Bio-Data

1. Name: **Dr. P Subramanya Prasad**
2. Date of Birth: **06/05/1971**
3. **Current Position and Address:** Chief Scientist (Geotechnical Engineering Division)
4. **Office Address:**

P. SUBRAMANYA PRASAD
CHIEF SCIENTIST
GEOTECHNICAL ENGINEERING DIVISION
CSIR – CENTRAL ROAD RESEARCH INSTITUTE (CRRI)
MATHURA ROAD
C.R.R.I. P.O
NEW DELHI - 110025
MOBILE: +91 9013471432
Email: pulikanti.crri@nic.in; pulikanti@gmail.com

5. **Educational Qualification:**

SNo	Degree	Year	University/ Institute	Subjects
1	B.Tech	1996	Sri Venkateswara University, Tirupati, Andhra Pradesh	Civil Engineering
2	M. E	1998	Indian Institute of Science (IISc), Bangalore	Geotechnical Engineering
3	Ph.D	2016	Indian Institute of Technology Delhi (IITD)	Doctoral Thesis Title: "Use of Copper and Imperial Smelting Furnace Slags as Structural Fills in Reinforced Soil Structures" Coursework grade: CGPA: 9.5/10

6. Academic/Research Experience/Employment

S. No.	From	To	Name of Organization	Position Held
1	12/11/ 2022	Till date	CSIR - Central Road Research Institute (CRRI), New Delhi	Chief Scientist (Geotechnical Engineering Division)& *Head of Planning, Monitoring & Evaluation (PME) Division (Additional charge) from 01/10/2022 to 30/10/2024*
2	12/11/ 2017	11/11/ 2022	CSIR - Central Road Research Institute (CRRI),	Senior Principal Scientist & *Head of Geotechnical Engineering Division from 01/05/2018 to 30/04/2020*
3	12/11/2012	11/11/2017	CSIR - Central Road Research Institute (CRRI)	Principal Scientist ***(Merit Promotion)***
4	12/11/2009	11/11/2012	CSIR - CRRI	Senior Scientist
5	12 /11/2005	11/11/2009	CSIR - CRRI	Scientist 'C'
6	12/11/2001	11/11/2005	CSIR - CRRI	Scientist 'B'
7	2000	2001	CSIR - CBRI	Research Fellow
8	1998	2000	Indian Institute of Science(IISc), Bangalore	Project Assistant

7. Areas of Specialization:

Geotechnical Engineering (Project list enclosed as Annexure – I)

- Landslide Investigations and Remediation Measures
- Ground Improvement and Erosion Control Measures
- Forensic Geotechnical Investigations & Remedial Measures
- Utilization of Waste and Marginal Materials for Road Works
- Geosynthetics in MSE wall and Pavement applications
- Pullout test, Connection strength test, and Installation Damage tests for geosynthetics
- Technical Audit / Quality Inspection of Road Projects

Planning, Monitoring, and Evaluation Division

The Planning, Monitoring, and Evaluation Division is one of the R&D Management departments of CSIR-CRRI; I have performed various activities. The main activity of the Planning, Monitoring, and Evaluation Division is R&D management, which inter-alia covers Planning, Monitoring & Evaluation of R&D projects, externally funded projects, issues concerning Intellectual Property and Business Development, attending to technical queries and technical/performance audits and assistance to Director, Management Council (MC) and Research Council (RC) on the project related matters.

In addition to business development and technology management activities, numerous sponsored, consultancy, collaborative, grant-in-aid, and in-house projects were carried out during this tenure. The projects were carefully assessed, evaluated, and monitored.

8. Honors/Awards/Recognitions received

- **10th CIDC Vishwakarma Award (2018**). Received a Trophy and Scroll of commendation from the Board of Governors of the Construction Industry Development Council (CIDC) for outstanding contribution to Research and Development under the Category 'Scientist (National level)'. New Delhi.
- **"IGS Delhi Chapter leadership award (2018)** for outstanding contribution in geotechnical engineering, received from Indian Geotechnical Society Delhi Chapter, New Delhi.
- **IGS – Mr. H.C. Verma Diamond Jubilee Award – 2013 (Innovative instrument design award)** for developing a large-scale test apparatus for measuring interface bond resistance between geosynthetics/G.I strips and backfill from Indian Geotechnical Society, India.
- **Supreme Engineers Award (2012)** from Economic Research India Pvt. Ltd, Mumbai, in recognition of having met the highest standards of excellence in engineering under the category "Cost Saving Outer Ring Road of Delhi" for the innovative technology for constructing an underpass below the railway embankment.

Best Paper Awards

- **IGS-Shri R.N. Prasad Biannual Award (2013)** for the paper entitled, "Investigation and Design for Restoration of Hill Slope in Mizoram," published in Indian Geotechnical Journal(as a co-author)
- As a principal author, received a Best Paper Award (2013) for the paper titled "Design of Remedial Measures at Lukhbir slide on NH - 31A," published in the Journal of Engineering Geology.

- **Best paper award (2021)** for the “Performance evaluation of geocell reinforced bases for locally available material in high altitude regions. Proceedings of 8th International Conference on Transportation Systems Engineering and Management (CTSEM 2021), 26 – 27 August 2021, Centre for Transportation Research, NIT Calicut, Kerala, India. (as a co-author)

