

# Vinayak S. Shedekar, Ph.D.

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## RESEARCH INTERESTS

Agricultural water management including irrigation and drainage; Design, monitoring and evaluating practices for agroecosystem sustainability and environmental quality; Soil health and climate-smart agriculture; Field- and watershed scale monitoring and modeling of hydrology, hydraulics, water quality, soil-plant-water interactions, greenhouse gases, carbon, and nutrient cycling; GIS-GPS applications and developing farmer-friendly decision tools.

## EDUCATION

- 2016 **Ph.D. in Food Agricultural and Biological Engineering (FABE),**  
The Ohio State University, Columbus, Ohio, USA  
*Dissertation title:* Developing an integrated, multi-scale modeling system for assessing conservation benefits in subsurface drained watersheds (Advisor: Dr. Larry C. Brown)
- 2005 **Master of Science in Water Science & Technology (WST),**  
Indian Agricultural Research Institute (IARI), New Delhi, India  
*Thesis title:* Water and nutrient dynamics in soil-less culture under automated fertigation (Advisor: Dr. A. K. Singh)
- 2003 **Bachelor of Technology in Agricultural Engineering,**  
Mahatma Phule Krishi (Agricultural) Vidyapeeth (University), (MPKV), Rahuri, India.  
*Thesis title:* Design and Development of Power Operated Paddy Thresher-cum-Winnower (Advisor: Amit Jaiswal)

## PROFESSIONAL EXPERIENCE

- Jan. 2023 – Present **Assistant Professor (Agricultural Water Management),** Dept. Food, Agricultural and Biological Engineering (FABE), The Ohio State University, Columbus, OH  
**Director,** Overholt Drainage Education and Research Program, FABE, OSU  
**Director,** International Program for Water Management in Agriculture, FABE, OSU
- Feb. 2021 – Dec. 2022 **Research Scientist,** FABE, OSU  
**Coordinator,** Overholt Drainage Education and Research Program, FABE, OSU  
**Coordinator,** International Program for Water Management in Agriculture, FABE, OSU
- June. 2018 – Jan. 2021 **Post-Doctoral Researcher,** FABE, OSU
- July 2016 – Dec. 2020 **Co-Leader,** Healthy Soil Healthy Environment Extension Signature Program, The Ohio State University, Columbus, OH ([www.soilhealth.osu.edu](http://www.soilhealth.osu.edu))
- Dec. 2015 – June 2018 **Research Associate II/B,** Soil Water, and Bioenergy program, OSU South Centers, The Ohio State University, Piketon OH
- June 2010 – Dec. 2015 **Graduate Research Associate,** Dept. Food, Agricultural and Biological Engineering (FABE), The Ohio State University, Columbus, OH
- Jan. 2007- May 2010 **Graduate Teaching Associate,** Dept. Food, Agricultural and Biological Engineering (FABE), The Ohio State University, Columbus, OH
- Aug. 2003 – Dec. 2005 **Junior Research Fellow,** Water Technology Center, Indian Agricultural Research Institute, New Delhi, India

**GRANTS AND EXTRAMURAL FUNDING (22 Funded ~\$6.5M)****Active Grants:**

1. Shedekar, V. (**Lead PI**), Winston R., Haab, T., Ghane, E. (2022-2024). A decision support tool to optimize engineered drain design for rural on-site wastewater and urban stormwater treatment systems. Ohio Department of Higher Education Harmful Algal Bloom Research Initiative (ODHE-HABRI). **\$265,711**
2. Witter, J., Shedekar, V. (Co-PI), Winston, R., Basta, N., Shah, A., D'Ambrosio, J., Mecklenburg, D. (2022-2024). Do conservation channel designs deliver an effective last-ditch defense against downstream phosphorus impairment? Ohio Dept of Higher Education Harmful Algal Bloom Research Initiative (ODHE-HABRI). **\$298,854**
3. Hood, J., , Lenhart, J., Chaffin, J., Brooker, M., Shedekar, V. (co-PI) (2022-2024). Evaluating the effect of colloidal phosphorus on phosphorus exports, bioavailability, and transformations from the edge-of-field to Lake Erie. (ODHE-HABRI). **\$899,998**
4. Lyon, S. and Shedekar V. (Co-PI). (2022-2027). Assessing efficacy of automated drainage water management as an environmental infrastructure investment on Ohio's farms. Ohio Water Development Authority, **\$199,681**
5. Shedekar, V. (**Lead PI**), Kalcic, M., Brooker, M., Mehan, S., Penn, C., Camberto, J., King, K., and Muenich, R. (2022-2025). Advancing Knowledge and Prediction of Phosphorus Dynamics In Tile Drained Landscapes. USDA-NIFA-AFRI, **\$750,000**
6. Shedekar, V. (**Lead PI**), Murumkar, A., Kalcic, M. (2021-2025). Contribution of legacy phosphorus to watershed outcomes, phase 2 - SWAT modeling. USDA-ARS, **\$110,000**
7. Shedekar, V. (**Lead PI**), Kalcic, M. (2020-2024). Quantifying the role of legacy phosphorus in water quality in the western Lake Erie basin watershed. USDA-ARS, **\$191,025**
8. Shedekar, V. (**Lead PI**), Kalcic, M. (2020-2024). Quantifying the water quality benefits of integrated conservation practices. USDA-ARS, **\$225,254**
9. Shedekar, V. (**Lead-PI**), Kalcic, M., Martin J., Islam. R., and LaBarge, G. (2020-2023). Soil health and water quality nexus in sustainable agroecosystems. NCR-SARE, **\$250,000**
10. Shedekar, V. (**Lead-PI**), Kalcic, M., Osterholz, W., and King, K. (2020-2023). Healthy Soils, Healthy Waters: Will Soil Health Improvements Mitigate Nutrient Loading to the Great Lakes? USDA-NIFA-AFRI, **\$499,926**
11. Thomson, A., Arriaga, F., Kalcic, M., Shedekar, V. (Co-PI), Mehan, S., and Osterholz, W., and King, K. (2022-2025). A multi-scale and regional approach to cold season hydrology and nutrient dynamics in agroecosystems for water quality protection. USDA-NIFA-AFRI, **\$750,000** (Project led by Univ. of Wisconsin, subcontract to OSU **\$233,597**)
12. Martin, J., Kacic, M., Murumkar, A., Shedekar, V. (Co-PI). (2021-2023). Evaluating field and watershed-scale water quality benefits of H2Ohio conservation practices in the Maumee River Watershed. Ohio Department of Higher Education Harmful Algal Bloom Research Initiative (ODHE-HABRI). **\$299,928**
13. Martin, J., Kacic, M., Murumkar, A., Shedekar, V. (Co-PI), Mehan S. (2021-2023). OLEC award for evaluating water quality benefits of H2Ohio conservation practices in the Maumee River Watershed. Ohio Lake Erie Commission (OLEC), Ohio. **\$173,414**

