



Ajin S Anil, Ph.D. Scientist (OPCW)

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Google Scholar link:

<https://scholar.google.com/citations?user=hOdAzOAAAAAJ&hl=en>

Academic background

Education:

- PhD (2023): ICAR-Indian Agricultural Research Institute, New Delhi (IARI), New Delhi, India (*Subject: Soil Science & Agricultural Chemistry*)
- MSc (2018): ICAR-Indian Agricultural Research Institute, New Delhi (IARI), New Delhi, India (*Subject: Soil Science & Agricultural Chemistry*)
- BSc (2016): Dr. Balasaheb Sawant Konkan Krishi Vidya-peeth, Dapoli, Maharashtra, India (*Subject: Agriculture*)

Professional:

- February 2022 to present: Scientist (OPCW), Institute of Pesticide Formulation Technology (IPFT), Gurugram, India.

Research Interests

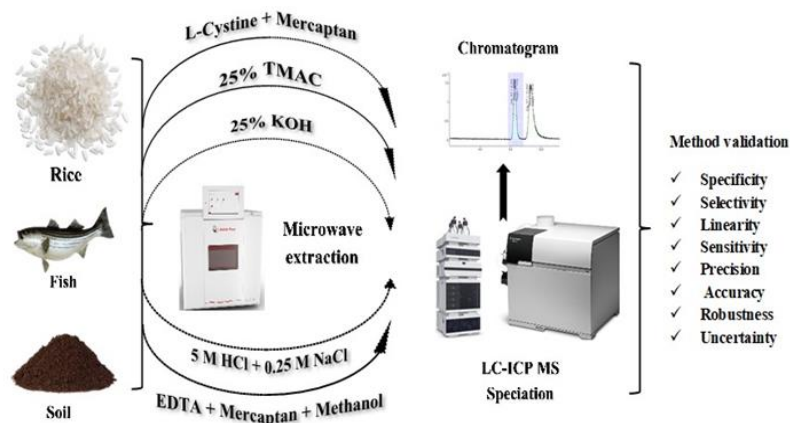
Agriculture plays a fundamental role in sustaining human life, providing essential resources and contributing to environmental health. My research focuses on understanding and enhancing the intricate dynamics within agricultural systems to promote sustainability and productivity. My primary research interests include:

- Nutrient Dynamics and Carbon Dynamics
- Conservation Agriculture and Sustainable Agriculture
- Innovative Methods for Nutrient Analysis
- Speciation of Arsenic and Mercury
- Heavy Metal Remediation
- Green Chemistry for Preventing Metal Pollution
- Nanotechnology for New Fertilizers
- Metal Profiling in Fertilizers
- Enriched Biochar as an Alternative to Chemicals
- Development of New Analytical Methods and Validation for Pesticide Formulation
- Green Chemistry for Determination of Pesticide Residues
- Biofertilizer Enrichment

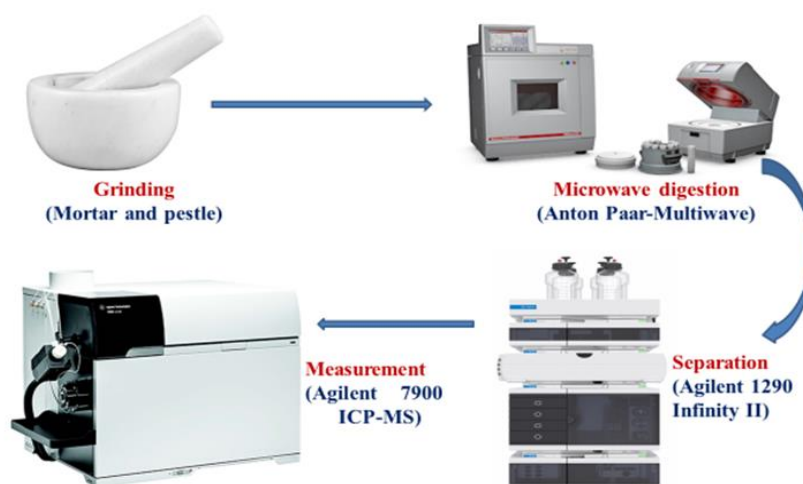
My research aims to bridge the gap between scientific innovation and practical application, contributing to the development of more sustainable and resilient agricultural practices.

