



CURRICULUM VITAE

Vimala D. Nair



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UNIVERSITY OF FLORIDA/IFAS
Soil, Water and Ecosystem Sciences Department

Vimala Devi Nair

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Degrees:

Univ. of Göttingen, Germany	Chemistry/Soil Sci.	Dr.Sc.(PhD)	1978
Univ. of Kerala, India	Chemistry	M.Sc	1973
Univ. of Kerala, India	Chemistry	B.Sc	1971

Professional Experience:

1. Res Professor: Soil and Water Sciences Department (SWSD), Univ. of Florida (UF). July 2010 – ongoing. Affiliate Faculty: i) *School of Natural Resources and Environment* (UF–IFAS); and ii) *Water Institute* (UF)
2. Res Associate Professor: SWSD, UF. July 2005 – June 2010
3. Res Assistant Professor: SWSD, UF. January 1997 – June 2005
4. Res Associate (0.5 FTE): SWSD, UF. September 1988 – December 1995
5. Lecturer in Chemistry: University of Nairobi & Kenyatta, Nairobi, Kenya. July 1981 – Dec1987
6. Post-Doctoral Res Fellow in Soil Chemistry: Ecology Program, International Centre of Insect Physiology and Ecology, Nairobi, Kenya. Sep.1979 – Nov. 1980
7. Lecturer in Chemistry: Government Colleges under the Department of Collegiate Education of the State of Kerala, India. Aug. '78 - April '79; Dec. '74 – July '76

Other professional activities:

1. Associate Editor, *Carbon Footprints*, 2022 – 2025
2. Invited lecture: International Forest Garden/ food forest symposium, Dartington, UK, May/June 2021
3. Member, Soil and Water Conservation Scholarship Committee, Soil Science Society of America (SSSA) (2017–2020)
4. Member of the Advisory Board of the Agroforestry Innovation Network (AFINET) European Project (2017–2020)
5. Co-Session organizer: Agroforestry, Water Quality and Nutrient Export at the 3rd World Congress on Agroforestry (WCA) held in Delhi, India, February 10 – 14, 2014.
6. Associate Editor, *Frontiers in Agroecology and Land Use Systems*, an open-access academic publisher and research network of the Nature Publishing Group. 2013 – continuing.
7. Associate Editor (AE), *J. Environ. Quality*. 1999 – 2004; AE of special issue of *J. Environ. Quality* published May/June 2011.
8. Editor, SWS Newsletter since it was first published, Fall 2000 to 2019. The newsletter is published every semester. <http://soils.ifas.ufl.edu/about/publications/myakka-newsletter/#d.en.282794>

Membership of professional societies:

- American Society of Agronomy (ASA), 1993 – continuing
- Soil Science Society of America (SSSA), 1993 – continuing

- Association of Agricultural Scientists of Indian Origin (ASSIO), continuing
- Florida Phosphorus-Index (P-Index) Committee, since 1991
- SERA-IEG 17 (*Southern Regional Extension and Research Activity Information and Exchange Group*), 1998 – continuing
- UF Association for Academic Women

Honors and awards:

- 2021 Soil Science Research Award, Soil Science Society of America (SSSA)
- Profiled in Soil Horizons, SSSA, 2015
<https://dl.sciencesocieties.org/publications/sh/pdfs/56/4/sh2015-56-4-dl>
- Fellow of the Soil Science Society of America, 2014
- Fellow of the American Society of Agronomy, 2013
- Courtesy faculty at the Univ. Santiago de Compostela, Spain from academic year 2009–2010 (continuing)
- Outstanding Senior Scientist Award by the Association of Agricultural Scientists of Indian Origin (AASIO), 2014
- Nominated for the 2010–2011 UF Doctoral Dissertation Advisor/Mentoring Award.
- 2005 SWSD Teacher/Advisor of the year award
- Outstanding Associate Editor (2003) for *JEQ* presented by ASA/CSSA/SSSA
- Special bonus 2002–2003 (SWSD, UF), for excellent contributions and service to the discipline, department, and UF–IFAS

Graduate Students and Post-doctoral Associates Supervised (2000-to date)

Chair/Co-Chair PhD (Completed): 10; Member PhD (Completed): 8

Chair/Co-Chair MS (Completed): 5; Member MS (Completed): 5

Post-doctoral associates: A.M. Freitas, B. Dari, S. Haile, M. Chrysostome, M. Josan, and S. Allen for a total of 80 person-months.

Current Placement of Supervised PhD students

Myrlene Chrysostome (PhD 2005): Associate Director, Millennium Challenge Corporation, Washington DC

Gerard-Alain Michel (PhD 2006): Federal Government of Canada, Ottawa, Canada

Manohardeep Josan (PhD 2007): Principal Supervisory Scientist, Water Quality Bureau, South Florida Water Management District.

Solomon Haile (PhD 2007): National Program Leader, USDA-NIFA.

David Howlett (PhD 2009): Agriculture Officer and Mission Disaster Relief Officer at USAID, Washington, DC.

Debolina Chakraborty (PhD 2011): Research Fellow - III, Auburn University

Biswanath Dari (PhD 2015): Assistant Professor, Oregon State University

Nilovna Chatterjee (PhD 2018): Scientist-Crop Modeling at CIBO Technologies, St. Louis, MO

Andressa Freitas (PhD 2019): Post-doctoral Associate, University of Florida

Felipe Pinheiro (PhD 2020): Consultant

Advisee Awards

Amanda Rodriguez:

- 2021 Best MS Thesis Award (SWSD)
- 2021 William K Robertson Award (SWSD)

Andressa Freitas:

- 2019 Emerging Scholar Award, UF Association for Academic Women
- 2019 ASA, CSSA, SSSA Future Leaders in Science Award
- 2019 Nomination by CALS for the University-wide selection of Madelyn Lockhart Dissertation Fellowship

Biswanath Dari:

- 2016 Best Dissertation Award (SWSD)
- 2014 Outstanding Graduate Student Award by the Association of Agricultural Scientists of Indian Origin (AASIO)
- 2014 William K Robertson Award (SWSD)
- 2014 One of the three selected by IFAS for the International Student Howard Hughes Medical Institute Fellowship
- 2013 Environmental Quality Outstanding Graduate Student Award (ASA)
- 2013-2014 Doris Lowe and Earl and Verna Lowe Scholarship (UF)
- 2012–2013 Outstanding Achievement Award (UF International Center)

Julia Showalter:

- 2011 – 2012 Fulbright Fellowship

Debolina Chakraborty:

- 2010 Sam Polston Fellowship (SWSD)
- 2008 William K Robertson (SWSD)

Manohardeep S. Josan:

- 2007 Best PhD Dissertation Award (SWSD)
- 2005 Outstanding International Student (College of Agriculture and Life Sciences)
- 2005 Student Representative of the SWSD
- 2005 Outstanding Graduate Student Award by the Alpha Zeta Chapter of FL
- 2005 Association of Agricultural Scientists of Indian Origin (AASIO) Outstanding Graduate Student Award
- 2004 Victor W. Carlisle Fellowship (SWSD)

Myrlene Chrysostome:

- 2005 Sam Polston Fellowship (SWSD)

Student awards – at Competitions

National/International:

ASA/SSSA/CSSA International Annual Meetings, Minority Student Poster Competition:

Chakraborty, 3rd place, 2008; Saha, 3rd place, 2007; Haile, 1st place, 2006; Josan, honorable mention, 2006 and 2005; Michel, honorable mention, 2006.

ASA/SSSA/CSSA International Annual Meetings Graduate Student Competition: Freitas, 2018 Biochar Community Poster Award, 2nd Place, Biochar Community Poster Award 2017, 1st Place; Chatterjee, 2015 Biochar Community Poster Award, 3rd place; Dari, 2014 Biochar Community Best Poster Award; 2014 2nd place Pedology Award (oral); 2013 Environmental Quality Outstanding Graduate Student Award, ASA Environmental Quality Section; 2013, second place poster; Chakraborty, 3rd place, 2009.

Regional: *Southern Branch ASA/SSSA/CSSA Meetings*: Showalter, 1st place, 2010; Chrysostome, 3rd place, 2004.

State: *Env. Sci Symposium organized by UF Air and Water Mgmt Assoc and Soc. Environ. Engineers, FL* (Chakraborty, 2009, 3rd place)

Soil and Crop Sci. Soc. of Florida's oral presentation competition (Josan, 2006, 2nd place)

Department: *SWSD Graduate Research Forum* (Oral presentation: Josan, 1st place, 2006; Best poster: Chakraborty, 2009 and 2010).

Courses currently taught

SWS 6932 in Fall Semesters: Scientific Writing

Online Course

Phosphorus in Florida Watersheds: Science and Applications <http://soils.ifas.ufl.edu/P-in-FL-watersheds.shtml>. This comprehensive course uploaded recently consists of six modules with each module consisting of five, approximately 15-minute lectures. It is expected to benefit participants interested in, or actively involved in, phosphorus management and water quality issues in Florida watersheds. The course topics and other relevant information pertaining to the course are available at the link above. The course introduction, as well as the various modules are available at: <http://soils.ifas.ufl.edu/P-in-FL-watersheds-lectures1.shtml#intro>.

Videos have been created on *Field Application of Poultry Litter Biochar*

<https://www.youtube.com/watch?v=3iUKCQHDpJo> and on *Quantitative Approach for*

Recovering Legacy Phosphorus while Minimizing Crop Nutrient Deficiency Risk

<https://www.youtube.com/watch?v=z--yIPbvIqU> Both videos are available at the SWSD's website.

Publications (in reverse chronological order)

- ^P Post-doctoral associate
- ^G Graduate student
- [&] Other (Undergraduate student)

Books, Co-authored:

1. Nair, P. K R, B.M. Kumar, and **V.D. Nair**. (2021). *An Introduction to Agroforestry: Four Decades of Scientific Developments*. 2nd Edition. Springer Nature, The Netherlands. <https://link.springer.com/book/9783030753573>

2. Nair, P.K.R., and **V.D. Nair**. 2014. *Scientific Writing and Communication in Agriculture and Natural Resources*. Springer Cham Heidelberg New York Dordrecht London. ISBN 978-3-319-03100-2. DOI 10.1007/978-3-319-03101-9 (e-book is a 2013 publication; ISBN 978-3-319-03101-9)

Books, Edited:

Chang, S., **V.D. Nair**, J. Kort, and D. Khasa. 2011. *Agroforestry Systems and Environmental Quality*. Special Section. *Journal of Environmental Quality*.

Books, Contributor of Chapters:

1. **Nair, V.D.**, and K.R. Reddy. 2013. Phosphorus sorption and desorption in wetland soils. pp 667 – 678. In: DeLaune, R., Reddy, K.R., Richardson, C.J., and Megonigal, P. (ed). *Methods on biogeochemistry of wetlands*. Soil Science Society of America Publication.
2. Nair, P.K.R. R.G. Tonucci, R. Garcia, and **V.D. Nair**. 2011. Silvopasture and carbon sequestration in the Brazilian savanna (cerrado). pp 145 –162. In: Kumar, B. M. and Nair, P. K. R. (ed), *Carbon Sequestration in Agroforestry Systems: Opportunities and Challenges*. Springer, The Netherlands (2011).
3. Saha, S., P.K.R. Nair, **V.D. Nair**, and G.M. Kumar. 2009. Soil carbon stock in relation to plant diversity of homegardens in Kerala, India. pp 53 –65. In: Jose, S. *Agroforestry for Ecosystem Services and Environmental Benefits*. Springer Science, The Netherlands. (Also published in *Agroforestry Systems*)
4. Takimoto, A., **V.D. Nair**, and P.K.R. Nair. 2009. Contribution of trees to soil carbon sequestration under agroforestry systems in the West African Sahel. pp 11 –25. *Agroforestry for Ecosystem Services and Environmental Benefits*. Springer Science, The Netherlands. (Also published in *Agroforestry Systems*).
5. **Nair, V.D.**, and R.S. Kalmbacher. 2005. Silvopasture as an approach to reducing nutrient loading of surface water from farms. pp 272 –274. In: Mosquera-Losada, M.R., J. McAdam, and A. Rigueiro-Rodríguez (eds), *Silvopastoralism and Sustainable Land Management*. CAB International, Wallingford, U.K.
6. Nair, P.K.R., M.E. Bannister, **V.D. Nair**, J.R.R. Alavalapati, E.A. Ellis, S. Jose, and A.J. Long. 2005. Silvopasture in southeastern United States: More than just a new name for an old practice. pp 72 –82. In: Mosquera-Losada, M.R., J. McAdam., and A. Rigueiro-Rodríguez (eds), *Silvopastoralism and Sustainable Land Management*. CAB International, Wallingford, U.K.
7. **Nair, V.D.** and D.A. Graetz. 2004. Agroforestry as an approach to minimizing nutrient loss from heavily fertilized soils: The Florida experience. In: Nair, P.K.R., M.R. Rao, and L.E. Buck (eds), *New Vistas in Agroforestry: A Compendium for the 1st World Congress of Agroforestry*, Kluwer, Dordrecht, The Netherlands.

8. Nair, P.K.R., and **V.D. Nair**. 2003. Carbon storage in North American agroforestry systems. pp 333 –346. In: Kimble, J.M, L. Heath, L.R. Birdsey, and L. Lal (eds), The Potential of U.S. Forest Lands to Sequester Carbon and Mitigate the Greenhouse Effect. Lewis Publishers, Boca Raton, Florida.
9. Graetz, D.A., and **V.D. Nair**. 1999. Inorganic forms of phosphorus in water and soils. Chapter 6. pp 171 –186. In: Reddy, K.R., G.A. O'Connor, and C. L.Schelske (eds.) Phosphorus Biogeochemistry of Sub-Tropical Ecosystems. C.R.C. Press, New York.
10. Graetz, D.A., K.R. Reddy, **V.D. Nair**, and P.O.G. Olila. 1997. Section 3 - Soils. In: Evaluation of Constructed Wetlands on Phosphate Mined Lands in Florida. Volume II. Institute of Phosphate Research, Bartow, FL 33830. Publication No. 03-103-139. pp 3.1 – 3.75.

Monographs

1. Segal, D.S., **V.D. Nair**, D.A. Graetz, K.M. Portier, N.J. Bissett, and R.A. Garren. 2001. Post-mine reclamation of native upland communities. Florida Institute of Phosphate Research, Bartow, Florida. 03-122-159. 107 pp.
2. **Nair, V.D.** 1978. Aluminium species in soil solutions. Goettinger Bodenkundliche Berichte. 52. Boenecke-Druck 3392-Clausthal Z. 29, Germany. 123pp.

