# **Dr. Asim Biswas**

# Canada Research Chair (Tier 1) in Digital Agriculture

Member, Royal Society of Canada; OAC Research Chair in Soils and Precision Agriculture Professor & Assistant Director, School of Environmental Sciences, University of Guelph Past-President, Canadian Society of Soil Science, Chair, Soil Physics and Hydrology Division

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# **RESEARCH EXPERTISE**

Digital and precision agriculture, Digital soil mapping, Proximal soil sensing, Remote sensing, Sustainable soil management, Soil spatial variability and Spatial statistics, Spatial model building, Soil-landscape scaling analysis, Quantitative land evaluation, Soil pedology and Pedometrics, Soil physics and Vadose-zone hydrology, Transport of water, nutrients, chemicals, and pollutants through soil, Agricultural water and nutrient management, Carbon fractionation and sequestration

# **EDUCATION**

- Ph.D. in Soil Physics (2007-2011) Dept. of Soil Sci., Uni. of Saskatchewan, SK, Canada
- M.Sc. (Ag.) in Soil Science (2004-2006) Soil Sci. and Agril. Chem., Uni. of Agril. Sci., India
- B.Sc. (Ag.) Hons. (2000-2004) Dept. of Agril. Chem. and Soil Sci., BCKV, India

# **PROFESSIONAL EXPERIENCE**

- Canada Research Chair (Tier 1) in Digital Agriculture (May 2024 to Present)
- Professor (Jul 2023 to Present), School of Environmental Sciences (SES), U. Guelph, Canada
- OAC Research Chair in Soils and Precision Agriculture (Sep 2022 to present), U. Guelph, Canada
- Assistant Director (Jan 2021 to Present), School of Environmental Sciences, U. Guelph, Canada
- Visiting Professor, (March 2021 to Present), Ludong University, China
- Jinshan Distinguished Scholar Professor (Jan 2018- Present), Jiangsu U., Zhenjiang, China
- Visiting Professor (April 2017 to Present) Jiangxi University of Finance and Economics, China
- Associate Professor (July 2019 to June 2023) U. Guelph, Guelph, Ontario, Canada
- Assistant Professor (June 2016 to June 2019) University of Guelph, Guelph, Ontario, Canada
- Adjunct Professor (August 2016 to Aug 2019) McGill U., Montreal, Quebec, Canada
- Assistant Professor (May 2013 to April 2016) McGill University, Montreal, Quebec, Canada
- Environmental Research Scientist (July 2011 to April 2013) CSIRO, Canberra, Australia

# **RESEARCH FUNDING**

• Current funding- >\$20M CAD

• Past funding- >\$15M CAD

### AWARDS

- 2023 Steacie Prize
- 2023 Mahima Fellow of the Society Award
- 2022 Jim Beamish Award of Canadian Society of Bioengineering
- 2021 College of New Scholars of the Royal Society of Canada
- 2021 Steacie Prize (one of the Top three finalists)
- 2021 Young Scientist Award of the Canadian Geophysical Union (CGU)
- 2021 Mahima Innovative Scientist Award of Mahima Research Foundation and Social Welfare, India
- 2021 International Academic Leader Award of International Research Association
- 2020 OAC G. P. McRostie Faculty Award of University of Guelph
- 2020 University Research Excellence Award of University of Guelph
- 2018 young Scholar Award of S6 Division of Soil Science Society of America
- 2018 Early Career Award of Soil Science Society of America
- 2018 Early Researcher Award of Ontario Ministry of Research, Innovation and Science.
- 2018 Water Young Investigator Award (second place) from 'Water' journal (MDPI Group).

# TEACHING

- ENVS 6900- Research Seminar
- ENVS 3060- Groundwater
- ENVS 6440- Geostatistics

- ENVS 6280- Soil Physics
- ENVS 6582- Special Topics in Soil Science

# PUBLICATIONS

### **Impacts**

o Total citations (as of 21 May 2024)

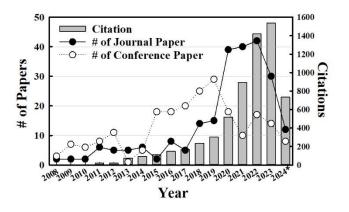
✓ Google scholar: 6,358

# Summary

#### Paper 'Published' in refereed journal 237 Papers 'Under Review' in refereed journal 41 Patent 1 Book 11 23 Book chapter Refereed proceedings 19 223 Conference abstracts 2 White Paper 2 Thesis Plenary talks 1 Keynote talks 17 Invited talks 48 Contributed conference talks 111 Conference posters 14



Google Scholar h-index: 43 Google Scholar i10-index: 157



# **SUPERVISION**

Level	Current	Completed		
Visiting Fellow	3	6		
Post-doctorate	3	10		
PhD	9	9		
Masters	8	24		
Undergraduate	6	30		
Research associate/Technician	1	5		
Summer students	5	24		
Academic advisor	6	29		
Thesis examiner- PhD- 30; Masters; 29				
PhD Comprehensive examiner- 39				

# CONTRIBUTION TO SCIENCE AND PROFESSION

- Membership at professional societies: 17
- Board of Directors, American Society of Agronomy
- President-Elect (2021), President (2022) and Past-President (2023) of Canadian Society of Soil Science
- Chair-Elect (2022), Chair (2023) and Past-Chair (2024) of Soil Physics & Hydrology Division of SSSA
- Chair (2021) and Vice Chair (2020) of Spatial Statistics and on Farm Experimentation Community
- Chair of the Proximal Soil Sensing Working Group of IUSS (2020-)
- Canadian Leader for the International Society of Precision Agriculture (2018-)
- Chair (2021) and member (2024) of the Award Committee of Canadian Society of Soil Science
- Chair (2020) and Vice Chair (2019) of the Soil and Water Management Professionals community of ASA
- Chair (2017) and Vice Chair (2016) Spatial Statistics Applications Community of ASA (2017)
- Associate Editor- VZJ, SSSAJ, CJSS, Scientific Reports, Sensors, Frontiers in Soil Science, Frontiers in Water, Modelling and Management of Water and Soil,
- Guest Editor- Geoderma, Sensors, Remote Sensing, Applied Sciences, Land (2), Front. Env. Sci., Front. Earth Sci., Front. Ecol. Evol., Nonlin. Proc. Geophys.
- Reviewer for 30 journals, reviewing >15 papers/year
- Proposal reviewer for NSERC, OMAFRA, AAFC, BARD, US ARO
- Judges for student competition- SSSA, CSSS, ISSS, CGU, EGU
- Kirkham Conference Committee member of SSSA (2016-), Fellow Committee of ASA, CSSS, SSSA; Early Career Committee member (2019-), Brady Lecture Series Committee member of SSSA (2020-), Nyle C. Brady Frontiers Soil Science Lectureship of SSSA (2020-), Early Career Award Committee (2020-), Soil water management and conservation Mentorship Committee (2021-), Don and Betty Kirkham Award Soil Physics Award committee of SSSA (2020-), Ontario Precision Agriculture CCA Exam Committee (2019-), Kirkham Conference Travel Award Selection Committee (2019-)
- 5 conference local organizing committee, 51 conference session organized/chaired
- Chair of Pedometrics 2019