

Name: Anup Krishna Prasad

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Age: 47 years

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Current Affiliation (Address for correspondence):

Associate Professor,

Department of Applied Geology,

Indian Institute of Technology (Indian School of Mines) Dhanbad, 826004, India



➤ **PROFESSIONAL PREPARATION:**

- **Ph.D. 2007** (CPI of 9.33/10 in Course Work: A+) Indian Institute of Technology Kanpur-208016, India
- **Master of Science and Technology (Applied Geology) 2002** (GPA. of 4.69/5.00; A+) Indian School of Mines Dhanbad, Jharkhand-826004, India
- **Bachelor of Science (Honours: Geology with Physics and Mathematics) 1998** D.D. College Keonjhar, Utkal University, Bhubaneswar, India

➤ **APPOINTMENTS (>17.5 YEARS OF POST-PHD EXPERIENCE):**

June 2014-continuing	• Associate Professor , Department of Applied Geology, IIT(ISM) Dhanbad/Indian School of Mines Dhanbad, India
Sep. 2011 – May 2014	• Consultant (Research Scientist) , NASA Research Project, Institute of Atmospheric Physics, Dept. of Atmospheric Sciences, U. of Arizona, Tucson, AZ, USA.
Jun. 2009 – Aug. 2012	• Research Assistant Professor, School of Earth and Environmental Sciences , Schmid College of Science and Technology, Chapman University, Orange, CA, USA.
Oct 2008 – May 2009	• Research Assistant Professor , Dept. of Physics, Computational Science and Engineering, Schmid College of Science, Chapman University, Orange, CA, USA.
Aug. 2007 – Sep. 2008	• Research Assistant Professor , at the Center for Earth Observing and Space Research, George Mason University, Fairfax, VA, USA.
May 2004 – Sep 2004)	• Visiting Scientist (at United Nations Environment Programme (UNEP), USGS, EROS, Sioux Falls, SD, USA.

- **AREA OF SPECIALIZATION AND RESEARCH INTEREST:** FTIR Spectroscopy of Coal/Shale/Minerals/Rocks, Coal Geology, Hyperspectral Remote Sensing and Exploration, Image Processing and Spatial Data Analysis, Aerosols and Climate Change, Geostatistics & GIS

➤ **EDITORIAL BOARD OF JOURNALS**

1. **Member of Editorial Board, Scientific Reports, Springer Nature**, Nature portfolio (<https://www.nature.com/srep/>). It's A Rank 3 Journal In Terms Of Number Of Citations Globally.
2. **Member of Editorial Board, Mineral Metal Energy Oil Gas and Aggregate (2MEOGA)** (<https://www.informaticsjournals.co.in/index.php/2meoga>). **Online ISSN : 3049-3455**
3. **Guest Editor: Prasad, A.K., and Sarkar, B.C. (2024). Geological, Structural, Geochemical, Hyperspectral, and Geostatistical Modeling for Mineral Exploration, Minerals, MDPI (Edited). ISSN 2075-163X.**

➤ **SPONSORED RESEARCH GRANTS/PROJECTS/CONSULTANCY:**

Research Grants/Projects: 9	Consultancy/EDP/Workshops: 9	Funding Agencies: DST (India), NASA, USDA-NSF-NIFA IGC, SSAI, NSF (USA)
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➤ **PUBLICATIONS:** Refereed Journal Articles **(42)**, Proceedings, Newsletters, Reports **(9)**, Book Chapters **(3)**, PATENTS: **(7)**.

