Dr. A. D. PRASAD

Education:

Degree	Specialisation	University	Division
Ph.D	Civil Engineering (Geomatics Engineering)	Indian Institute of Technology Roorkee, India	-
M.Tech	Industrial Pollution Control	National Institute of Technology Karnataka, India	First
B.E	Civil Engineering	Andhra University, India	First

Technical skills:

Programming	C, C++, Visual Basic 6.0, C#, VB.NET, Arc Objects, Map Objects, Python.
Database/Tools:	MySQL, SQL Server 2008.
Operating Systems:	Windows 98/2000/NT/7/8.1/10, MS-DOS, Linux, Android.
GIS Desktop	AutoCAD 3D Civil / Map, Trans CAD, Hydro CAD, Bentley - Micro station, In RAIL, In ROAD, ArcGIS10.8, Quantum GIS, Grass, ArcGIS Explorer, ILWIS, Surfer, HEC-RAS/HMS, WMS, Basins, GIS (R2V), Global Mapper 24.1, Trimble.eCognition.Developer.v10.3 etc.
Remote Sensing:	PCI Geomatica 2014, ENVI 5.6, Erdas Imagine 2014, IDRISI, TerrSet 18.31, SNAP etc.
ERP/ Business Analytics and Business Intelligence Software:	SAP R/3 4.7/6.0 SAP-BW (3.0B), BI (7.0), SAP-SEM (3.1B), (6.0), SAP PP, SAP-APO, SAP-Retail, SAP-SEM includes BPS, CPM, BCS, BIC, SRM, SAP- EH&S, SAS 4.0 etc.
Project control	Primavera P6, Microsoft Project.
Other Software's:	STAAD, 3D-Doctor, MATLAB, NI LabVIEW, MS-Office, SimaPro, Statistica, SigmaPlot 12.3, BlueSky Statistics, Minitab 18, Grapher, Tableau 2020, Statgraphics Centurion 18, etc.

Experience in Industries/Research Organizations/Post-Doc (in Yrs):

✓ **Software / IT Industry - 8.5 Years**

Post Ph.D. Experience:

- ✓ **NIT-Raipur – Since Jun-15**
- ✓ **NIT-Jalandhar – Sep-14 to May-15**

Research Interests:

- • **Geomatics Engineering**
- • **Energy / Renewable Energy**
- • **RS & GIS Applications**
- • **Water Resources Engineering**
- • **Environmental Engineering**
- • **Image Processing / Medical Image Processing**

Memberships / Certificates:

- • **Indian Society of Remote Sensing (ISRS)** – Life Member
- • **The Institution of Engineers (India) (IEI)** – Member
- • **The Institution of Engineers (India) (IEI)** – Chartered Engineer
- • **Indian Society of Geomatics (ISG)** – Life Member
- • **Indian Geotechnical Society (IGS)** – Life Member
- • **Trainers Training Programme on Entrepreneurship** – EDII Certificate

Short Term Courses Attended:

- ✓ "Technical Paper Writing", Organized by The Institute of Engineers, Roorkee, India, May 14-15, 2010.

- ✓ ECBC Training program on "Energy Conservation in Buildings", Organised by CREDA – Raipur, India, Oct 13-14, 2015.

- ✓ UNESCO Regional Capacity Development Workshop on Ensuring Water Security in Changing Environment scenario, IIT-Bombay, Nov 26-27, 2015.

Organising Conference / Workshop / Short Term Courses:

- ✓ "Uttarakhand State Science & Technology Congress – 2012" as Technical Session Head, Dehradun, Nov 21-23, 2012.
- ✓ "National Workshop on Water Resources in Developing Countries: Planning and Management" as Coordinator, National Institute of Technology, Raipur, Aug 27-28, 2015.

Distinctions:

✓ Received MHRD fellowship during studies.

✓ Worked at a capacity of competency head of a multinational organization **with an award** of "**best and brightest**" among all employees around the world.

✓ Reviewer for SCI journals of **Elsevier**, **Springer, MDPI** and **Inderscience** publishers.

✓ Editorial Board member of Journal on Computational Imaging and Multimedia Networks

✓ Acted as a session chain in 4th World Conference on Applied Sciences, Engineering &Technology, 24-26 October 2015, Kumamoto University, Japan.

✓ IIRS – ISRO Outreach Programme : Coordinator for Nodal Center

✓ Has experience in Software / IT industry with abroad work experiences in USA, UK, UAE, Saudi Arabia, Malaysia, Qatar and South Africa.