**Completed Grants:**

14. Kalcic, M., King, K.W., and Shedekar, V.S. (Co-PI). (2019-2020). Soil Health and Water Quality – Does a system with 40 years of no-till and cover crops reduce nutrient losses to the environment? Conservation Tillage Conference (CTC) Research Mini Grant, **\$1500**
15. Sundermeier, A. P., Shedekar, V.S. (Co-PI), Islam, K.R. (2018-2020). Making sense of Soil Health Reports – A partnership to develop recommendations for soil health testing, interpretation. NCR SARE Partnership Grant **\$29,980**
16. Islam, K. R., Shedekar, V.S. (Co-PI), Didenko N., et al. (2018-2019). Impact of sustainable agricultural management practices on soil quality and crop productivity. CRDF US-Ukraine initiative, **\$107,000**
17. Sundermeier A.P., and Shedekar, V.S. (Co-PI). (2017-2018). Soil Health Survey to Develop Recommendations Based on In-Field Analysis. Conservation Tillage Conference (CTC) Research Mini Grant, **\$3000**
18. Sundermeier A., Shedekar, V. (Co-lead), Culman S., Islam, K.R., et al. (2016-2019). Healthy Soil – Healthy Environment. Ohio State University Extension Signature Program, **\$20,000**.
19. Brown, L.C., Shedekar, V.S. (Project coordinator), et al., (2013-2015). Modeling water-table elevations for engineered drain applications with on-Site wastewater treatment systems in Ohio. The Ohio Department of Health, Columbus OH, **\$36,960**.
20. Islam, K.R. and Shedekar, V.S. (2014 to 2015). Developing a farmer friendly soil organic matter calculator for sustainable production of soybeans with enhanced ecosystem services. Ohio Soybean Council, **\$ 25,000**.

21. Brown, L.C., and Shedekar, V.S. (Co-I). (2013-2014). Evaluating effects of drainage Intensity on dynamics of Carbon, Nitrogen, and water in subsurface drained fields under various tillage and water management scenarios. Conservation Tillage Conference (CTC) Research Mini Grant, **\$2000**.
22. Islam, K.R., Reeder R., Shedekar, V.S., and Grigar, J.R. (2011-2012). Developing farmer friendly tools for predicting soil organic matter in a sustainable corn-based bioenergy feedstock system. Corn Marketing Program of Michigan, **\$30,000**.

#### Grant proposals in preparation/awaiting decisions:

23. Lyon, S., Shedekar, V. (Co-PI). (2023-2025). Impacts of automated drainage water management on water cycling. Unsolicited research proposal submission to the Water Research Foundation. **\$227,649** (in review)

#### INTELLECTUAL PROPERTY RIGHTS ACTIVITY

1. Islam, K.R., Reeder, R., **Shedekar, V.S.**, Grigar, J. The OSU Soil Organic Matter Calculator. Invention Disclosure accepted by the Ohio State University Technology Commercialization Office (Tech ID: 2018-218)
2. Islam, K.R., Reeder, R., **Shedekar, V.S.**, Grigar, J. Compositions and Methods for the Assessment of Soil Quality. Accepted by the Ohio State University Technology Commercialization Office (Provisional Patent Application filed Dec. 2018), and commercialized by Demeter, Inc. ([www.soill.com](http://www.soill.com))

#### REFEREED PUBLICATIONS (251 citations, h-index: 7, – Google Scholar)

1. Osterholz, W., **Shedekar, V.**, Simpson, Z. and King, K., 2022. Resolving new and old phosphorus source contributions to subsurface tile drainage with weighted regressions on discharge and season (WRDS). *Journal of Environmental Quality*. [doi.org/10.1002/jeq2.20426](https://doi.org/10.1002/jeq2.20426)
2. Youssef, M.A., Strock, J., Bagheri, E., Reinhart, B.D., Abendroth, L.J., Chighladze, G., Ghane, E., **Shedekar, V.**, Fausey, N.R., Frankenberger, J.R. and Helmers, M.J., 2023. Impact of controlled drainage on corn yield under varying precipitation patterns: A synthesis of studies across the US Midwest and Southeast. *Agricultural Water Management*, 275, p.107993. [doi.org/10.1016/j.agwat.2022.107993](https://doi.org/10.1016/j.agwat.2022.107993)
3. Gonzalez, J. Dick, W., Islam, K.R., Shedekar, V., Watts, W., Fausey, N., VanToai, T., Flanagan, D., Batte, M., Reeder, R. Kost, D., **Shedekar, V.** 2022. Flue-gas desulfurization gypsum and cereal rye (*Secale cereale*) cover crop impact soil chemistry: An emphasis on trace metals and plant nutrients. *Soil Science Society of America Journal* (Accepted for publication Feb. 2022, [doi.org/10.1002/saj2.20394](https://doi.org/10.1002/saj2.20394))
4. Wessel, B., Bolster, C., King, K., **Shedekar, V.** (2022) Rainfall-runoff models compared for tile-drained agricultural fields in the Western Lake Erie Basin, Ohio. *Journal of hydrology*. 610. <https://doi.org/10.1016/j.jhydrol.2022.127959>
5. Evenson, G., Osterholz, W., **Shedekar, V.**, King, K., Mehan, S., and Kalcic, M. 2022. Representing soil health practice effects on soil properties and nutrient loss in a watershed-scale hydrologic model. *Journal of Environmental Quality* (Accepted for publication, Jan. 2022, [doi.org/10.1002/jeq2.20338](https://doi.org/10.1002/jeq2.20338))
6. King, K., Hanrahan, B., Stinner, J. and **Shedekar, V.** 2021. Field Scale Discharge and Water Quality Response to Drainage Water Management. *Agricultural Water Management*, 264.
7. Hanrahan, B., King, K., Duncan, E., and **Shedekar, V.** 2021 Cover crops differentially influenced nitrogen and phosphorus loss in tile drainage and surface runoff from agricultural fields in Ohio, USA. *Journal of Environmental Management*, 293.
8. **Shedekar, V.S.**, King, K., Fausey, N.R., Islam, K.R., Soboyejo, A.B.O., Kalcic, M.M., Brown, L.C. 2021. Exploring the effectiveness of drainage water management on water budgets and nitrate loss using three evaluation approaches. *Agricultural Water Management*, 243.
9. **Shedekar, V.S.**, Penn C., Pease, L., King, K.W., Kalcic, M., and Livingston, S. 2020 Performance of a ditch-style phosphorus removal structure for treating agricultural drainage water with aluminum-treated steel slag. *Water*, 12(8), p.2149.
10. Raut, Y., **Shedekar, V.S.**, K.R. Islam, J.M. Gonzalez, D.B. Watts, W.A. Dick, D.C. Flanagan, N.R. Fausey, M.T. Batte, R.C. Reeder, and T.T. VanToai. 2020. Soybean yield response to gypsum soil amendment, cover crop and rotation. *Agricultural & Environmental Letters*, 5(1), p. e20020.
11. Penn, C., Livingston, S., **Shedekar, V.S.**, King, K. and Williams, M., 2020. Performance of Field-Scale Phosphorus Removal Structures Utilizing Steel Slag for Treatment of Surface and Subsurface Drainage. *Water*, 12(2), p.443.
12. Sundermeier, A., **Shedekar, V.S.** 2019. Soil Biological Response to Best Management Practices. *Journal of the NACAA*. 12(2).