Refereed Publications

Refereed-Journals

1. [§]Pinheiro, F. M., Nair, P. K. R., **Nair, V. D.**, et al. 2021. Soil carbon stock and stability under eucalyptus-based silvopasture and other land-use systems in the Cerrado biodiversity hotspot. Journal of Environ Manage 299 (2021) 113676 <https://doi.org/10.1016/j.jenvman.2021.113676>
2. [§]Pinheiro F. M., **Nair V. D.** 2021. Characterization of bonechar as a soil amendment in tropical soils. Horticultural International Journal. 5(2): 74 – 76
3. [¶]Freitas, A. M., **Nair V. D.**, and Harris W. G. 2020. Biochar as influenced by feedstock variability: Implications and opportunities for phosphorus management. Frontiers in Sustainable Food Systems. 4:510982 doi: 10.3389/fsufs.2020.510982
4. **Nair, V. D.**, Sollenberger, L. E., Harris, W. G., Sharpley, A. N., Freitas, A. M., Dubeux Jr. J. C. B. and Rodriguez, A. N. (2020). Mining of soil legacy phosphorus without jeopardizing crop yield. Agrosystems, Geosciences & Environment 3(1), e20056 <https://doi.org/10.1002/agg2.20056>
5. Zhu, X., Liu, W., Chen, J., Bruijnzeel, L.A., Mao Z., Yang X., Cardinael, R., Meng, F-R., Sidle, R.C., Seitz, S., **Nair, V.D.**, Nanko, K., Zou, X., Chen, C. and Jiang, X.J. (2020). Reductions in water, soil and nutrient losses and pesticide pollution in agroforestry

- practices: a review of evidence and processes. *Plant and Soil*. 453(1): 45 – 86.
<https://doi.org/10.1007/s11104-019-04377-3>
6. Chatterjee, N., Nair, P. K. R., **Nair, V. D.**, Bhattacharjee, A., Virginio, E. de M. F. Muschler, R. G. and Noponen, M. R. A. (2020). Do coffee agroforestry systems always improve soil carbon stocks: A case study from Turrialba, Costa Rica. *FORESTS* 2020, 11, 49; doi:10.3390/f11010049
 7. ^PLiao, X., **V.D. Nair**, A. Canion, D. Dobberfuhl, F. Katelyn, and P. Inglett. 2019. Subsurface transport and potential risk of phosphorus to groundwater across different land uses in a karst springs basin, Florida, USA. *Geoderma*. 338: 97-106
 8. ^PDari, B., **V.D. Nair**, A.N. Sharpley, P. Kleinman, D. Franklin and W.G. Harris. 2018. Consistency of the Threshold Phosphorus Saturation Ratio across a Wide Geographic Range of Acid Soils. *Agrosystems, Geosciences & Environment*. doi:10.2134/age2018.08.0028
 9. ^SChatterjee, N., P.K.R. Nair, S. Chakraborty, and **V.D. Nair**. 2018. Changes in soil carbon stocks across the Forest-Agroforest-Agriculture/Pasture continuum in various agroecological regions: A meta-analysis. *Agric. Ecosyst. Environ.* 266:55-67.
 10. ^SYiming Xu, Scot E. Smith, Sabine Grunwald, Amr Abd-Elrahman, Suhas P. Wani, and **V.D. Nair**. 2018. Estimating soil total nitrogen in smallholder farm settings using remote sensing spectral indices and regression kriging. *CATENA* 163: 111–122
doi.org/10.1016/j.catena.2017.12.011
 11. ^SDari, B., **V.D. Nair**, and W.G. Harris. 2017. Approaches for evaluating subsurface phosphorus loss potential from soil profiles. *Agric. Ecosyst. Environ.* 245: 92-99
 12. **Nair, V.D.**, P.K.R. Nair, ^SB. Dari. A.M. Freitas, N. Chatterjee and F.M. Pinheiro. Biochar in the Agroecosystem–Climate-Change–Sustainability Nexus. 2017. *Frontiers in Plant Science* 8. 2051 doi: 10.3389/fpls.2017.02051
 13. Tonucci, R.G., **V.D. Nair**, P.K.R. Nair, and Rasmio Garcia. Grass vs. tree origin of soil organic carbon under different land-use systems in the Brazilian cerrado. 2017. *Plant Soil*. DOI: 10.1007/s11104-017-334
 14. ^SYiming Xu, Scot E. Smith, Sabine Grunwald, Amr Abd-Elrahman, Suhas P. Wani, **V.D. Nair**. 2017. Spatial downscaling of soil prediction models based on weighted generalized additive models in smallholder farm settings. *Environmental Monitoring and Assessment*. DOI: 10.1007/s10661-017-6212-z
 15. ^SBanik, C., W.G. Harris, A. Ogram, and **V.D. Nair**. 2016. Carbon, iron and aluminum responses to controlled water table fluctuations in sandy soil material. *J Soils Sediments*.
 16. ^SDari B, **VD Nair**, WG Harris, PKR Nair, L Sollenberger, R Mylavarapu 2016. Relative influence of soil- vs. biochar properties on soil phosphorus retention. *Geoderma* 280: 82–87.
 17. Ferreiro-Domínguez, N., **V.D. Nair**, and D. Freese. 2016. Phosphorous dynamics in poplar silvopastoral systems fertilised with sewage sludge. *Agric. Ecosyst. Environ.* 223:87-98. [dx.doi.org/10.1016/j.agee.2016.02.022](https://doi.org/10.1016/j.agee.2016.02.022)

18. [§]Dari, B., **V.D. Nair**, J. Colee, W.G. Harris, and R. Mylavarapu. 2015. Estimation of phosphorus isotherm parameters: a simple and cost-effective procedure. *Front. Environ. Sci.* 3:70. doi: 10.3389/fenvs.2015.00070.
19. **Nair, V.D.**, M.W. Clark, and K.R. Reddy. 2015. Evaluation of legacy phosphorus storage and release from wetland soils. *J. Environ. Qual.* 44: 1956 – 1964. doi:10.2134/jeq2015.03.0154.
20. **Nair, V.D.**, and W.G. Harris. 2014. Soil Phosphorus Storage Capacity for Environmental Risk Assessment. *Advances in Agriculture*. doi:10.1155/2014/723064.
21. **Nair, V.D.** 2014. Soil phosphorus saturation ratio for risk assessment in land use systems. *Front. Environ. Sci.* 2:6.
22. Nair, P.K.R., and **V.D. Nair**. 2014. "Solid-Fluid doi:10.3389/fenvs.2014.00006-Gas": The State of Knowledge on Carbon Sequestration Potential of Agroforestry Systems in Africa. *Current Opinion in Environmental Sustainability* 6:22–27
23. [§]Chakraborty, D., **V.D. Nair**, W.G. Harris, and R.D. Rhue. 2012. Environmentally-relevant phosphorus retention capacity of sandy coastal plain soils. *Soil Sci.* 177:701-707.
24. ^PCarey, R.O., G.J. Hochmuth, C.J. Martinez, T.H. Boyer, **V.D. Nair**, M.D. Dukes, G.S. Toor, A.L. Shober, J.L. Cisar, L E. Trenholm, and J.B. Sartain. 2012. A Review of Turfgrass Fertilizer Management Practices: Regulatory and resource management practices for urban watersheds: The Florida experience. *HortTech.* 22: 418 – 429.
25. ^PCarey, R.O., G.J. Hochmuth, C.J. Martinez, T.H. Boyer, **V.D. Nair**, M.D. Dukes, G.S. Toor, A.L. Shober, J.L. Cisar, L E. Trenholm, and J.B. Sartain. 2012. A Review of Turfgrass Fertilizer Management Practices: Implications for Urban Water Quality. *HortTech.* 22: 280 – 291.
26. [§]Chakraborty, D., **V.D. Nair**, and W.G. Harris. 2012. Compositional differences between Alaquods and Paleudults affecting phosphorus sorption-desorption behavior. *Soil Sci.* 177:188–196.
27. Lana, R.M.Q., **V.D. Nair**, A.M.Q. Lana, G.A.F. Prado, and A de A Silva. 2012. Productivity and nutritive value of brachiaria forage intercropping with eucalyptus in a silvopastoral system in the Brazilian cerrado biome. *Ciência Florestal*. Online: ISSN 1980-5098.
28. [§]Chakraborty, D., **V.D. Nair**, M. Chrysostome, and W.G. Harris. 2011. Soil phosphorus storage capacity in manure-impacted Alaquods: Implications for water table management. *Agric. Ecosyst. Environ.* 142: 167-175. doi: 10.1016/j.agee.2011.04.019
29. [§]Howlett, D.S., G. Moreno, M.R. Mosquera-Losada, P.K.R. Nair, and **V.D. Nair**. 2011. Soil carbon storage as influenced by tree cover in the Dehesa cork oak silvopasture of central-western Spain" *J. Environ. Monitor.* 13:1897-1904.
30. [§]Howlett, D.S., M. R. Mosquera-Losada, P.K. R. Nair, **V.D. Nair**, and A. Rigueiro-Rodríguez. 2011. Soil carbon storage in silvopastoral systems and a treeless pasture in northwestern Spain. *J. Environ. Qual.* 40: 825-832. doi:10.2134/jeq2010.0145

31. [§]Tonucci, R.G., P.K. R. Nair, **V.D. Nair**, R. Garcia, and F.S. Bernardino. 2011. Soil carbon storage in silvopasture and related land-use systems in the Brazilian Cerrado. *J. Environ. Qual.* 40: 883-841. doi:10.2134/jeq2010.0162
32. Gama-Rodrigues, E.F., P. K. R. Nair, **V.D. Nair**, A.C. Gama-Rodrigues, Virupax C. Baligar, and Regina C.R. Machado. 2010. Carbon storage in soil size fractions under two cacao agroforestry systems in Bahia, Brazil. *Environmental Management*. 45: 274-283; doi 10.1007/s00267-009-9420-7
33. [¶]Haile, S.G., **V.D. Nair**, and P.K.R. Nair. 2010. Contribution of trees to carbon storage in soils of silvopastoral systems in Florida, USA. *Global Change Biology*. 16:427-438; doi: 10.1111/j.1365-2486.2009.01981.x.
34. Harris, W.G., [¶]M. Chrysostome, T.A. Obreza, and **V.D. Nair**. 2010. Soil properties pertinent to horticulture in Florida. *HortTechnology*. 20:10-18.
35. [§]Herrera, D., W.G. Harris, **V.D. Nair**, M. Josan, [§] and C.R. Staples. 2010. Effect of dietary modifications of calcium and magnesium on reducing solubility of phosphorus in feces from lactating dairy cows. *J. Dairy Science*. 328:2598-2611; doi:10.3168/jds.2009-2766.
36. Nair, P.K. R., **V.D. Nair**, B.M. Kumar, and [§]J. Showalter. 2010. Carbon sequestration in agroforestry systems. *Advances in Agronomy* 108:237-307.
37. Nair, P.K.R., [¶]S.K. Saha, **V.D. Nair**, and [¶]S.G. Haile. 2011. Potential for greenhouse gas emissions from soil carbon stock following biofuel cultivation on degraded lands. *Land Degradation and Development* 22:395-409.
38. [§]Saha, S., P.K.R. Nair, **V.D. Nair**, and G.M. Kumar. 2010. Carbon storage in relation to soil size-fractions under some tropical tree-based land-use systems. *Plant Soil*. 328:433-446. doi: 0.1007/s11104-009-0123-x
39. Mukherjee, A., **V.D. Nair**, M.W. Clark, and K.R. Reddy. 2009. Development of indices to predict phosphorus release from wetland soils. *J. Environ. Qual.* 38:878-886.
40. Nair, P.K.R., **V.D. Nair**, B.M. Kumar, and [¶]S.G. Haile. 2009. Soil carbon sequestration in tropical agroforestry systems: A Feasibility Appraisal. *Environmental Science and Policy*. 12:1099-1111; doi:10.1016/j.envsci.2009.01.010
41. Nair, P.K.R., B.M. Kumar, and **V.D. Nair**. 2009. Agroforestry as a strategy for carbon sequestration. *J. Plant Nutr. Soil Sci.* 172:10-23.
42. [§]Saha, S., P.K.R. Nair, **V.D. Nair**, and G.M. Kumar. 2009. Soil carbon stock in relation to plant diversity of homegardens in Kerala, India. *Agroforestry Systems*. 76:53-65.
43. [§]Takimoto, A., **V.D. Nair**, and P.K.R. Nair. 2009. Contribution of trees to soil carbon sequestration under agroforestry systems in the West African Sahel. *Agroforestry Systems*. 76:11-25.

44. [§]Haile, S.G, P.K.R. Nair, and **V.D. Nair**. 2008. Soil carbon storage in different size fractions in silvopastoral systems of Florida. *J. Environ. Qual.* 37:1789-1797.
45. [§]Takimoto, A., P.K.R. Nair, and **V.D. Nair**. 2008. Carbon stock and sequestration potential of traditional and improved agroforestry systems in the West African Sahel. *Agriculture, Ecosystems and Environment* 125:159-166.
46. Cao, X., W.G. Harris, [§]M.S. Josan, and **V.D. Nair**. 2007. Inhibition of calcium phosphate precipitation under over-saturated conditions. *Sci. Total Environ.* 383: 205-215.
47. [§]Chrysostome, M., **V.D. Nair**, W.G. Harris, and R.D. Rhue. 2007. Laboratory Validation of Soil Phosphorus Storage Capacity Predictions for Use in Risk Assessment. *Soil Sci. Soc. Am. J.* 71:1564-1569.
48. [§]Chrysostome, M., **V.D. Nair**, W.G. Harris, and R.D. Rhue. 2007. Minimizing confounding factors in phosphorus leaching assessment for dairy and poultry manure-amended soils. *Comm. Soil Sci. Plant Anal.* 38:975-987.
49. [§]Michel, G.A., **V.D. Nair**, and P.K.R. Nair. 2007. Silvopasture for reducing phosphorus loss from subtropical sandy soils. *Plant Soil.* 297:267-276.
50. **Nair, V.D.**, P.K.R. Nair, R.S. Kalmbacher, and I.V. Ezenwa. 2007. Reducing nutrient loss from farms through silvopastoral practices in coarse-textured soils of Florida, USA. *Ecological Engineering* 29:192-199.
51. **Nair, V.D.**, [§]S. Haile, [§]G.A. Michel, and P.K.R. Nair. 2007. Environmental quality improvement of agricultural lands through silvopasture in southeastern United States. *Sci. Agric.* 64:513-519.
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Refereed Proceedings:

Note: Two anonymous reviewers and an editor, in addition to departmental reviewers, reviewed these proceedings

Nair, V.D., N.J., Bissett, K.M. Portier, D.A. Graetz, and D.S. Segal. 2000. Soil Conditions and Plant Establishment on Reclaimed Phosphate-Mined Lands. pp 35-48. *In* W.L. Daniels and S.G. Richardson (eds), Proceedings, 2000 Annual Meeting of the American Society for Surface Mining and Reclamation, Tampa, FL, June 11-15, 2000. Amer. Soc. Surf. Mining Rec., 3134 Montavesta Rd., Lexington, KY.

Bissett, N.J., R.A. Garren, **V.D. Nair**, K.M. Portier, D.A. Graetz, and D.S. Segal. 2000. Testing the Efficacy of Seed and Plant Transfer by Topsoil Augmentation on Reclaimed Phosphate-Mined Lands. pp 13-34. *In* W.L. Daniels and S.G. Richardson (eds), Proceedings, 2000 Annual Meeting of the American Society for Surface Mining and Reclamation Tampa, Florida, June 11-15, 2000. Amer. Soc. Surf. Mining Rec., 3134 Montavesta Rd., Lexington, KY.

Non-refereed Publications

Reports and Deliverables to Funding Agencies

1. **Nair, V.D.**, and L.E. Sollenberger. 2022. Evaluating soil phosphorus bioavailability in Florida soils of variable composition. Final report for FDACS Contact # 27155.
2. **Nair, V.D.**, L.E. Sollenberger, W.G. Harris, and A.N. Sharpley 2018. Mining of soil legacy phosphorus without jeopardizing crop quality. 2018 USDA-NIFA PD Meeting. Newark, DE. October 01-03, 2018.
3. **Nair, V.D.**, L.E. Sollenberger, W.G. Harris, and A.N. Sharpley 2017. Mining of soil legacy phosphorus without jeopardizing crop quality. 2017 USDA-NIFA and NSF Water and Soils Meeting. Washington, D.C. January 29-31, 2018.

4. **Nair, V.D.** 2016. Quantitative approach for recovering legacy phosphorus while minimizing crop nutrient deficiency risk. 2016 AFRI/NIWQP Annual Project Directors Meeting. Washington D.C. 2024. October 12-13, 2016
5. **Nair, V.D.**, and B Dari. 2015. Understanding SUPER PHOSTM and Phosphoric Acid Transport in Soils. Report to Bio Huma Netics, Inc. 1331 W Houston Ave, Gilbert, AZ 85233 USA. 16 pp.
6. **Nair, V.D.** and B Dari. 2015. Understanding SUPER PHOSTM and Phosphoric Acid Transport in Soils. Report to Bio Huma Netics, Inc. 1331 W Houston Ave, Gilbert, AZ 85233 USA. 16 pp.
7. **Nair, V.D.** 2014. The SUPER PHOSTM Column Study. 2014. Report to Bio Huma Netics, Inc. 1331 W Houston Ave, Gilbert, AZ 85233 USA. 18 pp.
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9. Sartain, J.B., and **V.D. Nair**. 2012. Characterization of the Soil P Storage Capacity of Soil from Jake Gaither and Hilaman Golf Courses in the City of Tallahassee. City of Tallahassee, FL.
10. **Nair, V.D.**, M.W. Clark, and K.R. Reddy. 2011. Wetland Soils Nutrient Index Development and Evaluation of “Safe” Soil Phosphorus Storage Capacity. Final Report to FDACS. Contract Number 00073946 (Agency Number 014820). Tallahassee, FL.
11. Shukla, S., W. Graham, A. Hodges, **V.D. Nair**, and M. Christman. 2011. Evaluation of Cow-calf Best Management Practices with Regards to Nutrient Discharges in the Lake Okeechobee Basin. Contract Number 00074969. Final Report to FDACS. Tallahassee, FL.
12. **Nair, V.D.**, W.G. Harris, and R.D. Rhue. 2010. Protocol Development to Evaluate the Effect of Water Table Management on Phosphorus Release to Drainage Water. Year 4 Report to FDACS. Contract Number 00074229 (Agency Number 014885). Tallahassee, FL.
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15. **Nair, V.D.**, W.G. Harris, and R.D. Rhue. 2009. Deliverable 1 *Soil sampling, preparation and Analyses*. Protocol Development to Evaluate the Effect of Water Table Management on Phosphorus Release to Drainage Water. Report to FDACS. Contract Number 014885. Tallahassee, FL. pp 4 excluding a spreadsheet with data.

