

Krishna Chandra Tripathi
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Professional Qualifications:

1. UGC NET, 2012 qualified in Computer Science
2. **PhD (Regular and Full Time) from University of Allahabad** in March 2011 in the topic “**Application of Artificial Neural networks for investigating oceanic parameters**”.
 - a. JRF/ SRF/ during PhD in Sponsored Research Projects
3. **M.Sc. in Comp. Sc. from University of Allahabad**, Allahabad, 2003 (69%)
4. **B.Sc** in Physics, Mathematics and Computer Maintenance, **University of Allahabad**, Allahabad, 2000.

Teaching Experience (in Years): 14 years (teaching and research)

1. Associate Prof. (IPEC, Gzb) - September 2014-Present
2. Assistant Prof. - (IPEC, Gzb) May 2011 – August 2014
3. Senior Lecturer – August 2009 – April 2011
4. Scientist ‘C’ – (Allahabad University) March 2008 – July 2009
5. SRF and JRF – (Allahabad University) July 2003 – March 2008

Subjects of interest: Pattern Recognition, Automata Theory, Mathematical Modeling of Atmosphere and Oceans.

Academic achievements:

1. International Journals(15)

1. **K C Tripathi**, I M L Das and A K Sahai, *Predictability of sea surface temperature anomalies in the Indian Ocean using Artificial Neural Networks*, Indian Journal of Marine Sciences, **2006**, vol. 35, 210-220 (**ISSN: 0379-5136, impact factor: 0.563**)
2. **K. C. Tripathi**, S. Rai, A. C. Pandey and I. M. L. Das, *Southern Indian Ocean SST indices as early predictors of Indian summer monsoon*, Indian Journal of Marine Sciences, **2008**, vol. 37(1), 70-76 (**ISSN: 0379-5136, impact factor: 0.563**)
3. **K. C. Tripathi** and I. M. L. Das, *Simulation of Antarctica sea ice area with artificial neural network*, Indian Journal of Marine Sciences, **2008**, vol. 37(1), 77-85 (**ISSN: 0379-5136, impact factor: 0.563**).
4. S. Rai, A. C. Pandey, **K. C. Tripathi** and S. Dwivedi, *Predictive Skill of DEMETER models for wind prediction near Madagascar*, Indian Journal of Marine Sciences, **2008**, vol. 37(1), 62-69 (**ISSN: 0379-5136, impact factor: 0.563**).
5. Shikha Rai, A. K. Rai, I. M. L. Das and **K C Tripathi**, *Implementation of statistical methods on LIBS data for classification of residues of energetic materials (nitro compounds)*, Adv. Mat. Lett. **2011**, 2(1), 32-37 (**ISSN: 0976-3961, impact factor: 2.03**)

