

riccardo scalenghe

- > field of teaching for the past 4 years :
pedology, soil science
- > research topics :
periurban environment,
anthropogenic changes,
soil bio-geocycling, soil
pollution, land
evaluation

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SHORT CV

I was born in Turin in 1965, married, in our family we are four. I am researcher in pedology (former SSD AGR/14) at the University of Palermo since the year 2000. In 1989, I graduated in Agricultural Sciences at the University of Turin, the same year I obtained the professional qualification to practice as agronomist. In the past, I was part of the technical/scientific staff of the Einstein Committee ('Project Ecology', Rome, 1985 and 'The Breath of the City', Turin, 1986). Later, I was in charge for the Hydrometric Center of the 'Coutenza Canali Cavour' (Consorzio Irriguo Est Sesia, Novara, 1989-91) and environmental agronomist in land use planning (Consulagri, Turin, 1992-94). In 1996, I obtained the research doctorate in Soil Chemistry from the University of Pisa. I lectured Chemistry of Materials (Turin University, ay 1997/98), Soil Chemistry and Applied Pedology (Genoa University, ay 1997/98), Chemistry (University of Turin, ay 1998/99), Applied Soil Science (Turin University, ay 1999/00); Classification and Soil Mapping, Soil Geography, Applied Pedology, Techniques of Land Evaluation (Palermo University, since ay 2000/01). I was the co-scientific director of the Master in Sustainability Interuniversity Consortium among Bocconi University, Chieti, L'Aquila, Teramo and Turin Universities (ay 1997/99). I was a member of the academic board of the PhD in Soil Science (ay 2000/04) and in Hydraulics (ay 2005/07) at the University of Palermo. I was the rapporteur of 15 thesis in Forest and Environmental Sciences, Agricultural Sciences and Technology and Biotechnology, and 4 PhD thesis in Soil Science. Since 2002, I was responsible for several Erasmus bilateral agreements with European Universities (Beira Interior, Cluj Napoca, Malta, Poitiers, Santiago de Compostela, Sevilla, Tartu). Since 1992 I worked in research funded by the European Commission, FAO, OECD and British Council. Since 1997, I cooperated with The James Hutton Institute (former Macaulay Institute), the Swiss Federal Institute for Forest, Snow and Landscape Research and the Université de Poitiers. My research interests are currently focused on soil anthropogenic transformation. I worked on some aspects of the spatial soil variability but the main area of research was the study of nutrient cycles at the pedosphere-hydrosphere interface. In particular, I studied the cycle of phosphorus, nitrogen and carbon; I made a couple of research on the distribution of heavy metals and rare earth elements. Relatively to the soil, I have worked on its pedogenic aspects in alpine, temperate, and Mediterranean environments. Relatively to soil/water interface, I studied few aspects of the liquid and solid state of the water. I have also produced some contribution of both aspects of niche crops and the characteristics of soils used for specific agronomic uses. I am serving as editor for two journals (Agric, Ecosys & Environ, Heliyon) and as referee for a number of scientific journals (Appl Soil Ecol, Aust J Soil Res, ES&T, Geoderma, Int J Biodiv Cons, Int J Wildland Fire, J Agric Food Sci, J Archeol Sci, J Environ Manage, JPNSS, L&O, Land Urb Plann, Pedosphere, Soil Use Manage, Sci Tot Environ, Sensors, and SSSAJ). My scientific production of major impact consists of forty-seven papers published into ISI journals, six chapters in books and the co-editing of a book.

TRAINING

1989

Degree in agricultural sciences

1995

PhD in soil chemistry

2000

Lecturer certificate of academic competence

2018

Full professor certificate of academic competence

ORGANIZATION OR PARTICIPATION IN SCIENTIFIC MEETINGS

SCALENGHE R, Barberis E, Ajmone Marsan F. Phosphate release from soils depending on redox changes. XII Congresso SICA, Piacenza dal 19-09-1994

Afif E, Arduino E, AJMONE MARSAN F, Barberis E, Delgado A, Edwards AC, Lammers A, Maguire R, Scalenghe R, Schwertmann U, Torrent J, Wilson MJ. Phosphate release potential of overfertilized soils of important agricultural areas of EC. Canadian Society Soil Science, Québec City 28-07-1995