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18. **Nair, V.D.**, W.G. Harris, and R.D. Rhue. 2009. Deliverable 4 *Determine soil P storage Capacity (SPSC) using Mehlich 1 and oxalate parameters*. Protocol Development to Evaluate the Effect of Water Table Management on Phosphorus Release to Drainage Water. Report to FDACS. Contract Number 00069876. Tallahassee, FL
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23. **Nair, V.D.**, W.G. Harris, R.D. Rhue, and D.A. Graetz. 2007. Deliverable 3 *Range of Bh capacities of prevalent Spodosols series in Florida*. Protocol Development to Evaluate the Effect of Water Table Management on Phosphorus Release to Drainage Water. Report to FDACS. Contract number 0061882. Tallahassee, FL.
24. **Nair, V.D.**, W.G. Harris, R.D. Rhue, and D.A. Graetz. 2007. Deliverable 4 *Validation of P storage capacity, comparing predicted and observed water soluble P values for selected archived Okeechobee soil profiles with varying depths to the Bh horizon over a range of P levels*. Protocol Development to Evaluate the Effect of Water Table Management on Phosphorus Release to Drainage Water. Report to FDACS. Contract number 0061882. Tallahassee, FL.
25. **Nair, V.D.**, W.G. Harris, R.D. Rhue, and D.A. Graetz. 2007. Deliverable 5 *Report on site selection*. Protocol Development to Evaluate the Effect of Water Table Management on

- Phosphorus Release to Drainage Water. Report to FDACS. Contract number 0061882. Tallahassee, FL.
26. Harris, W.G., **V.D. Nair**, R.D. Rhue, and D.A. Graetz. 2007. Deliverable 1. *Progress report for laboratory-scale rainfall simulation*. Site-specific determination of soil capacity to assimilate or release P applied as manure, fertilizer, compost, or biosolids. Report to FDACS. Contract number 0061873. Tallahassee, FL.
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 30. Reddy, K.R., S. Grunwald, **V.D. Nair**, and Y. Wang, 2006. Baseline Characterization of the Taylor Creek Pilot Storm Treatment Areas (STA) in the Lake Okeechobee Watershed, West Palm Beach, Florida: South Florida Water Management.
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 32. **Nair, V.D.**, and D.A. Graetz. 1996. Water Quality Impact of Grazed Rangelands and Pastures: Literature Review. Final Report, SFWMD Contract No. C-5298. 68p.
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Non-refereed Proceedings

1. **Nair, V.D.**, D.A. Graetz, and M.L. Walker. 2002. Degree of Phosphorus Saturation (DPS): An Indicator for Predicting Water Quality Degradation. Paper 222. p 222-1 to 222-9. Transactions. World Congress of Soil Science. Bangkok, Thailand. August 14-21, 2002. CD Rom publication.
2. Nair, P.K.R., and **V.D. Nair**. 2002. Carbon Sequestration in Agroforestry Systems. Paper 989. p 989-1 to 989-13. Transactions. World Congress of Soil Science. Bangkok, Thailand. August 14-21, 2002. CD Rom publication.

Research Briefs

All Research Briefs of the Soil and Water Science, though listed under "Non-Refereed Publications", undergo at least 3 internal reviews (Chair and 2 Reviewers) by the Research Brief Committee prior to posting on the Department's web site.

1. ^PHaile, S.G., **V.D. Nair**, and P.K.R. Nair. 2009. Carbon Storage in Soils under Tree-based Land-use Systems. Soil and Water Science Department, University of Florida.
2. ^PHaile S.G., **V.D. Nair**, and P.K.R. Nair. 2009. Shifts in Stable Carbon Isotopic Signatures in Soil Fractions following Tree Integration into Pastures. Soil and Water Science Department, University of Florida.
3. **Nair, V.D.**, W.G. Harris, and D.A. Graetz. 2007. Introducing the phosphorus release risk factor in the Florida P-Index. Soil and Water Science Department, University of Florida. Research Brief. SWS 07-02 H
4. ^gChrysostome, M, **V.D. Nair**, W.G. Harris, and R.D. Rhue. 2007. Laboratory Validation of Soil Phosphorus Storage Capacity Predictions. Soil and Water Science Department, University of Florida. Research Brief. SWS 07-01.
5. **Nair, V.D.**, ^PS.C. Allen, R.S. Kalmbacher, and D.A. Graetz. 2004. Potential of silvopastoral practices to reduce nutrient loss from Florida soils. Soil and Water Science Department, University of Florida. Research Brief. SWS 04-05.
6. **Nair, V.D.**, W.G. Harris, and D.A. Graetz. 2004. Predicting the safe phosphorus storage capacity of sandy soils. Soil and Water Science Department, University of Florida. Research Brief. SWS 04-03.
7. **Nair, V.D.** and W.G. Harris. 2003. The role of amorphous iron and aluminum in phosphorus retention in sandy soils of the Suwannee River Basin. Soil and Water Science Department, University of Florida. Research Brief. SWS 03-04,
8. Rhue, R.D., **V.D. Nair**, and W.G. Harris. 2003. P quick test. Soil and Water Science Department, University of Florida. Research Brief. SWS 03-03.
9. Rhue, R.D., W.G. Harris, and **V.D. Nair**, 2003. A model for longterm P leaching in sandy soil. Soil and Water Science Department, University of Florida. Research Brief. SWS 03-02 H

10. **Nair, V.D.**, and D.A. Graetz. 2002. Threshold degree of phosphorus saturation (DPS) for Florida's sandy soils. Soil and Water Science Department, University of Florida. Research Brief. SWS 02-03.
11. **Nair, V.D.**, and D.A. Graetz. 2001. Degree of phosphorus saturation (DPS) in Lake Okeechobee basin soils. Soil and Water Science Department, University of Florida. Research Brief. SWS 01-04.
12. **Nair, V.D.** N.J. Bissett, K.M. Portier, D.A. Graetz, and D.S. Segal. 2001. Soil conditions and plant establishment on reclaimed phosphate-mined uplands. Soil and Water Science Department, University of Florida. Research Brief. SWS 01-03.

EDIS Publications

EDIS publications undergo review by two Reviewers prior to publication.

1. [§]B. Dari, **V.D. Nair** and W.G. Harris. 2017. Parameters for Site-Specific Soil Phosphorus Loss Modeling from Soil Test Data. SL442.
<http://edis.ifas.ufl.edu/pdffiles/SS/SS65600.pdf>
2. Rao Mylavarapu, Tom Obreza, Kelly Morgan, George Hochmuth, **Vimala Nair**, and Alan Wright. 2014. Extraction of Soil Nutrients Using Mehlich-3 Reagent for Acid-Mineral Soils of Florida. SL407. <http://edis.ifas.ufl.edu/pdffiles/SS/SS62000.pdf>
3. R. Mylavarapu, **V.D. Nair**, and K. Morgan. 2013. An Introduction to Biochar and their uses in Agriculture. SL 383. <http://edis.ifas.ufl.edu/pdffiles/SS/SS58500.pdf>
4. **V.D. Nair**, ^PM. Chrysostome, and W.G. Harris. 2011. Long-term Contribution of Phosphorus from Agricultural Lands to Lake Okeechobee. SL 357.
<http://edis.ifas.ufl.edu/pdffiles/SS/SS55800.pdf>
5. **V. D. Nair**, and W. G. Harris. 2011. Phosphorus Sources and Risk Potential: Organic and Inorganic Fertilizers.
<http://edis.ifas.ufl.edu/pdffiles/SS/SS55900.pdf>
6. [§]Chakraborty D., **V.D. Nair**, W.G. Harris, and R.D. Rhue. 2011. Potential for Phosphorus Removal by Plants from the Spodic Horizon. SL 359.
<http://edis.ifas.ufl.edu/pdffiles/SS/SS56000.pdf>
7. Nair, V.D., W.G. Harris, and [§]D. Chakraborty. 2010. An Indicator for Risk of Phosphorus Loss from Sandy Soils. SL 333.
<http://edis.ifas.ufl.edu/pdffiles/SS/SS53900.pdf>
8. **Nair, V.D.** W.G. Harris, [§]D. Chakraborty, and M. Chrysostome. 2010. Understanding Soil Phosphorus Storage Capacity. SL 336.
<http://edis.ifas.ufl.edu/pdffiles/SS/SS54100.pdf>

9. P^{Haile}, S.G., C.W. Fraisse, **V.D. Nair**, and P.K.R. Nair. Greenhouse Gas Mitigation in Forest and Agricultural Lands: Carbon Sequestration
http://edis.ifas.ufl.edu/document_ae435
10. P^{Haile}, S.G., C.W. Fraisse, P.K.R. Nair, and **V.D. Nair**. Greenhouse Gas Mitigation in Forest and Agricultural Lands: Reducing Emissions
http://edis.ifas.ufl.edu/document_ae443

IAEA Newsletter Article

1. Reddy, K.R., M.W. Clark, and **V.D. Nair**. 2012. Legacy Phosphorus in Agricultural Watersheds: Implications for Restoration and Management of Wetlands and Aquatic Systems. IAEA Newsletter.

SCOPE Newsletter

1. **Nair, V.D.**, and Harris, W.G. 2014. Practical Site-Specific Measurements for Phosphorus Risk Assessment. P 72. In: SCOPE Newsletter visions for sustainable phosphorus tomorrow contributions. The European Sustainable Phosphorus Platform. August 2014.

Soil and Water Science Department's Newsletter – "Myakka."

I have been the editor of "Myakka" for the past 18 years (Section 26). In addition, I have written the following articles for the newsletter.

1. Mining of soil legacy phosphorus without jeopardizing crop quality. Volume 18 Number 1 (Spring 2018)
2. Land application of biochar and phosphorus retention: "An Inconvenient Truth". Volume 16 Number 1 (Spring 2016)
3. A tool for phosphorus risk assessment of wetland soils. Volume 11 Number 1 (Spring 2011)
4. A new approach to predicting safe phosphorus loading in soils. Volume 9 Number 1 (Spring 2009).
5. Carbon sequestration of agroforestry systems. Volume 7 Number 2 2007 (Summer 2007).
6. Manure phosphorus management for the Suwannee River Basin: A model for highly leachable soils. Volume 4 Number 2 2004 (Summer 2004).
7. Environmental research in agroforestry. Volume 3 Number 1 2003 (Spring 2003).
8. UF/IFAS role in the development of the Phosphorus Index. Volume 2 Number 1 2002 (Spring 2002).
9. A soil phosphorus saturation index for phosphorus management in Florida. Volume 2 Number 1 2002 (Spring 2002).

10. The Phosphorus Index: UF/IFAS role in its development. Volume 1 Number 1 2001 (Fall 2000).

Abstracts

1. **Nair, V.D.** 2021. On-site prediction of available legacy soil phosphorus to maintain crop productivity. European Sustainable Phosphorus Platform Webinar: Perspectives for reducing “legacy phosphorus” in agricultural soils. 2 February 2022. Online. (Invited abstract).
2. [¶]Freitas, A.M., **V.D. Nair**, A.N. Rodriguez, and L.E. Sollenberger. 2020. Iron oxide strip procedure to evaluate P release from inorganic P and biochar-amended soils. ASA/CSSA/SSSA (Virtual) Meeting. November 09 – 13, 2020 (poster)
3. **Nair, V.D.** 2020. Would soil phosphorus storage capacity be an effective indicator of phosphorus fertilizer needs? ASA/CSSA/SSSA (Virtual) Meeting. November 09 – 13, 2020 (oral)
4. [¶]Rodriguez, A.N., and **V.D. Nair**. 2020. Methods of assessing phosphorus loss across a wide range of soil types for the protection of water quality. ASA/CSSA/SSSA (Virtual) Meeting. November 09 – 13, 2020 (oral)
5. [¶]Rodriguez, A.N., and **V.D. Nair**. 2020. Calibrating Mehlich 3-P recommendations using FeO-strip P. ASA/CSSA/SSSA (Virtual) Meeting. November 09 – 13, 2020 (5-minute rapid)
6. [¶]Rodriguez, A.N., **V.D. Nair**, and A.M Freitas. 2020. Calibrating Mehlich 3-P recommendations using FeO-strip P. ASA/CSSA/SSSA (Virtual) Meeting. November 09 – 13, 2020 (poster)
7. [¶]Freitas, A.M., **V.D. Nair**, W.G. Harris, and M.R. Mosquera-Losada. 2019. Phosphorus availability when converting biosolids into biochar. ASA/CSSA/SSSA Meetings, San Antonio, TX, November 10 – 13, 2019. (poster).
8. [¶]Freitas, A.M., **V.D. Nair**, L.E. Sollenberger, W.G. Harris, and A.N. Rodriguez. 2019. Residual soil phosphorus when poultry litter biochar and inorganic phosphorus are used as fertilizer sources. ASA/CSSA/SSSA Meetings, San Antonio, TX, November 10 – 13, 2019. (oral)
9. [¶]Rodriguez, A.N., and **V.D. Nair**. 2019. Estimating isotherm parameters for sandy to high phosphorus-retentive soils from soil test data. ASA/CSSA/SSSA Meetings, San Antonio, TX, November 10 – 13, 2019. (poster).
10. **Nair, V.D.**, [¶]A.M. Freitas, P.K.R. Nair, and A.N. Rodriguez. 2019. Biochar as a nutrient source in sustainable agriculture and environmental management. ASA/CSSA/SSSA Meetings, San Antonio, TX, November 10 – 13, 2019. (oral)
11. **Nair, V.D.** Biochar in agroforestry: Resources, production, and potential benefits. 2019. In: Agroforestry for climate change mitigation, biodiversity conservation and resilience in agroecological systems: current trends and future strategies. Indian Council of Agricultural Research-Kerala Agricultural University Winter School on Agroforestry. December 03 to 23, 2019, Thrissur, Kerala, India.

