, **Meteorological Institute, University of Bonn, Bonn, Germany**, 10 Jun 2013 (<http://www.geomet.uni-koeln.de/allgemein/studium/kolloquium/>).
- ‘On defining Indian winter Monsoon’, Science Day, Jawaharlal Nehru University, New Delhi, 110067, India, 28 Feb 2013.
- ‘Uncertainties in Regional Climate Models’, **International Humboldt Kolleg**, Jawaharlal Nehru University, New Delhi, 110067, India, 08-09 Feb 2013.
- ‘Role of fine scale land surface representation on the wintertime climatic simulations over the western Himalayas’, **AOGS2011**, Taipei, Taiwan, 08 – 12 Aug 2011.
- ‘Changing Climate over the Himalayas’, Doon University, Dehradun, India, 04 May 2011.
- ‘Role of Topography in defining Weather and Climate’, Science Dialogue in Kakegawanishi High School, Kakegawa, Japan, 08 Mar 2011.
- ‘Wintertime Studies over the Western Himalayas’, Research Institute for Global Change (RIGC), **Japan Agency for Marine-Earth Science and Technology (JAMSTEC), Yokohama, Japan**, 16 Feb 2011.
- ‘Wintertime climate analysis over the western Himalayas’, Workshop on Climate Science and Emerging Issues in Asia, Indian Institute of Technology, New Delhi, India – 110016, 02 Jul 2010.
- ‘HPC in weather and climate’, National Symposium on "High Performance computing in Academia and Beyond", Organized by C-DAC Pune and BESU, Kolkata, 04 Mar 2010.

- 'Climate Change and Glaciers', ENVIS Seminar on Changing Environment and its Impact on Development & Evaluation Workshop at G. B. Pant Institute of Himalayan Environment and Development, Kosi-Katarmal, Almora, Uttarakhand, India, 23 – 24 Mar 2009.
- 'Large scale global forcing and climate modeling: Outstanding Issues', Science Day Festival 2009, Jawaharlal Nehru University, New Delhi, India, 27 – 28 Feb 2009.
- 'Climate extremes over the Western Himalayas', Geomatics – 2009: National Conference on Geomatics and Impact of Climate Change with Specific reference to Mountain Ecosystem and Annual Convention of Indian Society of Geomatics, Forest Research Institute, Dehradun, India, 04 -06 Feb 2009.
- 'Climate Extremes over the western Himalayas', **UK-India workshop on 'Downscaling and linking to applications'** University of East Anglia, Norwich, UK, 26 - 30 Jan 2009.
- 'Climate Modeling', Academic Staff College, Jawaharlal Nehru University, New Delhi, India, 19 Nov 2008.
- 'Relationship between ENSO phases and Wintertime Precipitation over the western Himalayas', International Workshop on **"Environmental Conservation for Sustainable Livelihood in the Cold Desert Region of Asia"** (Organized by UN university, Tokyo, Japan and Jawaharlal Nehru University, New Delhi), Solan, India, 15 – 17 Oct 2008.
- 'Government initiative and National, International conventions for climate change: Summits/Conferences/protocols etc.' in ToT program on Climate Change and Disaster Management, National Institute of Disaster Management, New Delhi, India, 28 - 02 May 2008.
- 'Climate Variability over Western Himalayas in winter' workshop on security implications of climate change for Indian, Institute for defense Studies and Analyses (IDSA), New Delhi, India, 16 Apr 2008.
- 'Study of Regional Precipitation and Temperature Variability using Regional Climate Model (RegCM3) and Climate Change over Western Himalayas', Department of Science and Technology sponsored Sixth Training Course on Glaciology (Organized by Glaciological Division of Geological Survey of India), Manali, India, 04 Sep 2007.
- 'Variability of Weather Parameters over the Western Himalayas: A Case Study', ISRO - Geosphere Biosphere workshop on High Resolution Monsoon Reconstruction Since The Last Glacial Maximum (~20000yrs) (Organized by Physical Research Laboratory, Ahmadabad and Dept of Marine Geology & Geophysics, Cochin University), Cochin, India, 20 – 21 Jul 2007.
- 'Development of Mountain Meteorology in the Himalayas,' at Air Force Academic College (AFAC), Coimbatore, India, Apr 2007.
- 'Mathematical Modeling of Real World Systems', International Congress and 8<sup>th</sup> Conference of ISIAM on Certain Emerging Areas in Applicable Mathematics, Jammu, India, 20 Mar - 03 Apr 2007.
- Technology day oration on 'Wintertime Seasonal Scale Simulation Over Western Himalayas using RegCM3' at Snow and Avalanche Study Establishment, Chandigarh, India, 11 May 2006.
- 'Statistical Techniques for Restoring non-linearities in Atmospheric Process', Continuing Education Program (CEP) of Defense Research and Development Organization on Computational Techniques and its Applications, Institute of Armament Technology, Girinagar, Pune, India, 26 - 30 Dec 2005.