➤ **RESEARCH - CITATION INDICES:**
(Google Scholar) **h-index = 30, i10-index = 41, Citations: 3535.**

➤ **PUBLIC RESEARCHER PROFILES:**

Authors Portals/IDs	Link/Number
IRINS	https://iitism.irins.org/profile/97640
ORCID	https://orcid.org/0000-0001-7371-2322
Web of Science ResearcherID	https://www.webofscience.com/wos/author/rid/B-5650-2008
Sci-profiles	https://sciprofiles.com/profile/1889572
Scopus	https://www.scopus.com/authid/detail.uri?authorId=11739169500
Google Scholar	https://scholar.google.co.in/citations?user=HilQr7UAAAAJ

➤ **SPONSORED RESEARCH - GRANTS**

1. Project Title: "Application of spectroscopic methods and machine learning algorithms for a rapid and reliable estimate of the gross calorific value (GCV) in high-ash Indian coal", Funding Agency: MATRICS, SERB, DST, PI: Prof. A.K. Prasad (sole PI), Towal Award Amount: 6.6 Lakhs, Total Award Period Covered: 12/02/2024 to 11/02/2027.
2. Project Title: High ash coal gasification and associated upstream and downstream processes (Coal to Chemicals- CTC), Coal India R&D project. Funding Agency: CIL, PI: PI: Professor I.M. Mishra, Role as: Co-I: Prof. A.K. Prasad. Total Award Amount: Rs. 2160.721 Lakhs (IIT(ISM) Component: Rs. Rs. 1872.007 lakh). Total Award Period Covered: 17.07.2017- 16.07.2020.
3. Project Title: Studies on the Use of Coal and Petcoke as Fuel in the Cement Industry in India, Coal India R&D project. Funding Agency: CIL, PI: PI: Professor I.M. Mishra, Role as: Co-I: Prof. A.K. Prasad. Total Award Amount: Rs. 431.28 Lakhs. Total Award Period Covered: 05.07.2016 – 04.07.2018.
4. Project Title: "Geospatial Fusion of Parameters Controlling orogenic Gold Mineralization and Delineation of Gold prospective Zones within Chandil Formation, North Singhbhum Mobile belt, Eastern Indian Craton. A Regional Scale Analytical Approach through the Integrated Applications of GIS, GPS and Remote Sensing Technology. Funding Agency: NRDMS, DST PI: Dr. S. Singh, Role as: Co-PI: Prof. A.K. Prasad. Total Award Amount: Rs. 38,50,000. Total Award Period Covered: February 2016-January 2018.
5. Project Title: "Integration of Airborne Aerosol Prediction Systems and Vegetation Phenology to Track Pollen for Asthma Alerts in Public Health Decision Support Systems", Funding Agency: NASA, NASA MSFC- PI: Jeffrey Luvall, UA science PI: William A. Sprigg, Role as: Consultant - Research Scientist, Dr. A.K. Prasad. Total Award Amount (over a Million USD): \$1,200,000. Total Award Period Covered: August 2009- April 2014.
6. Project Title: "Collaborative Research: Type 1 - Multi-Model Regional Simulation of Climate Change Impacts on Agriculture and Ecosystems in the Southwestern United States" Funding Agency: USDA-NSF-NIFA, PI: Professor Menas Kafatos. Role as: CO-I, Dr. A.K. Prasad. Total Award Amount: \$848,000, Total Award Period Covered: 4/1/11-3/31/14
7. Project Title: "Studying Air Quality Dynamics using A Linear Genetic Programming Approach over Remotely Sensed Atmospheric Parameters: case study (Cairo, Egypt)" Funding Agency: NSF Award for US-Egypt joint research agreement (2009-2011), Role as: Research Scientist, Dr. A.K. Prasad. Total Award Amount: \$60,000, Total Award Period Covered: 2009-2011.

8. Project Title: "Aerosol Studies utilizing Remote Sensing and other Observations over India and their Significance for the Climate System". Funding Agency: IGC. P.I.: Professor Menas Kafatos, Role as: Co-I, Dr. A.K. Prasad. Total Award: \$100,000, Total Award Period: 2009-2011.
9. Project Title: Hazards Studies utilizing Remote Sensing and other Observations and their Connection to the Climate System". Funding Agency: SSAI. P.I.: Professor Menas Kafatos, Role as: Co-I, Dr. A.K. Prasad. Total Award Amount: \$149,500; Total Award Period: 6/1/09-12/31/11.