6. R. P. Shukla, **K. C. Tripathi**, A. C. Pandey and I. M. L. Das, *Prediction of Indian summer monsoon rainfall using Niño Indices: a neural network approach*, Atmospheric Research, DOI information: 10.1016/j.atmosres.2011.06.013, Volume 102, Issues 1–2, October 2011, Pages 99–109 (**ISSN: 0169-8095, impact factor: 2.20**)
7. Shraddha Srivastava and **Krishna C Tripathi**, *Artificial Neural Network and Non-Linear Regression: A Comparative Study*, International Journal of Scientific and Research Publications, Volume 2, Issue 12, December 2012, 1-5 (**ISSN: 2250-3153, impact factor: 0.33**)
8. **K C Tripathi**, Rashi Agarwal and P N Hrisheeksha *Global Prediction algorithms and predictability of anomalous points in a time series*, International Journal of Computers and Technology, 2013 (10, No 9) 1983-1989 (**ISSN: 2277-306, impact factor: 1.32**)
9. Abhishek Saxena, Neeta Verma and **K C Tripathi**, *A review study of Weather Forecasting using Artificial Neural Network Approach*, International Journal of Engineering Research & Technology (10, issue 11), November 2013, ISSN: 2278-018
10. Pranshu Saxena, **K C Tripathi** and P N Hrisheeksha, *Automated Nuclear Architecture of Each Biased Cell Nucleolus from Histological Imagery by Enhanced Contour Algorithm*, IFRSA's International Journal Of Computing , Vol 4, issue 2, April 2014
11. Neeta Verma, YDS Arya and **K C Tripathi**, *Artificial Neural Networks for predictability of All India Rainfall using historical time series*, International Journal of Science, Technology and Management (4) pp 808-814, **March 2015**, ISSN (online): 2394-1537
12. A. K. Mittal, U. P. Singh, A. Tiwari, S. Dwivedi, M. K. Joshi, **K. C. Tripathi**, *Short-term predictions by statistical methods in regions of varying dynamical error growth in a chaotic system*, Meteorol Atmos Phys DOI 10.1007/s00703-015-0375-3, Springer-Verlag, **April, 2015**, Print ISSN: 0177-7971, Online ISSN: 1436-5065
13. Meenal Jain and **K C Tripathi**, *AutoAssociative Neural Networks for Nonlinear Principal Components Analysis of Sea Surface Temperature Anomalies in Indian Ocean*, 58-60, Print ISSN:2393-9907, Online ISSN 2393-9915, **Vol 2, April-June, 2015**
14. Neeta Verma, YDS Arya and **K C Tripathi** Skill scores verification for All India Rainfall data using Artificial Neural Network, International Journal of Soft Computing, **2017 (in press)**.
15. A.C. Pandey, I.M.L. Das, Shailendra Rai, A.P. Mishra, V.K. Pandey, Suneet Dwivedi, Amitabh Mitra, **K. C. Tripathi** and B.P. Kirtman, *Mathematical Modelling of Atmosphere and Ocean Processes around Antarctic*, **Review Book** edited by NCAOR, Goa, Headland Sada, Vasco-da-Gama, **2007**, chapter 4 (pp 1-31).
16. M. K. Joshi, **Krishna C Tripathi**, Avinash C Pandey and I. M. L. Das, *"Intraseasonal variability of rainfall in India on regional basis"* in Challenges and Opportunities in Agrometeorology, edited by Attri,

S.D., Rathore, L.S., Sivakumar, M.V.K. and Dash, S.K., Springer-Verlag Berlin Heidelberg, Doi: 10.1007/978-3-642-19369-6_9, **2011**, 73-82.

17. Ravi P Shukla, **Krishna C Tripathi**, Sandipan Mukherjee, Avinash C Pandey and I. M. L. Das, “*Improved seasonal predictability of DEMETER models for Central Indian summer Monsoon Rainfall using weighted multi model ensemble*” in Challenges and Opportunities in Agrometeorology, edited by Attri, S.D., Rathore, L.S., Sivakumar, M.V.K. and Dash, S.K., Springer-Verlag Berlin Heidelberg, Doi: 10.1007/978-3-642-19369-6_9, **2011**, 123-138.