12. Nair, P.K.R., and **V.D. Nair**. 2018. Soil carbon storage and aggregate-size fractions under agroforestry systems. 4th World Congress on Agroforestry. LeCorum Conference Center, Montpellier, France. 20-22 May 2019. (oral)
13. **Nair, V.D.**, P.K.R. Nair, and [§]Freitas A.M. 2018. Potential for using biochar in resource-limited agroforestry systems. 4th World Congress on Agroforestry. LeCorum Conference Center, Montpellier, France. 20-22 May 2019. (oral)
14. [§]Pinheiro, F.M., P.K.R. Nair, S. Paulson, **V.D. Nair**, J. DeVore, and R.G. Tonucci. 2018. An innovative, farmer initiative of silvopastoral restoration in a degraded semiarid Caatinga region of Brazil. 4th World Congress on Agroforestry. LeCorum Conference Center, Montpellier, France. 20-22 May 2019.
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123. §Rew, T. J., D.A. Graetz, and **V.D. Nair**. 2005. Aluminum water treatment residuals for reducing P loss from manure-impacted high water-table soils. ASA-CSSA-SSSA Annual Meeting. Nov. 6-10, 2005, Salt Lake City, UT. CD Rom publication.
124. PAllen, S.C., **V.D. Nair**, S. Jose, and D.A. Graetz. 2004. Tree-crop competition for nutrients in a pecan-cotton agroforestry system. p. 164. *In*: Book of Abstracts. 1st World Congress of Agroforestry. June 27-July 2, 2004. Orlando, FL.
125. §Chrysostome, M., **V.D. Nair**, R.D. Rhue, W.G. Harris, K.M. Portier, and D.A. Graetz. 2004. Minimizing confounding factors in P leaching assessment for dairy and poultry manure-amended soils. p. 90. Program and Abstracts. Sustainable Land Application Conference. January 4-8, 2004. Lake Buena Vista, FL.
126. §Chrysostome, M., **V.D. Nair**, R.D. Rhue, and W.G. Harris. 2004. Validation of soil phosphorus storage capacity under controlled conditions. ASA/SSSA/CSSA Annual Meeting, October/November 2004, Seattle, WA. CD Rom publication.
127. Harris, W.G., **V.D. Nair**, and R.D. Rhue. 2004. Predicting vertical movement of manure phosphorus in sandy soils. ASA/SSSA/CSSA Annual Meeting, October/November 2004, Seattle, WA. CD Rom publication.
128. Harris, W.G., and **V.D. Nair**. 2004. Risk of phosphate movement from soils in the Suwannee River Basin. p19. Open-File Report 2004-1332. Suwannee River Basin and Estuary Integrated Science Workshop. September 22-24, 2004, Cedar Key, Florida.
129. §Josan, M.S., **V.D. Nair**, and W.G. Harris. 2004. Associated release of magnesium and phosphorus from active and abandoned dairy soils. p. 105. Programs and Abstracts. Sustainable Land Application Conference. January 4-8, 2004. Lake Buena Vista, FL.
130. §Josan, M.S., **V.D. Nair**, and W.G. Harris. 2004. Distinguishing calcium and magnesium forms of phosphorus in dairy manure-impacted soils. ASA/SSSA/CSSA Annual Meeting, October/November 2004, Seattle, WA. CD Rom publication.

131. **Nair, V.D.**, and W.G. Harris. 2004. Soil characteristics affecting phosphorus storage capacity determinations. ASA/SSSA/CSSA Annual Meeting, October/November 2004, Seattle, WA. CD Rom publication.
132. **Nair, V.D.**, R.S. Kalmbacher, [¶]S.C. Allen, D.A. Graetz, [¶]E. Ellis, and [¶]I. Ezenwa. 2004. Phosphorus and nitrogen dynamics in silvopasture, open pasture and rangeland in South-central Florida. p. 194. *In* Book of Abstract. 1st World Congress of Agroforestry. June 27–July 2, 2004. Orlando, FL.
133. **Nair, V.D.**, [¶]S.C. Allen, and D.A. Graetz. 2004. Environmental Benefits of Agroforestry Systems: Nutrients. Fourth Annual Meeting of the Advisory Council for the Center for Subtropical Agroforestry. May 13, 2004. Lake Mize Conference Center, Austin Cary Memorial Forest, Florida.
134. **Nair, V.D.**, and R.S. Kalmbacher. 2004. Silvopasture as an approach to reducing nutrient loading of surface water from farms. p. 141 *In*; Book of Abstracts. M.R. Mosquera-Losada, J. McAdam, and A. Rigueiro-Rodriguez (eds). Silvopastoralism and Sustainable Management International Congress. Lugo, Spain. Crop Production Department. High Polytechnic School Universidad Santiago de Compostela. Unicopia, Lugo.
135. [¶]Allen, S.C., S. Jose, P.K.R. Nair, **V.D. Nair**, D.A. Graetz, and C. Ramsey. 2003. Nitrogen mineralization in a temperate alley cropping system in the southern United States. ASA/SSSA/CSSA Annual Meeting, November 2-6, 2003. Denver, CO. CD Rom publication.
136. [§]Chrysostome. M., **V.D. Nair**, R.D. Rhue, W.G. Harris, and D.A. Graetz. 2003. Assessment of vertical movement of phosphorus through the soil profiles of manure-impacted sites. Southern Branch ASA Annual Meeting, Feb. 1-4, 2003. Mobile, Alabama.
137. **Nair, V.D.**, W.G. Harris, and D.A. Graetz. 2003. Predicting the safe phosphorus storage capacity of sandy soil profiles. ASA/SSSA/CSSA Annual Meeting, November 2–6, 2003. Denver, CO. CD Rom publication.
138. **Nair, V.D.** and D.A. Graetz. 2003. Third Annual Meeting of the Advisory Council for the Center for Subtropical Agroforestry. Potential of agroforestry systems to reduce nutrient transport from farmlands. May 22, 2003. University of Florida, Milton, Florida.
139. [§]Ramnarine, R., W.G. Harris, **V.D. Nair**, and K.M. Portier. 2003. Prediction of phosphatic soil distribution in Alachua County, FL. Southern Branch ASA Annual Meeting, Feb. 1-4, 2003. Mobile, Alabama.

140. Rhue, R.D., W.G. Harris, and **V.D. Nair**. 2003. Long-term phosphate sorption/desorption in sandy soil. ASA/SSSA/CSSA Annual Meeting, November 2–6, 2003. Denver, CO. CD Rom publication.
141. [§]Walker, L.C., D.A. Graetz, and **V.D. Nair**. 2003. Vertical mobility of phosphorus from fertilizer and manure sources in sandy soils. ASA/SSSA/CSSA Annual Meeting, November 2-6, 2003. Denver, CO. CD Rom publication.
142. [§]Walker, L.C., D.A. Graetz, and **V.D. Nair**. 2003. Vertical mobility and soil dynamics of phosphorus from fertilizer and manure sources in sandy soils. Southern Branch ASA Annual Meeting, Feb. 1–4, 2003. Mobile, Alabama.
143. [§]Hill, L.R., D.A. Graetz, **V.D. Nair**, and P.J. Bohlen. 2002. Phosphorus in the soil profile of subtropical rangelands and associated wetlands. ASA/SSSA/CSSA Annual Meeting Abstracts. 2002. Indianapolis, IN. CD Rom publication.
144. Nair, P.K R., and **V.D. Nair**. 2002. Carbon sequestration in agroforestry systems. p. 315 *In*: Abstracts Volume I. 17th World Congress of Soil Science. Bangkok, Thailand. August 14–21, 2002.
145. **Nair, V.D.**, D.A. Graetz, and [&]M.L. Walker. 2002. Degree of phosphorus saturation (DPS): An indicator for predicting water quality degradation. p. 1425. *In*: Abstracts Volume IV. 17th World Congress of Soil Science. Bangkok, Thailand. August 14–21, 2002.
146. **Nair, V.D.**, D.A. Graetz, [&]M.L. Walker, and K.M. Portier. 2002. Threshold degree of phosphorus saturation for Florida's sandy soils. ASA/SSSA/CSSA Annual Meeting Abstracts. 2002. Indianapolis, IN. CD Rom publication.
147. **Nair, V.D.**, R.D. Rhue, W.G. Harris, and D.A. Graetz. 2002. Depth evaluation of phosphorus loading in leaching assessment of manure-amended soils. ASA/SSSA/CSSA Annual Meeting Abstracts. 2002. Indianapolis, IN. CD Rom publication
148. **Nair, V.D.**, [¶]H.G. Adegbedi, and D.A. Graetz. 2002. Nitrogen and phosphorus dynamics in agroforestry systems in Florida. Second Annual Meeting of the Advisory Council for the Center for Subtropical Agroforestry. Lake Mize Conference Center, Austin Cary Memorial Forest, Florida.
149. Mylavarapu, R.S., S.P. Boetger, **V.D. Nair**, D.A. Graetz, and G. Hendricks. 2001. Nutrient Management in Florida. ASA/SSSA/CSSA Annual Meeting Abstracts. 2001. (invited). Charlotte, NC. CD Rom publication.
150. **Nair, V.D.**, D.A. Graetz, W.G. Harris, G. Kidder, R.S. Mylavarapu, R.D. Rhue, and C.C. Truman. 2001. Florida Phosphorus Index applied to soils with high phosphorus risk. ASA/SSSA/CSSA Annual Meeting Abstracts. 2001. Charlotte, NC. CD Rom publication.

151. [&]Walker, M.L., **V.D. Nair**, and D.A. Graetz. 2001. Analytical protocol for degree of phosphorus saturation determination in sandy soils. ASA/SSSA/CSSA Annual Meeting Abstracts. 2001. Charlotte, NC. CD Rom publication.
152. ^PPant, H.K., **V.D. Nair**, K.R. Reddy, and D.A. Graetz. 2000. Phosphorus retention/release potential of Spodosols. p. 379. *In: ASA/SSSA Annual Meeting Abstracts*, 2000. Minneapolis, Minnesota.
153. **Nair, V.D.**, and D.A. Graetz. 1999. Evaluation of phosphorus saturation in Florida Spodosols. p. 334 *In ASA/SSSA Annual Meeting Abstracts*, 1999. Salt Lake City, UT.
154. **Nair, V.D.**, D.A. Graetz, K.M. Portier, D.S. Segal, N.J. Bisstte, and R.A. Garren. 1998. Soil conditions and native plant establishment on reclaimed phosphate-mined lands. p. 341. *In ASA/SSSA Annual Meeting Abstracts*, 1998, Baltimore, MD.
155. Graetz, D.A., and **V.D. Nair**. 1997. Inorganic forms of phosphorus in water and soils. July 13-16, 1997, Clearwater Beach, FL. p. 29. *In: Program and Abstracts. Phosphorus Biogeochemistry in Florida Ecosystems*.
156. **Nair, V.D.**, D.A. Graetz, and E.G. Flaig. 1997. Manure-contaminated soils and off-site drainage water quality: Case studies. July 13-16, 1997, Clearwater Beach, Florida. p. 11 *In: Program and Abstracts. Phosphorus Biogeochemistry in Florida Ecosystems*.
157. **Nair, V.D.**, and D.A. Graetz. 1996. Water quality impact of beef cow/calf production in Florida. p.29. *In: ASA/SSSA Annual Meeting Abstracts*. 1996. Indianapolis, IN.
158. **Nair, V. D.**, D. A. Graetz, ^PO.G. Olila, and K.R. Reddy. 1995. Soil development in phosphate-mined reclaimed wetlands. p. 331. *In: ASA/SSSA Annual Meeting Abstracts*, 1995. St. Louis, MO.
159. [&]Dooley, D.O., D.A. Graetz, and **V.D. Nair**. 1994. Phosphorus characterization in a dairy lagoon effluent-impacted wetland. p. 416. *In: ASA/SSSA Annual Meeting Abstracts*, 1994. Seattle, WA.
160. **Nair, V.D.**, D.A. Graetz, and E. Flaig. 1994. Status of phosphorus in dairy manure-impacted Spodosols. p. 48. *In: ASA/SSSA Annual Meeting Abstracts*, 1994. Seattle, WA.
161. [&]Dooley, D.O., **V.D. Nair**, and D.A. Graetz. 1993. Phosphorus release from beef and dairy manures and manure-contaminated soils. p. 29. *In: ASA/SSSA Annual Meeting Abstracts*.1993, Cincinnati, OH.

162. Graetz, D.A., **V.D. Nair**, ^PO.G. Olila, and W.G. Harris. 1993. Fractionation of inorganic phosphorus in soils and sediments. p. 349. *In: ASA/SSSA Annual Meeting Abstracts*. 1993. Cincinnati, OH.
163. **Nair, V.D.**, D.A. Graetz, and K.R. Reddy. 1993. Influence of dairy manure on phosphorus retention capacity of Spodosols. p. 42 *In: ASA/SSSA Annual Meeting Abstracts*. 1993. Cincinnati, OH.
164. **Nair, V.D.**, and D.A. Graetz, 1991. Phosphorus fractionation in soils of selected South Florida dairies. p. 41. *In: ASA/SSSA Annual Meeting 1991*, Denver, CO.

k. Miscellaneous

1. Graetz, D.A., and V.D. Nair. 2000. Phosphorus sorption isotherm determination. *In* Pierzynski, G.M (ed). *Methods of Phosphorus Analyses for Soils, Sediments, Residuals, and Waters*. Southern Cooperative Series Bulletin No.396. SERA-IEG 17 Regional Publication. http://www.sera17.ext.vt.edu/Documents/Methods_of_P_Analysis_2000.pdf
This publication was updated in 2006 and in 2009
2. Nair, V.D. 1997. *Program and Abstracts* for the Phosphorus Biogeochemistry in Florida Ecosystems Symposium, Clearwater Beach, Florida. July 13-16, 1997. 123p.

Lectures, Speeches or Posters Presented At Professional Conferences/Meetings

All presentations are by the first author unless indicated otherwise.

§ Presenter

^P Post-doctoral associate

^g Graduate student

[&] Other (Undergraduate student)

Presentations at International Meetings – Invited

1. **Nair, V.D.** 2021. Biochar as a nutrient source in agroforestry systems. Symposium. Agroforestry Research Trust. Dartington, Totnes, UK (virtual; May/June 2021)
2. **Nair, V.D.** 2019. Biochar in agroforestry: Resources, production, and potential benefits. Agroforestry for climate change mitigation, biodiversity conservation and resilience in agroecological systems: current trends and future strategies. Indian Council of Agricultural Research-Kerala Agricultural University Winter School on Agroforestry. December 03 to 23, 2019, Thrissur, Kerala, India.
3. Nair, P.K.R., N. Chatterjee, and **V.D. Nair**. 2017. Agroforestry for sequestering carbon in soils. ASA/CSSA/SSSA Annual Meetings, October 22--25, 2017. Tampa, Florida.
4. **Nair, V.D.**, ^PB. Dari, and P.K.R. Nair. 2016. Biochar as a soil amendment: Potential role of coconut byproducts. 3rd International Symposium on Coconut Research and Development. ICAR – Central Plantation Crops Research Institute Kasaragod, Kerala, India 10-12, December 2016.
5. **Nair, V.D.** 2016. Sustainable Land Application of Biochar in Agroforestry. 3rd European Agroforestry Conference 23-25 May 2016, Montpellier, France.

6. **Nair, V.D.** 2015. Biochar Uses in Agroforestry Systems. The 2nd General Assembly of AGFORWARD, Chania, Greece. June 25, 2015.
7. Ferreiro-Domínguez, N., **Vimala Nair**, Antonio Rigueiro-Rodríguez, María Rosa Mosquera-Losada. 2015. Soil and pasture P concentration in a *Fraxinus excelsior* L. silvopastoral system fertilised with different types of sewage sludge. European Geosciences Union General Assembly Conference Abstracts. Soil System Science April 2015. Vienna, Austria. Volume 17; P 14889
8. Rafael Goncalves Tonucci, Rasmio Garcia, and **Vimala Nair**. 2015. Trees and grass contribution to soil organic carbon in agroforestry systems. World congress on integrated crop-livestock-forest systems; International symposium on integrated crop-livestock systems. Brasília, df. Towards sustainable intensification: proceedings. Brasília.
9. Nair, P.K.R., and **V.D. Nair**. 2014. Scientific Writing and Communication in Agriculture and Natural Resources Short Course. Kyoto University, Japan. July 28 – Aug 7, 2014.
10. **Nair, V.D.** 2014. Phosphorus in Agricultural Lands: Problems and Sustainable Solutions. Kyoto University, Japan. Aug 06, 2014.
11. Nair, P.K.R., **V.D. Nair**, P.S.K. Saha, P.S.G. Haile, D.S. Howlett, A.N.G. Takimoto, E.F. Gama-Rodrigues, and R.G. Tonucci. 2009. Climate Change Mitigation through Agroforestry: A Concept in Search of Science. 2nd World Congress of Agroforestry, Nairobi, Kenya. 23-28 August 2009. 2015
12. **Nair, V.D.** and P.K.R. Nair. 2009. Carbon storage in aggregate-size fractions under agroforestry systems. 2nd World Congress of Agroforestry, Nairobi, Kenya. 23-28 August 2009.
13. **Nair, V.D.** 2008. Scientific Writing in Agriculture and Natural Resource Management. Kerala Agricultural University-University of Florida Training Workshop. Kerala Agricultural University, Thrissur, Kerala, India. 20-25, October 2008.
14. **Nair, V.D.** 2008. Environmental Benefits of Agroforestry in Subtropical and Temperate Regions. European Community Action Scheme for the Mobility of University Students Program, Santiago de Compostella, Spain, March 31 to April 06, 2008.
15. Nair, P. K. and **V.D. Nair**. 2007. Agroforestry and Carbon Sequestration. Hangzhou (China) Workshop, May 2007.
16. Nair P.K. and **V.D. Nair**. 2007. Soil Sustainability and Agroforestry Systems. Ecological Research Center, CAS. Beijing, China, May 2007.
17. **Nair, V.D.** 2005. Research Writing, University of Santiago de Compostella, Lugo, Spain.
18. **Nair, V.D.** 2005. Phosphorus in Agricultural Land: Cattle, Soils, and Water Quality. University of Santiago de Compostella, Lugo, Spain.

