Tatiana F. Rittl, Ph.D.

Biogeochemistry Researcher,
specialized in recycling of organic waste & greenhouse gas emissions

Personal information	Current address	Contact
Born 16.11.1984 Nationality: Brazilian/German Married	Furuveita 5, 6611, Furugrenda Norway	+47 986 39 410 tatarittl@gmail.com linkedin.com/in/tatianarittl

RESEARCH INTERESTS

- Greenhouse gas emissions of agricultural systems;
- Identification and characterization of microbial processes;
- Sustainable recycling of organic waste;
- Analytical method development;

CORE STRENGTHS

- Highly effective in interdisciplinary projects;
- Strong skills for project and time management;
- Solid track record of grant acquisitions;

EDUCATION

Ph.D., Wageningen University, The Netherlands May 2011-May 2015

Title of thesis: Challenging the claims on the potential of biochar to mitigate climate change

- Improvement of BPCA method for biochar quantification.
- Assessment of the potential of biochar to increase soil carbon contents using ^{13}C isotope analysis.
- Integration of political and societal discourses into the assessment of the use of biochar in Brazil.

MSc., São Paulo University, Brazil with internship at Guelph University, Canada Mar. 2009- Mar. 2011

Title of dissertation: Subsidies for the delimitation and territorial planning of the buffer zone of Alto Ribeira Tourist State Park

- Subsidies for territorial planning of the buffer zone of a Brazilian Park.
- Spatial-temporal variations of the soil hydro-physical properties under different management systems.
- Quantification of soil micromorphology.

BSc., São Paulo University, Brazil Mar. 2005-Dec. 2008

Study of Environmental Management, in-depth courses: Soil Genesis, Soil Biogeochemistry, Mineral-Organic Matter Interactions, Remote Sensing, Geographic Information System.

RELEVANT WORK EXPERIENCE

Researcher Jan.2019-current

Norwegian Centre for Organic Agriculture (NORSØK), Norway

Soil organic matter and greenhouse gas studies

Postdoctoral Researcher Oct. 2015-Oct. 2018

São Paulo University, Brazil

Development of project proposals, experimental designing, execution of projects, supervision of students, presentation and publication of results.

Visiting Researcher May 2017-May 2018

Institute of Meteorology and Climate Research, Germany

Characterization and simulation of the effect of environmental conditions on soil microbial processes and greenhouse gas emissions of soils; ^{15}N-N_2O analyses for source process partitioning.

Internship April 2010–July 2010

Guelph University, Canada

Evaluation of structural and depositional soil crust in degraded soils using X-ray computed tomography scan.

Environmental Science Teacher Febr.2008-Febr.2009

Paula Souza São Paulo State Technical State School, Brazil

Environmental technical teacher in the courses: Land use planning, and Systems and ecosystems.

SKILLS, ACHIEVEMENTS & REFERENCES

Achievements

- Organization of the Fifth International Workshop of the Terra Preta Program (Brazil, 2016).
- Poster award at International Conference of International Humic Substances Society (Brazil, 2013).
- EU-COST Action on Biochar scholarship for the participation in the 2nd Biochar Summer School (Switzerland, 2013).
- 1 PhD scholarship and 1 grant proposal (Master project) from Coordination for the Improvement of Higher Education Personnel (CAPES).
- 5 BSs scholarships from the Brazilian National Council for Scientific and Technological Development (CNPq).
- Guidance of 9 BSc students and 2 PhD candidates (co-supervision).
- 3 São Paulo Research Foundation (FAPESP) scholarships (funding for Master, Postdoctoral, Visiting Researcher).
- Twice paranymph of Environmental course and twice Wageningen PhD paranymph.

Publications (last 5 years)

RITTL, T. F.; BUTTERBACH-BAHL, K. ; BASILE, C. M. ; PEREIRA, L. A. ; ALMS, V. ; DANNENMANN, M.; COUTO, E. G. ; CERRI, C. E. P. . Greenhouse gas emissions from soil amended with agricultural residue biochars: Effects of feedstock type, production temperature and soil moisture. BIOMASS & BIOENERGY, v. 117, p. 1-9, 2018.

SCHELLEKENS, J.; SILVA, C. A.; BUURMAN, P.; RITTL, T.; VIDAL-TORRADO, P.; DOMINGUES, R.; JUSTI, M.; TRUGILHO, P.. Molecular characterization of biochar from five Brazilian agricultural residues

obtained at different charring temperatures. Journal of analytical and applied pyrolysis, v. 130, p. 106-117, 2018.

RITTL, T. F.; OLIVEIRA, D. ; CERRI, C. E. P. . Soil carbon stock changes under different land uses in the Amazon. GEODERMA REGIONAL, v. 10, p. 138-143, 2017.

BEZERRA, J. ; TURNHOUT, E. ; VASQUEZ, I. M, ; RITTL, T, F, ; ARTS, B. ; KUYPER, T. W. . The promises of the Amazonian soil: shifts in discourses of Terra Preta and biochar. Journal of Environmental Policy & Planning, v. 2, p. 1-13, 2016

RITTL, T. F. ; ARTS, B. ; KUYPER, T. W. . Biochar: An emerging policy arrangement in Brazil?. ENVIRONMENTAL SCIENCE & POLICY, v. 51, p. 45-55, 2015.

CERQUEIRA, W. V.; RITTL, T. F.; NOVOTNY, E. H. ; PEREIRA-NETTO, A. D.. High throughput pyrogenic carbon (biochar) characterisation and quantification by liquid chromatography. Analytical Methods (Print), v. 7, p. 8190-8196, 2015.

SAGRILO, E. ; RITTL, T. F. ; HOFFLAND, E. ; ALVES, B. J.R. ; MEHL, H. U. ; KUYPER, T. W. . Rapid decomposition of traditionally produced biochar in an Oxisol under savannah in Northeastern Brazil. Geoderma Regional, v. 6, p. 1-6, 2015.

RITTL, T.; NOVOTNY, E. H. ; BALIEIRO, F. C. ; HOFFLAND, E. ; ALVES, B. J. R. ; KUYPER, T. W. . Negative priming of native soil organic carbon mineralization by oilseed biochars of contrasting quality. European Journal of Soil Science (Print), v. 66, 2015.

Other skills and qualifications

- MS Word & Excel skills, Gephi (network analysis), Statistical Analyses; Geographic Information System software
- ISO 14001:2004 Internal Auditor Training for Environmental Management Systems
- Nuclear magnetic resonance techniques for soil organic matter assessment.
- Summer course in participatory forest management as practice and performance.

Languages

- Portuguese (mother tongue)
- English (business fluency in speech & writing)
- Spanish (conversational fluency)
- German (basic)
- Norwegian (learning)