2. International and National Conferences(33)

1. **K.C. Tripathi**, I.M.L. Das and A.K. Mittal, *Prediction of Sea Surface Temperature in the Indian Ocean Region using Artificial Neural Networks*, Proceedings of the “First Prof. R. Ananthkrishnan Memorial Conference on Atmospheric Sciences, Climate Change and Environmental Studies”, organized by Indian Institute of Tropical Meteorology, Pune, pp 91-92, **2005**.
2. **K C Tripathi** and I.M.L. Das, *Simulation of Antarctica sea ice variability with Artificial Neural Network*, “Seminar on Antarctic Science: Indian Contributions in Global Perspectives”, organized by National Center of Antarctic and Ocean Research, Goa, 25-26 May, **2006**.
3. Rai, S., S. Dwivedi, **K. C. Tripathi**, R. P. Shukla, S. Kaushik and A. Shreshtha, *Predictability Issues in Tropical Regions-a case study for India and Nepal*, “Targetted Training Activity on Seasonal Predictability in Tropical Regions: Research and Applications”, Miramare, **Trieste, Italy** 7-18 August **2006**.
4. S. Rai, S. Dwivedi, **K. C. Tripathi**, A. C. Pandey and I. M. L. Das, *Predictive skill of DEMETER models for Indian summer monsoon*, “Indian Meteorological Society (IMS), Pune Chapter (TROPMET-2006)”, organized by Indian Meteorological Society (IMS), Indian Institute of Tropical Meteorology, Pune, **2006**, pp d11-d13.
5. **K. C. Tripathi**, I. M. L. Das, S. Rai and A. C. Pandey, *DEMETER Models: Predictability studies for meridional wind velocity with Multimodel Ensembling*, “TROPMET-2006”, “Indian Meteorological Society (IMS), Pune Chapter (TROPMET-2006)”, organized by Indian Meteorological Society (IMS), Indian Institute of Tropical Meteorology, Pune, **2006**, pp d14-d15.
6. **K. C. Tripathi**, S. Rai, A. C. Pandey and I. M. L. Das, *Southern Indian Ocean SST indices as early predictors of Indian summer monsoon*, “National Seminar on ”India – Scientific Endeavours in Antarctica and Southern Ocean”, organized by National Center for Antarctica and Ocean Research, Goa, **2007**.

7. **K C Tripathi** and I.M.L. Das, *Antarctic sea ice concentration simulated by artificial neural network*, Proceedings of “**International Workshop** on Snow, Ice, Glacier and Avalanches”, IIT Bombay, India, Annexure, 07-09 January, **2008**.
8. **K C Tripathi** and I.M.L. Das, *Antarctic sea ice concentration as a prospective predictor for Indian summer monsoon rainfall (awarded paper)*, “Proceedings of National Snow Science Workshop”, organized by **SASE (DRDO)**, Chandigarh, India, pp 229-232, 11-12 January, **2008**.
9. I M L Das and **K C Tripathi**, *On Possible Association Between Antarctic Sea Ice Concentration and All India Rainfall*, Abstracts of “SCAR/ IASC IPY Open Science Conference, **St. Petersburg, Russia**”, 8-11 July, **2008**.
10. Shikha Rai, A. K. Rai, I. M. L. Das and **K.C. Tripathi**, *Statistical modeling for signature of Nitro compounds in laser induced plasma*, “Proceedings of 5th **International Conference** on Laser-Induced Breakdown Spectroscopy (LIBS)”, Berlin, Adlershof, Germany, 22 – 26 September **2008** (in press).
11. Shikha Rai, A K Rai, I M L Das and **K C Tripathi**, *Discrimination of nitro compounds with LIBS by employing statistical analysis*, “First Rashtriya Yuva Vaigyanik Sammelan”, organized by Vigyan Bharati, Haryana, in association with the National Institute of Technology (NIT) Kurukshetra, Kurukshetra, 28-30 November, **2008**.
12. Manish K Joshi, **K C Tripathi**, A.C. Pandey and I.M.L. Das, *Spectral analysis of precipitation in southern Indian region*, “**International Conference** on Progress in Weather and Climate Modeling over the Indian Region”, organized by the National Centre for Medium Range Weather Forecasting (NCMRWF), Noida, during 9-12 December, **2008**, Extended Abstract, pp 223.
13. Ravi P Shukla, A C Pandey, **K C Tripathi**, Sandipan Mukherjee and I M L Das, *Predictability skill of the SNU Tier-1 seasonal forecast system for the Indian Summer Monsoon Rainfall*, “National Symposium on Advances in Remote Sensing Technology and Applications with Special Emphasis on Microwave Remote Sensing and Annual Convention of Indian Society of Remote Sensing (ISRS)”, organised by SAC (ISRO) and Nirma University, Ahmedabad, Ahmedabad, Gujarat, December 18-20, **2008**.
14. Nisha Baranwal, **K. C. Tripathi**, A C Pandey and I M L Das, *Heat Transport through Indonesian throughflow via Lombok, Savu and Timor Straits by Different wind stress forcing*, “National Symposium on Advances in Remote Sensing Technology and Applications with Special Emphasis on Microwave Remote Sensing and Annual Convention of Indian Society of Remote Sensing (ISRS)”, organised by SAC (ISRO) and Nirma University, Ahmedabad, Ahmedabad, Gujarat, December 18-20, **2008**.
15. A C Pandey, Sandipan Mukherjee, R P Shukla, **K C Tripathi** and I M L Das, *Seasonal Prediction skill analysis of surface variables of DEMETER models over western tropical Indian Ocean*, “National Symposium on Advances in Remote Sensing Technology and Applications with Special Emphasis on Microwave Remote Sensing and Annual Convention of Indian Society of Remote Sensing (ISRS)”,

