



## Dr. V Padmavathi

M. Tech., Ph. D. Geotechnical Engineering

**Professor & Vice-Principal**

**LFIGS, MISSMGE**

Civil Engineering

### Areas of Interest:

#### Interested research areas

- Shallow and Deep Foundations
- Ground Improvement Techniques
- Slope Stability
- Fiber Reinforced Soil

Specialized in Geotechnical Engineering with 20 years of experience in Industrial Consultancy field of Geotechnical engineering projects involving soil investigation and design. Has 20 years of teaching experience. Delivered number of lectures on the themes of Geotechnical Engineering and development.

### -> Educational & Professional

#### -> Academic Qualifications

- > Ph. D. in Laterally Loaded Piles (Geotechnical Engg.), JNTUH (2002-2008)
- > Post Graduate in Geotechnical Engineering, JNTUK with First Class with Distinction (1994-1997)
- > B. Tech. in Civil Engineering, JNTUK with First Class with Distinction (1988-1992)

#### ▶ Professional Experience

#### -> Industrial Experience

- > Project Assistant, IISc, Bangalore (1993 - 1993)

#### -> Teaching Experience

- > Project Assistant, BITS Pilani, Rajasthan (1999-02-01 - 2000-11-10)

#### -> At JNTUH

- > Associate Professor, JNTUH College of Engineering Hyderabad (2010 - 2016)
- > Assistant Professor, JNTUH College of Engineering Hyderabad (2000 - 2009)
- > Professor, JNTUH College of Engineering Hyderabad (2016 - Till Date)

#### -> Books

- > Padmavathi, V., *Stress-Displacement Behavior of PVC Cell Gabion Wall with Geogrid Reinforcement*, Springer, Singapore, ISBN 978-981-33-6564-3 (e-book), 2021
- > Padmavathi, V., *Study of Cohesive Soil Behavior on Addition of Coconut Fiber and Micro Fine Cement.*, Springer, Singapore, ISSN 2366-2557, ISBN 978-981-33-6465-3 (e-book), 2021

#### -> Events Participated/Organized

##### - Organized

- > Organized a Symposium on Geotechnical Practices (GeoPractices-2012), JNTU College of Engineering Hyderabad, 10-11-2012
- > Organized a Symposium on Geotechnical Applications, JNTU College of Engineering Hyderabad, 15-04-2011
- > Organized a Symposium on Geotechnical Practices, JNTU College of Engineering Hyderabad, 05-04-2011
- > Organized a Symposium on Selected Topics in Geotechnical Engineering, JNTU College of Engineering Hyderabad, 04-11-2010
- > Organized a Workshop on Geotechnics for Infra-, Irrigation & Tall Structures, JNTU College of Engineering Hyderabad, 21-09-2009
- > Organized a Seminar on Recent Advances in Geotechnical Engineering, JNTU College of Engineering Hyderabad, 19-09-2009
- > Organized a Symposium on Engineering of Ground and Environmental Geotechnics, JNTU College of Engineering Hyderabad, 28-02-2008 to 01-03-2008
- > Organized a Conference on First Indian Young Geotechnical Conference, JNTU College of Engineering, Hyderabad, 02-03-2007 to 03-03-2007

##### - Participated

- > Participated in a Conference on *1st Young Geotechnical Conference of Andhra Pradesh (YGeoTech 2012)*, IIIT, Hyderabad, 31-03-2012

#### -> Teaching

- > Engineering Rock Mechanics in M. Tech. Geotechnical Engineering II (2021-22)
- > Engineering Rock Mechanics in M. Tech. Geotechnical Engineering II (2020-21)
- > Engineering Rock Mechanics in M. Tech. Geotechnical Engineering II (2022-23)
- > Advanced Foundation Engineering in M. Tech. Geotechnical Engineering I (2018-19)
- > Advanced Foundation Engineering in M. Tech. Geotechnical Engineering I (2019-20)
- > Advanced Foundation Engineering in M. Tech. Geotechnical Engineering I (2020-21)
- > Advanced Foundation Engineering in M. Tech. Geotechnical Engineering I (2021-22)
- > Advanced Foundation Engineering in M. Tech. Geotechnical Engineering I (2022-23)
- > Geotechnical Engineering in Civil Engineering V (2021-22)
- > Geotechnical Engineering in Civil Engineering V (2022-23)
- > Foundation Engineering in Civil Engineering VI (2021-22)
- > Foundation Engineering in Civil Engineering VI (2022-23)