19. **Nair, V.D.** 2005. Phosphorus storage capacity of soils under silvopasture and tree-less pasture in Florida. IUFRO World Congress, Brisbane, Australia.
20. P.K. Nair, and **V.D. Nair**. 2006. Agroforestry as a land-management option in the 21st Century: A Global Overview: Aracruz Cellulose S. A, 10/01/2006, Vitória, ES, Brazil. (Seminar).
21. Nair, P.K.R. M.E. Bannister, **V.D. Nair**, J.R.R. Alavalapati, E.A. Ellis, S. Jose, and A.J. Long. 2004. International Congress on Silvopastoralism and Sustainable Management, April 18-24, 2004. Lugo, Galicia, Spain. (*Abstract and full paper on Silvopasture in southeastern United States: More than just a new name for an old practice*)
22. **Nair, V.D.** 2004. Silvopasture and Water Quality. Pre-Congress Workshop. 1st World Congress of Agroforestry. June 27-July 2, 2004. Orlando, FL.
23. **Nair, V.D.**, and R.S. Kalmbacher. 2004. International Congress on Silvopastoralism and Sustainable Management. April 18-24, 2004, Lugo, Galicia, Spain. (*Abstract and full paper on Silvopasture as an approach to reducing nutrient loading of surface water from farms*)

Presentations at International Meetings – Volunteered

1. [§]Pinheiro, F.M., P.K.R. Nair, S. Paulson, **V.D. Nair**, J. DeVore, and R.G. Tonucci. 2019. An innovative, farmer initiative of silvopastoral restoration in a degraded semiarid Caatinga region of Brazil. 4th World Congress on Agroforestry. LeCorum Conference Center, Montpellier, France. 20-22 May 2019. (poster)
2. [§]Pinheiro, F.M., P.K.R. Nair, **V.D. Nair**, Viana M.C.M and R.C. Alvarenga. 2019. Soil carbon storage in silvopasture in comparison with planted and native forests and pasture in a Brazilian Oxisol. 4th World Congress on Agroforestry. LeCorum Conference Center, Montpellier, France. 20-22 May 2019 (oral).
3. Nair, P.K.R., and **V.D. Nair**. 2019. Soil carbon storage and aggregate-size fractions under agroforestry systems. 4th World Congress on Agroforestry. LeCorum Conference Center, Montpellier, France. 20-22 May 2019. (oral)
4. **Nair, V.D.**, P.K.R. Nair, and [§]Freitas A.M. 2019. Potential for using biochar in resource-limited agroforestry systems. 4th World Congress on Agroforestry. LeCorum Conference Center, Montpellier, France. 20-22 May 2019. (oral)
5. Chatterjee, N., P.K.R. Nair, **V.D. Nair**, and S. Chakraborty. 2018. Soil organic carbon stocks across the Forest-Agroforest-Agriculture/Pasture continuum in various agroecological regions. 21st World Congress of Soil Science. August 2018, Rio de Janeiro, Brazil. (Presented by PK Nair)
6. Freitas, A.M., **V.D. Nair**, L.E. Sollenberger, and W.G. Harris. 2018. Poultry litter biochar as an alternative to inorganic phosphorus fertilizer in a year-round cropping system. 21st World Congress of Soil Science. August 2018, Rio de Janeiro, Brazil. (poster)

7. **Nair, V.D.**, A.M. Freitas, M.R. Mosquera-Losada, N. Ferreiro-Dominguez, and P.K.R. Nair. 2018. Using biochar from sewage sludge and other feedstocks in European agroforestry: Opportunities and challenges. 4th European Agroforestry Conference. Nijmegen, Netherlands. May 2018. (Extended abstract – peer-reviewed)
8. **Nair, V.D.**, P.K.R. Nair, and A.M. Freitas. 2018. Opportunities for biochar use in low-input agricultural systems. 21st World Congress of Soil Science. August 2018, Rio de Janeiro, Brazil.
9. Pinheiro, F.M, P.K.R. Nair, **V.D. Nair**, and M.C. Machado Viana. 2018. Soil-aggregate groups at various depths under silvopasture, forest, tree plantation and pasture systems in a Brazilian Oxisol. 21st World Congress of Soil Science. August 2018, Rio de Janeiro, Brazil
10. **Nair, V.D.**, P.K.R. Nair, R. Mosquera-Losada, G-A Michel, D. Howlett, and P. Nkedi-Kizza. Innovative Technology for Water Quality Protection in Agroforestry Systems. 3rd World Congress on Agroforestry, February 10-14, 2014; Delhi, India.
11. Lana, R.M.Q., A.M.Q. Lana, A De A Silva, G. A. F. Prado, and **V.D.Nair**. 2013. Productivity of brachiaria forage intercropping with eucalyptus in a silvopastoral system in the brazilian cerrado biome. FITA2013 "Sustainable Agriculture through ICT innovation", June 23-27, 2013, Italy.
12. Lana, A.Q.M., R.M.Q. Lana, G. A. F. Prado, A De A Silva, and **V.D. Nair**. 2013. Nutritive value of brachiaria forage intercropping with eucalyptus in a silvopastoral system in the brazilian cerrado biome. EFITA2013 "Sustainable Agriculture through ICT innovation", June 23-27, 2013, Italy.
13. Chakraborty, D., **V.D. Nair**, T.Z. Osborne†, and L.R. Ellis. 2012. INTECOL 9 Wetlands Conference. June 2012. Orlando, Florida.
14. Osborne, T.Z. †, **V.D. Nair**, L.R. Ellis, B. Jones, and W.G. Harris. 2012. INTECOL 9 Wetlands Conference. June 2012. Orlando, Florida.
15. **Nair, V.D.**, M. W. Clark†, and K. R. Reddy. 2012. Prediction of phosphorus release from wetland soils. INTECOL 9 Wetlands Conference. June 2012. Orlando, Florida.
16. **Nair, V.D.**, W.G. Harris, P.K.R. Nair, and D.A. Graetz. 2006. 18th World Congress of Soil Science. July 9-15, Philadelphia, PA.
17. **Nair, V. D.**, ‡S.G. Haile, ‡G.A. Michel, and P.K.R. Nair. 2006. Brazilian Congress of Agroforestry. VI. October 23-27, 2006. Campos dos Goytacazes, Rio De Janeiro, Brazil (*Abstract on* Environmental improvement of agricultural lands through silvopasture. Out of the numerous presentations, this paper was one among three selected for subsequent publication in Scientia Agricola).
18. †Allen, S.C., **V.D. Nair**, S. Jose, and D.A. Graetz. 2004. 1st World Congress of Agroforestry. June 27-July 2, 2004. Orlando, FL.
19. **Nair, V.D.**, R.S. Kalmbacher, †S.C. Allen, D.A. Graetz, †E. Ellis, and †I. Ezenwa. 2004. 1st World Congress of Agroforestry. June 27-July 2, 2004. Orlando, FL. (*Abstract on* phosphorus and nitrogen dynamics in silvopasture, open pasture and rangeland in south-central Florida).

20. **Nair, V.D.**, S. Jose, R.S. Kalmbacher, D.A. Graetz, and P.K.R. Nair. 2004. Reducing nutrient loss from Florida soils through agroforestry practices. Environmental Emelioration Session. 1st World Congress of Agroforestry. June 27-July 2, 2004. Orlando, FL
22. ^gChrysostome, M., **V.D. Nair**, R.D. Rhue, W.G. Harris, K.M. Portier, and D.A. Graetz. 2004. Sustainable Land Application Conference. January 4-8, 2004. Lake Buena Vista, FL.
23. ^gJosan, M.S., **V.D. Nair**, and W.G. Harris. 2004. Sustainable Land Application Conference. January 4-8, 2004. Lake Buena Vista, FL
24. Nair, V.D., D.A. Graetz, and M.L. Walker***. 17th World Congress of Soil Science. Bangkok, Thailand. August 14-21, 2002.
25. Nair, P.K R., and **V.D. Nair**. 17th World Congress of Soil Science. Bangkok, Thailand. August 14-21, 2002.

Presentations at National Meetings – Invited

1. Mylavarapu, R.S., S.P Boetger, **V.D. Nair**., D.A., Graetz, and G. Hendricks. 2001. Nutrient Management in Florida ASA/SSSA/CSSA Annual Meeting. October 21-25, 2001. Charlotte, NC. (*Abstract on Nutrient Management in Florida.*)
2. Graetz, D.A., W.D. Tooke, R.S. Mylavarapu, and **V.D. Nair**. Nutrient management in Florida. ASA/SSSA Annual Meeting, November 5-9, 2000. Minneapolis, MN.
3. Graetz, D.A., **V.D. Nair**, O.G. Olila, and W.G. Harris. 1993. Fractionation of inorganic phosphorus in soils and sediments ASA/SSSA Annual Meeting November 7-12, 1993. Cincinnati, OH.

Presentations at National Meeting – Volunteered

All ASA/SSSA/CSSA Annual Meetings from 2004 are International Meetings.

1. ^pFreitas, A.M., **V.D. Nair**, A.N. Rodriguez, and L.E. Sollenberger. 2020. Iron oxide strip procedure to evaluate P release from inorganic P and biochar-amended soils. ASA/CSSA/SSSA (Virtual) Meeting. November 09 – 13, 2020 (poster)
2. **Nair, V.D.** 2020. Would soil phosphorus storage capacity be an effective indicator of phosphorus fertilizer needs? ASA/CSSA/SSSA (Virtual) Meeting. November 09 – 13, 2020 (oral)
3. ^gRodriguez, A.N., and **V.D. Nair**. 2020. Methods of assessing phosphorus loss across a wide range of soil types for the protection of water quality. ASA/CSSA/SSSA (Virtual) Meeting. November 09 – 13, 2020 (oral)
4. ^gRodriguez, A.N., and **V.D. Nair**. 2020. Calibrating Mehlich 3-P recommendations using FeO-strip P. ASA/CSSA/SSSA (Virtual) Meeting. November 09 – 13, 2020 (5- minute rapid)

5. §Rodriguez, A.N., **V.D. Nair**, and A.M Freitas. 2020. Calibrating Mehlich 3-P recommendations using FeO-strip P. ASA/CSSA/SSSA (Virtual) Meeting. November 09 – 13, 2020 (poster)
6. §Freitas, A.M., **V.D. Nair**, W.G. Harris, and M.R. Mosquera-Losada. 2019. Phosphorus availability when converting biosolids into biochar. ASA/CSSA/SSSA Meetings, San Antonio, TX, November 10 – 13, 2019. (poster).
7. §Freitas, A.M., **V.D. Nair**, L.E. Sollenberger, W.G. Harris, and A.N. Rodriguez. 2019. Residual soil phosphorus when poultry litter biochar and inorganic phosphorus are used as fertilizer sources. ASA/CSSA/SSSA Meetings, San Antonio, TX, November 10 – 13, 2019. (oral)
8. §Rodriguez, A.N., and **V.D. Nair**. 2019. Estimating isotherm parameters for sandy to high phosphorus-retentive soils from soil test data. ASA/CSSA/SSSA Meetings, San Antonio, TX, November 10 – 13, 2019. (poster).
9. **Nair, V.D.**, §A.M. Freitas, P.K.R. Nair, and A.N. Rodriguez. 2019. Biochar as a nutrient source in sustainable agriculture and environmental management. ASA/CSSA/SSSA Meetings, San Antonio, TX, November 10 – 13, 2019. (oral)
10. §Freitas, A.M., **V.D. Nair**, L.E. Sollenberger, and W.G. Harris. 2018. Replacing inorganic phosphorus with poultry litter biochar in a year-round cropping system. ASA/CSSA/SSSA Meetings, Baltimore, MD, November 04 – 07, 2018 (poster)
11. §Freitas, A.M., **V.D. Nair**, L.E. Sollenberger, and W.G. Harris. 2018. Poultry litter biochar as a substitute for inorganic phosphorus fertilizer. Southern Branch ASA Meetings, Jacksonville, FL. February 7, 2018. (oral)
12. §Freitas, A.M., **V.D. Nair**, and W.G. Harris. 2018. Variable consequences of converting biosolids to biochar: Implications for Water Quality. 6th University of Florida Water Institute Symposium February 6 – 7, 2018. (poster)
13. **Nair, V.D.**, L.E. Sollenberger, §A.M. Freitas, W.G. Harris, Jose Carlos Batista Dubeux Jr., and §A. Rodriguez. 2018. Reducing Fertilizer Application while Mitigating Legacy Phosphorus. ASA/CSSA/SSSA Meetings, Baltimore, MD, November 04 – 07, 2018
14. §Freitas, A.M., **V.D. Nair**, and W.G. Harris. 2018. Variable consequences of converting biosolids to biochar: Implications for Water Quality. 6th University of Florida Water Institute Symposium February 6 – 7, 2018.
15. §Chatterjee, N., P.K.R. Nair, **V.D. Nair**, and S. Viswanath. 2017. Soil carbon storage in shaded perennial agroforestry systems in relation to overstory tree coverage. ASA/CSSA/SSSA Meetings, Tampa, FL, October 19 – 22, 2017.
16. §Dari, B., **V.D. Nair**, A. Sharpley, D. Franklin, P. Klienman, and W.G. Harris. 2017. An environmental phosphorus monitoring tool for soils of the eastern and mid-western USA. ASA/CSSA/SSSA Meetings, Tampa, FL, October 19 – 22, 2017.
17. §Freitas, A.M., **V.D. Nair**, W.G. Harris, M.R. Mosquera-Losada, and P.K. Nair. 2017. Phosphorus association and release from biosolids and corresponding biochars. ASA/CSSA/SSSA Meetings, Tampa, FL, October 19 – 22, 2017.

18. Mackowiak, C., ^PB. Dari, and **V.D. Nair**. 2017. Plant influence on soil phosphorus storage capacity in soils receiving alternative fertilizers. ASA/CSSA/SSSA Meetings, Tampa, FL, October 19 – 22, 2017.
19. **Nair, V.D.**, L.E. Sollenberger, [§]A.M. Freitas, B. Dari, W.G. Harris, and J.C.B. Dubeux Jr. 2017. Quantitative approach for recovering legacy phosphorus in soils. ASA/CSSA/SSSA Meetings, Tampa, FL, October 19 – 22, 2017.
20. [§]Danmova, N, Levia, J.A., Nkedi Kizza, P., Jawitz, J., Morgan, K.T., Harris, W.G., **Nair, V.D.**, and MacDonald, G. 2016. Sorption and transport of phosphorus and nitrogen in soils from Florida and Nigeria in a mixture of fertilizers and pesticides. ASA/CSSA/SSSA Meetings, Phoenix, AZ.
21. ^PDari, B., C.L. Mackowiak, **V.D. Nair** and J.P. Shirley. 2016. Soil phosphorus storage capacity in Florida soils receiving fertilizer alternatives. ASA/CSSA/SSSA Meetings, Phoenix, AZ. November 6-9, 2016.
22. [§]Freitas, A., **V.D. Nair**, W.G. Harris, and C. Mackowiak. 2016. Phosphorus release from biochar of various feedstocks: Implications for land management. ASA/CSSA/SSSA Meetings, Phoenix, AZ. November 6-9, 2016.
23. **Nair, V.D.**, [§]Freitas, A.M., and Harris, W.G. 2016. Land application of biochar: “an inconvenient truth.” ASA/CSSA/SSSA Meetings, Phoenix, AZ. November 6-9, 2016.
24. **Nair, V.D.**, L.E. Sollenberger, W.G. Harris, A. Sharpley, P. Kleinman, and Dorcas Franklin. 2016. Quantitative approach for recovering legacy phosphorus while minimizing crop nutrient deficiency risk. p113. 2016 AFRI/NIWQP Annual Project Directors Meeting. Washington D.C. 20024. October 12-13, 2016.
25. [§]Nilovna C., **V.D. Nair**, P.K.R. Nair, and S. Gerber. 2016. Carbon Storage and Dynamics in Soil Fractions under Shaded Perennial Agroforestry Systems. ASA/CSSA/SSSA Meetings, Phoenix, AZ. November 6-9, 2016.
26. [§]Pinheiro, F., P.K.R. Nair, and **V.D. Nair**. 2016. Use of biochar in Brazilian land-use systems: The current state of knowledge. ASA/CSSA/SSSA Meetings, Phoenix, AZ. November 6-9, 2016.
27. [§]Chatterjee, N., ^PB. Dari, **V.D. Nair**, and P.K.R. Nair. 2015. Phosphorus sorption behavior in biochar-amended soils. ASA/CSSA/SSSA Meetings, Mineapolis, Minesotta
28. [§]Dari, B., **V.D. Nair**, W.G. Harris, and R. Mylavarapu. 2015. Estimation of isotherm parameters: a simple and cost-effective procedure. ASA/CSSA/SSSA Meetings, Mineapolis, Minesotta
29. **Nair, V.D.**, [§]B. Dari, [§]D. Chakraborty, and W.G. Harris. 2015. Correspondence of the phosphorus saturation ratio threshold with environmental indicators of phosphorus loss risk. ASA/CSSA/SSSA Meetings, Mineapolis, Minesotta
30. Rafael Goncalves Tonucci, Rasmo Garcia, and **Vimala Nair**. 2015. Trees and grass contribution to soil organic carbon in agroforestry systems. World congress on integrated crop-livestock-forest systems; International symposium on integrated crop-livestock systems. Brasília, df. Towards sustainable intensification: proceedings. Brasília.