organised by SAC (ISRO) and Nirma University, Ahmedabad, Ahmedabad, Gujarat, December 18-20, **2008**.

16. Manish K Joshi, Avinash C Pandey, **K C Tripathi** and I M L Das, *Estimation of Precipitation in the southern Indian region using DWS-ETA model*, “National Symposium on Advances in Remote Sensing Technology and Applications with Special Emphasis on Microwave Remote Sensing and Annual Convention of Indian Society of Remote Sensing (ISRS)”, organised by SAC (ISRO) and Nirma University, Ahmedabad, Ahmedabad, Gujarat, December 18-20, **2008**.
17. Shikha Rai, A. K. Rai*, I. M. L. Das, and **K.C. Tripathi**, *Detection of traces of Nitrocompunds with LIBS using PCA*, “National symposium on Advances in Laser and Spectroscopy”, organised at Sagar University, M. P, February 27-28, **2009**.
18. Shikha Rai, A. K. Rai, I. M. L. Das, and **K.C. Tripathi**, *Statistical analysis of LIBS spectra of nitro compounds*, “Eighth DAE- BRNS National Laser Symposium (NLS-08)”, organised at Laser Science and Technology Centre (LASTEC), Delhi, January 7 - 10, P10-003, **2009**.
19. Shikha Rai¹, A. K. Rai¹, I. M. L. Das, and **K.C. Tripathi**, *Classification of traces of Nitro compounds with LIBS using PCA (awarded paper)*, “Meghnad Saha Memorial Symposium on Emerging Trends in Laser Spectroscopy and Applications (MMSETLSA-2009)”, Allahabad, India, organized by Department of Physics, University of Allahabad, Allahabad, 23-25 March, **2009**.
20. Manish K Joshi, **K C Tripathi**, A.C. Pandey and I.M.L. Das, *Intra seasonal variability of rainfall in India on regional basis*, “**International conference** on “Challenges and Opportunities in Agrometeorology (INTROMET)”, organized by Indian Meteorological Society, New Delhi, India, 23-25 February, **2009**
21. Ravi P Shukla, **K. C .Tripathi**, Sandipan Mukherjee, A. C. Pandey and I. M. L. Das, *Improved Seasonal Predictability Skill of the DEMETER Models for Central Indian Summer Monsoon Rainfall*, “**International conference** on Challenges and Opportunities in Agrometeorology (INTROMET)”, organized by Indian Meteorological Society, New Delhi, India, 23-25 February, **2009**
22. I M L Das and **K C Tripathi**, *Tele-connection between Antarctic Sea Ice Concentration and All India Rainfall*, “**International Symposium** On Snow and Avalanches”, Organized by INTERNATIONAL GLACIOLOGICAL SOCIETY, co-sponsored by Snow and Avalanche Study Establishment (SASE), Manali India, 5 - 10 April, **2009**.
23. **K C Tripathi** and I. M. L. Das, *Antarctic sea ice concentration and its relationship with niño indices*, “**International conference** on Polar Science and Technology”, organized by National Environmental Science Academy, New Delhi, New Delhi, India, 28-30 August, 2009.
24. **K C Tripathi**, M K Joshi, I. M. L. Das and A C Pandey, *Simulation of heat fluxes in the southern hemisphere region with mitgcm*, “**International conference** on Polar Science and Technology”,

organized by National Environmental Science Academy, New Delhi, New Delhi, India, 28-30 August, 2009.