SCALENGHE R, Barberis E, Ajmone Marsan F, Arduino E. P release from periodically reduced soils. XIII Congresso SICA, Firenze 05-10-1995

Ajmone Marsan F, Barberis E, Edwards AC, Maguire R, SCALENGHE R, Wilson MJ. Changes in the P availability of different soil particle-size fractions under simulated estuarine conditions. International Symposium on System Approaches for Agricultural Development. IRRI, Los Baños 08-12-1995

SCALENGHE R, Barberis E, Ajmone Marsan F. P adsorbing properties of overfertilized soils depending on redox changes. XIV Congresso SICA, Rimini 26-09-1996

SCALENGHE R. Effect of high CEC natural zeolites on the nutrient leaching in an integrated constructed wetland system. Ecological engineering Polish-Swedish Seminar, Starbinino 28-05-1997

Zanini E, SCALENGHE R, Gallini L. Approccio quantitativo all'identificazione del carattere 'fragico' in suoli di alta pianura piemontesi. XV Congresso SICA, Viterbo 25-09-1997

SCALENGHE R, Acutis M, Boero V, Freppaz M, Zanini E. Impiego di fasi minerali nel controllo della dinamica dei nutrienti nella bio-pedo-depurazione di reflui zootecnici. XVI Congresso SICA, Ravello 05-05-1998

Zanini E, SCALENGHE R, Biasiol B, Bonifacio E, Boero V. Erodibilità dei suoli a vigneto del terziario piemontese: approccio quantitativo nella valutazione delle tecniche di gestione. XVI Congresso SICA, Ravello 04-05-1998

Kowalik P, SCALENGHE R. Winter work of constructed wetlands in Poland and transfer of results into alpine environment. INTECOL World Congress, Firenze 26-07-1998

- SCALENGHE R. Qualità delle acque e gestione dei suoli. Università degli Studi di Firenze 12-12-1999
- Freppaz M, Edwards AC, Williams B, SCALENGHE R, Zanini E. Influenza del manto nevoso sulla dinamica dell'azoto in suoli alpini. Congresso SISS, Venezia 16-06-2000
- Scalenghe R, FREPPAZ M, Bonifacio E, Zanini E. Land use influence on N status at the soil-snow interface. International Symposium on "Forest soils for sustainable productivity", Vila Real 18-09-2000
- SCALENGHE R, Barberis E, Edwards AC. The phosphorus enrichment ratio of overfertilized soils. XVII IUSS World Soil Congress, Bangkok 08-08-2002
- DAZZI C, Laudicina VA, Monteleone S, Lo Papa G, Scalenghe R. Genesis and classification of gypsiferous soils in a semiarid area of southern Sicily, Italy. SUMASS Congress, Cartagena 20-09-2002
- SCALENGHE R. La salinizzazione. Scuola permanente suoli e siti inquinati, SISS/ARPA FVG, Cervignano del Friuli 12-12-2003
- SCALENGHE R. Lo calpestiamo continuamente. Istituto Sereno Regis, Torino 26-02-2009
- KOWALIK P, Scalenghe R. Water needs of biomass production for energy purposes in Poland. III Ogólnopolski Kongres Inżynierii Środowiska. Lublin 15-11-2009
- SCALENGHE R. L'impatto della guerra sul suolo. Università degli Studi di Cagliari 15-04-2014
- SCALENGHE R. Il paesaggio è vedere. Il suolo e ciò che gli gira attorno. Salone Internazionale del Libro, Torino 08-05-2014
- SCALENGHE R. Nuove pedogenesi: il suolo negli scenari di guerra. Università Cà Foscari, Venezia 01-04-2015
- SCALENGHE R. I segni della guerra", Università Cà Foscari, Venezia 28-09-2015
- SCALENGHE R. Gli effetti delle attività militari sul suolo e sul paesaggio. Politecnico di Torino 04-11-2015
- SCALENGHE R. Artificial Nature! YAP FEST MAXXI Temporary School, Fondazione MAXXI, Roma 13-07-2016
- SCALENGHE R. Suoli e paesaggi dell'Antropocene. Università degli Studi di Sassari, Nuoro 17-01-2017
- Member of the organizing committee of the WFS Meetings "Sustainable applications for the Sicilian development", World Federation of Scientists, Rome 06-2003
- Member of the Board of Directors of the International Summer School on "Forest soils and global change", Campobasso 10-2007
- Member of the organizing committee of the "Soil minimum tillage systems" Symposium, USAMV Cluj-Napoca from 06-2015