40. Ravichandra, A. P., Madhav, M. R., Narasimha Reddy, G. V. & **Padmavathi, V.** (2018) Performance of Model Gabion Type Retaining Walls Built Using Cylindrical Cells: A Laboratory Study. *International Journal of Geosynthetics and Ground Engineering* 4(2):18. <https://doi.org/10.1007/s40891-018-0135-9>

#### List of Publications

1. **Padmavathi, V.**, Saibaba Reddy, E. and Madhav, M.R. (2004). Behaviour of Rigid Batter Piles under Axial Loads. *Indian Geotechnical Conference IGC2004, Warangal, Vol.1*, pp. 355-357.
2. **Padmavathi, V.**, Saibaba Reddy, E. and Madhav, M.R. (2005). Analysis of Laterally Loaded Rigid Piles in Sands Using Non-Linear Subgrade Reaction. *Indian Geotechnical Conference IGC2005, Ahmedabad, Vol.2*, pp. 27-30.
3. **Padmavathi, V.**, Saibaba Reddy, E. and Madhav, M.R. (2005). Geotechnical Aspects of an Engineered Landfill - A Case Study. *GEO PRACTICE, Bangalore*, pp. 201-206.
4. **Padmavathi, V.**, Saibaba Reddy, E. and Madhav, M.R. (2005). Comparison of Distribution of Soil Pressures on Laterally Loaded Pile. *Proc. of CONCEPTS, Kakinada*, pp. 89-93.
5. **Padmavathi, V.**, Saibaba Reddy, E. and Madhav, M.R. (2006). Comparison of Ultimate Lateral Loads by Different Methods. *Indian Geotechnical Conference IGC2006, Chennai, Vol.1*, pp. 471- 474.
6. **Padmavathi, V.**, Saibaba Reddy, E. and Madhav, M.R. (2007). Ultimate Lateral Load on Piles in Cohesive Soils Based on Kinematics and Non-Linear Subgrade Reaction Approach. *First Indian Young Geotechnical Engineering Conference, FIYGEC-2007, Hyderabad*, pp. 322-327.
7. **Padmavathi, V.**, Saibaba Reddy, E. and Madhav, M.R. (2007). Analysis of Laterally Loaded Rigid Piles in Sands based on Kinematics and Non-linear Sub-grade Response. *Indian Geotechnical Journal, Vol. 37, No. 3*, pp. 190-209.
8. **Padmavathi, V.**, Saibaba Reddy, E. and Madhav, M.R. (2008). An Analytical Approach to Lateral Capacity of Rigid Pile in Layered Soil using Kinematics and Hyperbolic Model. *12<sup>th</sup> International Conference of International Association for Computer Methods and Advances in Geomechanics (IACMAG)*, Goa, India, 1-6 October, 2008. pp 3086-3094
9. **Padmavathi, V.**, Saibaba Reddy, E. and Madhav, M.R. (2008). Behaviour of Laterally Loaded Rigid Piles in Cohesive Soils Based on Kinematic Approach. *Journal of Lowland Technology International, Vol. 10, No.1*, pp. 27-41.
10. **Padmavathi, V.**, Madhav, M. R., Rao, P. N. and Saibaba Reddy, E. (2008). Lateral Displacement Response of a Rigid Pile in Soft Soil Overlain by Sand. *International Symposium on Lowland Technology, ISLT 2008, Busan, Korea*. pp. 169-174
11. **Padmavathi, V.**, Madhav, M. R. and Saibaba Reddy, E. (2008). Analysis of Laterally Loaded Rigid Piles in Two Layered Cohesive Soils Using Kinematics. *Indian Geotechnical Conference (GEOAGE), IGC2008, IISc, Bangalore, Vol.2*, pp. 113-116.
12. Madhav, M. R. and **Padmavathi, V.** (2008). Effect of Stiffness of Ground on Ultimate Capacity of Laterally Loaded Rigid Piles. *Indian Geotechnical Conference (GEOAGE) IGC2008, IISc, Bangalore, Vol. 1*, pp. 55-166. **(Plenary Lecture)**.
13. Apsara Sultana, **Padmavathi, V.** and Rao, P. N., (2008). Experimental Study on Stabilization of Expansive Soil with Stone Dust and Fibers. *Symposium on ENGINEERING OF GROUND & ENVIRONMENTAL GEOTECHNICS (SEG2)*, Hyderabad, pp. 198-202.
14. Madhav, M. R. and **Padmavathi, V.** (2008). Overview of Foundations for Tall Buildings. *National Workshop on High Rise Buildings (NWHRB), Hyderabad*, pp. 70-77. (Invited Lecture)