- ‘Operational Mountain Weather Forecast’ at **Center for Atmospheric and Oceanic Sciences, Indian Institute of Sciences, Bangalore, India**, Jul 2005.
- ‘Complexities of Mesoscale Weather Processes and their Prediction over the Himalayas’, **Institut d’Astronomie et de Geophysique Georges Lemaitre, Universite Catholique de Louvain, Louvain-la-Neuve, Belgium**, 15 Oct 2004.
- ‘Western Disturbances’, Uttaranchal – Participation of youth in Real-time/field Observations to Benefit Education (U-PROBE): A Pilot Experiment in 100 Schools of Uttaranchal – a Department of Science and Technology (DST – GoI) initiative in science education, CAS, IITD, New Delhi, India, 14 Jul 2004.

### Teaching Courses

- Atmospheric Processes of 2 Credits in M.Phil/Ph.D.
- Energy Use and its Environmental Implication of 3 credits in M.Phil/Ph.D.
- Meteorology of 2 credits in Masters’
- Climatology of 2 credits in Master's
- Energy and Environments of 2 credits in Master's
- Environmental Studies of non-credit for Bachelor’s

### Teaching/Academic Experience

- School of Environmental Sciences, Jawaharlal Nehru University, New Delhi India: M.Phil. and M.Sc. Students (continuing since Jan 2008)
- Educational Field Excursion of M.Sc. II<sup>nd</sup> Semester of Students of School of Environmental Sciences, Jawaharlal Nehru University, New Delhi
- Revision of existing M.Sc. syllabi at School of Environmental Sciences, Jawaharlal Nehru University, New Delhi, India
- Academic Staff College, Jawaharlal Nehru University, New Delhi, India - Lead talks for teachers of various graduate/post graduate colleges across India
- POst INDuction Training School (POINTS) of Defense Research and Development Organization for newly recruited scientists at Defense Institute of Advance Technology (DIAT-Deemed University), Girinagar, Pune, India (2002-2006)
- Continuing Education Program (CEP) of Defense Research and Development Organization on “Mountain Weather Forecasting: Emerging trends and Modeling Tools” from 09 to 20 Jul 2007
- Continuing Education Program (CEP) of Defense Research and Development Organization on “Computational Techniques and its Applications” from 26 to 30 Dec 2005 at Institute of Armament Technology, Girinagar, Pune, India
- Summer Project supervision of B.Tech. student
- Continuing Education Program (CEP) of Defense Research and Development Organization on “Application of Advanced Mathematical Techniques In Weather, Snow And Avalanche Related Studies” from 04 to 15 Jul 2005
- Continuing Education Program (CEP) of Defense Research and Development Organization on “Statistical and Fuzzy Techniques of Avalanche Forecasting - Recent Advances” from 28 Jun to 09 Jul 2004
- M.Tech. on Cold Region Science and Technology of G.B. Pant Agricultural University, Pantnagar, Uttaranchal, India (1995 – 2001)