➤ **CONSULTANCY**

1. Project Title "Vetting of the Groundwater Modelling Report and Comprehensive Hydrological Report, Gare Palma Sector-I Coal Mine", Funding Agency: M/s Jindal Power Limited, Total Award Amount: 13.511 Lakhs, Period: May 2025 to Jun 2025. Role as CI: Prof. A.K. Prasad.
2. Project titled "Geological Ore Body Modelling of Girar Iron and Gold Ore Block, Uttar Pradesh", Funding Agency: M/s Fomento Resources Pvt. Ltd., Panaji, Total Award Amount: Rs. 16.00 Lakhs, Period: May 2025 to Jul 2025. Role as: CI: Prof. A.K. Prasad, Co-CI: Prof. S. Singh,
3. Project Title "Water Quality Modeling for Gare Palma Sector-1 Coal Mine, Raigarh, Chattisgarh", Funding Agency: M/s Jindal Power Limited, Total Award Amount: Rs. 18.88 Lakhs, Period: Jun 2025 to Aug 2025. Role as: CI: Prof. A.K. Prasad (sole CI),
4. Project Title: "Resource estimation for titanium and vanadium in beach and dune samples of Talashil Block, Sindhudurg District, Maharashtra". Total: Rs. 4, 00, 020, Period: Dec 2024 to Jan 2025, Role as: CI, Prof. A.K. Prasad, Co-CI: Prof. A.S. Venkatesh.
5. Project Title: Study of Variability of Sea-Surface Height, Bathymetry, Topography and Scenarios of Submergence around Gulf of Khambhat, Arabian Sea". Total: Rs. 6, 50, 001, Period: Jul2022-Dec2022, Role as: CI, Prof. A.K. Prasad.

➤ **EDP/WORKSHOP/SHORT COURSES**

1. EDP: Training on identification of Macerals in Sedimentary rocks, Total Value: Rs.19,42,462, Role as: Co-CI, Prof. A.K. Prasad, CI: Prof. A.K. Varma, Co-CI: Prof. M.K. Mukherjee, Period: Two weeks (Tentative: April 2023)
2. Workshop Title: A "Three-Day Workshop" Under the aegis of TEQIP-III On Design & Style of a PhD Thesis and Reference Management using Open Source Solutions, April 06-08, 2018, Executive Development Centre (EDC), IIT(ISM) Dhanbad, Total: Rs. 2,50,000, Sponsor: TEQIP, Role as: CI, Prof. A.K. Prasad.
3. Workshop Title: A "Three-Day Workshop" Under the aegis of TEQIP-III On Design & Style of a PhD Thesis and Reference Management using Open Source Solutions, March 29-31, 2018, Executive Development Centre (EDC), IIT(ISM) Dhanbad, Total: Rs. 2,50,000, Sponsor: TEQIP, Role as: CI, Prof. A.K. Prasad.
4. Workshop Title: A "Three-Day Workshop" Under the aegis of TEQIP-III On Design & Style of a PhD Thesis and Reference Management using Open Source Solutions, January 16-18, 2018,, IIT (ISM) Institute Industry Interaction Facility (IIIF), New Delhi, Total: Rs. 2,50,000, Sponsor: TEQIP, Role as: CI, Prof. A.K. Prasad.

➤ **LAB, FIELD EXPERIENCES AND SYNERGISTIC ACTIVITIES**

- Estimation of carbon content in high-ash coal using mid-infrared Fourier-transform infrared spectroscopy.
- Rapid estimation of sulfur content in high-ash Indian coal using mid-infrared FTIR data
- A novel multi-model estimation of phosphorus in coal and its ash using FTIR spectroscopy.
- Automated grain size analysis of microphotographs from thin-sections and polished samples
- Automated Petrography of Coal using spectral signatures (thin and polished sections).
- 3D geological and geostatistical modeling of ore deposits.
- Ground control points (more than 100), using survey grade GPS receiver, around Jharia Coal Field. Accuracy assessment of cellphone GPS, DGPC and multi-sensor estimates of positioning and topography.

