

**Name:** Marco Rondon  
**Position Title:** Senior Research Fellow  
**Specialty Area:** Soil Biogeochemistry  
**Current time allocation:** 100%

**Appointment Date:** November 2001

**Education:**

1996 - 1999: Ph.D. (Soil Biogeochemistry). Cornell University, Departments of Soil, Crops and Atmospheric Science. Ithaca, NY USA.  
1989 - 1990: M.Sc. Soil Science. Universidad Nacional de Colombia, Bogota. Joint program with IAEA, Vienna, Austria.  
1992 Specialization. Use of Isotopic Tracer Techniques in Soil-Plant Relationships International Atomic Energy Agency Vienna, Austria  
1976- 1981: B.Sc. Chemical Engineering. Universidad Nacional de Colombia, Bogota.

**Positions held (since terminal degree):**

Current Position: Senior research fellow, Tropical Soil Biology and Fertility Institute of Centro Internacional de Agricultura Tropical (TSBF-CIAT) Cali, Colombia  
2003: Visiting Scientist: Japan International research center. Tsukuba, Japan  
2002-2003: Project Manager, Climate Change project, Centro Internacional de Agricultura Tropical (CIAT), Cali, Colombia  
2000-2001: Project coordinator, Carbon, nutrient and water stocks and fluxes of greenhouse gases in agroforestry systems and degraded pastures in The Central Amazon. Part of the LBA. Large Scale Biosphere- Atmosphere experiment in the Amazon. Manaus, Brazil  
1996-1999: Fulbright Fellow at Cornell University. Ithaca, NY. USA  
1991-1995: Associate researcher, CIAT. Stable Isotopes Laboratory. Cali, Colombia  
1982- 1990: Assistant Researcher, Colombian Institute of Nuclear Studies (INEA) Bogota, Colombia

**Research Responsibilities (2002 – present):**

- Between 2002 and 2003, I was responsible for defining the research area on the topic of climate change and agriculture for CIAT. My main research areas have been on the Mitigation component. Reducing net emissions of greenhouse gases into the atmosphere associated to agriculture and enhancing CO<sub>2</sub> sequestration. Currently I'm involved on research on Nitrification Inhibition by tropical grasses and on Rebuilding "Terra Preta" Anthroposols and its potential for long term carbon sequestration in soils. Other research areas include assessment of various land uses to provide environmental services at the watershed level.

**Professional Service (2002 – present):**

- American Society of Agronomy and Soil Science (ASA, ASSS)
- Colombian Society of Soil Science
- Occasional reviewer for Soil Biology and Biochemistry, Climate Change, Biology and Fertility of Soil, Revista Colombia de Ciencia del Suelo.
- Member of the Outstanding Publication Award of CIAT.

**Honors and Awards (since terminal degree):**

- CGIAR First Chairman's Science Award as Outstanding Young National Scientific Staff. Washington, D.C. October 31 1997. CGIAR.
- Australian Crawford Fund Fellowship to participate in the workshop on Novel Tracer Techniques. UWA- SCIRO. February. 1999.
- NATO- NCAR Fellowship to participate in the Advanced Study Institute on Soils and Global Change. Bonas, France. 1997

- Fulbright Fellowship to conduct Ph.D. Studies. 1995.

**Graduate Student Advisement (2002 – present):**

1 PhD student from Cornell University  
 1MSc Student from Universidad de los Andes, Bogota  
 1 MSc Student from Honduras at Universidad de Nacional de Colombia