31. Schmidt, Casey A., Biswanath Dari, Nilovna Chatterjee, David S. Howlett and **Vimala D. Nair**. 2015. Nutrient and Water Retention Dynamics of Biochar Produced from Pinyon- Juniper Forest Thinning in Nevada. ASA/CSSA/SSSA Meetings, Mineapolis, Minesotta.
32. *Dari, B., **V.D. Nair**, R. Mylavarapu, and W.G. Harris. 2014. Hardwood and poultry litter biochar effects on phosphorus sorption of soil. ASA/CSSA/SSSA 2014 International Annual Meetings, Long Beach, CA on November 2–5, 2014. (poster).
33. *Dari, B., **V.D. Nair**, W.G. Harris, and R. Mylavarapu. 2014. Input parameters in phosphorus loss predictive models based on compositional characteristics of Spodosol and Ultisol profiles. ASA/CSSA/SSSA 2014 International Annual Meetings, Long Beach, CA on November 2–5, 2014.
34. *Dari, B., **V D Nair**, R S Mylavarapu and W G Harris. 2014. Can biochar amendment reduce soil phosphorus loss risk? SERA 17 Meetings, Des Moines, IA. July 22–25, 2014
35. **Nair, V.D.**, W.G. Harris, M. Chrysostome, D. Chakraborty, and M.W. Clark. 2014. Challenges in assessment of legacy phosphorus. ASA/CSSA/SSSA 2014 International Annual Meetings, Long Beach, CA on November 2–5, 2014.
36. *Banik, B., W. Harris, A. Ogram, **V. Nair**, and M. Cohen. 2013. Response of Carbon and Metals to Experimentally Controlled Water Tables. 14th Annual Research Forum. Soil and Water Science Department, University of Florida.
37. *Banik, B., W. Harris, A. Ogram, **V. Nair**, and M. Cohen. 2013. Water Table Effects on Fate of Carbon and Metals in Soil Columns. ASA/CSSA/SSSA 2013 International Annual Meetings, Tampa, FL on November 3-6, 2013. CD Rom Publication.
38. *Dari, B., **V.D. Nair**, R. Mylavarapu, and W.G. Harris. 2013. Biochar application and Phosphorus sorption behavior. 20th World Congress of Soil Science on June 8 – 13, 2004, Jeju, Korea.
39. *Dari, B., **V.D. Nair**, R. Mylavarapu and W.G. Harris. 2013. Model Parameters from Soil Test Data for Input into Phosphorus-loss Predictive Models. 4th UF Water Institute Symposium, February 11-12, 2014. Gainesville, Florida.
40. *Dari, B., **V.D. Nair**, and R. Mylavarapu. 2013. Obtaining Model Input Parameters for Predicting Phosphorus Leaching using PLEASE Model. 14th Annual Research Forum. Soil and Water Science Department, University of Florida.
41. *Dari, B., **V.D. Nair**, W.G. Harris, and R. Mylavarapu. 2013. Tools for Predicting Phosphorus Storage and Release in Soils of Animal Agricultural Production Systems. ASA/CSSA/SSSA 2013 International Annual Meetings, Tampa, FL on November 3-6, 2013. CD Rom Publication.
42. Lana, R.M.Q., A.M.Q. Lana, A De A Silva, G. A. F. Prado, and V.D.Nair. 2013. Productivity of brachiaria forage intercropping with eucalyptus in a silvopastoral system in the brazilian cerrado biome. FITA2013 "Sustainable Agriculture through ICT innovation", June 23-27, 2013, Italy.
43. Lana, A.Q.M., R.M.Q. Lana, G. A. F. Prado, A De A Silva, and V.D. Nair. 2013. Nutritive value of brachiaria forage intercropping with eucalyptus in a silvopastoral

system in the Brazilian cerrado biome.

EFITA2013 "Sustainable Agriculture through ICT innovation", June 23-27, 2013, Italy.

44. Mylavarapu, R.S., W.G. Harris and **V.D. Nair**. 2013. Diagnostics for Environmental Assessment of Phosphorus. Technical Session, NIFA SERA-IEG-6 Southern Region Annual Meeting, Baton Rouge, LA., June 16-18.
45. **Nair, V.D.** The Power of a Soil's Threshold Phosphorus Saturation Ratio. 2013. ASA/CSSA/SSSA 2013 International Annual Meetings, Tampa, FL on November 3-6, 2013. CD Rom Publication.
46. **Nair, V.D.**, P.K.R. Nair, R. Mosquera-Losada, G-A Michel, D. Howlett, and P. Nkedi-Kizza. Innovative Technology for Water Quality Protection in Agroforestry Systems. 3rd World Congress on Agroforestry, February 10-14, 2014; Delhi, India.
47. ‡Dari, B., **V.D. Nair**, R. Mylavarapu, and W.G. Harris. 2012. Relating “Freundlich k” to the Soil Phosphorus Saturation Ratio. Southern Branch ASA Meetings.
48. ‡Dari, B., **V.D. Nair**, R.D. Rhue and R. Mylavarapu. 2012. Obtaining Langmuir parameters from a soil test solution. 13th Annual Research Forum. Soil and Water Science Department, University of Florida.
49. ‡Dari, B., **V.D. Nair**, R.D. Rhue and R. Mylavarapu. 2012. Relationship of Langmuir parameters to the soil phosphorus saturation ratio. ASA/CSSA/SSSA 2012 International Annual Meetings. CD Rom Publication.
50. **Nair, V.D.**, T.Z. Osborne, L.R. Ellis, B. Jones, and W.G. Harris. 2012. Spatial distribution of phosphorus in the Kissimmee River floodplain soils. ASA/CSSA/SSSA 2012 International Annual Meetings. CD Rom Publication.
51. Saha, S., P.K.R. Nair, **V.D. Nair**, and B.M. Kumar. Soil carbon storage in tropical land-use systems and its implications to food security and climate change management. Poster session presented at: International Symposium on Managing Soils for Food Security and Climate Change Adaptation and Mitigation; 2012 July 23 – 27; Vienna, Austria [Conference ID: 41176 (D1-CN-191)].
52. Chakraborty, D., **V.D. Nair**, T.Z. Osborne, and L.R. Ellis. 2012. Phosphorus retention and release from the Kissimmee River sediment and floodplain soils. INTECOL 9 Wetlands Conference. June 2012. Orlando, Florida.
53. Osborne, T.Z., **V.D. Nair**, L.R. Ellis, B. Jones, and W.G. Harris. 2012. Soil nutrient storage and cycling in the restored Kissimmee River floodplain. INTECOL 9 Wetlands Conference. June 2012. Orlando, Florida.
54. **Nair, V.D.**, M. W. Clark, and K. R. Reddy. 2012. Prediction of phosphorus release from wetland soils. INTECOL 9 Wetlands Conference. June 2012. Orlando, Florida.
55. Chakraborty, D., **V.D. Nair**, and T.Z. Osborne. 2011. Phosphorus retention and release from the Kissimmee River sediment and floodplain soils. The 3rd UF Water Institute Symposium. February 15 - 16, 2012, Gainesville, FL
56. ‡Dari, B., **V.D. Nair**, D.A. Graetz, and R. Mylavarapu. 2011. Soil phosphorus dynamics in a dairy farm during a seven-year period. The 3rd UF Water Institute Symposium. February 15 - 16, 2012, Gainesville, FL

57. ‡Chakraborty, D., and **V.D. Nair**. 2011. 12th Annual Research Forum. Soil and Water Science Department, University of Florida. (*Abstract on: Quantitative approach for assessment of phosphorus loss risk from Alaquod and Paleudult soil profiles*).
58. ‡Chakraborty, D., **V.D. Nair**, and W.G. Harris. 2011. ASA/CSSA/SSSA 2011 International Annual Meetings. CD Rom Publication. (*Abstract on: Phosphorus loss from illuvial horizons of coastal plain soils*).
59. Mitchell et al. 2011. The 3rd UF Water Institute Symposium. February 15 - 16, 2012, Gainesville, FL
60. **Nair, V.D.** 2011. Water Institute Symposium. 2011. A quantitative approach to soil phosphorus loss risk assessment. The 3rd UF Water Institute Symposium. February 15 - 16, 2012, Gainesville, FL
61. **Nair, V.D.**, M.W. Clark, and K.R. Reddy. 2011. ASA/CSSA/SSSA 2011 International Annual Meetings. CD Rom Publication. (*Abstract on: Wetland soils nutrient index evaluation*)
62. ‡Qin, Z., Shober, A., and **V.D. Nair**. 2011. 12th Annual Research Forum. Soil and Water Science Department, University of Florida. (*Abstract on: Evaluation of nutrient leaching from simulated residential mixed landscapes*).
63. ‡Qin, Z., A. Shober, A., and **V.D. Nair**. 2011. ASA/CSSA/SSSA 2011 International Annual Meetings. CD Rom Publication. (*Abstract on: Evaluation of nutrient leaching from simulated residential mixed landscapes*).
64. ‡Chakraborty, D., **V.D. Nair**, and W.G. Harris. 2010. ASA/CSSA/SSSA 2010 International Annual Meetings. Oct. 31 – Nov. 3, Long Beach, CA. (*Abstract on Compositional differences affecting phosphorus dynamics in Bh and Bt horizons*).
65. Mosquera-Losada, M.R., Ferreiro-Domínguez, N., **Nair, V.D.**, Rigueiro-Rodríguez, A. 2010. European Society of Agronomy, Montpellier, France. (*Abstract on Effects of anaerobic, composted and pelletised sludge on soil P saturation ratio in a silvopastoral system with *Fraxinus excelsior* L.*)
66. **Nair, V.D.**, and W.G. Harris. 2010. ASA/CSSA/SSSA 2010 International Annual Meetings. Oct. 31 – Nov. 3, Long Beach, CA. (*Abstract on Site-specific evaluation tool for phosphorus risk assessment*).
67. **Nair, V.D.**, and P.K.R. Nair. 2010. Aggregate formation and soil carbon sequestration under tree-based systems in various agroecological regions. XXIII IUFRO World Congress. 23-28 August 2010, Seoul, Korea.
68. ‡Showalter, J.M, **Nair, V.D.**, and P.K.R. Nair. Soil aggregation and recalcitrant carbon in a Florida silvopasture system. ASA/CSSA/SSSA 2010 International Annual Meetings. CD Rom Publication. Oct. 31 – Nov. 3, Long Beach, CA.
69. ‡Chakraborty, D., **V.D. Nair**, and W.G. Harris. 2009. ASA/CSSA/SSSA 2009 International Annual Meetings. Nov 1-5, Pittsburgh, PA.
70. ‡Chakraborty, D. and **V.D. Nair**. 2009. Environmental Engineering Sciences Symposium, hosted by the UF Air and Water Management Association and the Society of Environmental Engineers. University of Florida, Gainesville, FL.

71. ^PHaile, S.G., **V.D. Nair**, and P.K.R. Nair. 2009. ASA/CSSA/SSSA 2009 International Annual Meetings. Nov 1-5, Pittsburgh, PA.
72. Nair, P.K.R., **V.D. Nair**, ^PHaile, ^PS.K., Saha, [§]D.S. Howlett, A.N.G. Takimoto, E.F. Gama-Rodrigues, and R.G. Tonucci. 2009. ASA/CSSA/SSSA 2009 International Annual Meetings. Nov 1-5, Pittsburgh, PA.
73. **Nair, V.D.**, M.W. Clark, and K.R. Reddy. 2009. ASA/CSSA/SSSA 2009 International Annual Meetings. Nov 1-5, Pittsburgh, PA.
74. Wang, Y., K.R. Reddy, **V.D. Nair**, and R.R. Villapando. 2009. ASA/CSSA/SSSA 2009 International Annual Meetings. Nov 1-5, Pittsburgh, PA.
75. [§]Chakraborty, D., **V.D. Nair**, and W.G. Harris. 2008. ASA/CSSA/SSSA 2008 International Annual Meeting, Oct. 5-9 2008, Houston, TX.
76. Gama-Rodrigues, E.F., P.K.R. Nair, **V.D. Nair**, A.C. Gama-Rodrigues, V.C. Baligar, and R.C. Machado. 2008. ASA/CSSA/SSSA 2008 International Annual Meeting, Oct. 5-9 2008, Houston, TX.
77. ^PHaile, S.G., **V.D. Nair**, and P.K.R. Nair. 2008. ASA/CSSA/SSSA 2008 International Annual Meeting, Oct. 5-9 2008, Houston, TX.
78. [§]Howlett, D., M-R Mosquera-Losada, P.K.R. Nair, A. Rigueiro-Rodriguez, **V.D. Nair**, and G. Moreno. 2008. ASA/CSSA/SSSA 2008 International Annual Meeting, Oct. 5-9, 2008, Houston, TX.
79. Mosquera-Losada, M-R., **V.D. Nair**, D. Moran, P.K.R. Nair, J.J. Santiago-Freijanes, and A. Rigueiro-Rodriguez. 2008. ASA/CSSA/SSSA 2008 International Annual Meeting, Oct. 5-9, 2008, Houston, TX.
80. **Nair, V.D.**, W.G. Harris, and L.E. Sollenberger. 2008. ASA/CSSA/SSSA 2008 International Annual Meeting, Oct. 5-9 2008, Houston, TX.
81. ^PHaile, S.G., **V.D. Nair**, and P.K.R. Nair. (2008). International Symposium on Climate Information for Managing Risks: Partnerships and Solutions for Agricultural Resources. June 10-13 2008, St Pete Beach, FL.
82. ^PChrysostome, M., **V.D. Nair**, and W.G. Harris. 2007. ASA/CSSA/SSSA 2007 International Annual Meeting, Nov. 4-8, 2007, New Orleans, LA
83. Harris, W.G., X. Cao, **V.D. Nair**, ^PM.S. Josan, [§]D.A. Herrera, and A.C. Wilkie. 2007. ASA/CSSA/SSSA 2007 International Annual Meeting, Nov. 4-8 2007, New Orleans, LA.
84. ^PJosan, M.S., **V.D. Nair**, and W.G. Harris. 2007. ASA/CSSA/SSSA International Annual Meeting, Nov. 4-8 2007, New Orleans, LA.
85. Nair, P.K., **V.D. Nair**, [§]S.G. Haile, and [§]G.A. Michel. 2007. 10th North American Agroforestry Conference.).
86. **Nair, V.D.**, W.G. Harris, ^PM. Chrysostome, and R.D. Rhue. 2007. ASA/CSSA/SSSA International Annual Meeting, Nov. 4-8, 2007, New Orleans, LA.
87. [§]Saha, S.K., P.K.R. Nair, **V.D. Nair**, and B.M. Kumar. 2007. ASA/CSSA/SSSA International Annual Meeting, Nov. 4-8, 2007, New Orleans, LA.