13. **Shedeekar V. S.**, K. W. King, N. R. Fausey, ABO Soboyejo, R. D. Harmel, L. C. Brown. 2016. Assessment of Measurement Errors and Dynamic Calibration Methods for Three Different Tipping Bucket Rain gauges. *Atmospheric Research*. Vol. 178: 445-458.
14. Baffaut, S. Dabney, **V. Shedeekar**, M. Smolen, M.L. Chu, J. Guzman, M. Jha, M. Youssef, P. Gowda, J. Arnold, and J. Bonta. 2015. Hydrologic and water quality modeling: spatial and temporal considerations. *Transactions of the ASABE*. 58(6): 1661-1680.
15. Gunn, K. M., Fausey, N. R., Shang, Y., **Shedeekar, V. S.**, Ghane, E., Wahl, M. D., Brown, L. C. 2015. Subsurface drainage volume reduction with drainage water management: Case studies in Ohio, USA. *Agricultural Water Management*. Vol. 149.
16. Ghane E., Fausey, N.R., **Shedeekar, V.S.**, Piepho, H.P., Shang, Y., and Brown, L.C. 2012. Crop yield evaluation under drainage water management in Ohio. *Journal of Soil and Water Conservation*. 67(6): 465-473.

#### Articles under review / in press

17. Askar, M., Ghane, E., Youssef, M., **Shedeekar, V.**, King, K., Bhattarai, R. 2022. Predicting subsurface drainage discharge with DRAINMOD using SURRGO soil properties. *Agricultural Water Management* (Under review).
18. Osterholz, W., **Shedeekar, V.**, King, K., Simpson, Z. 2022. Source contributions to subsurface drain dissolved phosphorus losses in Ohio. *Journal of Environmental Quality* (Under revision after first round of review)
19. Schwab E., **Shedeekar, V.**, Clevenger, B., Cochran, R. 2022. Assessing and Improving Agricultural Drainage Education: Lessons Learned from the 2022 Overholt Drainage School. *Journal of NACAA*. (Under Review)

#### Book chapters

20. **Shedeekar, V.S.**, Fausey, N.R., King, K.W., and Brown L.C. 2020. Agricultural drainage – the past, present, and future. In *Soil and Water Conservation: A Celebration of 75 Years*. (Invited chapter for Soil and Water Conservation Society's 75<sup>th</sup> anniversary collection)
21. **Shedeekar, V.S.**, and L.C. Brown. 2017. GIS and GPS applications for Planning, Design and Management of Drainage systems. In: J. Delgado, G. Sassenrath, T. Mueller, editors, Precision Conservation: Geospatial Techniques for Agricultural and Natural Resources Conservation, *Agron. Monogr. 59. ASA and CSSA, Madison, WI*. doi:10.2134/agronmonogr59.2013.0026. (3 citations)

#### Manuscripts in preparation

22. **Shedeekar, V.S.**, Raut, Y., Watts, D., Dick, W.A., Flanagan, D., Gonzalez, J., Reeder, R., VanToai, T., Islam, K.R., and Fausey, N.R. Impact of gypsum application and cover crops on soil physical characteristics. (Draft undergoing internal review) Expected submission in May 2022 to *Soil Science Society of America Journal*.
23. **Shedeekar, V.S.**, King, K., Hanrahan, B., Stinner, J., Henderson, S., Kalcic, M. and Duncan, E. The effect of cover crops on seasonal water budgets. (Draft undergoing internal review) Expected submission in June 2022 to *Agricultural Water Management*.
24. Murumkar A., Kalcic M., Stow C., **Shedeekar V.S.**, Goering D., King K., Thorstensen A., Martin, J. Performance evaluation of a field-scale SWAT model using multi-site edge-of-field data in the Western Lake Erie Basin, USA. *Journal of Hydrology*. (Draft undergoing internal review).
25. Murumkar A., Martin, J., Kalcic M., Goering D., Thorstensen A., **Shedeekar V.S.**, Boles C., Redder T., Confesor R. Analysis of impact of timing of fertilizer and manure applications on nutrient runoff during high risk of rainfall events in the Great Lakes Region. *Science of The Total Environment*. (Draft undergoing internal review).
26. Murumkar A., Martin, J., Kalcic M., Goering D., Shedeekar V., Murumkar A., Martin, J., Kalcic M., Stow C., Goering D., King K., **Shedeekar V.S.**, Thorstensen A. Evaluation of Hydrologic models at field to watershed scales for decision support tool. *Water Resources Research*. (Draft undergoing internal review).

#### EXTENSION PUBLICATIONS

##### Published Extension publications/ Popular press articles

1. Frankenberger, J., Kladvko, E., Bowling, L., **Shedeekar, V.**, Youssef, M. et al. 2021. Questions and answers about controlled drainage for the Midwest. Extension Factsheet, Purdue University Extension (*In Press*)
2. King, K., Fausey, N., Williams, M., **Shedeekar, V.** 2022. Transforming drainage project site summary – OH-Delaware. Controlled Drainage. ([Link to publication](#))
3. Schwab, E., **Shedeekar, V.** 2022. Conservation drainage and advanced technologies to be the focus of upcoming Drainage School. Ohio's country Journal – February 2022 issue. ([ocj.com/2022/01/page/3/](https://ocj.com/2022/01/page/3/))

4. **Shedeekar, V.**, Chochran, R., Fischer, B. 2021. Controlled drainage for cover crops and winter wheat. Ohio's country Journal – January 2022 issue. ([ocj.com/2022/01/page/3/](http://ocj.com/2022/01/page/3/))
5. **Shedeekar, V.** 2021. Designing drainage systems for the future. Ohio's country Journal – June 2021 issue ([ocj.com/2021/06/page/8/](http://ocj.com/2021/06/page/8/))
6. Reese, M. 2021. Contributor to Digging parties and drainage. Ohio's country Journal – June 2021 issue ([ocj.com/2021/06/page/8/](http://ocj.com/2021/06/page/8/))
7. Sundermeier, A., **Shedeekar, V.S.** 2019. Soil Biological Response to Best Management Practices. 2019 eFields Report. Ohio State Digital Ag Program ([www.digitalag.osu.edu/efields](http://www.digitalag.osu.edu/efields))
8. Sundermeier A.P., and **Shedeekar, V.S.** 2019. Soil food web. C.O.R.N. Newsletter (2019-11), 4/30/2019 ([www.agcrops.osu.edu/newsletter/corn-newsletter](http://www.agcrops.osu.edu/newsletter/corn-newsletter))
9. Sundermeier A.P., and **Shedeekar, V.S.** 2019. The PLFA Soil Health Test. C.O.R.N. Newsletter (2019-09), 4/16/2019 ([www.agcrops.osu.edu](http://www.agcrops.osu.edu))
10. Sundermeier A.P., and **Shedeekar, V.S.** 2019. Solvita® CO<sub>2</sub> Respiration Soil Health Test. C.O.R.N. Newsletter (2019-08), 4/9/2019 ([www.agcrops.osu.edu](http://www.agcrops.osu.edu))
11. Contributor to No-Till news, Ohio Ag Net – January 2019 issue ([www.ocj.com/2019/01/no-till-news/](http://www.ocj.com/2019/01/no-till-news/))
12. Sundermeier A.P., and **Shedeekar, V.S.** 2018. soil aggregate stability – a soil health physical indicator. C.O.R.N. Newsletter (2018-02), 2/21/2018 ([www.agcrops.osu.edu](http://www.agcrops.osu.edu))
13. **Shedeekar, V.S.** 2014. Farmer-friendly tool for predicting soil organic matter. Ohio's Country Journal – February 2014 issue ([www.ocj.com](http://www.ocj.com))