Some of the research highlights of our work as follows,

LC-ICP-MS based extraction procedure for mercury speciation in Fish, Rice, Soil



Microwave assisted LC-ICP-MS method for determination of impurities and Phosphorus on Rock phosphate fertilizer



Selected publication

- **Anil, A. S.**, Alam, S., and Thakur, L. K. Optimized Mercury Speciation Analysis Using LC-ICP-MS and Microwave Assisted Extraction for Precise Determination of Methylmercury in Fish, Rice and Soil. **Journal of Food Composition and Analysis**, 2024, 106092. (IF: 4.3)
- **Anil, A.S.**, Sharma, V.K., Jiménez-Ballesta, R., Parihar, C.M., Datta, S.P., Barman, M., Chobhe, K.A., Kumawat, C., Patra, A., and Jatav, S.S. Impact of Long-Term Conservation Agriculture Practices on Phosphorus Dynamics Under Maize-Based Cropping Systems in A Sub-Tropical Soil. **Land**, 2022 11(9), P.1488. (IF: 3.9)
- Alam, S., Biswas, **S.**, **Anil, A. S.**, Thakur, L. K., & Kumar, J. Total Phosphorous and Mineral Content Determination in Rock Phosphates Using ICP-MS. **Communications in Soil Science and Plant Analysis**, 2024, 55(7), 944-958. (IF: 1.8)

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- **Anil, A. S.**, Sharma, V. K., Barman, M., Datta, S. P., Bandyopadhyay, K. K., Singh, P. K., & Chobhe, K. A. Effect of Calcium and Boron on Biomass Yield and Nutrients Uptake by Tomato (*Solanum Lycopersicum*). **The Indian Journal of Agricultural Sciences**, 2020, 90(6), 1176-1179. (IF: 0.4)
 - Patra A, Sharma VK, Nath DJ, Ghosh A, Purakayastha TJ, Barman M, Kumar S, Chobhe KA, **Anil AS**, Rekwar RK. Impact of soil acidity influenced by long-term integrated use of enriched compost, biofertilizers, and fertilizer on soil microbial activity and biomass in rice under acidic soil. **Journal of Soil Science and Plant Nutrition**. 2021, 21,756-67. (IF: 3.9)
 - Didawat RK, Sharma VK, Nath DJ, Patra A, Kumar S, Biswas DR, Chobhe KA, Bandyopadhyay KK, Trivedi A, Chopra I, Asik Dutta, KK Mohapatra, **Ajin SA**. Soil biochemical properties and nutritional quality of rice cultivated in acidic inceptisols using long-term organic farming practices. **Archives of Agronomy and Soil Science**. 2023, 69(8), 1282-97. (IF: 2.4)
 - Meena OP, Sammauria R, Gupta AK, Gupta KC, Behera B, Saxena R, Yadav MR, Singh P, Meena RK, Raza MB, **Anil AS**. Energy-carbon footprint vis-à-vis system productivity and profitability of diversified crop rotations in semi-arid plains of North-West India. **Journal of Soil Science and Plant Nutrition**. 2022, 22(2), 2026-41. (IF: 3.9)

Awards / Honours / Affiliations

- ICAR-NTA Scholarship (All India Rank-2374 in all India entrance exam, ICAR-2012)
 - ICAR-Junior Research Fellowship (All India Rank-7 in Physical Science subject group, ICAR-2016)
 - ICAR-IARI PhD Scholarship (All India Rank-4 in Soil Science and Agricultural Chemistry subject, ICAR-IARI Ph.D. Exam 2018)
 - Innovative Article Award (Agriculture & Food e-Newsletter, 2019)
 - ICAR-NET(II)-Soil Science (2018, Qualified with 71.02%.)
 - UGC-NET-Environmental science (2017)
 - Best poster award (GKV Society, 2018)
 - Best poster award (GAAFES International Conference, 2019)
 - Best seminar presenter (ICAR-IARI, New Delhi in 2018 & 2019)
 - Best poster award (Soil Conservation Society of India, 2021)
 - Best poster award (ANRCM, Lucknow 2021)
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