# RATTAN LAL

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Citizenship

Education B.Sc. (Agric.), 1963, PAU, India; M. Sc. (Soils), 1965, IARI, India; Ph.D. (Soils), 1968, OSU, Columbus, OH, USA

Language Proficiency English, Hindi, Punjabi, Urdu, French (fair)

# **Professional Positions Held**

2011 -	Distinguished	d University Professor	r of Soil Science

Director, Carbon Mgt. & Sequestration Program, OARDC/OSU, Columbus, OH 2001 -

2019 -Member, Science Advisory Group, Leonardo DiCaprio Foundation 2018 -Member, Science Policy Interface (SPI), UNCCD, Bonn, Germany

2017 -Member Board of AAA, and Executive Committee of "4 per Thousand"

2014 - 2019 Chair, Science Advisory Committee, UNU-FLORES, Dresden, Germany

2013 - 2016 Member, Steering Committee, Global Soil Week (IASS), Potsdam, Germany 2013 - 2016 Member, Advisory Board, Food Agriculture and Climate Change (FACCE), E.C. (Brussels)

2011 - 2012 2011 - 2018 Sr. Science Advisor, Inst. Advanced Sustainability Studies (IASS), Potsdam, Germany

Member, Scientific Advisory Board, SERDP, DOD, Washington, D.C.

2011 - 2014 Member, Federal Advisory Committee, Climate Assessment Report, NOAA, Washington, D.C.

2009 -Adjunct Professor, University of Iceland, Reykjavik, Iceland Prof. Soil Science, The Ohio State University, Columbus, OH 1989 - 2011

1989 - 1987 Assoc. Professor, Soil Science, The Ohio State University, Columbus, OH

1970 - 1987 Soil Physicist, IITA, Ibadan, Nigeria

1968 - 1969 Senior Research Fellow, University of Sydney, Australia

Research Assistant, Rockefeller Foundation, India & OARDC, OSU, Columbus, USA 1963 - 1968

# Additional Administrative Experience

Co-Chair, Tropical Land Clearing for Sustainable Agriculture, IBSRAM, Bangkok, Thailand 1984 - 1987 1981 - 1984 Chair, Inter. Com. on Tropical Deforestation and Land Development, IITA, Ibadan, Nigeria

# Service to Professional Organizations

2017 - 2018 2014 - 2016 President, International Union of Soil Sciences, Vienna, Austria

President Elect, International Union of Soil Science, Vienna, Austria 2007 - 2008 Member, NRC/NAS Panel on Africa and Asia, NRC/NAS, Washington, D.C.

2006 - 2007 President, Soil Science Society of America

2010 -Co-Editor-In-Chief Advances in Soil Science, Taylor and Francis

2004 -2012 Co-Editor-in-Chief, Soil & Tillage Research, Elsevier, Holland 2003 - 2005 Lead Author, U.N. Millennium Ecosystem Assessment

2000 -Editor-in-Chief, Encyclopedia of Soil Science, Dekker, NY, Taylor and Francis

2000 - 2005 Member, Review Panel, Environ. Division, Los Alamos National Lab., New Mexico

Member, U.S. Nat'l Comm. on Soil Sci., Nat'l Acad. Sci., Washington, D.C. Lead Author, IPCC Special Report, LULUCF, Geneva, Switzerland 1998 - 2002

1998 - 2000 1993 - 1996 Corresponding author, IPCC Working Group II: Geneva, Switzerland

Member NRC/NAS Panel on Sustainable Agric. & Vetiveria (90-92) NRC, Washington, D.C. • Visiting scholars: 180 (2 wks.–2 yrs.) 1990 - 1993

1988 - 1991 President, Int'l Soil Tillage Research Organization

1987 - 1990 President, World Association of Soil and Water Conservation

# Current Funding Support and Collaboration (Total Grants Received Since 1982 US \$~50 million)

(i) U.S. Government and Foundations: USDA, USAID, USDOE, US State Dept., US-EPA, The Rockefeller Foundation, TIE/CWC-OSU

(ii) Industry: Monsanto, Corn/Soybean Growers Assoc., AEP, OCOD, Tata Trust, Danone, The Herbert W. Hoover Foundation, Patagonia, Indigo

(iii) National Laboratory: Oak Ridge Nat'l. Lab., Los Alamos Nat'l Lab., Pacific Northwest Nat'l. Lab., Battelle, Brookhaven Nat'l. Lab.