- Status of Himalayan glaciers and snow cover, high-resolution dust source mask and near real-time processing of satellite data such as TRMM, MODIS etc. for intensity, duration and frequency mapping of natural hazards such as flood, flash floods, heat waves etc.
- Application of hyperspectral imaging and spectroradiometer data in identification of minerals in soil and maturity of pollens from different juniper tree species.
- Developed 1 km grid resolution **Juniper pollen source masks** using MODIS, Lidar, USGS and field data for pollen associated allergy-health risk forecast system over southwestern USA.
- **Convener:** Organized a session on "Remote Sensing and Modeling of Dust Storms" at **AOGS - AGU (WPGM) Joint Assembly**, 13 to 17 August, 2012. Singapore. **Session Co-convener:** Session: NH53A: Remote Sensing and Modeling of Dust Storms: Monitoring and Forecasting, Co-organizer. AGU Fall Meeting 2010, San Francisco, CA, 13-17 Dec 2010.
- **Invited Talk (discussion topic): Valley Fever Workshop** on 11-12 January, 2012 at University of Arizona, Tucson, AZ, USA. Discussion with workshop participants about cocci-soil-preferences, soil mapping, and possibility for "cocci masks" in DREAM Model.
- **Invited Talk: Special NASA/UAH Atmospheric Science Seminar** presentation, on "Melting of Himalayan Glaciers and Temperature trends", March 27th, 2012 at Huntsville, AL, USA,
- **Scientific member** of the sea expedition team for atmospheric studies over the Bay of Bengal and Arabian Sea, in an ISRO ICARB (Integrated Campaign on Aerosol and Radiation Budget) program.
- **GPS Permanent station and Field Campaigns:** In IG plains region. Automatic processing of dual frequency GPS data in linux for geodetic and atmospheric studies (GAMIT/GLOBK).
- **MODIS Terra and Aqua "Direct Broadcast" XL Band Antenna:** procurement, installation, management, processing package software updates & near real-time data production and delivery.

➤ **RESEARCH AND TEACHING EXPERIENCE: 17.5 years (post PhD)**

- **FELLOWSHIP/AWARDS:** Springer Nature Editor of Distinction Award 2025 (Editorial Contribution Award); GATE (Graduate Aptitude Test in Engineering) 2002; UGC scholarship - M.Sc.Tech (2001-02), ; UGC-CSIR NET/JRF (2001 and 2002) : National Eligibility for University/College, Lectureship + Research Fellowship, INDIA; Early Career Scientist: ECSA-WCRP Workshop 2011, WCRP Open Science Conference 2011; Young Scientist - travel award Union Radio Scientifique Internationale-URSI, NOAA/CLIVAR CDPW 2008, URSI 2008, CLIVAR 2004; Institute PhD fellowship (IIT Kanpur, 2002-07), National Scholarship (1998, Not Aailed)

➤ **AREA OF SPECIALIZATION AND RESEARCH INTERESTS:**

Area of Specialization:

1. FTIR Spectroscopy of Coal/Shale/Soil/Minerals/rocks. Coal characterization, Spectral response of natural materials, identification, and abundance.
2. Hyperspectral Remote Sensing and FTIR Spectroscopy for Exploration- Application of hyperspectral remote sensing in geosciences, integration of field and satellite data.
3. Digital Image Processing and Spatial Analysis of microphotographs and remotely sensed satellite images (automated).
4. Geostatistics & GIS - Geostatistical Modeling, Ore Reserve Estimation, Integrated spatial analysis using GIS.
5. Aerosols, Snow Cover, Urban heat island, and Climate Change issues.