#### Extension publications/ Popular press articles in preparation

14. *In preparation:* **Shedeekar, V.**, Brown, L., McDermott T., Bergesford, B. 2022. Irrigation in Ohio: Nine Major Factors (Formerly OSU Extension Factsheet AEX-370-91 by Brown, L.)
15. *In preparation:* Hall, P., **Shedeekar, V.**, Brown, L. 2022. The Ohio drainage laws petition procedure (Formerly OSU Extension Bulletin 482 by Nolte, B.)
16. *In preparation:* **Shedeekar, V.**, Brown, L., Clevenger, B., Reeder, R. Richer, E. 2022. Crop Yield and Economic Considerations for Agricultural Land Drainage. (Extension factsheet)
17. *In preparation:* Ghane, E. and **Shedeekar, V.** 2022. Dealing with heavy rainfall and drought in a changing climate (Joint Extension Bulletin between Michigan State University and The Ohio State University).
18. *In preparation:* **Shedeekar, V.** Ghane, E. Youssef, M., Strock, J. Frankeberger, J. et al. 2022. Does controlled drainage increase yield? Regional Extension Bulletin. (Transforming drainage project)

#### EXTENSION AND OUTREACH ACTIVITY

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|------|---|
| 2022 | <ul style="list-style-type: none"> <li>• Lead organizer of the 2022 Overholt Drainage School at OSU Lima, Lima Ohio (March 14-18, 2022, 60 trainees, 25 instructors/speakers) <a href="#">Evaluation report available here.</a></li> <li>• Member of the organizing committee for the 2022 Soil Health Webinar series (Dec. 2021 - Mar. 2022)</li> <li>• Water and Nutrient Losses from Healthy Soils under Sustainable Ag Practices. Invited talk at the Conservation Tillage and Technology Conference (March 9).</li> <li>• Engineered Drainage Design for onsite wastewater systems – invited talk at the Ohio Land Improvement Contractors of America (OLICA) Convention, Dublin Ohio (Jan. 4, 2022)</li> <li>• Future of Ag Drainage - Advances in Drainage Tools and Research – invited talk at the Ohio Land Improvement Contractors of America (OLICA) Convention, Dublin Ohio (Jan. 4, 2022)</li> </ul> |
| 2021 | <ul style="list-style-type: none"> <li>• Lead organizer of the Overholt Drainage Workshop –a half-day webinar on drainage law, design, and installation (June 9, 351 attendees, 8 speakers). <a href="#">Evaluation report available here.</a></li> <li>• Member of the organizing committee for the 2021 Soil Health Webinar series (Dec. 2020 - Mar. 2021)</li> </ul>   |
| 2020 | <ul style="list-style-type: none"> <li>• Decision tools for climate-smart agriculture – invited talk, Building Agricultural Resilience to a Changing Climate Workshop, 2020 OEFFA Annual Conference, Dayton Ohio (Feb. 13)</li> </ul>   |
| 2019 | <ul style="list-style-type: none"> <li>• Irrigating Growing Crops in Ohio – invited talk at Ag Solutions meeting, Maria Stein, Ohio (Dec. 2)</li> <li>• Cover Crops and Water Budget – Invited talk at the Conservation Tillage and Technology Conference, Ada, Ohio (March 5-6)</li> </ul>   |



## EXTENSION AND OUTREACH ACTIVITY

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- 2018
- Instructor ‘Get the scoop on Dirt – Healthy Soil STEM Activities’ at the Ohio 4-H Conference, Columbus Ohio. (March 8)
  - ‘Healthy Soil Healthy Environment – program poster presentation’ at the Ohio State University Extension and Community Engagement Conference, Columbus Ohio (Jan. 23-24)
  - Climate change and agriculture –STEM-FEST talk at the eSTEM Academy, Reynoldsburg OH (Jan. 3)
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- 2017
- ‘Soil and Water Quality Research at OSU South Centers’ presentation at the East Fork Watershed Cooperative meeting, Batavia Ohio (Dec. 30)
  - Invited talk “Engineered Drainage Design as Affected by Limiting Soil Conditions” at the Association of Ohio Pedologists meeting, Columbus Ohio (Feb. 16)
  - Invited talk “Healthy Soil Healthy Environment” at All Ohio SWCS meeting, Plain City, OH (Jan. 20)
  - Conducted research farm and laboratory tours in Piketon OH for 100+ visitors at the OSU South Centers, Piketon OH
  - Composting and recycling initiative in collaboration with Pike Co. Solid Waste Department, Waverly OH
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- 2016
- Organizer and instructor at Three soil health workshops, Wooster OH (April 21, April 27, Nov. 14)
  - Organized Soil, Water Bioenergy field day, Piketon OH (July 28)
  - Organized “Composting for Homeowners, Businesses, and Communities” workshop at OSU South Centers, Piketon OH (May 19)
  - Organizer/instructor: OEFFA conference workshop – “The Dirt on Organic Matter”, Granville (Feb. 12)
  - Conducted research farm and laboratory tours for 250+ visitors at OSU South Centers, Piketon OH
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- 2015
- Organizer and instructor of Training workshop “Using DRAINMOD-N II for Engineered drainage applications to on-site wastewater treatment systems in Ohio” at Columbus, Ohio (July 1)
  - Organizer and instructor of Workshop “Biofuels and Bioproducts”, Columbus OH (April 9)
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- 2014 to 2007
- “An overview of India’s water resources” – guest speaker at The Charles School (High School) at the Ohio Dominican University, Columbus OH (Feb. 19, 2014)
  - Developing farmer-friendly tools for assessment of soil health - OSU-FABE seminar (Oct. 15, 2013).
  - Instructor at Six Overholt drainage schools during 2008-2013 at different locations in Ohio (Van Wert, 2007; Findlay, 2008; Degraff, 2010; Wauseon, 2011; Paulding, 2012; Columbus, 2013)
  - Organizer and instructor at Three training workshops on “Sustainable Agriculture and Soil Health” in Illinois (Mount Vernon – May 14, Springfield – May 15, Sycamore – May 16, 2013)
  - Agricultural applications of geospatial technologies - Technical Presentation to delegation from Nanjing Agricultural University, China in Columbus OH (Oct. 24, 2012).
  - Training and orientation on drainage water management and wetlands for 2 delegations from China (Waterman Agricultural and Natural Resources Laboratory, Columbus, OH June-July 2011)
  - Instructor at the CIG Field Day on drainage water management. Dunkirk, OH (Aug. 2008)
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## INTERNATIONAL OUTREACH AND ENGAGEMENT