Prestigious Recognition

- The Government of India, Ministry of Road Transport & Highways (MoRTH), New Delhi, constituted the expert committee (on 2nd May 2024) to suggest Cost-effective Long-term Remedial Measures for Landslide Prone Areas in Hilly Regions. The competent authority (DG (RD) &SS, MoRTH selected and approved the undersigned (Dr. P. S. Prasad) as member secretary of the committee.
- Secretary (Forest & Environment), Govt. of Uttarakhand, Dehradun nominated me as a Special Invitee in the High Power Committee (HPC) constituted by Govt. of Uttarakhand in compliance with the Honorable Supreme Court order for the Chardham Project, Uttarakhand.(2019)
- The Government of India, Ministry of Road Transport & Highways (MoRTH), New Delhi, constituted the committee to study different technologies available for reducing the cost of highway construction in hilly terrain conditions. The competent authority (DG (RD) &SS, MoRTH selected and approved the undersigned (Dr. P. S. Prasad) as an expert committee member. (2023)
- The Government of India, Ministry of Road Transport & Highways (MoRTH), New Delhi, has emphasized the concept of value engineering and value for money to achieve the objective of cost optimization in its projects. An additional secretary, MoRTH, constituted the committee for cost optimization of highway projects. The competent authority (Director, CSIR - CRRI) nominated me (Dr. P. S. Prasad) as an expert committee member.(2023)
- The National Institute of Technology (NIT) Warangal, Telangana, nominated me as a Board of Studies (BoS) member for the revision of the syllabus for M.Tech & PhD (Geotechnical Engineering) for the period of 2019 – 2020 and 2021-22.
- Rajeev Gandhi Memorial College of Engg. & Tech. (Autonomous), Nandyal. AP nominated me as a Board of Studies (BoS) member for revising the syllabus for the B.Tech Civil Engineering courses for the years 2018 – 2024.
- Member Secretary of "Disaster Management Committee (G-6)” (2018 – 2021) of Indian Roads Congress, New Delhi.
- Advisory Board Member in the Seismic Academy (2018 – 2021), Hilti, Gurugram, Haryana.

9. Professional Affiliations

Membership in Organizational / National / International committees

- Life member of the National Indian Geotechnical Society
- Life member of the Indian Geotechnical Society (Delhi Local Chapter)
- Life member of the Indian Roads Congress
- Co-Convenor (2025 – 2027) of IRC Technical Committee H-4 – *Embankment, Ground Improvement and Drainage*
- Member Secretary (2018 – 2021) of "Disaster Management Committee (G- 6)" of Indian Roads Congress, New Delhi.
- Multi-disciplinary Expert Group (MDEG) member for "Soil Stabilization of Roads – Biological Enzyme Quick Road Building" for construction of roads in Border Roads Organization (BRO), Headquarters, DGBR, Border Roads Organization, New Delhi
- Special Invitee member of the committee on Technical Textiles on Research Development & Innovation (Ministry of Textiles, Government of India) to consider the research proposal under the National Technical Textile Mission.
- Executive member (2021 – 2023) in the Indian Geotechnical Society (IGC) Delhi Chapter, Delhi.
- Member of H-10 committee: Hill Roads and Tunnel Committee, Indian Roads Congress (IRC), New Delhi.
- Member of Geo-Synthetics Sectional Committee (TXD 30), BIS, Manak Bhavan, New Delhi.
- Member (Alternate) of the Hill area development engineering sectional committee (CED – 56), Bureau of Indian Standards, Manak Bhavan, New Delhi.

Annexure -I

List of Completed/ongoing Projects (As Project Leader, Activity Leader, Co - PI & Team Member)

Projects on Landslide Investigations and Remediation Measures

1. Geotechnical Investigations, Analysis and Design of Suitable Remedial Measures for Protection of Landslides and Sinking Zones on Road from Nyu Sobla to Sela-Tedang, Dharchula, Uttarkhand
2. Investigation, Analysis and Design of Remedial Measures of landslides at Pumbai Valley, Dharchula, Uttarkhand
3. Impact of changing climatic pattern in a part of Uttarakhand with specific reference to Landslides, Garhwal region
4. Slope stability evaluation, erosion control and landslide correction between km 67.0 to km 106.39 on NH-5, Himachal Pradesh
5. Feasibility Study on road alignment from km 40.00 to Saser Brangsa (Leh – Ladakh region)
6. Designing suitable remedial measures for sinking / landslide affected stretches in NH – 54. (from Jatinga junction to Harangajao, Assam)
7. Validation of Slope Protection Works of Zirakpur-Parwanoo Four Laning Project (NH – 22), Himachal Pradesh
8. Development of Management System for maintenance planning & budgeting of High Speed Corridors (Supra Institutional Project)

   Sub module: Study of land slide problem along High speed Corridors
9. Slope stability and design of remedial measures for Katni - Singrauli Railway Line Doubling Project
10. Site Stabilisation for Platform at Digilipur (North Andaman)
11. Field investigation and design of remedial measures of Lukhbir slide, Sikkim
12. Guidelines on management of landslides on Indian roads and highway (IRC)
13. Stability of slope and stability of foundation for the construction of buildings at coast guard campus – Port Blair
14. Investigation and remedial measures for slides occurred at the stretches km 162, 175, 179, 180 & 221.80 on road Dimapur – Kohima – Mao – Maram (DKMM – NH -39)
15. Detailed Investigation of Problematic Hunthar landslide/ Sinking areas at km 179.5 on NH-54 and Design Schemes for Suitable Remedial Measures , Mizoram
16. Slope stabilization works at IIRS Campus, Dehradun
17. Investigation of Landslide at Kaliasaur on National Highway 58 , Uttaranchal
18. Prevention of Unstable Cut Slopes along Approach Roads to Access Railway Line & Stabilisation of the Proposed Dumping Site, Jammu
19. Investigation regarding realignment of Hill top road at Simhachalam Hill, Visakhapatnam
20. Investigation, instrumentation and monitoring of land slide at Patalganga, Garhwal, Uttaranchal

21. Study of land slide and rock falls on Mumbai – Pune expressway, Maharashtra
22. Investigation and Reconstruction of suitable corrective measures for prevention of road cut slope along with access road from Naihar village to bridge, Koldam, Himachal Pradesh.
23. Design of remedial measures for Mao Landslide at km 214.240 on NH-39, Nagaland
24. Land slide investigation and remedial measures for stabilization of slope at km 45 on NH 150, Khawruhlian, Mizoram
25. Landslide Investigations on Phuentsholling – Thimpu Road, Bhutan
26. Engineering of Disaster Mitigation and Health Monitoring for Safe and Smart Built Environment (EDMISSIBLE)

Task Title: Landslide hazard information system and design of cost effective measures for landslide control

Projects on Ground Improvement, Forensic Geotechnical Investigations and Erosion Control Measures