DIRECTION OR PARTICIPATION IN THE ACTIVITIES OF RESEARCH GROUPS
"Phosphate release potential of overfertilized soils" [CEE/AIR 920303] TUM-

Freising (DE), Universidad Cordoba (ES), Macaulay Institute, Aberdeen (UK) 01-01-1991 to 31-12-1993

“Forest and food security of the Farako Forêt Classé (Mali)” FAO/GCP/RAF/303/ITA] 01-01-1995 to 31-12-1996

“Sustainable domestication of indigenous fruit trees: interactions between soil and biotic resources in some drylands of Southern Africa”, [CEE/INCO-DC ERBIC/18CT96/0035] Universität Göttingen (DE), Ben-Gurion University, Beer Sheva (IL), Veld Products Research Gaborone (BOT), Namibia University Windhoek (NA) 01-01-1996 to 31-12-1999

Board of Directors del Consortium for the Education on the Mountain and Marginal Ecosystems 01-01-1996 to 01-01-1999

“Expérimentation de procédés respectueux de l’environnement permettant le traitement des effluents d’élevage et de fabrication fromagère adaptés aux exploitations de montagne” [CEE/Interreg II N°106] Vallée d’Aoste (IT)-Haute Savoie (FR) 01-01-1997 to 01-01-2000

“Sustainable bio-technologies against forest regeneration decline and soil erosion in NorthEastern Bohemia” [CEE/INCO SUSBIOFOR PL971076] Universität Göttingen (DE), WSL (CH), Gdansk Politechnik (PL), Czech Academy of Sciences (CZ) 01-01-1998 to 31-12-2000

“Methode de caracterisation des sols pour le diagnostic et le zonage agropedologique” [CEE/Interreg II N°213], Vallée d’Aoste (IT)-Haute Savoie (FR) 01-01-1999 to 01-01-2001

“Argiles fibreuses: mécanismes pedogenetiques et distribution spatiale en sols forestier”, Università Italo-Francese 01-01-2001 to 01-01-2004

Supervised Work Experiences Abroad, Macaulay Institute, Aberdeen 01-01-2005 to 01-01-2007

“Impacts of land use and disturbance on ecological function of soils”, University of Stirling, British Council 01-01-2006 to 01-01-2007

“Litter beech and soil carbon”, Swiss Federal Institute for Forest, Snow and Landscape Research Birmensdorf, OECD 01-01-2006 to 01-01-2008

“La fonction ressource du sol : l’utilisation de Alfisols de Piémont pour la construction au dans la période romaine”, Université de Poitiers 01-01-2009 to 01-01-2012

COORDINATION OF SCIENTIFIC STUDIES AND RESEARCH RELATED BY PUBLIC OR PRIVATE INSTITUTIONS

Design and construction supervision of the experimental biopedotechnology plant Coopérative laitière de Champagne, Commune de Chambave - Progetto financed by Regione Autonoma Valle d’Aosta e Suaci Montagne Alpes Du Nord Chambéry 01-12-1999 to 31-12-2000

Head of the Palermo Research Unit - Two-year project funded by TOTAL [RM / SPE / BTN / SEB TC30 / 11/2005] "Evaluation of the impact of some bituminous

emulsions produced by TOTAL on natural soils, and simulation of the spill effect accidental "from 01-01-2006 to 01-06-2008

Head of the Palermo Research Unit - Project "A concrete soil carbon balance" [PG / 2008/219072] of the Emilia-Romagna Region from 01-01-2008 to 01-06-2010

Member of the 'Suoli e Pianificazione' Scientific Technical Committee to support the Regional Council of the Emilia-Romagna Region for the definition of the Guidelines for the sustainable use of soils in urban planning from 24-07-2010