- CANADA: Hosting a PhD student in Dec. 2022 as part of the collaborative research exchange program with McGill University (Dec. 5, 2022 to Jan. 9, 2023).
- INDIA: Invited presenter (‘Decision tools for climate-smart agriculture’) and session chair at the second International Conference on Food and Agriculture, Dhanbad, Jharkhand (March 29-31, 2018).
- AFRICA: Organized and participated as instructor in two one day workshops on “Climate-smart agriculture and Soil Health” in Burkina Faso as part of USDA-FAS Borlaug program (Feb. 25-Mar. 4, 2018).
- CHINA: Two-week knowledge exchange program visit (residue management for sustainable agriculture and soil health) to the Heilongjiang Academy of Agricultural Sciences, Jiamusi Branch, China (Sept. 2-17, 2017).
- CHINA: Hosted 8 exchange fellows from China’s Ministry of Agriculture as part of the U.S.-China Scientific Cooperative Exchange Program in Crop Rotation and Soil Quality Monitoring & Detection (July 24 – Aug. 5, 2017).
- FRANCE: Organized and participated as instructor in Four one day workshops on “Climate-smart agriculture and Soil Health” in France (March 13-20, 2017)

**TV/LIVE STREAMING ACTIVITY**

- Slow Food Columbus Webinar Series: Adaptation and Resilience – My journey from one farm to another. (April 13, 2021, available at [youtu.be/uCo\\_fsBh1Vg](https://youtu.be/uCo_fsBh1Vg))
- Host of Soil Health Series: a monthly video livestream focused on Soil Health, 2017-2018 ([soilhealth.osu.edu/video](https://soilhealth.osu.edu/video))
- AgriTalk: Soil Health and OSU's Extension program on Healthy Soils, Feb. 2017 ([youtu.be/nXxUiJkwRo0](https://youtu.be/nXxUiJkwRo0))
- AgriTalk: Soil Quality Assessment and Management, May 2016. ([youtu.be/zGXi5vGbmWA](https://youtu.be/zGXi5vGbmWA))
- Using Drainmod Model Results to Evaluate Engineered Drainage Design - Webinar organized by Ohio Department of Health (June 30, 2015)

**TEACHING EXPERIENCE (average SEI score: 4.4)****Course content development and Teaching (OSU-FABE/SENR)**

*ASM 575 Soil and Water Systems (TA)	2007, 2008
ASM 576 Water Management in the Landscape Environment (TA)	2007, 2008
ASM 370 Principles of Hydrology (Lead Instructor)	2008
#FABE 693 Hydrologic Modeling using SWAT (Lead Instructor)	2012
ASM 4575 Applied Agricultural Water Management (Lead Instructor)	2012, 2013, 2014
FABE 5730 Design of Agricultural Water Management Systems (Guest Lecture)	Feb. 2018
FABE 5730 Design of Agricultural Water Management Systems (Lead Instructor)	Spring 2019, 2020
ASM 4575 Applied Agricultural Water Management (Guest lectures & course planning)	Autumn 2019
ENR 3000 Introduction to soil physical, chemical, and biological properties related to land use, environmental quality, and crop production (Guest lecture)	Autumn 2021, Spring 2022

**Lab Instruction (OSU-FABE)**

ASM 371 Land Surveying for Agricultural and Environmental Systems (TA)	2008
FABE 373 Principles of Soil and Water Engineering (co-instructor)	2008
ASM 560 Fluid Power and Electronics in Agricultural Machinery (TA)	2008
FABE 425 Analysis of Elementary Biological-Physical Systems (TA)	2008, 2009
FABE 565 Utilization of Energy in Agriculture (TA)	2009
ASM 300 Engineering Technologies in Agriculture I (TA)	2009
FABE 525 Electrical Power Systems for Agriculture (TA)	2009, 2010
ASM 360 Agricultural Machinery (TA)	2010

\*Agricultural Systems Management

#Food, Agricultural and Biological Engineering

**MENTORING EXPERIENCE**

Six undergraduate students at Dept. of FABE, OSU	2009-2022
Five MS students (graduate research) at FABE-OSU	2013-2022
Two PhD international exchange scholars; Two OSU-FABE PhD students	2015-2022
Two Norman Borlaug short-term post-doctoral visiting fellows	2016-2017
One Fulbright post-doctoral research fellow	2016-2017
One TÜBİTAK (Scientific and Technological Research Council of Turkey) fellow	2017-2018
STEM mentor to high school student (2 <sup>nd</sup> place Award Winner of the 2018 Clean Tech Competition)	July, 2018
STEM mentor to high school student group (Solar energy project for 2019 Clean Tech Competition)	June 2019

**MEMBERSHIP IN SCIENTIFIC AND PROFESSIONAL SOCIETIES/ORGANIZATIONS**

1. Conservation drainage network [2019–present]

2. Toastmasters International – [2018 – present]
3. American Society of Agricultural and Biological Engineers (ASABE) – [2008 – present]
4. American Society of Agronomy (ASA) – [2012 – present]
5. Soil Science Society of America (SSSA) – [2012 – present]
6. Association of Ohio Pedologists [2017 – present]
7. American Society for Engineering Education (ASEE) – [2 Years]
8. American Association for the Advancement of Science (AAAS) – [2 Years]
9. Soil and Water Conservation Society (SWCS) – [2 Years]

## PROFESSIONAL SERVICE & MEETING ACTIVITIES

### 1) Manuscript reviewer (Reviewed 25+ submissions to 11 journals)

- Agricultural and Forest Meteorology - An International Journal (Elsevier, ISSN 0168-1923) - 2
- Agronomy Journal. (American Society of Agronomy, ISSN 0002-1962) - 1
- Applied Engineering in Agriculture (ASABE, ISSN: 0883-8542) - 2
- Atmospheric Research, Elsevier (ISSN 0169-8095) 1
- Climate Research, Inter-Research journals (ISSN 1616-1572) - 2
- Journal of Atmospheric and Oceanic Technology (American Meteorological Society, ISSN: 0739-0572) - 1
- Journal of Environmental Quality (ACSESS publications, ISSN: 1537-2537) - 2
- Journal of Hydrometeorology (American Meteorological Society, ISSN: 1525-755X) - 2
- Sustainability — Open Access Journal (MDPI publication, ISSN 2071-1050) - 1
- Transactions of the ASABE (ISSN 2151-0032) - 5

### 2) Professional meetings

- Session organizer – “Conservation Drainage Practices for Reducing Nutrient Loss” at the ASABE Annual International Meeting (Houston, TX, July 19, 2022).
- Session organizer – “NRES-Drainage Education in the 21st century – Honoring the Career of Drs. Larry Brown & Andy Ward” at the ASABE Annual International Meeting (Houston, TX, July 19, 2022).
- Session organizer – “Advances in drainage research and education” at the ASABE Annual International Meeting (Virtual Conference in July 2021)
- Session organizer – “Advances in drainage design, monitoring, and modeling” at the ASABE Annual International Meeting (Detroit, MI in July 2018, Boston, MA in July 2019, and Virtual Conference in July 2020)
- Session moderator - Urban Irrigation and Water Management Oral, at the 2018-2019 International Soils Meeting, Soils Across Latitudes, Jan. 6-9, 2019, San Diego, CA
- Session organizer “Quantifying soil health” Conservation Tillage Technology Conf., Ada, OH (Mar. 8, 2017)
- Expert panelist during the Association of Ohio Pedologists meeting, Columbus Ohio (Feb. 16, 2017)
- Expert panel meeting for Soil Calculator, organized by Agren INC., Memphis TN (Jan. 21, 2015)
- Session moderator during the 2012 ASABE Meeting at Dallas TX. (Session207: Drainage monitoring & modeling: from field to watershed scales). July 31, 2012

