

Biographies of candidates for the elections of the officers for IUSS Divisions and Commissions 2017

Division 2 - Soil properties and processes

Chairs

Ryusuke HATANAO

Ryusuke Hatano is a full professor of Research faculty of Agriculture, Hokkaido University. He obtained his PhD from Hokkaido University in 1986. He worked at Department of Soil Science and Geology, Wageningen University in 1992 as a visiting researcher. Since 1995, he has supervised 39 PhD students. He has worked for various international projects related to nutrient cycling in terrestrial ecosystems including nutrient discharge and greenhouse gas emissions in East Siberia, China, Japan and tropical peatland area of Indonesia and Malaysia. He hopes to open a symposium on “carbon and nitrogen cycling and greenhouse gas emissions in agroecosystems”.

URL: https://www.researchgate.net/profile/Ryusuke_Hatano

Tongmin SA

Korean Society of Soil Science and Fertilizer highly recommends Dr. Tongmin Sa for applying Division2: Division chair position. **Dr. Tongmin Sa** is a Professor of Agricultural Chemistry Department at Chungbuk National University, South Korea and a Full Member of the Korean Academy of Science & Technology (KAST). He is currently serving as the President of The Korean Society of Soil Science & Fertilizer (KSSSF) and the vice President of the International Scientific Center for Fertilizer (CIEC), Asia. He has written 19 book chapters and authored or co-authored over 310 peer reviewed publications. He advised over 85 graduate students and postdoctoral researchers from many countries. His academic background includes bachelors and master degree from Seoul National University and a doctoral degree in soil science from North Carolina State University. His expertise lies in investigating the mechanisms of microbial plant growth promotion and biofertilizer development. He is also recognized for researches on plant-microbe interaction study and microbial diversity changes in agricultural soils under environmental stress conditions, particularly metal contaminated and salt afflicted lands. His ongoing research and interest include microbe-mediated control of environmental pollution and volatile emissions, especially the roles of microbes in decreasing gas and volatile production related to global warming. His laboratory is also investigating structural and functional diversity of bacteria and archaea involved in rice paddies as influenced by different nutrient regimes, especially in long-term application of organic and chemical fertilizers. One of the goals in his laboratory is to also develop biofertilizers with their biocompatible carrier materials that enhances plant growth, biocontrol and stress tolerance in crop plants for field and agricultural use. His laboratory aims in advancing scientific research in the field of Fertilizer and Soil Microbiology while developing innovations for sustainable agriculture.

Yongguan ZHU

Dr Yongguan Zhu is a world leader in taking multidisciplinary and multi-scale approaches in soil and environmental pollution studies. He has made outstanding contributions to understanding the fundamental mechanisms of soil-plant-microbe interactions in relation to biogeochemistry of contaminants (e.g. arsenic and radionuclides) and nutrients (e.g. nitrogen), and environmental antibiotic resistance, and thereby developing solutions for real-world environmental problems. Dr Zhu is also an excellent science manager, and has been instrumental in translating scientific findings into global policies regarding environmental risk management, such as arsenic and antibiotic resistance; and in contributing to the implementation of global program in urban health & being sponsored by International Council for Science. Dr Zhu's major science discoveries have been widely reported/featured in global science media, such as Science, Nature, Cell Press, New Scientists etc.

Vice chairs

Leo CONDRON (*Professor, University of Lincoln*; Leo.Condron@lincoln.ac.nz)

Born Glasgow, Scotland. Qualifications include a BSc Honours in Agricultural Chemistry (University of Glasgow), PhD in Soil Science (Lincoln College, New Zealand), and DSc in Soil Science (University of Canterbury, New Zealand). Soil science academic at Lincoln University since 1991 and Professor from 2006. Research has focussed on the biogeochemistry of phosphorus in natural and managed ecosystems. Published 210 journal articles and book chapters (WoS H Index 42), and supervised over 100 postgraduate students and postdoctoral fellows. Fellow of the British and New Zealand Societies of Soil Science, and Chair of IUSS Commission 4.3 [Soils and Land-use Change] 2006-10.