SCIENTIFIC RESPONSIBILITY FOR PEER REVIEWED RESEARCH PROJECTS

Scientific Responsible of the Young Researchers Project "Genesis and evolution of the fragipan", MIUR from 01-01-1999 to 14-09-2000

IMG-Tempus Coordinator 'Distance Learning Education in Soil Science of Europe', Directorate-General Education and Culture, European Commission from 01-11-2002 to 31-10-2003

Scientific collaborator of the Research Funded by the University of Palermo Fondo already 60% [2004-ATE-0350] "Effects induced in the quality of an agricultural land from the conversion to organic agriculture" from 01.11.2004 to 31-10-2005

Scientific Coordinator of Research Funded by the University of Palermo Fondo already 60% [2004-ATE-0988] "Environmental significance of the redistribution of nutrients in separate textures of different soils" from 01.11.2004 to 31-10-2005

Scientific Coordinator of Research Funded by the University of Palermo Fondo already 60% [2005-ATE-0834] "Effect of cycles reduction and oxidation on the solubilization of phosphate in different soils" from 01.11.2005 to 31-10-2006

Scientific collaborator of Funded Research Fund already 60% [2006-ATE-0884] "Interaction of pollutants with soil", University of Palermo from 01-11-2005 to 31-10-2006

Scientific collaborator of the Research Funded by the University of Palermo Fondo already 60% [2005-ATE-1064] "Soils on alluvial deposits and their agronomic potential" from 01.11.2005 to 31-10-2006

Coordinator of the approved project 'DEscribing Soil for Extrapolating Risks and Trends' [NEST-2005-Path-COM] European Commission (not financed) from 01-01-2006 to 31-12-2006

Scientific Coordinator of Research Funded by the University of Palermo Fondo already 60% [2005-ATE-0834] "Effect of cycles reduction and oxidation on the solubilization of phosphate in different soils" from 01.11.2006 to 31-10-2007

Scientific Coordinator of Research Funded by the University of Palermo Fondo already 60% [2007-ATE-0968] "Interrelations between soil descriptors before and after an anthropic disturbance" from 01.11.2007 to 31-10-2009

Research collaborator MIUR PRIN [2008-NAZ-0256] "Agronomic valorization and phytochemical investigations in Pyrethrum (Chrysanthemum cinerariaefolium L.)" from 01.11.2008 to 31-10-2010

Scientific Coordinator of Research Funded by the University of Palermo Fondo already 60% [2012-ATE-0041] "Technological aspects related to the use of the

soil for the construction of bricks in the Roman period" from 01-11-2011 to 31-10-2013

Coordinator of the CORI Project [R6D13 + P8GE2012] "Interaction of clay minerals in the soil", University of Palermo from 10-05-2013 to 15-05-2013

Co-Director of the NATO project 'Integrating Ecosystem Services into Hybrid Warfare Damage Assessment (Hybr-ES)', Call for proposals "Science for Peace and Security Program", Emerging Security Challenges NATO (Stage 1 passed) from 01-09-2014 to 01-03-2015

COST project coordinator OC-2015-1 [OC-2015-1-19333] Soil Performance Appraisal, Regulation and Key strategies (SPARK) Panel Review RP 5 - Earth, agriculture and environmental sustainability. Evaluation Status Final 23/30, not financed from 01-03-2015 to 30-10-2015

Partner InterregMED 'Monitoring Sensitivity to land degradation in Mediterranean Protected Areas (SIEMPRE). Priority axis-Investment Priority-Specific Objective 3-2-1 [Ref 891]. (Stage 1 passed) from 01-10-2015 to 18-02-2016

Pre-proposal Coordinator 'A new model of knowledge organization about soils of urban areas for the best management of peri-urban ecosystems' [eCall 6619908]. JPI Urban Europe, ERA-NET Cofund Smart Urban Futures from 01-03-2016 to 01-09-2016

DIRECTION OR PARTICIPATION IN EDITORIAL COMMITTEES

Encyclopedia of Earth [http://editors.eol.org/eoearth/wiki/Riccardo_Scalenghe] since 01-11-2006