### Institutional and other Activities

- **Session Convener – Extreme Weather Events**, TROPMET 2016, Indian Meteorological Society, Bhubaneswar, Orissa, 18 – 21 Dec 2016

- **Co-Host** (With Prof Al. Ramanathan) of A course under **Global Initiative of Academic Network (GIAN) on 'Glacier and Water Resource Management'** at School of Environmental Sciences, Jawaharlal Nehru University, New Delhi, India, 25 – 31 Jul 2016.
- **Chief Proctor**, (Mar 2016 – Jan 2017), Jawaharlal Nehru University, New Delhi, India, 01 Mar 2016 – 24 Jan 2017.
- **Session Convener (with Prof Gang Liu)** – Computer application in earth sciences in 16<sup>th</sup> Annual Conference of the International Association for Mathematical Geosciences, Jawaharlal Nehru University, New Delhi, India, 17-20 October, 2014.
- **Member** (2013 - 2015), Center for the Study of Regional Development, School of Social Sciences, Jawaharlal Nehru University, New Delhi, India.
- **Executive Council Member**, (2012 – 2013), Jawaharlal Nehru University Teaching Association (JNUTA), New Delhi, India.
- **Proctor** (2013 - 2015), Jawaharlal Nehru University, New Delhi, India, 31 Jan 2013 – 30 Jan 2015.
- **Convener**, Sub-Committee on 'Formulating Methodology during admission' in School of Environmental Sciences, Jawaharlal Nehru University, New Delhi, India.
- **Warden In-charge (Administration)** (Sep 2012 – Sep 2014), Yamuna Working Women Hostel, Jawaharlal Nehru University, New Delhi, India.
- **Member** (2012 – 2014; 2016 - 2018), **Academic Council**, Jawaharlal Nehru University, New Delhi, India.
- **Member** (2012 – 2014; 2016 - 18), **Court**, Jawaharlal Nehru University, New Delhi, India.
- **Session Chair** - "Observational and Modeling studies on Tropical Cyclone", AOGS2010, Hyderabad, India.
- **Session Convener** - "Extreme Weather events in changing climate", AOGS2010, Hyderabad, India.
- **Member (2010 – 2012)**, Advisory Committee of Communication and Information Service (CIS), Jawaharlal Nehru University, New Delhi, India.
- Organizer workshop on "High Performance Computing", School of Environmental Sciences, Jawaharlal Nehru University, New Delhi, India, 08 – 11 Dec 2009.
- Member, High Performance Computational Facility, Jawaharlal Nehru University, New Delhi, India.
- **Member (2009 - 2010), Gender Sensitization Committee against Sexual Harassment (GSCASH)**, Jawaharlal Nehru University, New Delhi, India.
- Head, High Performance Computational Committee, School of Environmental Sciences, Jawaharlal Nehru University, New Delhi, India.
- Formulated syllabus for Meteorology and Climatology for School of Environmental Sciences, Jawaharlal Nehru University, New Delhi, India.
- Admission Coordinator of Area-I, School of Environmental Sciences, Jawaharlal Nehru University, New Delhi, India.
- Warden (2009 – 2010), Chandrabhagha Hostel, Jawaharlal Nehru University, New Delhi, India.
- Organized Continuing Education Programme (CEP), symposium and conference etc. of Defense Research and Development Organization at various capacities.
- Working President of Hindi Committee (2006 – 2008), for promoting science in Indian Hindi language at Snow and Avalanche Study Estt., Defense Research and Development Organization.

- Hindi Secretary (2003 – 06), for promoting science in Indian Hindi language at Snow and Avalanche Study Estt., Defense Research and Development Organization.
- Second secretary of 'EUREKA', an informal forum which shares latest happening in science at Snow and Avalanche Study Estt., Defense Research and Development Organization.
- Presiding officer/member of various institutional boards of Snow and Avalanche Study Estt., Defense Research and Development Organization.