Current Research Applications:

1. COAL & PETCOKE: Characterization using FTIR, Microscopy, and Estimation Modeling.
2. EXPLORATION: Mineral Exploration using FTIR, CHNS, and Hyperspectral Imaging.
3. OREBODY MODELING: Geostatistical modeling of Ore deposits.
4. Aerosols, Glaciers, and Climate Change: Aerosol characterization, Himalayan Snow Cover and Glaciers, Climate Change, Natural hazards, and Environmental Impact Analysis.

➤ **COURSES TAUGHT (UG/PG)**

Theory Courses:

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| 1. Coal Geology | 7. Atmosphere, Ocean, and Climate Dynamics |
| 2. Remote Sensing and GIS | 8. Research Methodology |
| 3. Image Processing and Data Analysis, | 9. Geodynamics |
| 4. Environmental Geology | 10. Geology for Mining Engineers |
| 5. Hyperspectral Remote Sensing | 11. Earth System Science |
| 6. Computer Applications in Geology | |

Practical Courses

- | | |
|---|---|
| 1. Coal Geology Practical | 4. Atmosphere, Ocean and Climate Dynamics Practical |
| 2. Remote Sensing and GIS Practical | 5. Computer Applications in Geology Practical |
| 3. Image Processing and Data Analysis Practical | 6. Geostatistics Practical |

List of Completed PhDs:

1. Dr. Kumari Preety, Adm. No. 2015DR0219, Prof. Anup Krishna Prasad (Guide); Prof. Atul Kumar Varma (Co-Guide), ASSESSMENT OF VERTICAL ACCURACY, RELATIVE PERFORMANCE, AND ENHANCEMENT OF SPACE-BASED DIGITAL ELEVATION MODELS (DEMs) USING DIFFERENTIAL GLOBAL POSITIONING SYSTEM (DGPS), Date of Award: 05-09-2022, Department of Applied Geology, IIT(ISM) Dhanbad.
2. Dr. Ashmeer Mohammad, Adm no. 2015DR1108, Prof. Anup Krishna Prasad (Guide), TITANIUM-VANADIUM BEARING MAGNETITE-ILMENITE MINERALIZATION WITHIN MAFIC SUITE IN AND AROUND SUDAMAKUND AND PAHARPUR AREAS, CHHOTANAGPUR GNEISSIC COMPLEX, EASTERN INDIA, Date of Award: 01-08-2023, Department of Applied Geology, IIT(ISM) Dhanbad.
3. Dr. Anubhav Shukla, Adm.no. 17DR000435 , Prof. Anup Krishna Prasad (Guide); Prof. Atul Kumar Varma (Co-guide), RAPID ESTIMATION OF SULFUR IN INDIAN COAL USING MID-INFRARED FTIR SPECTROSCOPY AND MODELING OF GROSS CALORIFIC VALUE, AND CARBON NANOPRODUCTS, Date of Award: 15-09-2023, Department of Applied Geology, IIT(ISM) Dhanbad.
4. Dr. Swakangkha Ghosh, Adm. No. 2016DR1103, Prof. Anup Krishna Prasad (Guide); Dr. George Philip, Wadia Institute of Himalayan Geology, Dehradun & Prof. T. H. Syed, Department of Earth Sciences, IIT Kanpur [External Co-guide(s)] ACTIVE TECTONICS AND PALEOSEISMOLOGICAL INVESTIGATIONS OF THE TRANS-YAMUNA ACTIVE FAULT SYSTEM, NORTHWESTERN SUB-HIMALAYA, INDIA: IMPLICATIONS FOR EARTHQUAKE HAZARD ASSESSMENT, Date of Award: 22-03-2024, Department of Applied Geology, IIT(ISM) Dhanbad.
5. Dr. Nirasindhu Desinayak, Adm. No. 2014DR0226, Prof. Anup Krishna Prasad (Guide); SPATIO-TEMPORAL DYNAMICS OF GLACIERS, SNOW COVER, AND TROPOSPHERIC TEMPERATURE IN THE HINDU KUSH HIMALAYAN REGION, Date of PhD Defense: 21-06-2024, Department of Applied Geology, IIT(ISM) Dhanbad.
6. Dr. Suren Nayak, Adm. No. 2016DR0056, Prof. Anup Krishna Prasad (Guide); SPATIO-TEMPORAL DYNAMICS OF LAND SURFACE TEMPERATURE AND URBAN HEAT ISLAND EFFECT OVER INDIA USING LONG-TERM MODIS OBSERVATIONS (2000-2023), Date of PhD Defense: 21.08.2024, Department of Applied Geology, IIT(ISM) Dhanbad.
7. Dr. Sameeksha Mishra, Adm No. 19DR0131, Prof. Anup Krishna Prasad (Guide); RAPID ESTIMATION OF CARBON CONTENT AND ASH YIELD IN INDIAN COAL USING MID-INFRARED FTIR SPECTROSCOPY, Date of PhD Defense: 23-12-2024, Department of Applied Geology, IIT(ISM) Dhanbad.