27. Review of Designs and Drawings of Reinforced Soil Structure (RSS) for the Rehabilitation and Upgradation of existing Bihpur Section of NH-106 from Km 106+000 to Km 136+000
28. Technical Solution and Guidance for Strengthening of Existing Road from Kuda BOP to Chapariya BP No. 1021 and its Auxiliary Connecting Link Road to Kailash Bop at BOP-No. 998 in AOR of Indo-Pak Border Kutch, Gujarat
29. Technical Solution and Guidance for Construction of Road from BP 1154 to BP 1159 of Indo-Pak Border, Kutch, Gujarat
30. Investigation and Design of retaining wall / protection wall for the construction of missing links in Lakpath – Gaduli – Hajipur – Odma – Khavada – Dholavira – Mauvana – Godakabet – Santalpur road (NH No. 754k), Gujarat
31. Technical solution for making cross Drainage structure (stone/rockfill embankment) over part of Harami Nala, Gujarat.
32. Technical solution and guidance for construction of road from BP1154 to BP 1159 of Indo-Pak border, Kutch, Gujarat.
33. Technical solution and guidance for strengthening of existing road from Kuda BoP to Chapariya BP no. 1021 and its auxiliary connecting link road to Kailash BOP at BoP No. 998 in AoR of Indo-Pak border, Kutch, Gujarat.
34. Review the design/drawings of slope stability of deep cut ground (with soil nails/normal slopes) from DFC Ch. 62+200 to DFC Ch. 65+750 (tunnel Portal Starting point P1) for Dedicated Freight Corridor track from Rewari to Dadri
35. Investigation of bulged RE wall and suggestion of suitable remedial measures at Mihan Depot, Nagpur (Phase-1)
36. Designing and guiding the implementation of remedial measures to rehabilitate MSE wall fascia at Chainages Km 118+600 and Km 116+300 of NH-6 on Surat-Hazira section.

37. Designing and guiding the implementation of remedial measures to rehabilitate MSE wall fascia blocks of the ROB-4 constructed at km 67+090 (RHS), Madurai - Kanyakumari Road
38. Investigation and Design of Remedial Measures for Stabilization of Soil Slope to Protect the Ballast Retaining Wall of Bridge No. 34 on Kota-Bina Rail Line near Kota
39. Design and Guidance for ground improvement techniques for construction of rail underpass at chainage km 33+585 between Julmi and Jhalawar city, Rajasthan
40. Design and guiding the soil improvement techniques for the construction of RUB at km 914/18 on Kota – NAD section, Kota, Rajasthan
41. Design and Technical guidance for stabilization of soil during box jacking at Km 37/2-3 below the existing rail lines (Delhi-Rewari), Sector-9, Gurugram
42. Design and Guidance during implementation of soil nailing for the stabilization of embankment for construction of rail underpass, Pragati Maidan, New Delhi
43. Feasibility study of local soil/ rockfill/ boulder as a fill material in Runway extension area, Jabalpur Airport
44. Fill material selection for use in New Apron and Stability of earth at the site of retaining wall, VSI Airport, Portblair
45. Repair and Rehabilitation of air field pavements at NSCBI Airport Kolkata
46. Design of road embankment in Runn of Kutch near Bhuj, Gujarat
47. Design of Bank Protection work of Haraminalla at Indo - Pak Border, Bhuj, Gujarat
48. Evaluation of three roads (Krishnapatnam port (AP), Poranki (AP) & Hyderabad (TS)) stabilized with cement and stabilroad stabilizer
49. Evaluation of Zydex (Terassil & Zycobond) Nanotechnology with cement in soil stabilization.
50. Stabilisation of soil using slaked and un-slaked lime for the optimum CBR Determination
51. Stabilroad Stabilizer study on durability and compressive strengths on soil
52. Evaluation of Flexi – C- Ment (Highly Elastomeric Polymer) Stabilizer with cement in soil stabilization for road construction
53. Expert opinion for road number 5 Medical Sq to Krida Sq. Umred Road" of Cement Road, Phase-1, NMC Nagpur
54. Design of concrete pavement for widening & construction of cement concrete road from Hotel Radison Blue Wardha Road to Jaitala Main Road.
55. Review of the design of roads in additional complex of Supreme Court of India (SCI)
56. Utilization of dredged sand as a construction material in road construction in new capital, Amaravati, Andhra Pradesh
57. Design of Remedial Measures for Upheaval of PQC slabs around Monorail Pillars in Mumbai

58. Agro based Geotextile system for efficient road Drainage / Pilot project on construction of Rural roads under PMGSY with Jute geotextiles
59. Design and Technical guidance for RCC Box pushing at rail chainage Km 1377/4-6 near Farah Railway Station on Mathura-Dholpur Section
60. Design and Technical guidance for stabilization of soil for the construction of RUB

    By Box Pushing at LC-40 near Sakoti Tanda Railway Station, Muzaffarnagar
61. Design of Soil Nailing for stabilization of vertical cut slopes for construction of road under the approach embankment of bridge by box pushing technique at west end approach of old Yamuna Bridge No. 249, Delhi Shahadra section
62. Design and construction of soil nailed system for the construction of Underpass at railway level crossing No. 156, Sahibabad, U.P
63. Design of Soil Nailing for stabilization of vertical cut slopes for construction of RUB by box pushing method at Apsara border on SBB – Vivek Vihar Section.
64. Design and execution of soil nail wall system for the stabilization of railway embankment for the trenchless crossing of 1700mm Dia, MS pipe below railway tracks near old steel bridge near Yamuna Bazar, Delhi.
65. Stabilization of slope of pile cap and suggestion of river bank protection measures for the construction of PMT bridge at river Ravi, Basohli, Jammu
66. Design of Suitable remedial measures for temporary link road between Lodhrani Kuda to BP 1021
67. Evaluation of Soil Strata for Centre Spine Road near T3 Terminal at IGI Airport.
68. Providing Technological solutions for road construction in Runn of Kutch – BP 1135 to BP 1169 and BP 1175 to G46.
69. Advice regarding construction of perimeter road at civil airport, Pantnagar
70. Economic Evaluation of Geosynthetic Reinforced Wall with different backfill
71. Stabilisation of soil for Parade grounds of Delhi Police training school Jharoda Kalan, Nazafgarh, New Delhi
72. Technical advice for rebuilding of East – West highway damaged by Kosi river breach, Nepal
73. Investigation of four roads in VPT area, Visakhapatnam
74. Embankment design for construction of two lane road with paved shoulder in NH-31of Khagria-Purnia section (Pasraha Zone) (Km 301+00 to Km 317+00)
75. Instrumentation and Monitoring of Band drains work for development of adequate road connectivity to Visakhapatnam Port
76. Design of embankment using hydraulic fill for widening of M.B. road from ITO chungi to old Yamuna Bridge 4 lane to 8 lanes
77. Design review for the construction of Reinforced soil wall structure for construction of 4 lane By-Pass on NH-76 at Kota
78. Feasibility study for the Utilisation of Renolith in Road works