### 3) Judge/Proposal reviewer

- Reviewer and panelist for Cycle 20 of the U.S.-Egypt S&T Joint Fund (Agriculture and Water Research Panel), The National Academies of Sciences, Engineering, and Medicine (January, 2020)
- Judge, 2019 Spellman High Voltage Electronics Clean Tech student Competition (June-July, 2019)
- Reviewer and panelist for Cycle 19 of the U.S.-Egypt S&T Joint Fund (Agriculture and Water Research Panel), The National Academies of Sciences, Engineering, and Medicine (July, 2018)
- Judge, 2018 Spellman High Voltage Electronics Clean Tech student Competition (June-July, 2018)
- Judge, State Science Day organized by Ohio Academy of Science, Columbus OH (May 13, 2017)
- Judge, Denman Undergraduate Research Forum, The Ohio State University, Columbus OH (May 9, 2012)
- Judging facilitator and session moderator at the Edward F. Hayes Graduate Research Forum, The Ohio State University, Columbus OH (2010, 2011)
- Proposal reviewer for SEEDS: The OARDC Research Enhancement Competitive Grants Program, Student Competitions (2008)

## SCHOLARSHIPS/FELLOWSHIPS RECEIVED

- Ohio State University HR Staff Career Development Award (\$1250, October, 2018 to January, 2019)



- Ohio State University HR Staff Career Development Award (\$1,000, February to October, 2017)
- Office of outreach and engagement travel scholarship for organizing farmer trainings in France (\$2000, March, 2017)
- Ray Travel Award/Grant from OSU's Council of Graduate Students for conference paper presentation (June, 2009)
- Junior Research Fellowship by ICAR, IARI, New Delhi, India (2003-05)
- Brihad Bharatiya Samaj scholarship for Undergraduate Education, Mumbai, India (2001-2003)
- University Merit Scholarship for Undergraduate education, MPKV, Rahuri, India (1999-2000)
- National Merit Scholarship, a monthly stipend during high-school education, India (1994-1999)
- Maharashtra State Talent Search Scholarship, State of Maharashtra, India (1995-1996)

## **LEADERSHIP AND VOLUNTEER ACTIVITIES**

- Vice chair, NRES-23 Drainage Committee of the American Society of Agricultural and Biological Engineers (Sept. 2021 – present)
- Contributor to the Transforming Drainage Project: Contributed to Ohio site summaries factsheets; member of the Extension/outreach team; Leading the extension factsheet development effort focused on crop yield data synthesis; co-author on the crop yield synthesis manuscript; mentored a graduate student (advisor: Dr. Brent Sohngen) at OSU for modeling yield economics of drainage water management
- Member, Conservation Drainage Network Extension and Outreach team
- Member of the board of directors, Ohio No-till Council (March, 2020 – present)
- Reviewer for Post-doctoral travel awards, Post-doctoral Association of the OSU (January, 2019)
- Member, strategic planning committee for outreach and engagement, OSU South Centers, Piketon Ohio (2017-2018)
- Chair of the Senate Advisory Committee of the Council of Graduate Students (CGS) during 2010-11
- President, “Sankalpa-India” a non-profit student organization at The OSU (2010-11)
- Member of the University Senate and Council of Graduate Students at The OSU (2009-11)
- Member of the University Research Committee of the OSU (2009-10)
- President, FABE Graduate Students' Council (2007-08)
- Member of a committee for FABE's TA development program sponsored by the Dept. of FTAD (2008-10)
- Volunteered at the International Conference on Soil, Water and Environmental quality- Issues and Strategies held at IARI, New Delhi during January-February, 2005
- National Services Scheme Volunteer (2000-02) at MPKV, Rahuri, India
- Represented University teams in Football (soccer), Volleyball, Field Hockey, Kho-Kho and Athletics at MPKV, Rahuri and IARI, New Delhi, India (2002-2005).

## **AWARDS AND RECOGNITION (\*Awards for excellence in Extension activity)**

- \*Search for Excellence Award in Sustainable Agriculture for the 2021 Soil Health Winter Seminar Series organized by OSU Extension Soil Health Team during Jan. 14 through March 18, 2021 (<https://agcrops.osu.edu/events/webinar-recordings/dirt-soil-health-investing-below-surface-0>).
- \*First place- Epsilon Sigma Phi Team Teaching Award for Pike County Nutritional Sciences Field Day (Outstanding state Extension program planning and delivery). At the annual meeting of Epsilon Sigma Phi (Jan. 22, 2018)
- Poster Award (2<sup>nd</sup> place) – “The OSU Soil Organic Matter Calculator - a Decision Tool to Manage Soil Health” at the 2016 ASA, CSSA and SSSA International Annual Meetings, Phoenix, AZ (Nov. 2016)
- Poster Award (1<sup>st</sup> place) – “Developing a farmer-friendly decision tool for managing soil organic matter”. The 2016 OARDC Research Conference (April 2016)
- Larry M. Lewellen Award for Distinguished Service Award for exceptional service to graduate students at The Ohio State University (2012)
- University-level Leadership award for outstanding contribution as a Student Organization Leader of Sankalpa (2012)
- Graduate student of the year award, for outstanding academic performance and extracurricular activities in the Dept. of FABE at the OSU (2010)

- FABE Leadership award for exceptional involvement in service and leadership activities at the department and university level (2010)
- Member of the FABE graduate student organization that won the university-level 2009 Distinguished Diversity Enhancement Awards, The Ohio State University. (<https://universityawards.osu.edu/archives/2009/distinguished-diversity>)
- Graduate (M.Sc.) research project was acknowledged as a significant research work (was among 22 qualified out of nearly 70 aspirants) by IARI during Convocation-2006
- First rank (among nearly 500 aspirants) in national level Junior Research Fellowship examination conducted by Indian Council of Agricultural Research (ICAR) in Water Science and Technology (2003)
- Best Volunteer award, National Services Scheme (MPKV, Rahuri), India (June 2001)

## SKILLS AND SOFTWARE KNOWLEDGE

- Hydrologic monitoring, Water quality monitoring, Meteorological monitoring, Laser surveying, GPS surveying
- Soil, plant and water sampling and physical and chemical analysis, Tracer studies,
- Programming Languages: Visual Basic, Python, FORTRAN, MATLAB, R
- Statistical Software: Minitab, Sigma-Plot
- Computer simulation models: SWAT, DRAINMOD-NII, CROPWAT, ROSETTA, RUSLE-2, COMET-FARM, HEC-RAS
- Other software, programs: ESRI ArcGIS, Farm Works Office, SMS, MS Office Suite