URL: <http://www.lincoln.ac.nz/Lincoln-Home/About-Lincoln/Staff-Profiles/>

Paul HALLETT (*Professor, University of Aberdeen*; paul.hallett@abdn.ac.uk)

As Professor of Soil Physics at the University of Aberdeen I investigate how biology and chemistry interact with soil physical properties. My current projects explore the formation of the rhizosphere (BBSRC), red soils in China (NERC CZO), improving nitrogen use with Brazil (BBSRC), soil degradation and water stress in Ethiopia (NERC) and slope stabilisation with vegetation (EPSRC). I coordinate the MSc Soil Science teaching soil pedology, plant-soil interactions and soil physics. I was Chair of Commission 2.1 Soil Physics (2006-2010) and on BSSS Council (2007-2012). I have acted on the scientific committee of numerous conferences, including session planning for the WCSS.

URL: <http://www.abdn.ac.uk/sbs/people/profiles/paul.hallett>

COMMISSION 2.1 – Soil physics

Chairs

Munehide ISHIGURO

Dr. Munehide Ishiguro received a Ph.D. degree (1992) in Agricultural Engineering from Kyoto University, Japan. He stayed as a guest researcher in the Industrial Membrane Institute of Ottawa University, Canada (1993-4) and the Laboratory of Physical Chemistry and Colloid Science, Wageningen University, the Netherlands (2005). He is a Professor of Soil Conservation in Hokkaido University from 2011. He is now in the President of the Japanese Society of Soil Physics (2017-). He would like to organize symposiums concerning soil interfacial electric phenomena related to soil

structure and environmental sciences, and nutrient dynamics related to soil health and new cultivation method. Additional information can be found at the website.

URL: <http://researchmap.jp/read0055665/?lang=english>

Stephan PETH

Prof. Dr. Stephan Peth /University Kassel, Germany, studied Geology at the Universities of Mainz, Durban-Westville, Stellenbosch and Kiel. He received his PhD in 2004 in Soil Science and his Habilitation in 2010 on “Dynamics and architecture of soil pore spaces” at the Institute of Plant Nutrition and Soil Science (University of Kiel). Since 2012 he is head of the Department of Soil Science at the Faculty of Organic Agricultural Sciences (University of Kassel). His main research interest is in the field of Soil Physics with focus on mechanical and hydraulic soil processes and the application of X-ray microtomography and image analysis in soil research.

URL: <http://www.uni-kassel.de/go/boku>

Vice chairs

Brigitta TóTH

Brigitta Tóth is a senior scientist of Institute of Soil Science and Agricultural Chemistry Hungarian Academy of Sciences, Budapest and adjunct professor at the University of Pannonia in Keszthely, Hungary. Research activities are focused on soil physics; soil database construction, harmonization; prediction of soil properties at local, regional and continental scale; data mining techniques; mapping of soil hydraulic properties. Most important contributions and results are EU-HYDI database construction; development of pedotransfer functions for Hungarian and European scale applications; incorporation of EU-PTFs in euptf R package; preparation of soil hydraulic maps for Europe at 250 m resolution.

URL: <http://mta-taki.hu/en/tagok/toth-brigitta>

Andrzej BIEGANOWSKI

Andrzej Bieganski is an experienced researcher conducting research in soil physics. His main activity is connected with soil metrology and emission and absorption of GHGs. The linkage between the research and practice is important to him. He is a chairman of the Soil Physics Commission of Polish Soil Science Society and a member of Technical Committee No 192 for General Aspects of Soil Quality and Soil Physics of the Polish Committee for Standardization. He cooperates with scientists from many countries. He was/is the leader/participant in many international and domestic projects. Good organizer. His H-index is 10, number of citations 260.

Cătălin SIMOTA

(born 1951) graduated in physics (1975) and PhD in soil science (1988) present position General Director – National Research Institute for Soil Science Agrochemistry and Environment (ICPA) have a long activity in soil physics developing simulation models for soil water dynamics and crop yield formation (SIBIL, ROIMPEL), pedotransfer functions predicting soil water properties using easy available soil data, evaluating changes in soil properties due to soil compaction, using soil data for risk analysis and for the development of agro-environment policy measures. He is the author and co-author of 18 papers in ISI referred journals having the Hirsch index 11.