79. Ground improvement measures for widening of industrial bye – pass road, Visakhapatnam
80. Detailed investigation and design of high embankment on soft ground for Kalindi Bye-pass from Kalindi colony to Kalindi kunj (Road No : 13A), New Delhi
81. Erosion control measures for slope protection on Road / Embankment at Rann of Kutch, Gujarat
82. Advice regarding repair / preventive measures for flood damages, Indo – Pak Border roads, Gujarat
83. Recommendations for ground improvement at Chennai Bypass road project
84. Design of PMGSY road (Package GJ 1305), Sanghad Village, Anjar
85. Design of Border Road Embankment BP 1169 – BP 1175 & BP 1120 to 1123/1, Runn of Kutch, Gujarat.
86. Design of Remedial Measures for Outward Shifting / Titling of Crash Barrier at Down Ramp of MVLR
87. Design of capillary cutoff and improvement of subgrade layer (Construction of Thanesar Dhand to Khanouri Road)
88. Design review RE wall for Rohtak Bawal Section of NH – 71: Jhajjar Bypass.

Projects on Utilization of Waste and Marginal Materials for Road Works

89. Utilization of industrial wastes / Marginal materials for mechanically stabilized earth wall applications
90. Design of Coal Ash Railway embankment
91. Advice regarding use of fly ash in road embankments, Delhi State Industrial Development Corporation, Bawana, Delhi
92. Utilisation of Fly Ash and Copper Slag for Road and Embankments – Wastes from Birla Copper Unit at Dahej
93. Design of Approach embankments of Signature Bridge across Yamuna River, Wazirabad, Delhi

Projects on Technical Audit / Quality Inspection of Road Projects

94. An Independent review of Signature Bridge project for technical and contractual issues
95. Performance Audit of NHAI road projects under Public Private Partnership (PPP) for
    (a) Kagal- Satara BOT project (Km 592.240 to 725km), NH – 4, Maharashtra
    (b) Tuni – Anakapalli, BOT (km 750 to km 799), NH – 5, Andhra Pradesh
96. Quality inspection of PMGSY roads
97. Quality control of Master Plan Roads in Dwaraka – strengthening of the existing two lanes carriageway, constructing additional four lanes, service

road, foot path, drainage, C.D works and fixing kerb stones, constructing bridges & culverts, etc.,

98. Quality Audit of Four Laning Road from Ludhiana to Talwandi (92.0 km to 170.0 km of NH - 95)

Projects on Pullout Test, Connection strength test and Installation Damage of Geosynthetics

99. Evaluation of Installation damage of GeoStarps and Armalynk samples from a test section
100. Reinforced soil structure connection testing and report
101. Evaluation of connection strength between geogrid and gabion fascia
102. Evaluation of interaction friction coefficient of Geostrap and paralink / Paragrid reinforcement Embedded in soil through pullout tests – (Four laning of Solan – Kaithlighat Section of NH – 22 from km 106.00 to 129.050)
103. Evaluation of Installation damage of GeoStarp from a test section
104. Evaluation of Connection Strength between Geogrid and Strata Block unit
105. Evaluation of Connection Strength between Geostrap and Terra Block system
106. Evaluation of connection (mechanical connection) strength of the cavity (HYSD Steel rod which is embedded in Reinforced Soil Wall (RSW) Fascia Panel) for the Geo strap in RSW fascia panel
107. Evaluation of pullout strength for the galvanized steel hook (mechanical connection) for the geogrid in RE panel
108. Evaluation of interaction friction coefficient of Geostrap reinforcement embedded in soil through pullout tests
109. Evaluation of connection strength between Tenax HDPE geogrids & T-clip for modular concrete blocks (T-Block)
110. Evaluation of pullout coefficient of Geostrap reinforcement embedded in soil through pullout tests
111. Evaluation of pullout coefficient of Geostrap reinforcement embedded in soil (Davangere to Haveri, Karnataka) through pullout tests
112. Evaluation of pullout coefficient of Geostrap reinforcement embedded in soil (Nalgampalli - Karnataka/AP Border) through pullout tests

Annexure -II

Publications:

Journals

M. Vinoth and P. S. Prasad. (2025). "Optimized Buffer Layer combination over expansive soils". International Journal of Geosynthetics and Ground Engineering. **11**, 9. https://doi.org/10.1007/s40891-025-00616-z

Minchala, D., Gottumukkala, B., **Prasad, P. S**., & Swarna, S. T. (2024). "Performance evaluation of marginal materials in geosynthetic reinforced base layers". Road Materials and Pavement Design, 1–14. https://doi.org/10.1080/14680629.2024.2373228

D. Minchala, B. V. Gottumukkala, **S. P. Pulikanti**, and K. K. Kuna (2024), "Laboratory Evaluation of Marginal and Industrial Waste Material in Geocell-Reinforced Pavements under Cyclic Loading," Journal of Testing and Evaluation 52, no. 1 (January/February 2024): 392–403. https://doi.org/ 10.1520/JTE20220627

Minchala, Divakar Bharath Gottumukkala., Surya Teja Swarna., **Prasad, P S**., Goli Arun Kumar (2024) "Performance Evaluation of Geosynthetic reinforced Marginal Material as a base layer over weak subgrade". International Journal of Pavement Engineering, 25:1, 2318605, DOI: 10.1080/10298436.2024.2318605.

Bharath G; Bharatram M; Divakar M; **Prasad P.S**; Kranthi K.K. (2023) "Laboratory and Field Evaluation of Geocell Reinforced Bases for Locally Available Material in the Himalayan Region", International Journal of Geosynthetics and Ground Engineering 9, Article number 74, DOI:10.1007/s40891-023-00497-0

Prasad, P.S., and Kumar, K., (2017). Slope stability evaluation erosion control and landslide correction between km 67.0 to 106.39 on NH-5, Himachal Pradesh. SP of Journal of Engineering Geology, 42 (2), 1 - 12.