### Editor

Meteorology and Atmospheric Physics (Feb 2016 - )  
 Climate Change and Environmental Sustainability (Jun 2017 - )  
 Austin Journal of Earth Science (Jun 2015 - )

### Reviewer

Journal of Climate, Quarterly Journal of the Royal Meteorological Society, Journal of Geophysical Research-Atmospheres, The Holocene, Climate Dynamics, Science of Total Environment, International Journal of Climatology, Journal of Hydrology, Pure and Applied Geophysics, Hydrological Research Letters, Theoretical and Applied Climatology, Water Resource Research, Advances in Meteorology, Proceedings of the National Academy of Sciences, India Section A: Physical Sciences, Earth Interactions, Modeling Earth Systems and Environment, Natural Hazards, Remote Sensing Letters, PLoS One, Atmospheric Environment, International Journal of Remote Sensing, Global and Planetary Change, Weather and Climate Extremes, Advance in Climate Change Research, Dynamics of Atmospheres and Oceans, Meteorology and Atmospheric Physics, Atmosfera, Journal of Earth System Science, Current Science, Mausam, Annals of Glaciology, American Journal of Climate Change, Research Journal of Earth and Planetary Sciences, Geomatics, Natural Hazards and Risk, Journal of Earth Science and Climate Change, International Journal of Environmental Science and Technology, Journal of Climate Change, Atmospheric Chemistry and Physics, Atmospheric Research, Meteorological Applications, Journal of Atmospheric and Solar-Terrestrial Physics, Advances in Meteorology

### Collaborations and Mentoring

U.C. Mohanty (IIT, Bhubneshwar, Orissa, India), F. Giorgi (ICTP, Trieste, Italy), L.S. Rathore (IMD, Delhi, India), S.K. Dash (IIT, Delhi, India), T. Yasunari (Nagoya University, Nagoya, Japan), D. Niyogi (Purdue University, US), D. R. Sikka (Ex-Director, IITM, Pune, India), P. Kumar (Max-Planck Institute for Meteorology, Humburg, Germany), S. Das (NCMRWF, Noida, India), C. Simmer (Meteorological Institute, Univ. of Bonn, Germany), R. K. Yadav (Indian Institute of Tropical Meteorology, Pune, Maharashtra, India), R. Shankar (Institute of Mathematical Sciences, Chennai, Tamilnadu, India), Argha Banerjee (Indian Institute of Science and Education Research, Kolkata, West Bengal, India), Clare Goodess (CRU, Norwich), Phil Jones (CRU, Norwich), R. J. Thayyen (National Institute of Hydrology, Roorkee, India)

### Supervision

#### Doctoral

A. Sikha (contd.) –  
 (In Co-supervision with Dr. K. K. Singh)  
 R. M. Devi (contd.) –

(In Co-supervision with Dr. B. Sinha)

S. G. Kutty (contd.) -

P. Kumar (contd.) -

T. M. Midhuna (contd.) - Indian Winter Monsoon and its future projection under changing climate scenario

D. Kumar (contd.) - Assessment of Coupled Regional Land-Atmosphere model for Indian summer monsoon and its future projection

P. K. Rai (contd.) - Variability of Indian Summer Monsoon at various time scales in relation with different atmospheric forcings

A. Chaudhary (contd.) - Study of Indian summer monsoon using Regional Climate model experiments

M. Jain (contd.) - Urbanization and its manifestations on localized weather (in Co-supervision with Prof. D. Niyogi)

B. S. Sahu (2017) - Analysis of long term variability in total ozone column and erythemal ultra violet radiation over Indian region (in Co-supervision with Dr. A. Tandon)