COMMISSION 2.2 – Soil chemistry

Chairs

Boris JANSEN

Boris Jansen is the current Chair of the Soil Chemistry Commission and works as Assistant Professor of Soil Chemistry at the Institute for Biodiversity and Ecosystem Dynamics at the University of Amsterdam, The Netherlands. He combines an MSc in Environmental Chemistry (1998) with a PhD in Soil Chemistry (2003). Currently he focusses on the molecular dynamics of soil organic matter. Jansen was President of the Dutch Soil Science Society (2007-2010), has authored over 50 peer-reviewed publications in the field of soil chemistry and is Editor of SOIL. In addition, Jansen is Director of the interdisciplinary Bachelor program Future Planet Studies.

URL: <http://www.uva.nl/over-de-uva/organisatie/medewerkers/content/j/a/b.jansen/b.jansen.html>

Yong Sik OK

Korean Society of Soil Science and Fertilizer would like to support Dr. Yong Sik Ok for applying Division 2: Soil chemistry commission chair. Dr. Yong Sik Ok is a Full Professor at the School of Natural Resources and Environmental Science, Kangwon National University (KNU), Chuncheon, Korea. Dr. Ok is also the Director of the Korea Biochar Research Center, an Adjunct Professor at the University of Wuppertal, Germany, and a Guest Professor at the Ghent University Global Campus, Ghent University, Belgium. Dr. Ok holds a B.S. (1998), a M.Sc. (2000) and a Ph.D. (2003) in the Division of Environmental Science and Ecological Engineering at Korea University, Seoul. Dr. Ok worked as a Postdoctoral Fellow in the Department of Renewable Resources at the University of Alberta, Canada. Dr. Ok has been a Visiting Professor at, among others, the Department of Renewable Resources (University of Alberta), the Faculty of Bioscience Engineering (Ghent University) and the Department of Civil and Environmental Engineering (Hong Kong Polytechnic University). The research interests of Dr. Ok include waste management, bioavailability of emerging contaminants, and bioenergy and value-added products such as biochar. Dr. Ok also has previous experience in fundamental soil science and remediation of metals in soils and sediments. Together with graduate students and colleagues, Dr. Ok has published over 350 referred journal articles. Dr. Ok maintains a worldwide network and is an Associate Editor for Environmental Pollution and Critical Reviews in Environmental Science and Technology, and a Member of Editorial Board for Chemosphere and several other international scientific journals. Dr. Ok has also served as a Guest Editor for Bioresource Technology, Journal of Hazardous Materials, Chemosphere, Plant and Soil, Journal of Environmental Management, Applied Geochemistry, Environmental Geochemistry and Health, Environmental Science and Pollution Research, and Geoderma. Dr. Ok has organized many international conferences, the most recent being CLEAR 2014 (Korea), Biological Waste 2014 (Hong Kong), and Asia Pacific Biochar Conference 2016 (Korea). Dr. Ok has been an active member of numerous national and international commissions and committees, and regularly serves as external judge for national and international funding institutions.

Vice chairs

Syuntaro HIRADATE

Dr. Syuntaro Hiradate received B.S. (1987), M.S. (1992), and Ph. D (1998) in Japan. He had worked as a researcher in National Institute for Agro-Environmental Sciences, Japan (1992-2017), and moved to Kyushu University as a professor of Soil Science (2017). He contributed over 150 scientific journal publications and 10 books. He received Progress Award of the Japanese Society of Soil Science and Plant Nutrition (JSSSPN) (1999) and JSSSPN Awards (2014). He will lead soil chemistry by promoting

exchange with analytical chemistry, environmental chemistry, ecology, biology, etc.

URL: <http://researchmap.jp/read0004449/?lang=english>

Karen VANCAMPENHOUT

Karen Vancampenhout holds a degree in Forestry and a PhD in Soil Science (2008). She is a professor of Soil Science and Natural Resource Management at the University of Leuven. She specializes in soil organic carbon and has a broad experience in soil analysis ranging from classical wet chemistry to highly specialized molecular methods. Karen's research projects aim at exploring new angles in natural resource management challenges, and have an important field component. Research themes include integrated system approaches to soil fertility management, carbon and nutrient cycles and soil variability. She has projects in Belgium, Ethiopia, Uganda, Mozambique and Peru.