Books Published

1. KVSG Murali Krishna, A D Prasad (2019), "RECYCLE AND REUSE OF MUNICIPAL AND INDUSTRIAL WASTEWATER", PARAMOUNT PUBLISHING HOUSE, ISBN: 978-93-88808- 48-4

2. Vishal Kumar, A V Ahirwar, A D Prasad (2021), "Noise Pollution Monitoring, Mapping and Health Impact", B P International, ISBN: 978-93-5547-261-8.

Book Chapters Published

1. M Narayana Rao, A D Prasad, KVSG Murali Krishna (2023), "Chapter 7 - Do's and don'ts of wastewater treatment, their reuse, and future directions", Academic Press, https://doi.org/10.1016/B978-0-323-96124-0.00004-0.

International Journal papers: -

1. Kumar, V., Ahirwar, A. V., & Prasad, A. D. (2023). Monitoring and mapping noise levels of university campus in central part of India. Journal of Air Pollution and Health, 8(1), 1-12.

2. Prasad, A. D., Singh, N., Ganasala, P., & Shekhar, S. (2023). Morphometric Analysis of Natural Landscapes of Northern Maharashtra using Geomatics Techniques, Western Ghats, India. Water and Energy International, 65(10), 11-24.

3. Lambey, V., & Prasad, A. D. (2022). Spatio-temporal analysis of sensor based air pollutants in Raipur city, India. Journal of Air Pollution and Health, 7(4), 323-340.

4. Sahu, I., Prasad, A. D., & Ahmad, I. (2022). Comparison of GIS-Based Intrinsic Groundwater Vulnerability Assessment Methods: DRASTIC and SINTACS. Nature Environment & Pollution Technology, 21.

5. Verma, S. K., Prasad, A. D., & Verma, M. K. (2022). An Assessment of Ongoing Developments in Water Resources Management Incorporating SWAT Model: Overview and Perspectives. Nature Environment & Pollution Technology, 21(4).

6. Hernández-Guzmán, R., Ruiz-Luna, A., & Prasad, A. D. (2022). Quantifying the ecosystem service value dynamics in response to land use and land cover changes in Michoacán, Mexico. Journal of Applied Remote Sensing, 16(3), 034503-034503.

7. Prasad, A.D., Ganasala, P., Hernández-Guzmán, R. (2022). Remote sensing satellite data and spectral indices: an initial evaluation for the sustainable development of an urban area. Sustain. Water Resour. Manag. 8, 19. https://doi.org/10.1007/s40899-022-00607-2

8. Lambey, V., & Prasad, A. D. (2021). A Review on Air Quality Measurement Using an Unmanned Aerial Vehicle. Water, Air, & Soil Pollution, 232(3), 1-32. https://doi.org/10.1007/s11270-020-04973-5

9. P. Ganasala and A. D. Prasad (2020), Contrast Enhanced Multi Sensor Image Fusion Based on Guided Image Filter and NSST, IEEE Sensors Journal, vol. 20, no. 2, pp. 939-946.

10. Ganasala, P, Prasad, AD (2019), Medical image fusion based on laws of texture energy measures in stationary wavelet transform domain, Int J Imaging Syst Technol.

11. A. D. Prasad (2016), Scope of Integrated Farming Systems with Organic Agriculture and Geomatics Techniques in India. IJEE, Vol 6-N0-1, pp. 41-43

12. Padma Ganasala, Vinod Kumar, and A. D. Prasad (2016), Performance Evaluation of Color Models in the Fusion of Functional and Anatomical Images, J Med Syst 40: 122

13. Fathian, F., Prasad, A.D., Dehghan, Z. and Eslamian, S. (2015), Influence of land use/land cover change on land surface temperature using RS and GIS techniques, Int. J. Hydrology Science and Technology, Vol. 5, No. 3, pp.195–207

14. A. D. Prasad, Jain K, Gairola A and R. Hernandez-Guzman (2013), Ranking of Pumped storage hydropower site for preliminary studies, IJEE, Vol 6-N0-1, pp. 136-142

15. A. D. Prasad, Jain K and Gairola A (2013), Surface Temperature Estimation using Landsat Data for part of the Godavari and Tapi Basins, India: A Case Study, IJEAT, Volume-2, Issue-3, pp. 320-322

16. A. D. Prasad, Jain K and Gairola A (2013), Mapping of lineaments and knowledge base preparation using geomatics techniques for part of the Godavari and Tapi Basins, India: A case study; IJCA,Volume 70– No.9, pp. 39-47

17. A. D. Prasad, Jain K and Gairola A (2013), Pumped Storage Hydropower Plants Environmental Impacts using Geomatics Techniques: An Overview , International Journal of Computer Applications 81(14), pp. 41-48

18. A. D. Prasad, Jain K and Gairola (2012), A GIS for rural health in India, IJEE, Vol 5-N0 5(2), pp. 1432- 1437.

International Conference papers: -

1. Verma, S., Prasad, A. D., & Verma, M. K. (2022). Optimizing Multi-reservoir Systems with the Aid of Genetic Algorithm: Mahanadi Reservoir Project Complex, Chhattisgarh. In Applied Geography and Geoinformatics for Sustainable Development: Proceedings of ICGGS 2022 (pp. 35-49). Cham: Springer International Publishing.