A. Chevaturi (2015) – Study of precipitating events over India

P. Maharana (2014) – Interannual and intraseasonal climatic variability over the Indian region

**M. Phil.**

A. Sikha (2017) - A model based case study of water stress on cotton crop (in Co-supervision with Dr. K. K. Singh)

R. M. Devi (2014) – Study of extreme precipitation over Uttarakhand region during summer 2013

**Masters'**

D. Sen (2016) - Statistical analysis of the influence of nutritional cycles on a selected cluster of genes and their role in combating oxidative stress in *E. Coli* cells: A multiple linear regression approach

T. Nengker (2016) - Evaluation of the performance of CORDEX-SA experiments for seasonal temperature over the Himalayan region for the present climate

S. Ghimire (2015) - Performance of CORDEX-South Asia Regional Climate Models in Simulating Precipitation Climatology over Hindu-kush Himalayan region

K. Saurabh (2014) - Fog forecast over Delhi region using artificial neural network

A. Shika (2014) - Cloudburst: An extreme precipitation event

P. Gunwani (2010) - Energy balance model



J. T. Bhutia (2009) - Western Disturbances

**Programming languages** : FORTRAN77, FORTRAN90

**Operating systems used** : DEC ALPHA (OSF), SGI (IRIX), Sun (Solaris), CARY- SV1, Windows/DOS

**Software** : MATLAB, Mathematica, MS OFFICE, Word Perfect, Visualization packages (Surfer, Grapher, Grads)

### References

1. **Prof. U. C. Mohanty**, School of Earth, Ocean and Climate Sciences, Indian Institute of Technology, Bhubaneswar, Orissa, India. Email: [ucmohanty@gmail.com](mailto:ucmohanty@gmail.com); [mohanty@cas.iitd.ernet.in](mailto:mohanty@cas.iitd.ernet.in). Web: <http://cas.iitd.ac.in/>
2. **Prof. T. Yasunari**, Director General, Research Institute for Humanity and Nature, Kyoto, Japan. Email: [yasunari@chikyu.ac.jp](mailto:yasunari@chikyu.ac.jp); [yas.monsoon@nifty.com](mailto:yas.monsoon@nifty.com). Web: <http://www.chikyu.ac.jp/yasunari/yasunari.bak/index-e.html>
3. **Prof. J. Srinivasan**, Center for Atmospheric and Oceanic Sciences, Indian Institute of Sciences, Bangalore, India. Email: [jayes@caos.iisc.ernet.in](mailto:jayes@caos.iisc.ernet.in). Web: <http://caos.iisc.ernet.in/faculty/jayes.html>.
4. **Prof. R. Ramesh**, Physical Research Laboratory, Ahmedabad - 380 009, Gujrat, India. Email: [ramesh@prl.res.in](mailto:ramesh@prl.res.in); [r.ramesh@prl.ernet.in](mailto:r.ramesh@prl.ernet.in). Web: <http://www.prl.res.in/>.
5. **Prof. F. Giorgi**, Earth System Physics, International Center for Theoretical Physics, Trieste, Italy. Email: [giorgi@ictp.it](mailto:giorgi@ictp.it). Web: <http://users.ictp.it/~giorgi/>.

### Training Courses Attended

- Workshop on High-Impact Weather Predictability and Information System for Africa and AMMA-THORPEX Forecasters' Handbook, 5 - 8 Oct 2009, ICTP, Trieste, Italy
- Targeted Training Activity: Seasonal Predictability in Tropical Regions: Research and Applications, 07 – 18 Aug 2006, in collaboration with and Co-sponsored by COLA-IGES (Center for Ocean, Land, Atmosphere Studies) MD, USA and ICTP, Trieste, Italy
- Applications of Neuro Fuzzy Techniques in Engineering Systems, 21 – 25 Nov 2005, Institute of Armament Technology, Deemed University, Pune, India
- Right Mindset and Practices for Effective Project Management in Defense Research and Development Organization Context, 26 - 30 Sep 2005, Institute of Technology Management, Mussoorie, India
- Targeted Training Activity: Course on Climate Dynamics for Climate Research Centers and University Lecturers, 09 - 27 Aug 2004, in collaboration with and Co-sponsored by COLA-IGES (Center for Ocean, Land, Atmosphere Studies) MD, USA and ICTP, Trieste, Italy
- Summer School on Mountain Meteorology (SSMM) on “Thermally Driven Winds in Mountainous Terrain”, 18 – 22 Aug 2003, University of Trento, Italy