Nicoleta Olimpia VRÎNCEANU

Nicoleta Olimpia VRÎNCEANU (47 years old, chemist). In 2009 she received the Ph. D degree in Agronomy from USAMV Bucharest. In 1994 she joined the Department of Pollution Control from RISSA as assistant researcher, became a researcher in 1997 and senior researcher in 2001. Since 2015 she is Head of Environmental Protection Laboratory. Her current research interests include behaviour of heavy metals in soil – plant system, heavy metals balances in agro-ecosystems, solutions and procedures for ecological remediation of polluted soils. She has published 7 books of which 3 were awarded with Romanian prizes and has 80 published articles.

COMMISSION 2.3 – Soil biology

Chairs

Ellen KANDELER

After a position as a researcher at the Federal Institute for Soil Management, Vienna, Ellen Kandeler moved to the University of Hohenheim, Stuttgart, Germany, as a professor of Soil Biology. She is author or co-author of over 200 scientific journal publications. At Hohenheim, she maintains an active teaching program focusing on soil biology and soil science. Her current research programme focus on the small-scale distribution and activity of micro-organisms in soils as well as on microbial responses to environmental change (climate, management, heavy metals). Ellen Kandeler is the current representative of Division 2

URL: <https://www.uni-hohenheim.de/en/organization/person/prof-dr-ellen-kandeler#contact>

Miklós DOMBOS

He is a soil ecologist working as senior researcher at the Institute for Soil Sciences of the Hungarian Academy of Sciences (MTA ATK TAKI) in Budapest, Hungary since 2005. Miklós leads a soil zoological research group focusing on ecology of the soil mesofauna and developing a novel automated sensor system for real-time monitoring of soil-living invertebrates. He is the principal investigator of several international projects (MEDAPHON, INSECTLIFE) and member of the Hungarian Soil Science Society. He published mostly on topics of soil ecology and soil science.

URL: <http://www.zoolog.hu>

Vice chairs

Koki TOYOTA

Dr. Koki Toyota received his Ph.D. degree from Nagoya University in 1993. He served as Assistant Professor, Nagoya University (1994-2000) and worked as a visiting scientist in The James Hutton Institute, UK, in 1995. He moved to Tokyo University of Agriculture and Technology in 2000. Dr. Toyota performs research and teaching programs focusing on soil biology, with emphases on soil borne plant pathogens, nematodes and their antagonists and has published over 150 scientific papers. He is Senior Editor of *Microbes and Environments*, and in the Editorial board of *Biology and Fertility of Soils*. A symposium is under consideration to focus on roles of soil biology in sustainable agriculture. Additional information can be found at his laboratory website.

URL: <http://web.tuat.ac.jp/~toyoda/index.html>

Magdalena FRAC

Associate Professor Dr. Magdalena Frąc

The leader of the Laboratory of Molecular and Environmental Microbiology, The head of the Department of Soil and Plant System, Institute of Agrophysics, Polish Academy of Sciences, Doświadczalna 4, 20-290 Lublin, Poland

www.ipan.lublin.pl, <http://www.ipan.lublin.pl/en/profil-pracownika/85>

She has more than 10 years research and teaching experience at master and doctoral studies. Her group works on soil microbial diversity and enzymatic activity evaluation under organic waste application, soil tillage and anthropogenic factors. The focus is on use of microbial functional and genetic diversity as soil health and quality marker. She held several internships in foreign scientific institution (Czech Republic, Estonia, Germany, Italy, Japan, USA). She participated in 21 research national and international projects. She was responsible for research and infrastructure projects management of about 770K€ and 6Mio€ (EU-funds), respectively. Her H-index is 11, citations number 350.