Ongoing PhDs: 7 Full-time, 6 Part-time.

Administrative Duties:

1. CHAIRMAN, DOCUMENTATION CELL, IITISM, 2018-19.

2. ASSOCIATE DEAN (ACADEMIC PG), 2018-19
3. ASSOCIATE DEAN (INDUSTRIAL RESEARCH & CONSULTANCY), 2019-20
4. TREASURER, IITISM ALUMNI ASSOCIATION, ISMAA, 2015-2019
5. SECRETARY, DAC, APPLIED GEOLOGY, 2015-19
6. MEMBER, BOCS, APPLIED GEOLOGY, 2015-2017
7. MEMBER, DST FIST PHASE-II, APPLIED GEOLOGY, 2014-2020.
8. MEMBER, VISION DOCUMENT COMMITTEE, IITISM, 2017-18.
9. CO-CONVENER, CONCETTO, 2017-18.
10. MEMBER, BASANT, 2015-19, 2024-25.
11. MEMBER, JOSAA, IIT-JEE ADMISSION, 2023-2024, 2024-2025 session.
12. Member DPAC, AGL, 2023-2025.
13. OTHER CONFIDENTIAL/EXAMINER/PSCs (PG/PhD) TASKS. Institute/External.

Total Number of Journal Publications in Entire Career (According to Web of Science - WoS): 42

Number of Publications as Sole Guide/Principal Guide of PhD students in current position (According to Web of Science, WoS)

No. of Publications in Q1 Journals	No. of Publications in Q2 Journals
4	5

List of Publications:

Refereed Journal Articles (Web of Science – WoS - Published)