88. §Rew, T.J., D.A. Graetz, M.S. Josan, **V.D. Nair**, and W.G. Harris. 2007. ASA/CSSA/SSSA International Annual Meeting, Nov. 4-8, 2007, New Orleans, LA.
89. Takimoto, A., P.K.R. Nair, and **V.D. Nair**. 2007. ASA/CSSA/SSSA International Annual Meeting, Nov. 4-8, 2007, New Orleans, LA.
90. Cao, X., W.G. Harris, §M.S. Josan, and **V.D. Nair**. 2006. ASA-CSSA-SSSA International Annual Meeting, Nov. 12-16, 2006, Indianapolis, IN.
91. §Chrysostome, M., **V.D. Nair**, W.G. Harris, and D.A. Graetz. 2006. ASA-CSSA-SSSA International Annual Meeting, Nov. 12-16, 2006, Indianapolis, IN.
92. §Haile, S., **V.D. Nair**, and P.K.R. Nair. 2006. ASA-CSSA-SSSA International Annual Meeting, Nov. 12-16, 2006, Indianapolis, IN.
93. Harris, W.G., **V.D. Nair**, R.D. Rhue, and §M. Chrysostome. 2006. SERA-17 (Southern Extension-Research Activity) Meetings.
94. §Herrera, D.A., W.G. Harris, **V.D. Nair**, and C.R. Staples. 2006. ASA-CSSA-SSSA International Annual Meeting, Nov. 12-16, 2006, Indianapolis, IN.
95. §Josan, M.S., **V.D. Nair**, and W.G. Harris. 2006. ASA-CSSA-SSSA International Annual Meeting, Nov. 12-16, 2006, Indianapolis, IN.
96. §Takimoto, A., P.K.R. Nair, and **V.D. Nair**. 2006. ASA-CSSA-SSSA International Annual Meeting, Nov. 12-16, 2006, Indianapolis, IN.
97. §Haile, S., P.K.R. Nair, and **V.D. Nair**. 2005. ASA/CSSA/SSSA International Annual Meeting, Nov. 6-10, 2005, Salt Lake City, UT.
98. §Herrera, D.A., C.R. Staples, W.G. Harris, and **V.D. Nair**. 2005. ASA/CSSA/SSSA International Annual Meeting, Nov. 6-10, 2005, Salt Lake City, UT.
99. §osan, M.S., **V.D. Nair**, and W.G. Harris. 2005. ASA-CSSA-SSSA International Annual Meeting, Nov. 6-10, 2005, Salt Lake City, UT.
100. §Michel, G.A., **V.D. Nair**, P.K.R. Nair, and §S. Allen. 2005. ASA/CSSA/SSSA International Annual Meeting. Nov. 6-10, 2005, Salt Lake City, UT.
101. §Michel, G.A., **V.D. Nair**, P.K.R. Nair, and §S.C. Allen. 2005. 9th North American Agroforestry Conference. (*Abstract on Silvopasture as an approach to reducing nutrient pollution from pasturelands in Florida*).
102. **Nair, V.D.**, W.G. Harris, §L.R. Ellis, and §D.H. Hornsby. 2005. ASA/SSSA/CSSA International Annual Meeting. Nov. 6-10, 2005, Salt Lake City, UT.
103. §Rew, T.J., D.A. Graetz, and **V.D. Nair**. 2005. ASA-CSSA-SSSA International Annual Meeting. Nov. 6-10, 2005, Salt Lake City, UT.
104. §Chrysostome, M., **V.D. Nair**, R.D. Rhue, and W.G. Harris. 2004. ASA/SSSA/CSSA International Annual Meeting, October/November 2004, Seattle, WA.
105. Harris, W.G., **V.D. Nair**, and R.D. Rhue. 2004. ASA/SSSA/CSSA International Annual Meeting, October/November 2004, Seattle, WA.

106. Harris, W.G. and **V.D. Nair**. 2004. Risk of phosphate movement from soils in the Suwannee River Basin. Suwannee River Basin and Estuary Integrated Science Workshop. September 22-24, 2004. Cedar Key, FL.
107. §Josan, M.S., **V.D. Nair**, and W.G. Harris. 2004. ASA/SSSA/CSSA International Annual Meeting, October/November 2004, Seattle, WA.
108. **Nair, V.D.** and W.G. Harris. 2004. ASA/SSSA/CSSA International Annual Meeting, October/November 2004, Seattle, WA. (*Abstract on Soil characteristics affecting phosphorus storage capacity determinations*).
109. ¶Allen, S.C., S. Jose, R.P.K. Nair, **V.D. Nair**, D.A. Graetz, and C. Ramsey. 2003. ASA/SSSA/CSSA Annual Meeting, November 2-6, 2003. Denver, CO. (*Abstract on Nitrogen mineralization in a temperate alley cropping system in the southern United States*).
110. §Chrysostome. M, **V.D. Nair**, R.D. Rhue, W.G. Harris, and D.A. Graetz. 2003. Southern Branch ASA Annual Meeting, Feb. 1-4, 2003. Mobile, AL (*Abstract on Assessment of vertical movement of phosphorus through the soil profiles of manure-impacted sites*).
111. **Nair, V.D.**, W.G. Harris, and D.A. Graetz. 2003. ASA/SSSA/CSSA Annual Meeting, November 2-6, 2003. Denver, CO. (*Abstract on Predicting the safe phosphorus storage capacity of sandy soil profiles*).
112. §Ramnarine, R., W.G. Harris, **V.D. Nair**, and K.M. Portier. 2003. Southern Branch ASA Annual Meeting, Feb. 1-4, 2003. Mobile, AL (*Abstract on Prediction of phosphatic soil distribution in Alachua County, FL*).
113. Rhue, R.D., W.G. Harris§, and **V.D. Nair**. 2003. ASA/SSSA/CSSA Annual Meeting, November 2-6, 2003. Denver, CO (*Abstract on Long-term phosphate sorption/desorption in sandy soil*).
114. §Walker, L.C., D.A. Graetz, and **V.D. Nair**. 2003. Southern Branch ASA Annual Meeting, Feb. 1-4, 2003. Mobile, AL (*Abstract on Vertical mobility and soil dynamics of phosphorus from fertilizer and manure sources in sandy soils*).
115. **Nair, V.D.**, D.A. Graetz, &M.L. Walker, and K.M. Portier. ASA/SSSA/CSSA Annual Meeting, November 10-14, 2002. Indianapolis, IN
116. **Nair, V.D.**, R.D. Rhue, W.G. Harris, and D.A. Graetz. ASA/SSSA/CSSA Annual Meeting, November 10-14, 2002. Indianapolis, IN
117. §Hill, L.R., D.A. Graetz, **V.D. Nair**, and P.J. Bohlen. ASA/SSSA/CSSA Annual Meeting, November 10-14, 2002. Indianapolis, IN
118. §Walker, M.L., **V.D. Nair**, and D.A. Graetz. ASA/SSSA/CSSA Annual Meeting, October 21-25, 2001. Charlotte, NC.
119. **Nair, V.D.**, D.A. Graetz, W.G. Harris, G. Kidder, R.S. Mylavarapu, R.D. Rhue, and C.C. Truman. ASA/SSSA/CSSA Annual Meeting, October 21-25, 2001. Charlotte, NC.

120. **Nair, V.D.**, N.J. Bissett, K.M. Portier, D.A. Graetz, and D.S. Segal. Annual Meeting of the American Society for Surface Mining and Reclamation, Tampa, FL, June 11-15, 2000.
121. N.J. Bissett, R.A. Garren, **V.D. Nair**, K.M. Portier, D.A. Graetz, and D.S. Segal. Annual Meeting of the American Society for Surface Mining and Reclamation Tampa, Florida, June 11-15, 2000.
122. ^PPant, H.K., **V.D. Nair**, K.R. Reddy, and D.A. Graetz. ASA/SSSA Annual Meeting, November 5-9, 2000. Minneapolis,
123. **Nair, V.D.**, and D.A. Graetz. ASA/SSSA Annual Meeting, October 31-November 5, 1999. Salt Lake City, UT.
124. **Nair, V.D.**, D.A. Graetz, K.M. Portier, D.S. Segal, N.J. Bissett, and R.A. Garren. ASA/SSSA Annual Meeting, October 18-23, 1998. Baltimore, MD (*Abstract on Soil conditions and native plant establishment on reclaimed phosphate-mined lands*).
125. **Nair, V.D.**, and D.A. Graetz. 1996. November 3-8, 1996. ASA/SSSA Annual Meeting, Indianapolis, IN
126. **Nair, V.D.**, D. A. Graetz, O.G. Olila, and K.R. Reddy. ASA/SSSA Annual Meeting. October 29-November 3, 1995. St. Louis, MO
127. **Nair, V.D.**, D.A. Graetz, and E. Flaig. ASA/SSSA Annual Meeting November 13-18, 1994. Seattle, WA
128. ^DDooley, D.O., D.A. Graetz, and **V.D. Nair**. ASA/SSSA Annual Meeting November 13-18, 1994. Seattle, WA
129. **Nair, V.D.**, D.A. Graetz, and K.R. Reddy. ASA/SSSA Annual Meeting November 7-12, 1993. Cincinnati, OH
130. [&]Dooley, D.O., **V.D. Nair**, and D.A. Graetz. ASA/SSSA Annual Meeting, November 7-12, 1993. Cincinnati, OH

Presentations at State meetings – invited

1. **Nair, V.D.** Presenter at the 2020 Precision Agriculture BMP In-Service Training, February 20-21, 2020, UF Austin Cary Forest (organized by Lakesh Sharma)
2. **Nair, V.D.** 2015. Soil Phosphorus Saturation Ratio for Risk Assessment in Land-use Systems. 16th Annual Soil and Water Science Research Forum. September 17, 2015.
3. **Nair, V.D.**, and W.G. Harris. 2014. Milk Check-Off Proposal Presentation
4. **Nair, V.D.** 2013. New Approaches for Predicting Phosphorus Release from Wetland Soils. Water, Wetlands, and Watersheds Seminar. Phelps Lab. UF. 09-18-2013.
5. Mylavarapu, R.S., W.G. Harris and **V. Nair**. 2013. Diagnostics for Environmental Assessment of Phosphorus. Technical Session, NIFA SERA-IEG-6 Southern Region Annual Meeting, Baton Rouge, LA., June 16-18.

-No. of attendees: 51, representing 14 southern states in the US; Invited Presentation, 30 min.

Creative Works: PowerPoint Slide set- 29 slides- same as above.

6. **Nair, V.D.** 2011. Soil P Storage Capacity (SPSC): A Simple Cost-Effective Tool for Phosphorus Risk Assessment and Management. Workshop on phosphorus management in the Okeechobee Basin. Okeechobee, Florida. August 31, 2011.
7. **Nair, V.D.** 2011. Phosphorus Release from Soil to Waters Bodies: Assessment and Management. Inaugural Presentation. May 09, 2011.
8. **Nair, V.D.** 2010. Factors and Procedures for Evaluating Phosphorus Loss from the Lake Okeechobee Watershed. Workshop on phosphorus management in the Okeechobee Basin. Okeechobee, Florida. June 02, 2010.
9. **Nair, V.D.** 2009. Factors and Procedures for Evaluating Phosphorus Loss from the Lake Okeechobee Watershed. Workshop on phosphorus management in the Okeechobee Basin. Okeechobee, Florida. June 17, 2009.
10. **Nair V.D.** 2008. Phosphorus storage and release characteristics pertinent to water table management and BMP implementations for Okeechobee Basin soils. Workshop on phosphorus management in the Okeechobee basin. Okeechobee, Florida. June 04, 2008.
11. **Nair V.D.** 2004. Cattle, Soils, and Water Quality: Spodosols of the Lake Okeechobee Basin. St. Johns River Water Management District. Palatka. March 11, 2004.
12. Harris, W.G., **V.D. Nair**, R.D. Rhue, D.A. Graetz, R.S. Mylavarapu, and C.C. Truman. 2004. Florida P-Index: Site-Specific Soil Assessment Approaches. 2004 Nutrient Management and Water Quality In-service Training, February 25-26, 2004. Gainesville, FL.
13. **Nair, V.D.**, W.G. Harris, R.D. Rhue, D.A. Graetz, R.S. Mylavarapu, and C.C. Truman. 2004. Florida P-Index: The Leaching Potential Criterion. 2004 Nutrient Management and Water Quality In-service Training, February 25-26, 2004. Gainesville, FL.
14. **Nair, V.D.**, P.S.C. Allen, and D.A. Graetz. 2004. Fourth Annual Meeting of the Advisory Council for the Center for Subtropical Agroforestry. May 13, 2004. Lake Mize Conference Center, Austin Cary Memorial Forest, FL (Abstract on Environmental Benefits of Agroforestry Systems: Nutrients).
15. **Nair, V.D.** and Graetz, D.A. Third Annual Meeting of the Advisory Council for the Center for Subtropical Agroforestry. May 22, 2003. University of Florida, Milton, FL (Abstract on Potential of agroforestry systems to reduce nutrient transport from farmlands).
16. **Nair, V.D.**, H.G. Adegbedi, and D.A. Graetz. Second Annual Meeting of the Advisory Council for the Center for Subtropical Agroforestry. May 30, 2002. Lake Mize Conference Center, Austin Cary Memorial Forest, Florida. (Abstract on Nitrogen and phosphorus dynamics in agroforestry systems in Florida).
17. Graetz, D.A. and **V.D. Nair**. July 13-16, 1997. Clearwater Beach, Florida. (Abstract and book chapter on Inorganic forms of phosphorus in water and soils. Phosphorus biogeochemistry in Florida ecosystems).

Presentations at State meetings – volunteered

1. [¶]X. Liao, P.W. Inglett, A. Canion, D. Dobberfuhl, **V.D. Nair**. 2015. Assessing the potential for phosphorus contamination of ground water in different land uses of the Silver Springs springshed. Springs Annual Meeting.
2. **Nair, V.D.**, W.G. Harris, D.A. Graetz, R.D. Rhue, M. Chrysostome, and L.R. Ellis 2008. Phosphorus issues and protocol development for risk assessment in Florida watersheds. Sustainable Water Resources Symposium, UF Water Institute, Gainesville, FL.
3. [§]Haile, S., P.K.R. Nair, and **V.D. Nair**. 2006. Soil carbon pools in slash pine-based silvopastoral systems of North Florida. Joint Annual Meeting of the Florida State Horticultural Society and the Soil and Crop Science Society of Florida. June 4-6, 2006. Tampa, FL. Abstract 147.
4. [§]Josan, M.S., **V.D. Nair**, and W.G. Harris. 2006. Manure components affecting phosphorus stability of dairy manure-amended soils. Joint Annual Meeting of the Florida State Horticultural Society and the Soil and Crop Science Society of Florida. June 4-6, 2006. Tampa, FL. Abstract 148.
5. [§]Michel, G.A., **V.D. Nair**, and P.K.R. Nair. 2006. Reducing phosphorus loss from pastureland through silvopasture. Joint Annual Meeting of the Florida State Horticultural Society and the Soil and Crop Science Society of Florida. June 4-6, 2006. Tampa, FL. Abstract 150.
6. [§]Rew, T.J., D.A. Graetz, **V.D. Nair**, and G.A. O'Connor. 2006. Controlling phosphorus loss from a manure-impacted soil with aluminum water treatment residuals. Joint Annual Meeting of the Florida State Horticultural Society and the Soil and Crop Science Society of Florida. June 4-6, 2006. Tampa, FL. Abstract 152.
7. Harris, W.G. and **Nair, V.D.** 2004. Suwannee River Basin and Estuary Integrated Science Workshop. September 22-24 2004, Cedar Key, FL.
8. **Nair, V.D.**, D.A. Graetz, and E.G. Flaig. Phosphorus Biogeochemistry in Florida Ecosystems. July 13-16, 1997. Clearwater Beach, FL

Presentation at “Special meeting of PIs of IFAFS animal manure management related projects” - invited

Harris, W.G., and **V.D. Nair**. 2002. Manure Phosphorus Management for the Suwannee River Basin: A Model for Highly Leachable Soils. IFAFS project briefing meeting. May 14-16, 2002. Kansas City, Kansas (Presented by Harris).