Agriculture, Ecosystems and Environment editorial board since 01-07-2016

Heliyon editorial board since 18-11-2016

PARTICIPATION IN THE COLLEGE OF TEACHERS OF RESEARCH DOCTORATES AND PHD TEACHING DUTIES

PhD thesis (Claudio Territo, Giuseppe Lo Papa, Michele Freppaz, Vito Armando Laudicina), Italian PhD cycles XVIII, XX, XXI e XXII (dal 2003) dal 01-11-2000 al 01-01-2008

Teaching Body of the PhD in "Pedology" [DOT0320320] of the University of Palermo from 01-11-2000 to 31-10-2007

Teaching Body of the Ph.D. in "Environmental Hydrology" [DOT0320773] of the University of Palermo from 01-11-2004 to 31-10-2010

Teaching Committee of the PhD in "Agricultural, Forestry and Environmental Food Sciences" of the University of Palermo from 01-05-2017

FELLOWSHIPS AT UNIVERSITIES AND FOREIGN RESEARCH INSTITUTES

Research assignment at Macaulay, Aberdeen from 01-08-1996 to 01-12-1998

Co-director and lecturer of the "Master in Sustainability" of the CODEMM (Bocconi University Interuniversity Consortium, University of Chieti, L'Aquila, Teramo and of Turin) the patronage of the Ministry of the Environment from 01-01-1997 to 31-12-1999

Teacher of the Italian-Russian School of Higher Education in Ecological, Natural and Environmental Sciences, organized by the Italo-Russian Institute of Ecological Education and Research from 01-07-2004 to 31-07-2004

Lecturer of the Italian-Argentine Master "Sustainable Organization and Management of Zootechnical Production and Protection of the Environment" University of Molise and the Universidad de Concepción of Uruguay in Argentina from 05-05-2005 to 06-05-2005

Co-director of the International Summer School on "Forest Soils and Global Change", organized by the University of Cordoba, Molise, Palermo, Santiago de Compostela and Turin, MIUR funding from 01-11-2006 to 31-10-2007

Teaching assignment at the Universidad de Sevilla from 08-01-2007 to 18-01-2007

Research assignment at the Eidg Forschungsanstalt WSL, Birmensdorf from 01-09-2007 to 01-06-2008

Member of the Italian-Russian Task Force on the harmonization of the teaching of soil science in the academic field, Lomonosov Moscow University from 01-05-2010 to 20-05-2010

Teaching assignment at the University of Cluj Napoca from 01-12-2011 to 20-12-2011

Professor of Post Graduate Course IPROMO on "Mountain Environment and Global Change", University of Turin / FAO / UNESCO from 08-07-2017 to 09-07-2017

ACHIEVEMENT OF AWARDS AND RECOGNITIONS FOR SCIENTIFIC ACTIVITY, INCLUDING THE AFFILIATION TO ACADEMIES OF RECOGNIZED PRESTIGIOUS IN THE SECTOR

Zanini E, Scalenghe R, Boero V, Bonifacio E. Modelling of aggregate breakdown in some Italian Alfisols. ISSS World Congress, Montpellier, mention of best symposium contribution 4/2114 08-1998

Scalenghe R., Certini G., Corti G., Ugolini F.C., Zanini E. Ipotesi sulla genesi del carattere fragico. Congresso SISS, Gressoney St. Jean, mention of best symposium contribution 06-1999

Lecture "Il fattore antropico di formazione dei suoli" Accademia di Agricoltura, Torino 07-05-2002

Scalenghe R, Edwards AC, Barberis E. Phosphorus loss in overfertilized soils: The selective P partitioning and redistribution between particle size separates. Most downloaded European Journal of Agronomy

Lecture "Definizione di suolo in ambiente extraterrestre" Accademia dei Georgofili, Firenze 27-01-2011

Publons Award: Sentinels of Science-Agricultural and Biological Sciences from 01-10-2015 to 01-09-2016

Publons Award: top reviewer University of Palermo, position #1 from 31-08-2016 to 01-09-2017

Publons Award: top reviewer Environmental Sciences from 31-08-2016 to 01-09-2018

Publons Award: top reviewer Agricultural and Biological Sciences from 31-08-2016 to 01-09-2018