1. Mishra, S., Prasad, A. K., Vinod, A., Shukla, A., Mukherjee, S., Purkait, B., Varma, A. K., & Sarkar, B. C. (2025). A multi-model approach for estimation of ash yield in coal using Fourier transform infrared spectroscopy. *Scientific Reports*, 15(1), 13786. <https://doi.org/10.1038/s41598-025-98071-3>. (WoS Citations: NA, ImpactFactor: 3.8)
2. Vinod, A., Prasad, A.K., Mishra, S. et al. A novel multi-model estimation of phosphorus in coal and its ash using FTIR spectroscopy. *Scientific Reports*, 14, 13785 (2024). <https://doi.org/10.1038/s41598-024-63672-x> (WoS Citations: 5, ImpactFactor: 3.8)
3. Nayak, S.; Vinod, A.; Prasad, A.K. (2023). Spatial Characteristics and Temporal Trend of Urban Heat Island Effect over Major Cities in India Using Long-Term Space-Based MODIS Land Surface Temperature Observations (2000–2023). *Appl. Sci.*, 13, 13323. <https://doi.org/10.3390/app132413323>. (WoS Citations: 3, ImpactFactor: 2.818)
4. Desinayak, N.; Prasad, A.K.; Vinod, A.; Mishra, S.; Shukla, A.; Nayak, S. (2023). Rise in MidTropospheric Temperature Trend (MSU/AMSU 1978–2022) over the Tibet and Eastern Himalayas. *Appl. Sci.*, 13, 9088. <https://doi.org/10.3390/app13169088> (WoS Citations: 1, ImpactFactor: 2.818)
5. Mishra, S.; Prasad, A.K.; Shukla, A.; Vinod, A.; Preety, K.; Varma, A.K. (2023). Estimation of Carbon Content in High-Ash Coal Using Mid-Infrared Fourier-Transform Infrared Spectroscopy. *Minerals*, 13, 938. <https://doi.org/10.3390/min13070938>. (WoS Citations: 11, ImpactFactor: 2.5)
6. Shukla, A., Prasad, A.K., Mishra, S., Vinod, A., & Varma, A.K. (2023). Rapid Estimation of Sulfur Content in High-Ash Indian Coal Using Mid-Infrared FTIR Data. *Minerals*, 13(5), 634. MDPI AG. Retrieved from <http://dx.doi.org/10.3390/min13050634>. (WoS Citations: 12, ImpactFactor: 2.5)
7. Ghosh, S., Philip, G., Prasad, A. K., Syed, T.H., & Mohanty, S.P. (2023). Towards Quantifying the relative tectonic activity in the Trans-Yamuna segment of the NW Himalaya. *Geocarto International*. <https://doi.org/10.1080/10106049.2022.2155712> (WoS Citations: 4, ImpactFactor: 3.45)
8. Mohammad, A., Prasad, A.K., Wetsah, K., Azad, M., Aryan, V., & El-Askary, H. (2022). Titaniferous-Vanadiferous, Magnetite-Ilmenite Mineralization in a Mafic Suite within the Chhotanagpur Gneissic Complex, Bihar, India. *Minerals*, 12(7), 860. <https://doi.org/10.3390/min12070860> (WoS Citations: 1, ImpactFactor: 2.818)

