

## Summary



Profession	Water Quality Specialist, Aquatic Ecotoxicologist, Natural Resource Management and Chemical Risk Assessment Specialist; Ecosystem Services Specialist, Risk Communicator
Specialization	Water Quality Monitoring, Sustainable Agriculture, Water Resource Management, Environmental Chemistry, Pesticide Use Specialist, Risk Assessment and Risk Communication, Capacity Building,
Nationality	German
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## Employment History

### ***EcoTrac Consulting, Nairobi, Kenya (2014 to present)***

Training Specialist & Pesticide Specialist/ Managing Director

### ***Federal Environmental Agency, Berlin (2015-06/2016)***

Research Associate, mesocosms (simulated river systems) and pesticides

### ***Forum für International Agrarpolitik, Hamburg (2014 to present)***

Expert opinion on sustainable agriculture, pesticides, GMOs, International Agricultural Trade

## Education

PhD, Environmental Science, University Koblenz Landau, Germany, 2009.

Msc Zoology , Technical University Braunschweig, Germany, 2000

Biological Technical Assistant, Vocational School, Braunschweig, Germany, 1994

### ***University Koblenz Landau, Institute of Environmental Sciences, Germany (2013 to 07/2015)***

Research Associate

DAAD Rückkehrstipendium für deutsche Wissenschaftler aus dem Ausland. „How does agricultural management change due to climate change and will it impact on future pesticide use and associated risk’.“

### ***University of Johannesburg, Centre for Aquatic Research, South Africa PostDoctoral Fellow (2011 -2013)***

Project manager and lead scientist in projects related to ‘Livelihood Security through water resources protection within agriculture’. Lecturer on Ecotoxicology, Ecological and Pesticide Risk Assessment, Natural Resource Management. Supervision of MSc and Honours students.

### ***Universita Cattolica, Piacenza, Italy Scientific Officer (2009-2010)***

Management of a European ‘Think Tank’ called OPERA (European Observatory of Pesticide Risk Analysis). Daily communication between public agencies (EC, EFSA), international NGOs (e.g. WWF) and industry. Scientific Advisor to European Member States in implementing National Action Plans.

**RIFCON GmbH, Heidelberg, Germany**

Peer reviewer (2009)

Higher Tier Risk assessment of Pesticides: Peer Reviewer of dossiers and aquatic specialist studies undertaken for registration processes

**Languages**English – Fluent  
German – Fluent  
French - Basic**Department of Water Affairs, Pretoria, South Africa***Specialist Scientist (2006-2009)*

Specialist input and lead scientist in water quality assessments, monitoring programs related to chemical use in agriculture, Design of National Water Resource Monitoring Programs. Networking with other government departments, capacity building.

**Strategic Environmental Focus, Pretoria, South Africa***Specialist in Aquatic Ecotoxicology (2005 – 2006)*

Providing specialist consulting services in the aquatic environment including proposal writing, client interaction and providing inputs into: Environmental Impact Assessments (EIAs), Water Use Licence Applications, Ecotoxicity Assessment, Baseline Assessments and Environmental Risk Assessment.

**Awards**Young Science  
Conference on  
Integrated Science for  
'Food Futures', Lake  
Como, Italy. May  
2013.**Ecosun Environmental Consultants (now Golder Associates Africa (Pty) Ltd., Johannesburg, South Africa***Specialist Aquatic Scientist (2004-2005)*

Management of the Ecotoxicology Laboratory. Providing specialist consulting services in the aquatic environment including proposal writing, client interaction and providing inputs into: Environmental Impact Assessments (EIAs), Water Use Licence Applications, Ecotoxicity Assessment, Baseline Assessments and Environmental Risk Assessment.

Marie Curie  
Fellowship, Exposure  
modelling of  
pesticides, Piacenza,  
Italy, 2004**University of Cape Town, Freshwater Research Unit, Cape Town, South Africa***Research Assistant and lecturer (2001 – 2004)*

PhD research on the occurrence and risk assessment of pesticides in the Lourens River estuary. Supervision of honours and masters students and course coordination in aquatic ecology.