ANVUR - Evaluation of Research Quality 2004-2010 points 3 (out of 3) from 01-11-2011 to 01-11-2011

ANVUR - Evaluation of Research Quality 2011-2014 points 2 (out of 2) from 01-11-2016 to 01-11-2016

SPECIFIC PROFESSIONAL EXPERIENCES CHARACTERIZED BY RESEARCH ACTIVITIES

Member of the technical-scientific staff of the Einstein Committee in the realization of the "Ecology Project" on the territory of the City of Rome (Province of Rome, ACEA, ENI, ENEA) from 01-01-1984 to 01-06-1985

Member of the technical-scientific staff of the Einstein Committee in the realization of the project "The breath of the city" on the territory of the City of Turin (Municipality of Turin, Italgas) from 01-09-1986 to 01-10-1987

Head of the Operational Hydrological Center of the Coutenza Canali Cavour (East Irrigation Association Sesia, Novara) from 01-12-1989 to 31-12-1990

Authorization to practice as agronomist doctor from 12-12-1989 to today PhD in Soil Chemistry from 01-11-1992 to 01-01-1996

Work performance contract [D.R. 685 of 6/3/1991] for the coordination in the experimentation of high-altitude plant ecotypes in the process of phytodepuration of zootechnical slurry, DIVAPRA / University of Turin from 01-01-1997 to 31-12-1997

Contracted work contract, pursuant to articles 2222 et seq. Of the Civil Code, with the DIVAPRA of the University of Turin for the coordination of scientific activities in the framework of the EU Project - INTERREG n. 326 "Experimentation of new procedures for the treatment of dairy waste and livestock" from 01-01-1999 to 01-09-2000

Erasmus / Socrates bilateral exchange manager: Universidad de Sevilla, Universidad de Santiago de Compostela, Politechnika Gdańska, Universidade de Beira Interior, University of Cluj Napoca, University of Malta, Tartu University, Université de Poitiers from 01-11-2000

Commissioner Final Exams Research Doctorate: Naples Federico II (2004), Florence (2007), Turin (2010, 2012), Cagliari (2007, 2014), Sassari (2017)

Commissioner in Comparative Evaluations for researcher positions: University of Turin (2005), University of Perugia (2007), University of Florence (2017)

Reviewer for ISI journals: Frontiers in Ecology and the Environment, Science of the Total Environment, Landscape and Urban Planning, Anthropocene, Agriculture, Ecosystems and Environment, Limnology and Oceanography, Agronomy for Sustainable Development, Journal of Environmental Management, Remote

Sensing, Plos One, Geoderma, Plant and Soil, Chain, Progress in Physical Geography, Applied Soil Ecology, Journal of Hydrology: Regional Studies, Molecules, Journal of Archaeological Science, Environmental Science and Pollution Research, International Journal of Wildland Fire, Urban Forestry and Urban Greening , Journal of Environmental Quality, Journal of the Science of Food and Agriculture, The Holocene, Journal of Soils and Sediments, Water, Forests, Environmental Monitoring and Assessment, Sensors, Soil Research, Pedosphere, Journal of Environmental Planning and Management, Soil and Sediment Contamination, Journal of Zhejiang University A, Environment, Development and Sustainability, Urb Research and Practice, Metals, Applied and Environmental Science, Acta Agriculturae Scandinavica B, Agrochemistry, Frontiers of Earth Science, ISPRS International Journal of Geo-Information, Journal of Archaeological Science: Reports

Scientific expert included in the Expert Database (EDB) of the European EFSA agency from 01-01-2010 to 01-01-2017

Auditor for the MIUR: FIRB, Future in Research, VQR2004-2010, VQR 2011-14 from 01-01-2010

Scientific expert included in the REPRISE register of the Ministry of Education, University and Research for activities related to the financing of research projects or ex-ante evaluation, in itinere and ex-post of research projects. Area of expertise: Basic research, ERC sectors PE10_9 - SH2_3 - SH3_13 - SH3_7 - SH6_3 from 01-01-2014

Auditor for the Narodowego Centrum Nauki (National Science Center), Poland from 01-03-2017

Expert of the American Geophysical Union (AGU) included in the AGU pricing study from 01-05-2017 to 01-06-2017