9. Desinayak, N., Prasad, A.K., El-Askary, H., Kafatos, M., & Asrar, G. R. (2022). Snow cover variability and trend over the Hindu Kush Himalayan region using MODIS and SRTM data. *Annales Geophysicae*, 40(1), 67–82. <https://doi.org/10.5194/angeo-40-67-2022> (WoS Citations: 18, ImpactFactor: 2.19)
10. Preety, K., Prasad, A.K., Varma, A. K., & El-Askary, H. (2022). Accuracy Assessment, Comparative Performance, and Enhancement of Public Domain Digital Elevation Models (ASTER 30 m, SRTM 30 m, CARTOSAT 30 m, SRTM 90 m, MERIT 90 m, and TanDEM-X 90 m) Using DGPS. *Remote Sensing*, 14(6), 1334. <https://doi.org/10.3390/rs14061334> (WoS Citations: 25, ImpactFactor: 5.349)
11. El-Askary, H., Park S. K., M-H Ahn, Prasad, A.K., and Kafatos, M. (2015), On the Detection and Monitoring of the Transport of an Asian Dust Storm Using Multi-sensor Satellite Remote Sensing, *Journal of Environmental Informatics*, doi:10.3808/jei.201500306. (WoS Citations: 18, ImpactFactor: 3.773)
12. Park, S., El-Askary, H. , Sabbah, I., Kwak, H., Prasad, A. K., W-K Lee, and Kafatos, M. (2015), Studying air pollutants origin and associated meteorological parameters over Seoul from 2000 to 2009, *Advances in Meteorology*, Article ID 704178, pp. 1-2. <https://doi.org/10.1155/2015/704178>. (WoD Citations: 11, ImpactFactor: 1.348)
13. Kim, So-Ra, A.K. Prasad, H. El-Askary, W-K Lee, D-A Kwak, S-Ho Lee, and M Kafatos (2014), Application of the Savitzky-Golay filter to land cover classification using temporal MODIS vegetation indexes, *Photogrammetric Engineering & Remote Sensing*, 80(5), 675-685, <https://doi.org/10.14358/PERS.80.7.675>. (WoS Citations: 33, ImpactFactor: 1.80).
14. Sprigg, W. A. , S. Nickovic, J. N. Galgiani, G. Pejanovic, S. Petkovic, M. Vujadinovic, A. Vukovic, M. Dacic, S. DiBiase, A. K. Prasad, and H. El-Askary (2014), Regional dust storm modeling for health services: The case of valley fever, *Aeolian Research*, 14, 53–73. <http://dx.doi.org/10.1016/j.aeolia.2014.03.001>, (WoS Citations:69, ImpactFactor: 2.520).
15. Vukovic, A., M. Vujadinovic, G. Pejanovic, , J. Andric, M. R. Kumjian, V. Djurdjevic, M. Dacic, , A. K. Prasad, H. M. El-Askary, B. C. Paris, S. Petkovic, S. Nickovic, and W. A. Sprigg (2014), Numerical simulation of "An American Haboob", *Atmos. Chem. Phys.*, 14, 3211– 3230, 2014, www.atmos-chem-phys.net/14/3211/2014/; doi:10.5194/acp-14-3211-2014, (WoS Citations: 49, ImpactFactor: 5.510).
16. Jaswal, A. K., N. Kumar, A. K. Prasad, and M. Kafatos (2013), Decline in horizontal surface visibility over India (1961-2008) and its association with meteorological variables (2013), *Natural Hazards*, 1-26pp., <https://doi.org/10.1007/s11069-013-0666-2>. (WoS Citations: 22, ImpactFactor: 1.639).
17. Kumar, S., Singh A.K., A.K. Prasad, and R.P. Singh (2013), Variability of GPS derived water vapor and comparison with MODIS data over the Indo-Gangetic plains, *Physics and Chemistry of the Earth*, 55-57, 11-18, (doi:10.1016/j.pce.2010.03.040). (WoS Citations: 26, ImpactFactor: 0.917).
18. Kaskaoutis, D. G., A.K. Prasad, P.G. Kosmopoulos, P.R. Sinha, S. K. Kharol, P. Gupta, H. M. El-Askary, and M. Kafatos (2012), Synergistic use of remote sensing and modeling for tracing dust storms in the Mediterranean, *Advances in Meteorology*, , 14pp, doi:10.1155/2012/861026, (WoS Citations: 27, ImpactFactor: 1.239).
19. El-Askary, H., Mohamed Allali, C. Rakovski, A.K. Prasad, Menas Kafatos, and Daniele Struppa (2012), Computational methods for climate data, *Wiley Interdisciplinary Reviews: Computational Statistics*, 4 (4), pages 359–374, DOI: 10.1002/wics.1213, (WoS Citations: 3 , ImpactFactor: 5.4).
20. Prasad, A.K., R. P. Singh, and M. Kafatos (2011), Influence of coal-based thermal power plants on the spatial-temporal variability of tropospheric NO₂ column over India, *Environmental Monitoring and Assessment*, DOI 10.1007/s10661-011-2087-6. (WoS Citations: 44, ImpactFactor: 1.436).
21. Prasad, A. K., H.M. El-Askary, and M. Kafatos (2010), Implications of high altitude desert dust transport from Western Sahara to Nile Delta during biomass burning season, *Environmental Pollution*, 158, 3385-3391. <https://doi.org/10.1016/j.envpol.2010.07.035>. (WoS Citations: 36, ImpactFactor: 3.395).
22. Prasad, A.K., R.P. Singh (2010), Chlorophyll, calcite, and suspended sediment concentrations in the Bay of Bengal and the Arabian Sea at the river mouths, *Advances in Space Research*, 45, 61– 69. <https://doi.org/10.1016/j.asr.2009.07.027>. (WoS Citations: 19, ImpactFactor: 1.076).
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