15. Madhav, M. R. and **Padmavathi, V.** (2009). Bearing Capacity & Leaning Instability of Tall Structures. *National Workshop on High-rise Constructions (NWHRC), Hyderabad*, pp. 6-14. (Invited Lecture)
16. Venu, M., **Padmavathi, V.** and Rao, P. N. (2009). Effect of admixtures in concrete mix design. *International Conference on Advances in Concrete, Structural and Geotechnical Engineering*.
17. **Padmavathi, V.**, Saibaba Reddy, E. and Madhav, M.R. (2009). Lateral Displacement Response of Piles Installed in near Surface Improved Cohesionless Soils. *Indian Geotechnical Conference, GEOTIDE, Guntur, Vol. 2*, pp. 739-742
18. Madhav, M. R., **Padmavathi, V.**, and Saha, N. (2009). **Edn**-Elastic Response and Moment-Rotation Relationships of Foundations. *Indian Geotechnical Conference (Plenary Lecture), Vol.1*, pp. 844-851.
19. K. Suresh, **Padmavathi, V.**, Apsara Sultana, (2009). Experimental Study on Stabilization of Black Cotton Soil with Stone Dust and Fibers. *Indian Geotechnical Conference, GEOTIDE, Guntur, Vol. 2*, 502-505
20. **Padmavathi, V.**, Madhav, M. R. and Saibaba Reddy, E. (2010). Behaviour of Piles Installed in near Surface Improved Clays. *International Symposium on Lowland Technology, ISLT 2010, Saga, Japan*, pp. 231-237.
21. **Padmavathi, V.**, Madhav, M. R. and Saha, N. (2010). Analysis of Stability of Tall Structures Founded on Soft Ground. *Indian Geotechnical Conference to be held in December, 2010, Vol.2*, pp.853-856
22. Padmavathi, M., **Padmavathi, V.** and Madhav, M.R. 2010. Movement - Rotation Relationships of Foundations using Hyperbolic Subgrade Response. *IGC 2010, Mumbai, Vol. 2*, pp. 837-840.
23. **Sreerama Rao, A. and Padmavathi, V.** (2010). Prediction of Heave in Reinforced Expansive Clay with Granular Pile Anchors. *Indian Geotechnical Conference to be held in December, 2010, Vol. 2*, pp. 515-518
24. **Padmavathi, V.**, Madhav, M. R. and Saibaba Reddy, E. (2010). Lateral Capacity of Rigid Piles in Two Layered Cohesionless Soils. *1<sup>st</sup> ARC on SM & GE, Hong Kong*, Paper No. 136.
25. Padmavathi, M., **Padmavathi, V.** and Madhav, M.R. 2011. Analysis of Inelastic Response of Shallow Foundations Subjected to Moment Loading. *Proceedings of Indian Geotechnical Conference December 15-17, 2011, Kochi*, Vol.2 pp. 931-934.
26. Padmavathi, M., **Padmavathi, V.** and Madhav, M.R. 2012. Inelastic Response of Shallow Foundations subjected to Moment Loading on Non-linear Winkler Foundation. *AP YGEC, Hyderabad*.
27. Lakshmana Rao, M., **Padmavathi, V.** and Madhav, M.R. 2012. Interface Friction between Soil and Geosynthetic. *APYGEC, Hyderabad*.
28. Srinivasulu, S., **Padmavathi, V.**, Araki, H., Borzooei, S. and Madhav, M.R. 2012. ANN Based Prediction and Sensitivity Analysis of Maximum Dry Unit Weight and Optimum Moisture Content Values over a Large Range. *8<sup>th</sup> Int. Symp. On Lowland Technology, Bali*, pp. 346-352
29. Padmavathi, M., **Padmavathi, V.**, and Madhav, M. R. (2014). Load-Displacement and Moment - rotation responses of foundations subjected to moment loading. *International Journal of Geomechanics, ASCE, ISSN 1532-3641*.
30. Cecil S. Edem, Padmavathi, M., **Padmavathi, V.**, and P. N. Rao., (2015). "Seismic stability analysis of earthen dam - a case study of the left embankment of Nagarjuna Sagar dam, India." *Proceedings International Conference on Landslides and Slope stability, (SLOPE 2015)*, 27-30<sup>th</sup> September, 2015, Bali, Indonesia. pp. G4.1-7
31. Madhavi Latha, G. and **Padmavathi, V.** (2015). Stability Analysis of Slopes Supporting the World's Highest Railway Bridge. *Proceedings International Conference on Landslides and Slope stability, (SLOPE 2015)*, 27-30<sup>th</sup> September, 2015, Bali, Indonesia. pp. L1.1-8