Selected Contracts and Grants (from 2000 in reverse chronological order)

- St Johns River Water Management District. Lab and Field Assessment to Remediate Biosolids from Fields. \$600K (co-PI). 2022-2025.
- St Johns River Water Management District. Transformation and Transport of Biosolids-derived Phosphorus from Fields to Receiving Waterbodies. \$605K (co-PI). 2021-2023.

- Internal funds. Mehlich 3-P recommendations for Florida. \$84,808 (co-PI). 2021-2022.
- FDACS. Evaluating Soil Phosphorus Bioavailability in Florida Soils of Variable Composition. \$106,382 (PI). 2020-2021.
- USDA-AFRI. Quantitative Approach for Recovering Legacy Phosphorus while Minimizing Crop Nutrient Deficiency Risk. \$485K. (PI). 2016-2021.
- Florida Cattle Enhancement Board. Options for phosphorus fertilization and retention in bahiagrass pastures \$185K (co-PI). 2017-2018.
- FDACS. Online Training Modules on Soil Phosphorus Control Strategies in Florida. \$30K (PI). 2015-2016.
- Florida Cattlemen's Association. Biosolids options for phosphorus fertilization and its effect on P retention in pasture soils. \$54K (co-PI). 2015-2016.
- USDA-NRCS. Identify Methods to Refine Phosphorus Indices and Synthesize and Extend Lessons and Outcomes from Three Regional Indexing Efforts. 2012-2016. Regional PI.
- USDA-NRCS. Identify Methods to Refine Phosphorus Indices and Synthesize and Extend Lessons and Outcomes from Three Regional Indexing Efforts. 2012-2015. FL PI.
- Kissimmee River Sediment and Floodplain Soil Nutrient Assessment: Sample Collection, Data Analysis, and Reporting. SFWMD. 146K (co-PI). 2011-2012.
- Dissemination of Information Related to "Protocol Development to Evaluate the Effect of Water Table Management on Phosphorus Release to Drainage Water." FDACS. 35K (PI). 2010-2011.
- Evaluation of Cow-Calf Best management Practices. FDACS. \$140K (co-PI). 2009-2011.
- Wetland Soils Nutrient Criteria Development and Evaluation of "Safe" Soil Phosphorus Storage Capacity. FDACS. \$138K (PI). 2009-2010.
- Nutrient Budget Analysis for the Lake Okeechobee Watershed. HDR Engineering/ South Florida Water Management District (SFWMD). \$83K (co-PI). 2009-2010.
- Protocol Development to Evaluate the Effect of Water Table Management on Phosphorus Release to Drainage Water. FDACS. \$491K (PI). 2006-2010.
- Site-specific Determination of Soil Capacity to Assimilate or Release P Applied as Manure, Fertilizer, Compost, or Biosolids. FDACS. \$190K (co-PI). 2006-2007.
- Soil amendments to increase phosphorus retention and reduce edge-of-field losses. Florida Department of Environmental Protection (FDEP). \$268K (co-PI). 2003-2006.
- Manure-derived components and their influence on long-term stability of P in soils. USDA-NRI. \$287K (co-PI). 2002-2005
- Manure P management for the Suwannee River Basin: a model for highly leachable soils. USDA-IFAFS. \$671K (co-PI). 2000-2004.
- Environmental impacts of agroforestry systems. USDA-IFAFS subproject. \$178K (PI). 2001-2004. Total Project = \$ 4 million (co-PI).

- Degree of Phosphorus Saturation (DPS) and Leaching Potential in Soils of the Middle Suwannee River Area under Varying P Application Rates. FDEP/FDACS. \$146K (co-PI). 2000-2002.

UNIVERSITY GOVERNANCE AND SERVICE

Faculty Advisory Committee: 2016

Chair, Newsletter Editorial Committee, Soil and Water Science Dept. – 2001-2019.

Member, Search and Screen Committee for the position of Research Assistant Scientist (Environmental Hydrology) - Position #651150 – 2004

Member, Research Briefs Committee, Soil and Water Science Dept. – 2001-2006

Member, Safety Committee, Soil and Water Science Dept – 2000-2004

Member, Chair's Advisory Committee, Soil and Water Science Dept – 2000-2002

Member of Awards/Scholarship Committee, Soil and Water Science Dept. – 1997-1999

Member, Search and Screen Committee for the position of Research Assistant Professor (Wetland Biogeochemistry) - Position Announcement #977540 – 1999

Member, Search and Screen Committee for the position of Assistant Professor (Soil and Nutrient Management) - Position #916230 – 1998

Member, Search and Screen Committee for the position of Assistant in Soil and Water Science – Position #973130 – 1998

EDITOR OF A SCHOLARLY JOURNAL, SERVICE ON AN EDITORIAL BOARD OR REVIEWER FOR A SCHOLARLY JOURNAL

a. Editor:

- Associate Editor, *Carbon Footprints*, an international open access scientific journal, <https://oaepublish.com/>
- Associate Editor, for *Agroecology and Land Use Systems*, an open-access academic publisher and research network working in collaboration with the Nature Publishing Group, from 2013 (continuing)
<http://loop.frontiersin.org/people/119860/overview>
 - *Frontiers in Sustainable Food Systems*
- Associate Editor, *Journal of Environmental Quality* from 1999–2001 and 2002–2004
- Associate Editor for the *special collection of papers in “Agroforestry and Environmental Quality”*, *Journal of Environmental Quality*, May–June 2011

b. Editorial Advisory Boards:

- Member of the Editorial Board, *Carbon Footprints* (2022-2024)
- Member of the Editorial Board, *Agroecology and Land Use Systems* from 2013
- Member of the Editorial Board, *Journal of Environmental Quality* from 1999–2001 and 2002–2004

c. Reviewer for Scholarly Journals other than above

The following are some reviews during the past 10 years; numbers indicated are minimum numbers.

- *Advances in Environmental Research* (1)
- *Agriculture, Ecosystems and Environment* (3)
- *Agriculture Water Management* (1)
- *Agroforestry Systems* (3)
- *Applied Soil Ecology* (1)
- *Applied Geochemistry* (1)
- *CATENA* (1)
- *Chemical Engineering Journal* (2)
- *Ecological Engineering* (3)
- *Geoderma* (1)
- *Journal of Environmental Quality* (5)
- *Journal of Environmental Management* (1)
- *Journal of Environmental Sciences (China)* (1)
- *Journal of Plant Nutrition and Soil Science* (2)
- *New Zealand Journal of Agricultural Research* (2)
- *Scientia Agricola* (2)
- *Soil and Tillage Research* (1)
- *Soil Science* (2)
- *Soil Science Society of America* (2)
- *Wetlands*, (1).

d. Book Manuscripts Reviewed

- Book chapter on *Phosphorus Management and Sustainability* for CAB Intl. (1)
- *New Vistas in Agroforestry: A Compendium for the 1st World Congress of Agroforestry*, Kluwer, Dordrecht, The Netherlands, 2004 (5)
- *Silvopastoralism and Sustainable Management International Congress* held 18 April to 24 April 2004, in Lugo, Spain (4)
- *Special Issue on Silvopasture* (1).

Proposal Reviewer: Development of indicators predicting phosphorus storage for complete risk assessment and safe retention capacity for management of Ontario soils by Zhang, T.Q., and Tan, C. Submission no ND2012-1720. New Directions Research Program 2012/2013.

International Activities

Significant International Activities since 2005 (reverse chronological order)

- Delivered an invited presentation at the International Forest Garden/ Food Forest Symposium, Biochar as a Nutrient Source in Agroforestry Systems, Dartington, UK, May 31 – June 4, 2021 (virtual)
- Delivered keynote lecture at the workshop on Agroforestry for climate change mitigation, biodiversity conservation and resilience in agroecological systems: current trends and

future strategies. Indian Council of Agricultural Research-Kerala Agricultural University Winter School on Agroforestry. December 03 to 23, 2019, Thrissur, Kerala, India.

- On the Advisory Board of the Agroforestry Innovation Network (AFINET) European Project (science-based guidelines for innovation/ tools for farmers), 2017 – 2019. First meeting was on February 16–17, 2017 in Lugo, Spain (Supported by the European Union, participants in AFINET include members from 13 participating organizations within Europe including the UK.)
 - Second Meeting of AFINET, Newbury, UK June 20–24, 2017
 - Third Meeting of AFINET, Lisbon, Portugal December 05–08, 2017.
- Delivered keynote/lead lecture at the ICAR-Central Plantation Crops Research Institute (CPCRI) Third International Symposium on Coconut Research and Development (ISOCRAD) in Kasaragod, India. Also co-chaired a technical session on Enhancing Input Use Efficiency at ISOCRAD 3, December 10-12, 2016.
- Conducted Workshop on Scientific Writing and Effective Communication: January 5 – 6, 2015 at Goa University, Goa, India.
- Scientific Writing and Communication in Agriculture and Natural Resources Short Course. ICRIAT, Hyderabad, India: Dec 8 – 13, 2014.
- Scientific Writing and Communication in Agriculture and Natural Resources Short Course. Kyoto University, Japan. July 28 – Aug 7, 2014. Co-taught with PK Nair, SFRC.
- Phosphorus in Agricultural Lands: Problems and Sustainable Solutions. Seminar presented at Kyoto University, Japan. Aug 06, 2014.
- Co-organized a session on *Agroforestry, Water Quality and Nutrient Export* under the theme *Applying Science to the Future of Agroforestry: Policy Innovation and Global Issues* with Dr. M Rosa Mosquera Losada, at the 3rd World Agroforestry Congress, 10 – 14 Feb, 2014 New Delhi, India.
- Hosted a Brazilian PhD student, Rodrigo Martins Alves de Mendonca (Sept 2012 to March 2013; Sponsor: Brazilian institutions/agencies)
- Brazil, 2012: Organized symposium/workshop in Brazil:

At the symposium at the Federal University of Uberlandia:

- Livestock and water quality issues in agriculture and agroforestry systems
- Phosphorus loss from soils: Conventional and recent techniques for assessment and management
- Field trip to various farming systems including a dairy farm heavily impacted with manure P

At the workshop in Belo Horizonte:

- Question/Answer session on P storage and release from Brazilian soils
- Field trip to various farming systems including the research site of Rodrigo Martins Alves de Mendonca who is currently with me at the SWSD

- Graduate student Julia Showalter is currently in India (January 03, 2011 to February 01, 2011) for initial assessment of sites suitable for her PhD research
- Hosted Regina Lana Quintero, Professor, Federal University of Uberlandia – Brazil, September 2010 to October 2011.
- Kenya, 2009: 2nd World Congress of Agroforestry. Following my involvement with the 1st World Congress of Agroforestry, 2004, I organized a session “Agroforestry, Water Quality and Environmental Amelioration” at the 2nd World Congress in Nairobi, Kenya. Currently editing papers from the conference as an Assoc. Editor for a special collection of papers in the J. of Environmental Quality.
- India, 2008: Invited resource person for a UF – KAU (Kerala Agricultural University) Research Writing Workshop, 20 to 25 October 2008. Details are currently being worked out by the local host, Dr. B.M. Kumar. Participation in this workshop would enable me to share my experiences in manuscript writing as well as the review process to the participants of the workshop. Related activities of this collaboration are:
 - Student research in Kerala, India in 2007. Dr. Kumar is a committee member of the student. Work conducted by the student on carbon sequestration in homegardens in Kerala, India was presented at our society meetings under my active involvement, Abstracts: Saha et al. 2007) received an honorable mention at the 2007 poster competition.
 - Manuscript on carbon sequestration (Saha et al., 2009a, b)
- Spain, 2008: Delivered an invited inaugural lecture “Environmental Benefits of Agroforestry in Subtropical and Temperate Regions” to the ERASMUS (European Community Action Scheme for the Mobility of University Students Program) course and interacted with participants from 10 European countries; Santiago de Compostella, Spain; March 31 to April 06, 2008.
- China, 2007: Environmental Management and Protection Training Workshop, German—Chinese Cooperation (China). I was invited to participate in this workshop by German collaborators (see next bullet).
- Germany, 2007: Visited the University of Göttingen to discuss prospects for collaborative research. I shared my current research activities with German scientists. I was invited to participate in a workshop in China, which was based on German—Chinese collaboration.
- India, 2006: Examiner of PhD thesis No. 1543 (Agricultural Chemistry & Soil Science) of the University of Calcutta, Kolkatta, India entitled Polyphosphate Fertilizers of Iron-Manganese and Molybdenum. My MS student (graduated) and my current PhD student have associations with the major professor of this thesis.
- Brazil, 2006: Participated in the VI Brazilian Congress of Agroforestry Systems, University of RJ – Campos dos Goytacazes, Rio De Janeiro, Brazil, and interacted with

Dr. Emanuela Gama-Rodrigues, which led to my co-hosting her as a visiting scientist at UF for one year from Dec 2007. We presented a paper at the ASA/SSSA/CSSA Annual Meetings (see section 15, Abstracts: Gama-Rodrigues et al., 2008). My presentation there was one of three selected to be developed as a full paper that was published in *Scientia Agricola* (Peer-reviewed journal articles, Nair et al., 2007).

- Brazil, 2006: Collaboration has been initiated with Luís Reynaldo Ferracciú Alleoni at the Dep.de Ciência do Solo, in Piracicaba, Sao Paulo – Brazil. Soil samples have been sent from our lab here to Brazil for testing of compatibility of soil testing methodologies adopted in US and Brazil. I will shortly be receiving additional samples from Brazil.
- Spain, 2005 to date: Visited and traveled extensively with local hosts (at the University of Santiago de Compostella) the northern and northwestern parts of the country for two weeks in October 2005 and provided suggestions on layout of collaborative field experiments. My involvement with the University has led to the following:
 - Collaborative work with researchers at the University in Lugo, Spain. The SPSC concept which I developed at the SWSD (Section 12: Research Narrative) is now being applied to the sandy soils of Spain. We have a joint presentation at the ASA/SSSA/CSSA annual meetings for which an abstract has already been submitted (Section 15: Abstracts, Mosquera-Losada et al. 2008).
 - A US student with SFRC is working with Dr. Mosquera-Losada on a collaborative project which has led to another presentation at our society meetings (Abstracts: Howlett et al., 2008).

Note: In addition to the above, research activities on carbon sequestration on tree-based agricultural systems (collaborative projects with SFRC) is spread around six locations and as many agroforestry systems in six countries (Costa Rica, coffee growing); Florida, USA -- silvopasture; Galicia, Spain -- dehesa; Kerala, India – homegardens & coffee/tea plantations; Minas Gerais, Brazil -- silvopasture; Bahia, Brazil – shaded cacao and Ségoe, Mali -- parklands).

International Conferences Attended

- International Forest Garden/ Food Forest Symposium, Dartington, UK, May 31 – June 4, 2021 (virtual)
- Agroforestry 2017: improving productivity for farmers and foresters. Vincent Conference Centre, Cranfield University, Cranfield UK, June 22, 2017
- 3rd International Symposium on Coconut Research and Development. ICAR – Central Plantation Crops Research Institute Kasaragod, Kerala, India December 10-12, 2016.
- 4th International Agronomy Congress November 22-26, 2016, New Delhi, India
- ECHO International Agriculture Conference November 15-18, 2016, Fort Myers, FL, USA
- 3rd European Agroforestry Conference May 23-25, 2016, Montpellier, France.
- 2nd General Assembly of AGFORWARD, Chania, Greece. June 25, 2015.
- VI Brazilian Congress of Agroforestry Systems, Campos dos Goytacazes, Brazil.

October 2006 (invited)

- 18th World Congress of Soil Science in Philadelphia, Pennsylvania, July 2006
- International Union of Forest Research Organizations (XXII IUFRO World Congress), Brisbane, Queensland, Australia. August 2005 (invited).
- Joint Annual General Meeting and Convention of the Canadian Institute of Forestry and the Society of American Foresters, Edmonton, Canada. October, 2004.
- 1st World Congress of Agroforestry, Orlando, Florida., June/July 2004 (member of the Organizing Committee)
- Silvopastoralism and Sustainable Management International Congress, Lugo, Spain. April 2004 (member of the Scientific Committee)
- 17th World Soil Science Congress in Bangkok, Thailand. August 2002. A paper resulting from this presentation (and discussions with other scientists) was published in the Journal of Environmental Quality in 2004 (session 15f.1).
- International Union of Forest Research Organizations (XXI IUFRO World Congress), Kuala Lumpur, Malaysia. August 2000.