## CONFERENCE PAPERS AND POSTERS

1. **Shedekar, V.S.** 2022. Controlled drainage management strategy for winter/cover crops in Ohio. Conservation Drainage Network Meeting, Fort Wayne, IN. (April 6-7, 2022)
2. Murumkar A., Martin J., Kalcic M., King K., **Shedekar V.S.**, Mehan S., and Kujawa H. (2022). Simulating the watershed-scale water quality impacts of Drainage Water Management in the Western Lake Erie Basin, USA. 2022 Annual International Meeting of American Society of Agricultural and Biological Engineers. July 17-20, 2022. Abstract accepted for oral presentation.
3. Mehan S., Kujawa H., Murumkar A., **Shedekar V.S.**, Kalcic M., King K. (2022). Using Soil and Water Assessment (SWAT) for simulating drainage water management: Lessons learned. 2022 Annual International Meeting of American Society of Agricultural and Biological Engineers. July 17-20, 2022. Abstract accepted for oral presentation.
4. Murumkar A., Martin, J., Kalcic M., Goering D., Thorstensen A. **Shedekar V.**, Boles, C., Redder T., Confesor R. (2021). Simulating the water quality impacts of nutrient application timing based on risk of rainfall events in western Lake Erie basin, USA. 2021 AGU Fall Meeting. December 1-17, 2021. *Enlightening Oral presentation.*
5. Murumkar A., Martin, J., Kalcic M., Goering D., Thorstensen A., **Shedekar V.**, Evenson G., Apostel A., Kast J., Boles C., Redder T., and Confesor R. (2021). Simulating impact of NOAA-NWS Runoff Risk Advisory Forecast (RRAF) tool on water quality impacts in western Lake Erie basin, USA. 2021 Annual International Meeting of American Society of Agricultural and Biological Engineers. July 11-14, 2021. On Virtual platform Oral -Virtual
6. Himanchal. Meena A., Duhan S., Ahmad M., Jakhar P., Puthukkulam A., **Shedekar V.**, Murumkar A., Plappally A. (2021). Modelling of Jojari river in semi-arid western Rajasthan, India using the geospatial techniques and 1D flow model analysis. International Conference BRICS Nus: Water Resources and Pollution Treatment (WRPT-21), July 6 – 8, 2021.
7. Mehan S., King K., Kujawa H., **Shedekar V.S.**, Murumkar A., Kalcic M. (2021). Evaluating the effectiveness of SWAT (Soil and Water Assessment Tool) in simulating the impact of drainage water management (DWM) system on water quality. 2021 Annual International Meeting of American Society of Agricultural and Biological Engineers. July 11-14, 2021. On Virtual platform Oral -Virtual.
8. **Shedekar, V.S.**, King, K.W., Kalcic, M. 2021. Water balance assessment in Ohio's tile drained landscapes. 2021 Annual International Meeting of American Society Agricultural and Biological Engineers. July 12-15, 2021. (Virtual).
9. King, K.W., **Shedekar, V.S.**, Hanrahan, B., Stinner, J., Pease, L. 2020. Assessing the role of drainage water management in meeting Lake Erie's watershed goals. 2020 Annual International Meeting of American Society Agricultural and Biological Engineers. July 12-15, 2020. (Virtual).
10. Murumkar A., Martin, J., Kalcic M., Goering D., Evenson G., Apostel A., Kast J., Thorstensen A., **Shedekar V.**, Boles C., Redder T., Confesor R. 2020. Guiding nutrient application timing using the NOAA-NWS Runoff Risk

- Advisory Forecast tool: A case study of water quality impacts in western Lake Erie basin, USA. 2020 Annual International Meeting of American Society Agricultural and Biological Engineers. July 12-15, 2020. (Virtual)..
11. Murumkar A., Martin, J., Kalcic M., Stow C., Goering D., King K., **Shedeekar V.**, Evenson G., Apostel A., Kast J., Thorstensen A. 2020. Flow comparison: Hydrologic models with edge-of-field observed data. 2020 Annual International Meeting of American Society Agricultural and Biological Engineers. July 12-15, 2020. (Virtual)..
  12. **Shedeekar, V.S.**, Islam, K.R., Raut, Y.R, Fausey, N.R., Watts, D., Gonzalez, J., Dick, W., Van Toai, T., Flanagan, D. 2019. Effect of Cover Crops and Crop Rotation on Physical Properties of Soils Amended with Flue Gas Desulfurization Gypsum. Proc. ASA, CSSA and SSSA International Annual Meetings, Nov 10-13, 2019, San Antonio, TX.
  13. Duncan, E., King, K.W., **Shedeekar, V.S.**, Hanrahan, B. 2019. Cover crops and nutrient loss from the edge-of-field network in Northwest Ohio. Proc. ASA, CSSA and SSSA International Annual Meetings, Nov 10-13, 2019, San Antonio, TX.
  14. Schumacher, W., Rudolf, M., Maxwell, J., **Shedeekar, V.S.**, Raut, Y., Islam, K.R. 2019. Are Soil Parameters Able to Predict Forested Wetland Health? Proc. ASA, CSSA and SSSA International Annual Meetings, Nov 10-13, 2019, San Antonio, TX.
  15. Islam, K.R., **Shedeekar, V.S.**, Raut, Y.R, Bandaogo, A., Gonzales, J., Watts, D., Flanagan, D., Van Toai, T., Fausey, N.R., Batte, M., Dick, W. 2019. Predicting Soil Carbon and Nitrogen Stocks Under No-till Soybean-Corn Amended with FGD Gypsum and Cover Crops. Proc. the ASA, CSSA and SSSA International Annual Meetings, Nov 10-13, 2019, San Antonio, TX.
  16. **Shedeekar, V.S.**, King, K.W., Kalcic, M, Fausey, N., Brown, L. 2019. Estimating effectiveness of drainage water management in paired field studies. Proc. the 2019 Annual International Meeting of the ASABE, July 7-10, 2019, Boston MA.
  17. **Shedeekar, V.S.**, Murumkar, A., King, K., Kalcic, M, Islam, K.R., Brown, L. 2019. Irrigation considerations for grain crops in Ohio. Proc. the 2019 Annual International Meeting of the ASABE, July 7-10, 2019, Boston MA.
  18. King, K.W., **Shedeekar, V.S.**, Duncan, E., Hanrahan, B., Kalcic, M. 2019. Water and nutrient budgets in tile drained landscapes with and without cover crops. Proc. the 2019 Annual International Meeting of the ASABE, July 7-10, 2019, Boston MA.
  19. Murumkar A., Martin, J., Kalcic M., Evenson G., Apostel A., Kast J., Goering D., Thorstensen A., Boles C., Redder T., Confesor R., Stow C., King K., **Shedeekar V.** 2019. Evaluating a decision support tool to guide the timing of fertilizer application. 3<sup>rd</sup> Annual All Partners Meeting, The Cooperative Institute for Great Lakes Research. September 24-25, 2019. Ann Arbor, Michigan (Poster).
  20. **Shedeekar, V. S.**, Murumkar, A.R., Brown, L.C. 2019. Water Requirement Trends for Irrigated Grain Crops in Ohio. Proc. 2018-2019 International Soils Meeting, Soils Across Latitudes, Jan. 6-9, 2019, San Diego, CA.
  21. Sundermeier, A.P., **Shedeekar, V.S.** 2019. Healthy Soil Healthy Environment Signature Program. Proc. 2018-2019 International Soils Meeting, Soils Across Latitudes, Jan. 6-9, 2019, San Diego, CA.
  22. Bandaogo, A., Raut, Y., **Shedeekar, V.**, and Islam, K.R. 2019. Cover Crop and Zeolite Impact of Soil Quality. Proc. 2018-2019 International Soils Meeting, Soils Across Latitudes, Jan. 6-9, 2019, San Diego, CA.
  23. **Shedeekar, V.S.**, King, K.W., and Pease, L. 2019. Evaluation of Woodchip Bioreactors for Nitrogen and Phosphorus Removal from Subsurface Drainage Discharge in Ohio. Proc. 2018-2019 International Soils Meeting, Soils Across Latitudes, Jan. 6-9, 2019, San Diego, CA.
  24. Murumkar, A., Arya, D.S., Taxak, A.K., and **Shedeekar, V.S.** 2018. Climate change impact on meteorological parameters and hydrology of Bhima River basin, India. Proc. International Conference on Sustainable Water Management, December 10-11, 2018, Chandigarh, India.
  25. **Shedeekar, V.S.**, King, K., Fausey, N.R., Islam, K.R., Soboyejo, A.B.O., Brown, L.C. 2017. Uncertainty in rainfall measurements and its implications to hydrologic modeling. Proc. ASA, CSSA and SSSA International Annual Meetings, "Managing Global Resources for a Secure Future" Oct. 22-25, 2017, in Tampa, FL.
  26. **Shedeekar, V.S.**, Sundermeier, A.P., Islam, K.R., Culman, S.W. 2017. Making research available to build healthy soils – an Ohio Initiative. Proc. ASA, CSSA and SSSA International Annual Meetings, "Managing Global Resources for a Secure Future" Oct. 22-25, 2017, in Tampa, FL.
  27. Islam, K.R., Khaitov, B., Didenko, N., Raut, Y., **Shedeekar, V.S.**, Amoakwah, E. 2017. A New Method to Measure Particulate Organic Carbon, Nitrogen, Phosphorus, and Sulfur Pools as Early Indicators of Soil Quality. Proc. ASA,