**COUNTRIES OF WORK EXPERIENCE**

South Africa, Democratic Republic of Congo, Sudan, Cameroon, Zambia, Kenya, Tanzania, Germany, Italy

**Project Experience – Sustainable Agriculture & Livelihood Assessment**

South Africa

Livelihood Assessment in rural agricultural areas

Assessment of ecosystem services of natural resources associated with agriculture

Design of questionnaires

Climate change and its consequences to pesticide use in agriculture in South Africa

**Project Experience – Aquatic Ecotoxicology**

Democratic Republic

Set up of higher tier risk assessment measurements for pesticides (including *in situ* bioassays and mesocosms)

of the Congo, South

Biomonitoring of aquatic resources impacted by mining and agriculture

Africa, Sudan,  
Germany, Italy

Implementation and modification of pesticide registration procedures  
Farmer Schools  
Impact of different farming strategies on the integrity of the natural environment

### ***Project Experience – Capacity Building***

Sudan, South Africa,  
Tanzania, Kenya,  
Zambia, Cameroon

Courses on Environmental Risk Assessment of chemicals  
Courses on Design of Monitoring Programmes  
Courses on Natural Resource Management  
Course on Higher Tier Risk Assessment for registration purpose

South Africa

Awareness creation on Integrated Pest Management  
Capacity building on mitigation measures for pesticide risk reduction

Germany

Summer Schools in Open Source tools for risk assessment procedures

### ***Attended Courses***

Open2 Study (online course)  
Humboldt University, Berlin

Sustainable agriculture, Climate change and agriculture  
Environmental Economics, Precision Farming and Organic Farming, Horticulture, Applied Phytomedicine

### ***Publication List***

#### ***Professional Membership***

Society of Environmental Toxicology and Chemistry (SETAC, Europe)

Bollmohr, S., Day, J.A., Schulz, R., 2007. Temporal variability in particle-associated pesticide exposure in a temporarily open estuary, Western Cape, South Africa. *Chemosphere* 68(3): 479-488.

Bollmohr, S. & Schulz, R., 2009. Seasonal changes in macroinvertebrate populations in a Western Cape River (South Africa) receiving nonpoint-source organophosphate pollution. *Environmental Toxicology and Chemistry* 28 (4): 809-817.

Secretary General of SETAC Africa

Bollmohr, S., Hahn, T., Schulz, R., Day, J.A., 2009. Interactive effect of salinity variation, salinity adaptation and chlorpyrifos exposure on an estuarine harpacticoid copepod, *Mesochra parva*, in South Africa. *Ecotoxicology and Environmental Safety* 72 (3): 756-764.

Southern African Society of Aquatic Scientist (SASAqS)

Bollmohr, S., van den Brink, P.J., Wade, P. W., Day, J.A., Schulz, R., 2009. Spatial and temporal variability of particle associated pesticide exposure and their effects on benthic community structure along a temporarily open estuary. *Estuarine and Coastal Shelf Science* 82 (1): 50-60.

#### ***Paper Referee in International Journals***

Water SA  
South African Journal of Aquatic Science

Bundschuh, M., Dabrunz, A., Bollmohr, S., Brinkmann, M., Caduff, M., Gomez-Eyles, J.L., Kienle, C., Melato, M., Patrick-Iwuanyanwu, K.C., Van Hoecke, K., Seiler, T.B., Brooks, A. 2009: 1st Young Environmental Scientists Meeting (YES-Meeting) – New Challenges in Environmental Sciences, *Environmental Sciences and Pollution Research* 21 (1), 113-114

Bollmohr, S., van den Brink, P.J., Wade, P. W., Day, J.A., Schulz, R., 2011.