#### **Awards and Honors**

- World Food Prize, Des Moines, IA, USA (2020)
- Japan Prize in "Biological Production, Ecology," Tokyo, Japan (2019)
- GCHERA World Agriculture Prize, Nanjing, China (2018)
- Glinka World Soil Prize, FAO, Rome, Italy (2018)
- U.S. Awasthi IFFCO Award, New Delhi, India (2019)
- Alumni Medalist (2019), 422<sup>nd</sup> Commencement Medal (2019), Professional Achievement Award (2012), OSU Alumni Association, OH, USA
- Medal of Honor, UIMP, Santander, Spain (2018); Distinguished Service Medal, IUSS, Rio, Brazil (2018)
- Sustained Achievement Award, Renewable Natural Resources Foundation, Washington DC, USA (2017)
- Doctor of Science, Honoris Causa: PUCV, Chile (2019), Gustavus Adolphus College (2018), Univ. of Lleida, Lleida, Spain (2017), TUD, Germany (2015), Alecu Russo Balti State University, Moldova (2010), Norwegian University of Life Sciences, Norway (2005), PAU, Ludhiana, India (2001)
- Atlas Award, Best Paper Among 2500 Journals, "Food Security in a Changing Climate," Elsevier Science Publisher, Amsterdam, Netherlands (2016)
- INRA, Morocco Government Award for Strategic Development of Earth System Science Worldwide, Marrakesh, Morocco (May 2016)
- Clarivate-Thomson Reuters Highly Cited Researchers (top 1%) (2014-2019), World's Most Influential Scientific Minds (2014-2016) • Global Drylands Champion, UN Convention to Combat Desertification, Bonn, Germany (2013)
- Honorary Member, Indian Society of Soil Science (2012), WASWAC (2000), DBG: Korrespondierendes Mitglied (2020)
- Distinguished Achievement in Agriculture Award, Gamma Sigma Delta International (2012)
- M.S. Swaminathan Award, TAAS, New Delhi, India (2009)
- IPCC—Nobel Peace Prize Certificate, Geneva, Switzerland (2007)
- Presidential Lecture, Current Trends, 10th May, Chaired by President Grimsson of Iceland, Reykjavik, Iceland (2006)
- Liebig Award, International Union of Soil Sciences, Philadelphia, USA/Vienna, Austria8 (2006)
- Norman Borlaug Award, Coromandel Fertilizers, IARI, New Delhi, India (2005)
- Distinguished Lecture (2000), Distinguished Scholar Award, (1994), The Ohio State University, Columbus, OH, USA
- Hugh Hammond Bennett Award (1998), Best Research Paper for Quality and Impact Honorable Mention Award (2020), JSWC, Ankeny, IA, USA
- Soil Sci. Res. Award (2002), International Soil Sci. Award (1988); Soil Sci. Applied Res. Award (1992) of Soil Sci. Soc. of America (SSSA), WI, USA
- Fellow: ASA (1985), SSSA (1986), TWAS (1992), AAAS (1996), SWCS (1997) NAAS, India (1998), Rothamsted, UK (2013)
- Carl Sprengel Agronomic Res. Award (2005), Environment Quality Award (2004), Int'l Agronomy Award (1995), ASA, WI, USA
- Gold Medal, BSc from PAU, Ludhiana, (1963); Gold Medal MSc from IARI, New Delhi (1965), Dist. Alumni Award PAU (1998)



- Publications: ~2437 (through 1/2020)
- Refereed journal articles: 955
  - o 1st author: 296, 2nd author: 400, 3rd author: 138, other: 121
- Books written/edited: 98
- Book chapters: 543
- h-index: 150 (1/2020 Google Scholar)
- Total Citations: ~101,811
- Mentoring: ~360 Intl. professionals
- Graduate students: 112
- Postdoctoral researchers: 54