- CSSA and SSSA International Annual Meetings, "Managing Global Resources for a Secure Future" Oct. 22-25, 2017, in Tampa, FL.
28. Islam, K.R., **Shedekar, V.S.**, Didenko, N., Raut, Y., Khaitov, B. 2017. Long-term tillage effects on soil health. Proc. ASA, CSSA and SSSA International Annual Meetings, "Managing Global Resources for a Secure Future" Oct. 22-25, 2017, in Tampa, FL.
  29. Sundermeier, A.P., **Shedekar, V.S.** 2017. Organic Cropping Systems Effect on Soil Parameters. Proc. ASA, CSSA and SSSA International Annual Meetings, "Managing Global Resources for a Secure Future" Oct. 22-25, 2017, Tampa, FL.
  30. **Shedekar, V.S.**, King, K., Fausey, N.R., Islam, K.R., Soboyejo, A.B.O., Brown, L.C. 2017. Modeling effects of drainage water management in fields with rolling topography. Proc. of the 2017 ASABE Annual International Meeting, July 16-19, 2017, in Spokane, WA. <https://doi.org/10.13031/aim.201701282>
  31. **Shedekar, V. S.**, Islam, K.R., 2017. A novel approach for on-farm assessment, prediction and management of Soil Organic Carbon (Poster). The Global Symposium on Soil Organic Carbon – March 21-23, 2017, at FAO, Rome, Italy.
  32. **Shedekar, V. S.**, Islam, K.R., Reeder R., and Grigar, J.R. 2016. The OSU Soil Organic Matter Calculator - a Decision Tool to Manage Soil Health. Poster presentation at the 2016 ASA, CSSA and SSSA International Annual Meetings, "Resilience Emerging from Scarcity and Abundance" Nov. 6-9, 2016, in Phoenix, AZ.
  33. Gupta S., Murumkar A., Kaurwar A., Satankar R. K., Virat J., Kumar G., Hatte S., George K. J. **Shedekar V. S.** and Plappally A. 2016. Identification of a matrix framework to study the life cycle of water in Indian domestic sector. Water Today's Water Expo 2016, Chennai Trade Centre, Tamil Nadu, India. (Oral)
  34. **Shedekar, V.S.**, L. Pease, Y. Shang, M. Ghumrawi, R. T. De Leon, K. Gunn, L. Diop, L. C. Brown. 2015. Modeling water-table elevations for engineered drain applications with on-site wastewater treatment systems in Ohio. Paper presentation at the 2015 Annual International Meeting of the ASABE at New Orleans, LA. Paper no. 152190795.
  35. **Shedekar, V.S.**, Khandakar, I., Reeder R., and Grigar, J.R. 2013. A farmer-friendly tool for predicting soil organic matter. Poster presentation at the 2013 ASA, CSSA and SSSA International Annual Meetings, "Water, Food, Energy & Innovation for a Sustainable World," Nov. 3-6, 2013, in Tampa, FL.
  36. Grigar, J.R., **Shedekar, V.S.**, Khandakar, I., and Reeder R. 2013. Validation of a farmer-friendly soil organic matter calculator. Oral presentation at the 2013 ASA, CSSA and SSSA International Annual Meetings, "Water, Food, Energy & Innovation for a Sustainable World," Nov. 3-6, 2013, in Tampa, FL.
  37. **Shedekar, V.S.**, K.W. King, L.C. Brown and N.R. Fausey 2010. Travel time analysis for a subsurface drained sub-watershed in Upper Big Walnut Creek Watershed, Ohio. Paper presentation at the 2010 Annual International Meeting of the ASABE at Pittsburgh, Pennsylvania.
  38. **Shedekar, V.S.**, K.W. King, L.C. Brown, N.R. Fausey and Maryjane Heckel 2009. Measurement errors in tipping bucket rain gauges under different rainfall intensities and their implication to hydrologic models. Paper presentation at the 2009 Annual International Meeting of the ASABE at Reno, Nevada. **(8 citations)**
  39. Ghane, E., N. Fausey, **V. Shedekar** and L. Brown 2011. Three years of crop yield using drainage water management in Ohio. Paper presented at the 2011 Annual International Meeting of the ASABE at Louisville, KY.
  40. Ward, A., M. Wahl, **V. Shedekar**, R. Kallio, S. Kallio, J. Berning, and J. Witter 2008. Successfully Incorporating Industry-Student Partnerships and Real World Problems in the Curriculum (Poster). Seventh Annual ASEE Global Colloquium on Engineering Education. Cape Town, South Africa. October 19-23, 2008.
  41. Ward, A., R. Kallio, **V. Shedekar**, S. Kallio, and M. Wahl. Streamways & Floodplains: Two Urban Applications in Central Ohio. Central OH Stormwater & Erosion Control Expo. The Ohio State University. Mar. 13, 2008.
  42. Wahl, M.D., **Shedekar V.S.**, Kalio S., Kallio R and Ward, A. 2007. Stream restoration options for Rose Run creek at New Albany township. Presentation at the Nonpoint source conference 2007. Columbus, OH.
  43. **Shedekar V.**, Patil T., More V. and Jaiswal A. 2002. Design, development and performance evaluation of power operated hold-on type paddy thresher. The 37th Annual Convention of the ISAE, Udaipur, Rajasthan, India.