Prasad, P. S., and Ramana, G. V. (2016). Imperial Smelting Furnace (Zinc) Slag as a structural fill in reinforced soil structures. Geotextiles and Geomembranes. 44(3), 406 – 428.

Prasad, P. S., and Ramana, G.V. (2016). Feasibility of copper slag as a structural fill in reinforced soil structures. Geotextiles and Geomembranes, 44(4), 623 – 640.

Prasad, P. S and Ramana, G.V. (2016). Reply for Dr. Xu's discussion of "Feasibility study of copper slag as a structural fill in reinforced soil structures" by P. S. Prasad and G.V. Ramana, 44(4), 623 – 640. Geotextiles and Geomembranes 44(6). 897 - 898.

Prasad, P.S., Kumar, K., Negi, I.S., and Kathait, A. (2014). Design of remedial measures at Lukhbir slide on NH – 31, Journal of Engineering Geology, 28 (2), 49 – 62. **(*Best Paper Award*)**

Negi, I.S., Kumar, K., Kathait, A., and **Prasad, P. S.** (2013). Cost assessment of losses due to recent reactivation of Kaliasaur Landslide on National Highway 58 in Garhwal Himalaya, 68(2), Natural Hazards, 901 – 914.

Panigrahi, R.K., Vittal, U.K.G., **Prasad, P. S**., Mathur, S., and Gupta, P. (2011). Investigation and design for restoration of hill slope in Mizoram, Indian Geotechnical Journal, 41(4), 215 – 225. **(*Best Paper Award*)**

Kathait, A., Kumar, K., **Prasad, P. S**., Singh, K., and Negi, I. S. (2011). Simple method for quick change detection using some topographic detection using some topographic attributes within Patalganga landslide, 5 (1 and 2), April and November 2011, Disaster and Development. pp. 11 – 22.

Kumar, K., **Prasad, P. S**., Mathur, S., and Kimoti, S. (2010). Rockfall and subsidence on Mumbai – Pune Expressway. International journal of Geo-engineering Case Histories, 2(1), pp. 24 – 39.

Panigrahi, R. K., Vittal, U. K. G., **Prasad, P. S**., Gupta, P., and Mathur, S. (2009). 'Geotechnical Classification of Rocks for Hill Slope Failure at km 45.00 on NH-150, Mizoram', Published in Indian Mining and Engineering Journal, Vol.47, No.9, 2009

Havanagi, V.G., Mathur, S., **Prasad, P.S**., and Kamaraj N. (2007). Feasibility of copper Slag – Fly ash soil mix as a road construction material. Transportation Research Record; Journal of the Transportation Research Board, 1989(2), pp. 13-20, 2007.

Kumar, K., **Prasad, P. S**., Goyal, N., and Mathur, S. (2007). Large – Scale -Mapping and Monotoring of the Patalganga Landslid, Disaster and Development, Journal of the national Institute of Disaster Management, 1(2), pp. 187 – 196.

Kumar, K., **Prasad, P. S**., Goyal, N., and Mathur, S. (2007). Study of Rockfall at Amritanjan Bridge site on Mumbai – Pune Expressway – A Case Study, Jl. Of Rock Mechanics and Tunnelling Technology. 13(2), pp. 129 -139. **(*Best Paper Award*)**

Havanagi, V. G., **Prasad, P. S**., Vittal U.K, G and Mathur, S. (2006). Feasibility of utilization of copper slag – fly ash - soil mixes for road construction, Highway Research Bulletin, Highway Research Board, Indian road congress, No. 75, pp. 59 – 67.

Sridharan, A., Nagaraj, H.B., and **Prasad, P. S.** (2000). Liquid limit of soils from equilibrium water content in one-dimensional normal compression. Proceedings of the ICE -Geotechnical Engineering, 143(3), pp. 165 – 169.

Sridharan. A, Pandian, N.S., and **Prasad, P. S.** (2000). Liquid limit determination of class F coal ash. Journal of Testing and Evaluation, JTEVA, ASTM, 28(6), pp. 455 – 461.

Articles in Magazines

Prasad, P.S and Kumar, K. (2020). Landslide investigations and design of cost effective measures at Mithana Landslide. GeoXchange, Vol. 01, Issue 01, pp 35 – 40.

Vinoth, M., **Prasad, P.S**., and Vittal, U.K.G. (2019). Performance Analysis of Plaxis Models of Stone Columns in Soft Marine Clay. Indian Highways, 47(10), October, pp. 25 – 30.

Vittal, U.K.G., and **Prasad, P. S**. (2015). Slope protection works for rockfall prevention, New Building Materials and Construction World, 21 (3), 88 – 96.

Vittal, U.K.G., and **Prasad, P.S.** (2013). Design and Construction of Road Embankment using fly ash in waterlogged area, New Building Materials and Construction World, 19 (3), 116 – 123.

Panigrahi, R.K., Vittal, U.K.G., **Prasad, P. S**., and Mathur, S. (2010). Geological and geotechnical investigations for remedy of slope failure problem at Km 214.240, of NH – 39 in Nagaland, Indian Highways, June, pp. 29 – 45.

Kumar, K., Gupta, P., **Prasad, P. S**., and Mathur, S. (2008). Design of suitable corrective measures for stability of critical slope near Kol dam, H.P – A Case Study, Indian Highways, January, pp. 41 – 47.

International / National Conferences

Parmar, J., Pandya, S., Peddinti, P.R.T. and Prasad, P. S. 2022. "Sustainable Pavement Subgrades for Unsaturated Saline Bhavnagar Coast." In International Conference for Transportation and Development 2022: Pavements, edited by Wei, H., Seattle, Washington D.C,: ASCE. pp. 283–293. (https://doi.org/10.1061/9780784484357.025).

Jahnavi, P., Pranav, R. T. P., Prasad P. S. (2022). Fly Ash Stabilised Saline Soils as Subgrade for Low Volume Roads, Scopus Indexed International Conference, PICET 2022, 20-21 May, 2022, Parul University, Vadodara, Gujarat.