- Numerical Weather Prediction (Parameterization of Physical Processes), 08 Apr – 04 May 2002, Indian Institute of Technology, New Delhi, India
- Familiarization Programme on Numerical Weather Prediction (NWP), 18 – 20 Dec 2001, National Centre for Medium Range Weather Forecasting (NCMRWF), New Delhi, India
- Numerical Weather Prediction (Data Processing, Assimilation and Initialization), 12 Mar – 07 Apr 2001, Indian Institute of Technology, New Delhi, India
- Cloud Physics and Atmospheric Electricity – Fundamentals, 13 Jun – 14 Jul 2000, Indian Institute of Tropical Meteorology, Pune, India (secured 1<sup>st</sup> position in paper presentation)
- Intensive course on use of Statistical methods in weather analysis and prediction, 02 – 21 Dec 1996, Indian Institute of Technology, New Delhi, India
- National symposium on International Geosphere-Biosphere Program, 21 –24 Apr, 1993, Central Leather Research Institute and Anna University, Madras, India
- Familiarization course in Oceanography, 25 - 29 Jan 1993, National Institute of Oceanography, Goa, India
- Understanding the present climate and its Future change over the Indian subcontinent due to global warming, 7 – 24 Dec, 1992, Indian Institute of Technology, New Delhi, India

### Field Experiences

- Jun 2017, Uttarkashi Basin (Uttarakhand)
- Apr 2017, Bhagirathi Basin (Harsil and Chamba)
- Feb 2017, Alaknanda and Bhagirathi Basin
- Aug 2016 - Ladhak region, India, for Climate Change Research
- Jan – Feb 2016 – Sundarbans, West Bengal, for Climate Impact Research; Ministry of Home, Govt. of India, Under JNU-DRP program
- Sep 2013 – Ladhak region, India, for Climate Change Research
- Jun 2009 – Himachal Pradesh, India, forest for sampling tree ring for climate proxy data records
- Apr 2009 – Uttarakhand, India, forest for sampling tree ring for climate proxy data records
- Dissemination workshop on “Avalanche Forecasting” for defense personals at Baramulla (altitude 1625m), 20-21 May 2005
- Winter 2004 - 05 at Srinagar (altitude 1582m)
- Cadre on “Avalanche safety and rescue” for defense personals at Baramulla (altitude 1625m) in December 2003
- Winter 2002 - 03 at Srinagar (altitude 1582m)
- Cadre on “Avalanche safety and rescue” for defense personals at Drass (altitude 3230m) in October 1999
- Installation of surface meteorological observatory at Bakrwal (altitude 3620m) in Kargil Sector along LOC in great Himalayan range in October 1999
- Winter 1999 - 2000 at Srinagar (altitude 1582m)
- Winter 1998 - 99 at Srinagar (altitude 1582m)
- Winter 1997 - 98 at Patseo (altitude 3800m) in Pir Panjal range of Indian Himalayas
- Assistance to Border Road Organization (BRO) in snow road clearance along Srinagar (altitude 1582m) – Leh (altitude 3523m) axis from Sonamarg (altitude 2745m) to Zozila pass (altitude 3529m) in Great Himalayan range in May 1996

- Revamping of surface meteorological observatories at Pharkian (altitude 2960m), Z-Gali (altitude 3192m) and Sonapindi Gali (altitude 3281m) in Pir Panjal range of Indian Himalayas in October 1995
- Winter 1994 - 95 at Siachen Glacier (altitude 3570m): Largest Glacier outside the polar region in Karakoram hill range