**Refereed journal publications (2002-2006)**

- Murdiyarso, D. S. Brown, O. Coto, J. Drexhage, C. Forner, M. Kanninen, L. Lipper, N. North, C. Robledo, M. Rondón. 2006. Linkages between mitigation and adaptation in land use change and forestry activities. In press by Elsevier Pub.
- Rondon, M. White, D. Cajas, S. Rincon, A. 2006. Ready to participate in the carbon trading market?. Experiences and challenges of a CDM project to recuperate degraded lands in Colombia. Submitted to J Envi Qual.
- Kuksack, C., Fernandes, E., Lehmann, J., Rondon, M., Luizao, F. 2006. Inorganic and organic phosphorus pools in earthworm casts (Glossoscolecidae) and a Brazilian rainforest Oxisol. *Soil Biology & Biochemistry*, 38, 3: 553-560.
- Rondon M.; D. Acevedo ;R. M. Hernandez; Y. Rubiano; M. Rivera; E. Amezcuita; M. Romero; L. Sarmiento; M. Ayarza; E. Barrios; I. Rao. 2006. Carbon Sequestration Potential of the Neotropical Savannas (Llanos) of Colombia and Venezuela. In. Potential to sequester Carbon in soils from latinamerica. ( Lal, R., Kimble, J eds) . In press by The Harworth Press Inc.
- G.V. Subbarao, O. Ito, W. Berry, K.L. Sahrawat, M. Rondon, I.M. Rao, K. Nakahara, T. Ishikawa, and K. Suenaga. 2005. Scope and Strategies for regulation of nitrification in agricultural systems - Challenges and Opportunities". submitted to Critical reviews in Plant Science.
- Lehmann. J. and Rondon, M. 2005. Black carbon for sequestration in terrestrial ecosystems. submitted to Climate change
- Barrios, E., J. Cobo, I. Rao, R. Thomas, E. Amézquita, J. Jiménez, M. Rondón. 2005. Fallow management for soil fertility recovery in tropical Andean agroecosystems in Colombia. *Agriculture Ecosystems and Environment* 1109. 1-2, 29-42.
- Rondon, M., Ramirez, J.A., Lehmann, J. 2005. Charcoal additions reduce net emissions of greenhouse gases to the atmosphere. In: Proceedings of the 3<sup>rd</sup> USDA symposium on greenhouse gases and Carbon sequestration. Baltimore, March 2005. In press
- Feldpausch, T.R., Rondon, M.A., Fernández, E.C.M., Riha, S.J., Wandelli, E. 2004. Carbon and nutrient accumulation in secondary forests regenerating on pastures in Central Amazonia. *Ecological Applications*. 14(4): Supplement. Pp. S164-S176.
- Subbarao, G.V., Ito, O., Wang, H., Nakahara, K., Ishikawa, T., Suenaga, K., Samejima, H., Rondon, M., Rao, I.M., and Ishitani, M. 2004. Can nitrification be inhibited/regulated biologically? New approaches to develop germplasm to minimize nitrogen losses in crop-livestock systems. Proceedings of the 3<sup>rd</sup> International Nitrogen Conference, October 12-16<sup>th</sup> 2004, Nanjing, China.

**Invited keynote presentation at major international conferences (2002-2006)**

- UN Framework convention on Climate Change. Bonn, 2005
- International Nitrogen Meeting: Brasilia, Brazil, 2005
- International symposium on Carbon sequestration, Baltimore, USA, 2005
- International workshop on adaptation to Climate change: Turrialba Costa Rica, 2003

**Research Grants (2002 – present):**

<b>Funding Source</b>	<b>Grant Title (Principal investigators)</b>	<b>Amount US\$</b>	<b>Period</b>
JIRCAs, Japan.	Field evaluation of Nitrification Inhibition by tropical grasses	60,000	2004-2006
USAID	Research on use of bio-char for land rehabilitation	50,000	2004-2005
Water Challenge Program of Water and Food (CGIAR)	Unravelling the mysteries of Quesungual	754,800	2005-2007
CVS, Colombia	Valuating environmental services from private and government reforestation projects in Colombia.	60,000	2005-2006
World Bank.	Rehabilitating degraded land with silvopastoral systems in the north savannas of Colombia. CDM project approved by the Biocarbon fund	1,800,000	2006- 2020