Jahnavi, P., Prasad P. S., Pranav, R. T. P., Saloni, P. (2022). Assessment of Highly Saline Soil Stabilized with Fly Ash - Cement Admixtures. 11th Annual Conference on Deep Foundation Technologies for Infrastructure Development in India, Deep Foundation Institute (DFI) India, 15-18 September, 2022, IIT Tirupati, Andhra Pradesh.

Singh, K., Mittal, S., Prasad, P.S., Kumar, K. (2019). Critical Evaluation on Retention of Fine Sand Through Soil Nailing for Construction of Rail Underpass by Box Jacking—A Case Study. In: Sundaram, R., Shahu, J., Havanagi, V. (eds) Geotechnics for Transportation Infrastructure. Lecture Notes in Civil Engineering, vol 29. Springer, Singapore. pp 325–339. (https://doi.org/10.1007/978-981-13-6713-7_26)

Vinoth, M., Prasad, P.S., Mathur, S., Kumar, K. (2022). Investigation and Design of Remedial Measures for Landslide in Hunthar Veng, Mizoram—A Case Study. In: Satyanarayana Reddy, C.N.V., Muthukkumaran, K., Vaidya, R. (eds) Stability of Slopes and Underground Excavations. Lecture Notes in Civil Engineering, vol 185. Springer, Singapore. pp 79–90. (https://doi.org/10.1007/978-981-16-5601-9_8)

Emmadi, S., Ramana, G.V., Prasad, P.S. (2022). Investigation, Design and Construction Methodology of 120 m High IKOCP Dumping Yard, Singareni Collieries. In: Nandagiri, L., Narasimhan, M.C., Marathe, S., Dinesh, S. (eds) Sustainability

Trends and Challenges in Civil Engineering. Lecture Notes in Civil Engineering, vol 162. Springer, Singapore. pp 459–469. (https://doi.org/10.1007/978-981-16-2826-9_29)

Prasad, P.S., Kumar, K. (2022). Highways Upgradation in the Hilly Areas and Its Impact—An Example of Uttarakhand. In: Kolathayar, S., Ghosh, C., Adhikari, B.R., Pal, I., Mondal, A. (eds) Resilient Infrastructure. Lecture Notes in Civil Engineering, vol 202. Springer, Singapore. pp 461–475. (https://doi.org/10.1007/978-981-16-6978-1_36)

Bharath, G., Shaw, A.K., Prasad, P.S., Kamaraj, C. (2023). Laboratory Evaluation of a Geosynthetic-Reinforced Pavement over Poor Subgrade. In: Nandagiri, L., Narasimhan, M.C., Marathe, S. (eds) Recent Advances in Civil Engineering. Lecture Notes in Civil Engineering, vol 256. Springer, Singapore. pp 443–455. (https://doi.org/10.1007/978-981-19-1862-9_28)

Mathew, J., Patel, M., Prasad, P.S. (2023). Bulk Utilization of WRP Slag for Geotechnical Characterization: An Experimental Study. In: Nandagiri, L., Narasimhan, M.C., Marathe, S. (eds) Recent Advances in Civil Engineering. Lecture Notes in Civil Engineering, vol 256. Springer, Singapore. pp 759–774. (https://doi.org/10.1007/978-981-19-1862-9_49)

Mohini, P., **Prasad, P. S.,** Pranav, R. T. P. and Kanaujia, V.K. (2021). An Experimental Study on the Strength behaviour of Black Cotton Soil Stabilized with Industrial Waste Material (Zinc Slag) for Pavement Construction. First Indian Geotechnical and Geo-environmental Engineering Conference (IGGEC 2021), 19 – 20 November 2021(Virtual Mode), Dr. B. R. Ambedkar National Institute of Technology Jalandhar, Punjab, India

Bharath, G., Bharatram, M., **Prasad P.S**. and Kranthi, K.K. (2021). Performance evaluation of geocell reinforced bases for locally available material in high altitude regions. 8th International Conference on Transportation Systems Engineering and Management (CTSEM 2021), 26 – 27 August 2021(Virtual Mode), Centre for Transportation Research, NIT Calicut, Kerala, India

Prasad, P.S., Vittal, U.K.G., Sitaramanjaneyulu, K., and Madhav, M. R. (2016) “Remedial Measures for Upheaval of PQC Panels Adjacent to Piers of Monorail in Mumbai” 5th International Conference on Forensic geotechnical Engineering (5ICFGE), 8th - 10th December 2016, Bangalore, India, pp. 366 – 377.

Anand, A. K., **Prasad, P.S**., and Kumar, K. (2015), "Geomorphometric analysis of Chamoli and Karnaprayag District, Uttrakhand in respect to Hazard Zonation of the Area " ISPRS WG VIII/1 Workshop on Geospatial Technology for Disaster Risk Reduction, Jaipur, India on 17th December, 2015

Prasad, P.S., and Ramana, G.V. (2014). Utilization of Copper Slag as a structural fill for mechanically stabilized walls, Paper no. 12, 10 ICG (International conference on Geosynthetics), 21 – 25 September 2014, Berlin, Germany.

Kumar, K., Prasad**, P.S**., Kathait, A., and Negi, I., (2014), Monitoring of critical Himalayan landslides and design of preventive measures. In: K. Sassa et al. (eds.),

Landslide Science for a Safer Geoenvironment, Vol. 2, Part V, Springer International Publishing Switzerland, pp 583-588.

Prasad, P.S., and Ramana, G.V. (2013). Study to determine feasibility of using imperial smelting furnace slag as structural fill for mechanically stabilized walls, Nov. 18 – 20, 2013 GhIGS GeoAfrica 2013 Conference, Accra, Ghana

Kumar, K., **Prasad, P. S**., Kathait, A and Negi, I. S. (2013), Over Eight Decades Old "Young" Landslide – a case study, Seventh International Conference on Case Histories in Geotechnical Engineering, April 29 – May 4, 2013, Chicago.

Vittal, U.K.G., **Prasad, P.S**., Kishor, K., and Mathur, S.(2013), Rockfall mitigation studies on NH – 22 – A Case Study, Proc. of the Indian geotechnical conference (IGC), Theme 7, December 22-24, 2013, Roorkee.