25. M K Joshi, **K C Tripathi** , A C Pandey and I. M. L, Das, *Spectral analysis of climatological mean of rainfall over the last five decades*, “**International conference** on Polar Science and Technology”, organized by National Environmental Science Academy, New Delhi, New Delhi, India, 28-30 August, 2009.
26. M K Joshi, K C Tripathi , A C Pandey and I. M. L, Das, *Simulation of Antarctic sea ice concentration over the last three decades using MITgcm model*, “**International conference** on Polar Science and Technology”, organized by National Environmental Science Academy, New Delhi, New Delhi, India, 28-30 August, 2009.
27. R P Shukla, **K C Tripathi** , A C Pandey and I. M. L, Das, *Prediction of Indian Summer Monsoon Rainfall using Nino indices*, “**International conference** on Polar Science and Technology”, organized by National Environmental Science Academy, New Delhi, New Delhi, India, 28-30 August, 2009.
28. Archana Rai, M K Joshi, **K C Tripathi** , A C Pandey and I. M. L, Das, *Intraseasonal and interannual variations in the zonal and meridional wind components in the cryosphere region using MITgcm*, “**International conference** on Polar Science and Technology”, organized by National Environmental Science Academy, New Delhi, New Delhi, India, 28-30 August, 2009.
29. R. P. Shukla, **K C Tripathi**, S. Mukherjee, A C Pandey and I M L Das, Prediction of Indian summer monsoon rainfall using nino inices: a neural network approach, “**International workshop** on high resolution climate model”, Internation Center for Theoretical Physics (ICTP), Miramare, **Trieste, Italy** 27 July-14 August, 2009.
30. Saxena Chandni, **K C Tripathi** and P. N. Hrisheeksha, *Autoassociative Neural Network For Nonlinear Principal Component Analysis Of Some Atmospheric Parameters*, accepted for publication in proceedings for IEEE International Conference on Research and Development Prospects on Engineering and Technology, EGS Pillay Engineering College, Nagapattinum, 29-30 March, **2013**
31. Neeta Verma, YDS Arya and **K C Tripathi**, Artificial Neural Networks for predictability of All India Rainfall using historical time series, in proceedings of International Conference on Recent Trends in Engineering Science and Management, Jawaharlal Nehru University (JNU, Convention Center), New Delhi, **15th March, 2015**
32. Sakshi Srivastava, Shrayansh Jain, Prachi Sharma, **K.C.Tripathi**, Dynamical aspects of prediction by Artificial Neural Network when predicting in chaotic regime, “Global Information and Business Strategies, 6th Comit-2015”, international conference on management and information technology, Gitarattan Institute of Business Studies, 24-25 **April-2015**.

33. Meenal Jain and **K C Tripathi**, AutoAssociative Neural Networks for Nonlinear Principal Components Analysis of Sea Surface Temperature Anomalies in Indian Ocean, 58-60, Proceedings of the 9th International Conference on “Advances in Soft Computing, E-Learning, Information and Communication Technolog”, organized by “Krishi Sanskriti”, **20th June, 2015, at Jawaharlal Nehru University, New Delhi**