2. Kumar, V., Ahirwar, A. V., & Prasad, A. D. (2022). Noise Mapping of Different Zones in an Urban Area During Deepawali Festival. In Applied Geography and Geoinformatics for Sustainable Development: Proceedings of ICGGS 2022 (pp. 113-120). Cham: Springer International Publishing.

3. Lambey, V., & Prasad, A. D. (2022). Measurement of PM10, PM2. 5, NO2, and SO2 Using Sensors. In Applied Geography and Geoinformatics for Sustainable Development: Proceedings of ICGGS 2022 (pp. 89-99). Cham: Springer International Publishing.

4. Verma, S., Prasad, A. D., & Verma, M. K. (2022). Time Series Modelling and Forecasting of Mean Annual Rainfall Over MRP Complex Region Chhattisgarh Associated with Climate Variability. In Recent Advances in Sustainable Environment: Select Proceedings of RAiSE 2022 (pp. 51-67). Singapore: Springer Nature Singapore.

5. Lambey, V., & Prasad, A. D. (2022). An Automatic Integrated Tool for Deriving Morphometric Parameters. In River and Coastal Engineering: Hydraulics, Water Resources and Coastal Engineering (pp. 41-53). Cham: Springer International Publishing.

6. Sahu, I., Prasad, A. D., & Ahmad, I. (2022). Integrated Tool for Morphometric Analysis Using QGIS. In River and Coastal Engineering: Hydraulics, Water Resources and Coastal Engineering (pp. 103-113). Cham: Springer International Publishing.

7. Kumar, V., Ahirwar, A. V., & Prasad, A. D. (2022, June). Noise Mapping during New Year Eve in selected residential zone of Raipur City. In IOP Conference Series: Earth and Environmental Science (Vol. 1032, No. 1, p. 012030). IOP Publishing.

8. Verma, S. K., Sahu, R. T., Singh, H., Prasad, A. D., & Verma, M. K. (2022, June). A study of Environmental and Ecological impacts due to Construction and Operation of Tehri-Polavaram Dam. In IOP Conference Series: Earth and Environmental Science (Vol. 1032, No. 1, p. 012020). IOP Publishing.

9. Shashikant, V., Sahu, R. T., Prasad, A. D., & Verma, M. K. (2022, May). Development of an optimal operating policy of multi-reservoir systems in Mahanadi Reservoir Project Complex, Chhattisgarh. In Journal of Physics: Conference Series (Vol. 2273, No. 1, p. 012020). IOP Publishing.

10. Sahu, I., Prasad, A. D., & Ahmad, I. (2022, March). Groundwater vulnerability assessment using SINTACS model and GIS: A case study in Raipur city. In IOP Conference Series: Earth and Environmental Science (Vol. 982, No. 1, p. 012070). IOP Publishing.

11. Lambey, V., Sahu, I., Prasad, A.D. (2022). Comparison of Morphometric Parameters for Jonk Watershed Derived from Integrated Tool Developed in ArcGIS and QGIS Platform. In: Laishram, B., Tawalare, A. (eds) Recent Advancements in Civil Engineering. Lecture Notes in Civil Engineering, vol 172. Springer, Singapore. https://doi.org/10.1007/978-981-16-4396-5_72

12. Verma, S., Prasad, A.D., Verma, M.K. (2022). Trends of Rainfall and Temperature over Chhattisgarh During 1901–2010. In: Rao, C.M., Patra, K.C., Jhajharia, D., Kumari, S.

(eds) Advanced Modelling and Innovations in Water Resources Engineering. Lecture Notes in Civil Engineering, vol 176. Springer, Singapore. https://doi.org/10.1007/978-981-16-4629-4_1

13. Azharuddin, M., Verma, S., Verma, M.K., Prasad, A.D. (2022). A Synoptic-Scale Assessment of Flood Events and ENSO—Streamflow Variability in Sheonath River Basin, India. In: Rao, C.M., Patra, K.C., Jhajharia, D., Kumari, S. (eds) Advanced Modelling and Innovations in Water Resources Engineering. Lecture Notes in Civil Engineering, vol 176. Springer, Singapore. https://doi.org/10.1007/978-981-16-4629-4_8