Kumar, K., **Prasad, P. S**., Goyal, N. K., Kathiat, A., and Negi, I. S. (2013), Successful case studies of some critical landslides on various Border Roads, Technical Seminar on Construction of Roads and Bridges in Challenging Conditions like Hills, High Rainfall and Snow Bound Areas July 18-19 2013, Pune.

Vittal, U.K.G., **Prasad, P.S**., Kumar, K and Mathur, S. (2013), Rockfall mitigation studies on NH – 22 – A Case Study, December 22-24, Proc. of the Indian geotechnical conference (IGC)2013, Roorkee, India.

Prasad, P.S., Kumar, K., Vittal, U.K.G., Mathur, S, Bhagwan, J., Singh, K. (2012), Landslide Investigation at km 162, NH-39, - a case study, Proc. of the Indian geotechnical conference (IGC), vol. 2. pp. 1100 – 1103, December 13-15, 2012, Delhi.

Kumar, K., Kathait, A., **Prasad, P.S**., Goyal, N.K., Singh, K., Negi, I. S and Gangopadhyay, S. (2012), Geoenvironmental Appraisal of Landslide Hazards on Highways, 13th ESRI India User Conference, Noida (NCR), December 5-6. 2012.

Kumar, K., **Prasad, P.S**., Kathait, A., Negi, I. S. and Mathur, S, (2012) Road Tunnel, A Need for Immediate Consideration to Avoid Loss and Sufferings From Landslide Disasters on Himalayan Highways, WTC2012 - Tunneling and Underground Space for a Global Society, 18-23 May, 2012, Bangkok, Thailand.

Kumar, K., Kathiat, A., and **Prasad, P.S** (2012). Strategies for landslide risk mitigation on Indian Highways, Proc. of the Indian geotechnical conference (IGC), Vol. 2, pp. 1081 – 1084, December 13-15, 2012, and Delhi.

Sinha, A. K., Havanagi, V. G., **Prasad, P.S**., Kumar, K., and Mathur, S. (2012) 'Design of tunnel muck dumping yard at Jammu & Kashmir rail link', Published in national conference and field study on landslide management, Nainital, March 2012

Kumar, K., **Prasad, P.S**., and Mathur, S. (2011). Debris flows in North Eastern Region of India – a Case Study 14th Asian Regional conference on Soil Mechanics and Geotechnical Engineering, Hong Kong, Chaina, pp426, Paper No: 467, 23-27, May 2011. (Soil Mechanics and Geotechnical Engineering: Challenges and solutions)

Bhagwan, J., **Prasad, P.S**., Kumar, K., and Mathur, S. (2011). Investigation for stabilisatio of landslides in Bhutan, 14th Asian Regional conference on Soil Mechanics

and Geotechnical Engineering , Hong Kong, Chaina, pp399, Paper No: 145, 23-27, May 2011. (Soil Mechanics and Geotechnical Engineering: Challenges and solutions)

Kumar, K., **Prasad, P.S**., Kathait, A., Kalota, D., Negi,I. S., Kimoti, S., and Mathur, S, (2011). Landslide susceptibility analysis by using frequency ratio method of Patalganga Valley, Garhwal Himalaya. Proceeding of National Conference on Landslide Hazard Consequences and Challenges, pp.30 – 47, Feb. 10 -12, 2011, Roorkee, India.

Kumar, K., **Prasad, P.S**., Negi, I.S., Kathait, A., Kimoti, S., Singh, K., and Mathur, S. (2011). Recent Reactivation of Kaliasaur landslide and impact thereafter. Proceeding of National Conference on Landslide Hazard Consequences and Challenges, pp. 48 – 58, Feb. 10 -12, 2011, Roorkee, India.

Kumar, K., **Prasad, P.S**., Shivashis Kimoti, Indervir S Negi, , Kathait, A., Abhilipsa Dash, and Mathur, S. (2011) Kinematic slope stability analysis of Kaliasaur Landslide on NH 58, Garhwal Himalaya, Third Indian Rock Conference, INDOROCK 2011, Oct. 13 – 15, 2011, Roorkee, India. pp. 341 – 347.

Kumar, K., **Prasad, P.S**., Kathait, A., Inder S Negi, and Mathur, S. (2011) Landslide Hazard Management on Mountainous Highways – A Critical Need, 12th ESRI India user Conference, Dec. 7 – 8, 2011, New Delhi, India.

Vittal, U.K.G., **Prasad, P.S**., and Mathur, S. (2011) Construction of Road Embankment using fly ash in water logged area: a case study, National Conference on Fly ash, Dec. 5 – 7, 2011, Hyderabad, India. pp. v2.1 – v2.7.

Prasad, P.S., Kumar, K., Ganesh, J., Vittal, U. K. G., and Mathur, S. (2011) Landslide Investigation at Km 221, NH – 39 – a Case study, pp. 1007 – 1010, IGC 2011, Dec. 15 – 17, 2011, Kochi, Kerala, India.

Singh, K., **Prasad, P.S**., Ganesh, J., Bhagwan, J., and Mathur, S. (2011) Geotechnical investigations and design of remedial measures for roads at Visakhapatnam port area, Visakhapatnam, pp. 1015 – 1018, IGC 2011,Dec. 15 – 17, 2011, Kochi, Kerala, India

Prasad, P.S., Kumar, K., Vittal, U. K. G., and Mathur, S. (2010). Regeneration of Debris flow and landslide, on National Highway – 39 near Kohima, Nagaland, India ISFGE 2010 forensic approach to analysis of Geohazard problems, 14 – 15 Dec.2010, Mumbai, India, pp 122 – 127.

Vittal, U.K.G., **Prasad, P.S**., and Mathur, S.(2010) Sub-surface Drainage Measures for Lowering Ground Water Table at Pantnagar Airport, Indian Geotechnical Conference 2009, Guntur, India, 2010, pp 162 -165

Vittal, U.K.G., **Prasad, P.S**., and Mathur, S. (2010). 'Construction of road embankments over marine clay deposits – Significance of instrumentation for monitoring consolidation', Published in the Conference on Trends and Advances in Transportation Engineering (TREAT-2010), organised by Bangalore University Highway Engineering Alumni Association, March 2010.

