

LOURDES R. SIMPOL, PHD

Director, Tropical Institute for Climate Studies (TropICS)

Coordinator, Master in Tropical Risk Management

University	Ateneo de Davao University
Education	PhD Pharmaceutical Science, Hiroshima University, 1994 MS Chemistry, Ateneo de Manila University, 1989 BS Chemistry, Ateneo de Davao University, 1983
Years of Experience	22
Citizenship	Filipino
Languages	English, Filipino
Countries of Work Experience	Philippines

Professional Summary

Dr. Simpol has 22 years of professional experience in environmental sciences and the academe. Her areas of expertise include climate change, “applied” risk assessment, mitigation and adaptation to grassroots (Local Government Units and People’s Organizations). The results of her work in water quality assessment, including protocol development for new analysis and sampling procedures, have been applied to different river systems of Davao City (7 river systems), Davao del Sur (2 river system) and South Cotabato (3 river system) since 1994. Dr. Simpol is the Director of the Tropical Institute for Climate Studies (TropICS) at the Ateneo de Davao University, a newly created institute that deals with the research on climate related studies.

Selected Project Experience

Principal Investigator, 4 ongoing researches of the Tropical Institute for Climate Studies on Risk and Vulnerability Assessment, Automated Weather Stations in the Davao City and Payment for Ecosystem Services Case studies for Renewable Energy and Mining, Enhancing Regional Capacity in Reducing Disaster Risk to Climate Related Hazards, 2011-Present. The Automated Weather Station Research developed an automated prototype Rainfall and Temperature Gauge that can now be deployed in various areas in Davao City for database purposes of rainfall and temperature for future climate modeling. The output of the research was leveraged to the Department of Science and Technology and was approved to fund 20 Automated Weather Stations, which will be installed in Davao City by June 2013. The Payment for Ecosystem Services cases on Hydropower and Mining will build up on the users responsibility to the ecosystem. These are cases that build on the heavy use of resource (water and mineral) but the government has no system now of paying back to the ecosystem. The 4th research on Enhancing Regional Capacity in Reducing Disaster Risk to Climate Related Hazard is a post Typhoon Pablo Analysis on the social vulnerability of the provinces in Region XI. The parameters used in the analysis are crops, livelihood and ecological resource. The more vulnerable areas are those heavily dependent on monocrops and mineral extraction.

Principal Investigator, Research on the Assessment of Vulnerability to Extreme Flash Floods Within the Matina Watershed, assessed the flooding that happened in Davao City on June 28, 2010. The research was able to translate most of the vulnerable areas of Matina Pangi into digitized maps.

Co-Principal Investigator. Mining and Water Research with the Anthropology Institute of the Ateneo de Davao University, 2011-Present. This research is being undertaken by the University to look into the Environmental Impact Statement Report for the proposed mining in South Cotabato. The research aims to establish proper monitoring schemes to both quantity and quality of water for the use of the different stakeholders in the 8 possible affected ecosystems of the mining area.

Mentor, 2012 – Present. Study on Silway-Klinan River Systems: Building Stakeholders Alliance for Disaster Risk Reduction (DRR) – Climate Change Adaptation (CCA). This newly concluded study by the graduate students of South Cotabato analyzed the risks due to climate-related hazards in the Silway-Klinan River systems of Polomolok, South Cotabato. These two rivers traverse the Mt. Matutum Protected Landscape and drains to General Santos City. The result of the analysis showed that with the new challenges from the different hazards and anthropogenic activities in the area there is a need to form an alliance to be able to manage the watershed better.

Principal Investigator, Ligawasan Marsh Rapid Site Assessment, Funded by the Foundation of the Philippine Environment, 2007-2008. The research studied the different resources, sectors and factors of the marsh. With the newly approved Bangsa Moro Framework, the study conducted then is one of the main reference use in the planning process for future interventions.

Co-Principal Investigator, Mount Matutum Protected Landscape Rapid Site Assessment, funded by the Foundation of the Philippine Environment, 2007-2008. The maps and analysis generated on this study are now being used by the Mt. Matutum Management Council in their planning process.