14. Dhiwar, B.K., Verma, S., Prasad, A.D. (2022). Identification of Flood Vulnerable Area for Kharun River Basin by GIS Techniques. In: Rao, C.M., Patra, K.C., Jhajharia, D., Kumari, S. (eds) Advanced Modelling and Innovations in Water Resources Engineering. Lecture Notes in Civil Engineering, vol 176. Springer, Singapore. https://doi.org/10.1007/978-981-16-4629-4_27

15. Soni, S., Prasad, A.D. (2021). Detection of Flood Hazard Using QGIS. In: Pathak, K.K., Bandara, J.M.S.J., Agrawal, R. (eds) Recent Trends in Civil Engineering. Lecture Notes in Civil Engineering, vol 77. Springer, Singapore. https://doi.org/10.1007/978-981-15-5195-6_65

16. Verma S., Prasad A.D., Verma M.K. (2021) Trend Analysis and Rainfall Variability of Monthly Rainfall in Sheonath River Basin, Chhattisgarh. In: Pathak K.K., Bandara J.M.S.J., Agrawal R. (eds) Recent Trends in Civil Engineering. Lecture Notes in Civil Engineering, vol 77. Springer, Singapore. https://doi.org/10.1007/978-981-15-5195-6_58.

17. A. D. Prasad and P. Ganasala, "Preliminary Assessment of Remote Sensing Satellite Data and Spectral Indices for Sustainable Development of a Smart City," 2020 International Conference on Advances in Computing, Communication & Materials (ICACCM), Dehradun, India, 2020, pp. 212-214, doi: 10.1109/ICACCM50413.2020.9212894.

18. B. P. Kumar and A. D. Prasad, "IoT based equipment for real-time identification of soil properties," 2020 7th International Conference on Smart Structures and Systems (ICSSS), Chennai, India, 2020, pp. 1-6, doi: 10.1109/ICSSS49621.2020.9202279.

19. P. Ganasala and A. D. Prasad (2020), " "Functional and Anatomical Image Fusion based on Texture Energy Measures in NSST Domain," 2020 First International

Conference on Power, Control and Computing Technologies (ICPC2T), Raipur, India, 2020, pp. 417-420.

20. Vasanth D., Prasad A.D. (2019) Ceramic Membrane: Synthesis and Application for Wastewater Treatment—A Review. In: Rathinasamy M., Chandramouli S., Phanindra K., Mahesh U. (eds) Water Resources and Environmental Engineering II. Springer, Singapore

21. Lambey, V. and Prasad, A. D.: UNMANNED AERIAL VEHICLE APPLICATIONS OF 3D MODELLING, VISUALIZATION AND PARAMETER CALCULATIONS, Int. Arch. Photogramm. Remote Sens. Spatial Inf. Sci., XLII-5, 649-652, https://doi.org/10.5194/isprs-archives-XLII-5- 649-652.

22. Sahu, I. and Prasad, A. D (2018).: ASSESSMENT OF HYDRO POTENTIAL USING INTEGRATED TOOL IN QGIS, ISPRS Ann. Photogramm. Remote Sens. Spatial Inf. Sci., IV-5, 115-119, https://doi.org/10.5194/isprs-annals-IV-5-115-2018

23. Lambey V., Prasad A.D., Chouksey A., Sahu I. (2019) Impact of Water Conservation
24. Structures on Hydrology of a Watershed for Rural Development. In: Rao P., Rao K., Kubo S. (eds) Proceedings of International Conference on Remote Sensing for Disaster Management.

25. Akhilesh Poyam, A D Prasad (2019). "Water Quality Monitoring Using Unmanned Air Vehicle (UAV) And Internet of things (IoT)". In 2019 National Conference on Innovation in Chemistry and Environmental Engineering (ICEE).

26. A.D.Prasad, Padma Ganasala (2017), Feasibility of solar photovoltaic system: A case study, ICEEE , International Conference on Energy,Environment and Economics (ICEEE 2017), 11th -13th December 2017, Heriot-Watt University, Edinburgh, UK

27. Padma Ganasala and A. D. Prasad (2018), 'Medical Image Fusion based on Frei-Chen Masks in NSST Domain, IEEE, 619: 623, 5th International Conference on Signal Processing and Integrated Networks (SPIN), India

28. A D Prasad, Scope of Integrated Farming Systems with Organic Agriculture and Geomatics Techniques in India, 4th World Conference on Applied Sciences, Engineering &Technology, 24-26 October 2015, Kumamoto University, Japan

29. A D Prasad, Jain K and Gairola A, A review on hydropower, storage systems and site selection in the watershed as a part of natural resource management using geomatics techniques , NIRD,Hyderabad– Jan 2012.