Anca-Rovena LĂCĂTUȘU

born at 15 June 1966, Faculty of Biology, University of Bucharest, Senior Researcher, Head of Soil Biology Laboratory at National Research and Development Institute for Soil Science, Agrochemistry, and Environment (ICPA Bucharest), Romania. Research activity based on connection between biological sciences with environmental quality monitoring, soil fertility improvement, organic farming, bio/phytoremediation of polluted soils, sustainable agriculture. Project leader/management team member of 18 national and international projects, 3 patents (DERWENT International Database Web of Science), author and co-author of 14 books and book chapters published in national and international publishing houses, 121 articles (13 ISI/ISI Proceedings; 77 in IDB and peer reviewed journals/proceedings), over 200 citations in ISI journals and IDB, Hirsch index 6.

COMMISSION 2.4 – Soil mineralogy

Chair

Stephan HILLIER

Steve Hillier is a mineralogist working in the Environment and Biochemical Sciences group at The James Hutton Institute (formerly Macaulay Institute). His interests and publications revolve around the use of quantitative clay mineralogical analysis to understand soil properties. He is visiting professor in the Department of Soil and Environment at the Swedish University of Agricultural Sciences, Uppsala, and was Conference Chair for Euroclay 2015, in Edinburgh. He is Chair of the

newly formed Clay Minerals Task Group of the International Centre for Diffraction Data, associate editor of Clay Minerals, and Vice Chair of the International Union of Soil Science Commission on Soil Mineralogy.

Vice Chair

Sofia N. LESSOVAIA

Prof. Dr. Sofia N Lessovaia is a lecture of Dep. of Physical Geography and Landscape Planning, Institute of Earth Sciences, St. Petersburg State University, St. Petersburg. She graduated from St. Petersburg (Leningrad) University, Biology and Soil Sciences faculty, 1989, got the Ph.D. (1993), Dr. Sci. (Geography) (2006), St. Petersburg State University.

Expertise: soil mineralogy, clay mineralogy, rock weathering in soil environment of the north of Eurasia, soil genesis. She has published more than 40 papers, including those in international journals and chapters in monographs, and took place in organizing the several international conferences and field tours.

URL: http://earth.spbu.ru/en/structure/staff/staff-A-Z_939.html

COMMISSION 2.5 – Soil chemical, physical and biological interfacial reactions

Chairs

Takuro SHINANO

Takuro Shinano obtained Ph.D. in Agriculture at Hokkaido University (HU) in 1998. He started his career as assistant professor of Laboratory of Plant Nutrition, Faculty of Agriculture, HU since 1990, then as associate professor since 2002. He moved to National Agriculture and Food Research Organization (NARO) in 2008 as a leader of Rhizosphere unit in Hokkaido. He became director of NARO/Agricultural Radiation Research Center in Fukushima at 2013. He published 148 reviewed papers. He received Progressed Award of JSSSPN (2000) and NARO Special Prize II (2016). In the commission 2.5 of IUSS, transmission of information and also planning a cross regional symposium to focus on mutual function in this area are in his scope.

URL: http://www.naro.affrc.go.jp/english/tarc/research/agricultural_radiation_center/index.html

his research activity is in <https://www.researchgate.net/profile/TakuroShinano>

Siobhan STAUNTON

I the undersigned, Dr Siobhán Staunton, member of the British Soil Science Society and the French Association Française pour l'Etude des Sols (AfeS), currently employed as research Director, INRA, Montpellier, France hereby declare that I am candidate for reelection to the position of Chair of Commission 2.5, Soil physical, chemical and biological interfacial reactions. I would like to continue to work in collaboration with the current vice-Chair, Professor Qiaoyun Huang, Huazhong Agricultural University, Wuhan, China who is also standing for reelection.

Vice Chair

Qiaoyun HUANG

Dr. Qiaoyun Huang is a Changjiang Scholar Professor, Distinguished Young Scholar of NSFC, Dean at Faculty of Resources and Environment, Vice Director of State Key Laboratory of Agricultural Microbiology, Huazhong Agricultural University, China. His research focuses on the interfacial processes of soil mineral-organic matter-microorganism interactions. He has published 120 referred SCI papers. He is currently the vice chairman of Commission 2.5 of IUSS, and the member of the International Advisory Committee of ISEB. He was the Chairman of 4th ISMOM and 21st ISEB conferences. He serves as the editorial member of Appl Soil Ecol, J Soil Sediment, Front Microbiol and Geomicrob J.