Principal Investigator, Pesticide Residue Analysis in Talomo and Panigan-Tamugan River Systems, 2003. The study revealed that even banned pesticides are present in the surface waters of the ecosystem. Banned but persistent organo chlorines can also be found in the sediment samples.

Principal Investigator, Protocol Development for Pesticide Analysis of Talomo and Lipadas Watershed for the PCEEM Project, 1998-2003. The protocols developed were utilized in the other succeeding researches and monitoring being done in the different watersheds of Davao City.

Other Assignments

Director, Tropical Institute for Climate Studies (TropICS), Ateneo de Davao University, 2011 – 2014. It is the main duty of the director to build up resources of the institute (whether material, human or social). In just more than a year the Institute has acquired equipment and grants from funding aside from the University Research Council. Aside from acquiring grants it is also the task of the director to oversee researches, build networks and develop the capacity and skills of junior researchers of the Institute.

OIC-Assistant Dean, Natural Science and Mathematics, School of Arts and Sciences, Ateneo de Davao University, 2012 – 2013.

Division Chairperson, Natural Science and Mathematics, School of Arts and Sciences, Ateneo de Davao University, 2005 – 2012.

Faculty-Researcher, Chemistry Department. Ateneo de Davao University, 1994-Present.

Editor. Agham Mindanaw Ateneo de Davao Journal of Science and Technology. Ateneo de Davao University, 2003-2006.

Member, Technical Working Group of Philippine Canadian Environment and Economic Management (PCEEM) for Talomo and Lipadas Watersheds in Davao City, 1998-2003.

Research Assistant, Chemistry Department, Ateneo de Manila University, 1986 -1989.

Selected Publications and Presentations

Recent:* Manuta, J.B., Simpol, L.R., Tomas, R.C, Vidal, L.H., Garcia, G.M., 2013. *Agusan Marsh Climate Change Adaptation Project (Baseline Study Report 2013).

***Book:* Manuta, J. B., Amoyen, N. D., Simpol, L. R., Tomas, R.C. , Otadoy, J.B., Bayawa, R.C., Abeto, R.S., de la Rosa, V.G. , Rola, R.T., 2012. *Rivers run through it: Mount Matutum Protected Landscape (MMPL)*. Kaalamang Likas Yaman (KALIKASAN), The BCSD Knowledge Series Two. Foundation for the Philippine Environment: Quezon City, Philippines**

***Monographs:* Building Back Better, Safer and Resilient Post-Pablo Economy and Communities in Eastern Mindanao, Monograph Series 2 (2013).
Enhancing Regional Capacity in Reducing Disaster Risk to Climate Related Hazards, **Monograph Series 1** (December 2012)**

***Journal:* Yamamura, S., Simpol, L.R., Ozawa, K., Ohtani, K., Otsuka, H., Kasai, R., Yamasaki, K., Padolina W. G., Antiallergic dimeric phenylbenzoquinones from *Ehretia microphylla* (1995) *Phytochemistry*
Simpol, LR., Otsuka, H., Ohtani, K., Kasai, R., Yamasaki, K. Nitrile glucosides and rosmarinic acid, the anti-histamine inhibitor from *Ehretia philippinenses* (1994) *Phytochemistry*.**

Presentation: Assessment of Vulnerability to Extreme Flash Floods of the Areas within the Matina Watershed (Glenn Depra, Emmanuel Sabale and Lourdes R. Simpol) , May 20, 2012. Seeking Out Security: Understanding the Factors Affecting the Movement of People. A conference on internal migration and Displacement. Davao City, Philippines

References

Name:	Fabian M. Dayrit, PhD	Elvi Tamayo	Fr.Daniel McNamara, SJ
Title	Professor, Chemistry Department, Ateneo de Manila University Mentor 02-426-5985 toby_dayrit@yahoo.com	Deputy Academic Vice President for Formation, Ateneo de Davao University Colleague 63-82-221-2411 (loc 8376) elvs04@yahoo.com elvs09@gmail.com	SAS Dean, Ateneo de Davao University Supervisor 63-82-221-2411 (loc 8300) djmcnamarasj@addu.edu.ph