32. Padmavathi, M., **Padmavathi, V.**, and Madhav, M. R., (2015). "Effect of compressibility of ground on bearing capacity of foundation under moment loading." *Proceedings of 15<sup>th</sup> Asian Regional Conference on Soil Mechanics and Geotechnical Engineering, IND-09*, 9-13, November, 2015, Fukuoka, Japan.
33. Cecil, S. Edem., Padmavathi, M., and **Padmavathi, V.** (2015). "Dynamic response analysis of highway embankment with different fill material modifications." *International Journal of Latest Technology in Engineering Management & Applied Science, Vol. IV, Issue-X, ISSN 2278 - 2540*.
34. Vaishnavi, G., Madhav, M. R., Padmavathi, M., **Padmavathi, V.**, (2015). "Behaviour of two pile group subjected to eccentric loading." *Proceedings of Indian Geotechnical Conference (50<sup>th</sup> IGC), Geotechnics for Infrastructure & Foundation Techniques*, December 17-19, College of Engineering Pune, Paper No.317.
35. Karthik, K. R. M., **Padmavathi, V.** and Nirmala Peter, E. C. (2016). Utilization of Pond Ash and Pond Ash Stabilized by RBI Grade-81 for Road Construction. *Proceedings of Indian Geotechnical Conference, Paper ID. 192*.
36. HariBharghav, M., Madhav, M.R. and **Padmavathi, V.** (2017). Estimation of Deformation Moduli of Reinforced Foundation Beds from Load Tests. *Proceedings of Indian Geotechnical Conference, Paper ID. Th11\_250*.
37. **Padmavathi, V.**, Nirmala Peter, E. C., Rao, P. N. & Padmavathi, M. (2018). Stabilization of Soil Using Terrasil, Zycobond and Cement as Admixtures. *Proceedings of the 2nd GeoMEast International Congress and Exhibition on Sustainable Civil Infrastructures, Egypt, Latest Thoughts on Ground Improvement Techniques*, pp. 163-170.  
ISSN 2366-3405 ISSN 2366-3413 (electronic), Sustainable Civil Infrastructures, ISBN 978-3-030-01916-7 ISBN 978-3-030-01917-4 (eBook), <https://doi.org/10.1007/978-3-030-01917-4>, © Springer Nature Switzerland AG 2019, H. Shehata and H. Poulos (Eds.): GeoMEast 2018, SUCI, pp. 163-170, 2019, [https://doi.org/10.1007/978-3-030-01917-4\\_13](https://doi.org/10.1007/978-3-030-01917-4_13)
38. **Padmavathi, V.** & Madhav, M. R. (2018). G Shear Test to Determine Shear Characteristics of Coarse Grained Soils at Low Normal Stresses. *Proceedings of the 2nd GeoMEast International Congress and Exhibition on Sustainable Civil Infrastructures, Egypt, Contemporary Issues in Soil Mechanics*, pp. 114-122.  
ISSN 2366-3405 ISSN 2366-3413 (electronic), Sustainable Civil Infrastructures, ISBN 978-3-030-01940-2 ISBN 978-3-030-01941-9 (eBook), <https://doi.org/10.1007/978-3-030-01941-9>, © Springer Nature Switzerland AG 2019, S. Hemed and M. Bouassida (Eds.): GeoMEast 2018, SUCI, pp. 114-122, 2019, [https://doi.org/10.1007/978-3-030-01941-9\\_9](https://doi.org/10.1007/978-3-030-01941-9_9)
39. Padmavathi, M., Koteswara Rao, L., Padmavathi, V., Madhav, M. R. & Sanjeeva, P. (2018). Response of Four Pile Group Subjected to Eccentric Loading. *Proceedings of the 2nd GeoMEast International Congress and Exhibition on Sustainable Civil Infrastructures, Egypt, Sustainability Issues for the Deep Foundations*, pp. 26-35.  
ISSN 2366-3405 ISSN 2366-3413 (electronic), Sustainable Civil Infrastructures, ISBN 978-3-030-01901-3 ISBN 978-3-030-01902-0 (eBook), <https://doi.org/10.1007/978-3-030-01902-0>, © Springer Nature Switzerland AG 2019, H. El-Naggar et al. (Eds.): GeoMEast 2018, SUCI, pp. 26-35, 2019, [https://doi.org/10.1007/978-3-030-01902-0\\_3](https://doi.org/10.1007/978-3-030-01902-0_3)

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