- Bulletin of Environmental Contamination and Toxicology (BECT)
- Journal of Environmental Toxicology and Chemistry (ET&C)
- Comparison of environmental variables, anthropogenic stressors and meiofauna community structure in two temporarily open estuaries differing in size and type of catchment. *Water SA* Vol 37 No3, 391-400.
- Calliera, M., Marchis, A., Bollmohr, S., Sacchetti, G., Lamastra, L., Capri, E., 2012. A process to provide harmonised criteria for the selection of indicators for pesticide risk reduction within the framework of the sustainable use directive. *Pest. Manag. Sci.*
- Rivera-Ferre, M.G., Pereira, L., Karpouzoglou, T., Nicholas, K.A., Onzere, S., Waterlander, W., Mahomoodally, F., Vrieling, A., Babalola, F.D., Ummenhofer, C.C., Dogra, A., de Conti, A., Baldermann, S., Evoh, C., Bollmohr, S., 2013. A vision for transdisciplinarity in Future Earth: Perspectives from young researchers. *J. of Agric., Food Sys. and Comm. Dev.* Vol 3, 249-260.
- (Under Review)*
- Bollmohr, S., Thwala, M., 2016. Predicted ecological risk of aerial pesticide application towards water resources in Groblersdal, Mpumalanga, South Africa. *WaterSA*
- Bollmohr, S., Thwala, M., 2016. Prioritization of crops grown in Mpumalanga Region, South Africa, based on environmental risks associated to aerial application of pesticides. *Journal of Crop Production*
- Bollmohr, S., Schulz, R., 2016: Review: How do smart farming activities and climate change adaptation strategies change the possible environmental risk of pesticides. *Agriculture, Ecosystems and Environment.*
- Osmond, S., Wepener, V., Bollmohr, S., 2016. Application of case-based reasoning models and field validation studies to determine the risks posed by pesticide use in viticulture to aquatic ecosystems. *Environmental Toxicology and Chemistry.*
- Conference Presentations**
- Bollmohr, S., 2012. The use of an ecosystem service performance index to describe the water quality status in Limpopo Province, South Africa, SETAC World, Berlin Germany
- Bollmohr, S., van den Brink, P.J., Wade, P. W., Day, J.A., Schulz, R., 2009. Spatial and temporal variability of particle associated pesticide exposure and their effects on benthic community structure along a temporarily open estuary. SAC conference, Landau, Germany
- Bollmohr, S., Thwala, M., Jooste, S., 2008. Particle bound and dissolved pesticide exposure in South African rivers - Implication for the National Toxicity Monitoring Programme. Wad Medani, Sudan.
- Bollmohr, S., Wade, P.W., Schulz, R., van den Brink, P., 2007. Spatial and temporal variability in particle associated pesticide exposure and their effects on meiofaunal community structure in a temporarily open estuary. SETAC Europe, Porto, Portugal.
- Bollmohr, S., Padovani, L., Capri, E. 2005. Poster presentation: Using TOXSWA model to predict chlorpyrifos contamination in a slow flowing ditch – Can the exposure prediction be used for effect estimation? SETAC

Europe, Lille, France.

Bollmohr, S. & Schulz, R., 2004. Oral presentation: The behavior of currently used insecticides in a South African temporarily open estuary. SETAC Europe, Prague, Tchecheslowakia.

Bollmohr, S. & Schulz, R., 2003. Oral presentation: Zooplankton dynamics in two South African temporarily open estuaries differing in nonpoint-source pesticide pollution. South African Society of Aquatic Scientists (SaSAqS), Cape Town

Bollmohr, S. & Schulz, R., 2003. Oral presentation: Effects of organophosphates on estuarine benthic copepods during different seasons: Comparison of sediment toxicity tests and population responses. Joint European South African International Pesticide Conference, Cape Town.

Bollmohr, S. & Schulz, R., 2003. Oral presentation: Seasonal changes in macroinvertebrate populations in a Western Cape River (South Africa) receiving nonpoint-source organophosphate pollution. SETAC Europe, Germany