Kumar, K., **Prasad, P.S**., Kimothi, S., Ganesh, J., and Mathur, S. (2010) A Geomorphologic Appraisal of Patalganga Landslide on National Highway-58, Garhwal

Himalaya, Uttaranchal, Indian Geotechnical Conference 2009, Guntur, India, 2010, pp 599 – 603.

Bhagwan, J., Singh, K., **Prasad, P.S**., and Mathur, S. (2010). Stabilisation of soil for police parade grounds of Delhi police training school, Delhi Indian Geotechnical Conference 2009, Guntur, India,2010, pp 569 – 573.

Kumar, K., **Prasad, P.S**., and Mathur, S. (2009). Mitigation and Management of Slope Hazards on Mumbai – Pune Expressway World Tunnel Congress(WTC) 2009, May 23-28, 2009, Budapest, Hungery

Havanagi, V. G., Sinha, A.K., **Prasad, P.S**., Sitaram, K., and Mathur, S. (2009). Copper slag as an alternative material for road construction 24th international conference on Solid Waste technology and Management, Philadelphia, U.S.A, March 2009, pp 133 – 144.

Vittal, U.K.G., **Prasad, P.S**., Ganesh, J. and Mathur, S. (2008). Design of Road Embankment in the Salt Marsh Area in Kutch, Gujarat, Symposium on Engineering of Ground and Environmental Geotechnics , Hyderabad, Feb 2008, pp. 128 -133.

Vittal, U.K.G., **Prasad, P.S**., Sharma, N. K., and Mathur, S. (2008). 'Designing Ground Improvement Techniques in Soft Clay Areas', Published in the Proceedings of National symposium on Geoenvironment, Geohazards, Geosynthetics and Ground Improvement – Experiences and Practices (Geosymposium 2008), Organised by IGS Delhi Chapter, Delhi, July 2008.

Bhagwan, J., Mukherjee, D., **Prasad, P.S**., and Mathur, S. (2008). Investigations for stabilization of Slopes in Bhutan, Symposium on Engineering of Ground and Environmental Geotechnics , Hyderabad, Feb 2008, pp. 134 -137.

Kumar, K., **Prasad, P.S**., Mathur, S and Goyal, N. K. (2008). Study of Rockfall and Subsidence at km 41 on Mumbai – Pune Expressway – A Case Study, Proceedings of 12th International conference of International association for Computer Methods and advances in Geomechanics, Goa, 2008, pp 4659 - 4666.

Kumar, K., **Prasad, P.S** ., Mathur, S and Goyal, N. K. (2008). A Study on Debris and earth Flow on National Highway – 39, Near Kohima, Nagaland, Proceedings of 12th International conference of International association for Computer Methods and advances in Geomechanics, Goa, 2008, pp 4453 - 4460.

Panigrahi, R.K., Vittal, U.K.G., **Prasad, P.S**., and Mathur, S. (2008). Geomechanical Classification of Rocks of Mao landslide at Km 214.240 on NH – 39, Nagaland Proceedings of National symposium on Geoenvironment, Geohazards, Geosynthetics and Ground Improvement – Experiences and Practices, Delhi, 2008, pp 275 – 281.

Vittal, U.K.G., **Prasad, P.S**., Sharma, N.K., Sinha, A.K., Havanagi, V.G., and Mathur, S. (2008). Designing Ground Improvement Techniques in soft Clay areas Proceedings of National symposium on Geoenvironment, Geohazards, Geosynthetics and Ground Improvement – Experiences and Practices, Delhi, 2008, pp 350 – 356.

Bhagwan, J., Singh, K., **Prasad, P.S**., and Mathur, S. (2008) Feasibility of suitable fill material for embankments – A Case Study Proceedings of Indian Geotechnical Conference, Bangalore, Dec 2008.

Prasad, P.S., Vittal, U. K. G., and Mathur, S. (2007). Failure of Reinforced Earth Slope – A Case Study Proceedings of First Indian Young Geotechnical Engineers Conference, Hyderabad, March 2007.

Bhagwan, J., **Prasad, P.S**., and Mathur, S. (2007). Investigations for Stabilisation of Land Slide at Sorchen in Bhutan. Proccedings of 13th Asian Regional Conference on Soil Mechanics and Geotechnical Engineering, Vol1, Part 2, pp. 959-962, 2007.

Vittal, U.K.G., **Prasad, P.S**., Mathur, S and Nanda, P.K. (2006). Instrumentation for monitoring consolidation of marine Clay Deposits – A Case study, Proceedings of International conference on infrastructure development on expansive soils, Erode, Feb 2006, pp. 91 – 97.

Kumar, K., **Prasad, P.S**., Kanaujia, V.K., and Mathur, S. (2006). Geological and Geotechnical investigations of Patalganga Landslide adjacent to NH – 58, Garhwal, Uttaranchal – A Case Study. Proceedings of Indian Geotechnical Conference, Chennai, Dec 2006.

Bhagwan, J., Mukherjee, D., **Prasad, P.S**., and Mathur, S. (2006). Investigations for Stabilisation of Kharbandi Land Slide in Bhutan. Proceedings of Indian Geotechnical Conference, Chennai, Dec 2006.

Vittal, U.K.G., **Prasad, P.S**., and Mathur, S. (2006). Geotechnical properties of Visakhapatnam marine clays. Proceedings of Indian Geotechnical Conference, Chennai, Dec 2006.

Vittal, U.K.G., **Prasad, P.S**., Mathur, S., and Nanda, P. K. (2006). Instrumentation for Monitoring Consolidation of marine Clay Deposits – A Case Study, Published in International Conference on Infrastructure Development on Expansive Soils, Feb 2006, Erode, Tamil Nadu

Vittal, U.K.G., **Prasad, P.S**., and Mathur, S. (2004). Instrumentation of road embankment on soft marine clay – a case study, published in the Indian Geotechnical Conference, Warangal, Dec. 2004.

Prasad, P.S., Vittal, U.K.G., and Mathur, S. (2003). Some Aspects of Constructing Embankments on Soft Marine Clays', Published in the seminar on integrated development of rural and arterial road network for socio-economic growth, New Delhi, December 2003.