Faculty Development Program/STTP/workshop Organized:0

Faculty Development Program/STTP/workshop attended:12

1. **Keynote speaker** at the **one Day National Seminar on “Soft Computing and Intelligent Systems”** at **GITARATTAN INTERNATIONAL BUSINESS SCHOOL (giBS)** on **11th April, 2015**
2. National workshop on advanced ocean state forecast & ocean modeling, MOG/SAC/ISRO, Ahmedabad, India, December 20-21, **2004**.
3. First Prof. R. Ananthkrishnan Memorial Conference on Atmospheric Sciences, Climate Change and Environmental Studies, Indian Institute of Tropical Meteorology, Pune, India, January 18 – 19, **2005**.
4. Seminar on “Antarctic Science: Indian Contributions in Global Perspectives”, National Center of Antarctic and Ocean Research, Goa, India, May 25 - 26, **2006**.
5. Targetted Training Activity, Seasonal Predictability in Tropical Regions: Research and Applications. Miramare, Trieste, Italy, August 7-18, **2006**.
6. TROPMET-2006, Indian Meteorological Society (IMS), Pune Chapter, Indian Institute of Tropical Meteorology, Pune, November 21 – 23, **2006**.
7. Indo – Polish Workshop on Liquid Crystals, Physics department, University of Allahabad, Allahabad, December 12, **2007**.
8. International Workshop on Snow, Ice, Glacier and Avalanches, IIT Bombay, India, Annexure , 07-09 January, **2008**.
9. National Snow Science Workshop, Snow & Avalanche Study Establishment (organized by **Defence Research & Development Organisation**), Chandigarh, India. Awarded for giving the **third best paper in oral presentations category**, 11-12 January, **2008**.
10. National Symposium on Advances in Remote Sensing Technology with Special Emphasis on Microwave Remote Sensing, Nirrma University (organized by Indian Society of Remote Sensing, ISRS), Ahmedabad, 18-20 December, **2008**.
11. International conference on “*Challenges and Opportunities in Agrometeorology (INTROMET)*”, organized by Indian Meteorological Society, New Delhi, India, 23-25 February, **2009**
12. Artificial Neural Networks for predictability of All India Rainfall using historical time series, Neeta Verma, YDS Arya and **K C Tripathi** in proceedings of International Conference on Recent Trends in

Engineering Science and Management, Jawaharlal Nehru University (JNU, Convention Center), New Delhi, **15th March, 2015**

Honors and Awards Received:

Supervisory support provided:

- 1. No. of PhD Supervision:** Completed: 0 Ongoing: 2
2. No. of M Tech Thesis Guided: Completed: 6 Ongoing: 3

Membership of professional Societies: CSTA

RESEARCH GRANTS


- **2013-Principal Investigator**, “Computer processing of Digital Images, Analysis of Video for object tracking, behavior of crowd and feature extraction and denoising of Remotely sensed images” with a total cost = Rs. 2.55 lacs **for three years by AICTE**

AWARDS AND ACHIEVEMENTS

- Keynote speaker at the **one Day National Seminar on “Soft Computing and Intelligent Systems” at GITARATTAN INTERNATIONAL BUSINESS SCHOOL (giBS) on 11th April, 2015**
- Visited Trieste, Italy from 6th August to 18th August **2006** to attend the “Targeted Training Activity” at the “International Center for theoretical Physics” (ICTP), **Trieste, Italy on the invitation of ICTP**. Made the presentation for the “Indo-Nepal Group” in the Activity.
- **Acknowledged & appreciated by ROTARY ALLAHABAD** for judging the models in the inter-institutional annual science models contest “**Sci-fest 2007**” held on 22nd September, **2007** at St. Joseph’s College, Allahabad.
- **Awarded third best young scientist** at National Snow Science Workshop, organized by SASE & DRDO, Chandigarh, India, 11-12 January, **2008**.
- **Acknowledged & appreciated by ROTARY ALLAHABAD** for judging the models in the inter-institutional annual science models contest “**Sci-fest 2008**” held on 19th October, **2008** at St. Joseph’s College, Allahabad.
- Member of the **working group 1 of the last Tri-nation, India, Brazil and South Africa (IBSA) Ocean meeting in Goa, 4-8/May/2009** held to improve the seasonal predictability. It incorporated the expert systems methodology such as the **Artificial Neural Networks** proposed therein for the purpose.

Literary Achievements

- Author of the Hindi Novel “Chai, Shrab aur Zehar”, Rajkmal Prakashan, New Delhi, 2011 (over 2000 copies sold)
- **Publications and citations**
 - **15 papers in national/ international journals** (books) of which **10** are in **SCI** listed journals
 - **33 papers** in national/ international **conferences/ seminars**
 - **Citations:** about **75 international citations** (excluding self citations) of the above mentioned papers

Name: Krishna Chandra Tripathi		
Designation	Associate Professor	
Qualification	PhD (Regular), University of Allahabad, 2011	
Area of Interest	Pattern Recognition, Automata Theory, Mathematical Modeling	
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