Commission for Water Sustainability

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Study areas

Countries	Ghana and Zambia
Region	West Africa and Southern Africa

Topics of last three projects

1	Assessing potential impacts of land use and climate changes on river ecology of a forested catchment
2	Assessing combined impacts of land use and climate changes on forest hydrology in southern Ghana
3	Assessing impacts of land use changes on hydrology of a forest catchment in Ghana

Envisioned activities in Commission

attend/ organise meetings	✔
contribute to publications	✔
read newsletter	✔
joint research, collaboration	✔
Other (please specify)	

Research interests in water (select maximum 10)

Climate & Water		Hydrological extreme events		Water flow		Surface water		Ground water		Marine Environment		Aquatic habitats/ Ecosystems		Water availability	
Water in arid areas		Floods	✓	Catchment processes	✓	Limnology		Soil water		Coastal waters		Wetlands	✓	Water utility	
Arctic water		Droughts		Run-off generation	✓	Fluvial dynamics		Karst water		Estuarian waters		Lakes		Water storage	
Water cycle		Ice phenomena		Groundwater-Surface water interactions		Continental scale processes		Hydrogeology				Peatlands		Dams / Reservoirs	
Atmospheric water				Hyporheic processes		Dams / Reservoirs		Recharge				Rivers		Water scarcity	
Glaciers & Cryosphere				Interstitial water		Sediments								Supply & Distribution	
				Porwater		Rivers								Water allocation	
				Alluvial water		Floodplains	✓							Water restrictions	

Modelling and GIS		Water quality		Water & Health		Water & Energy		Water management/ policy		Water use		Water Law & Economics		Socio-political aspects	
Hydro GIS	✓	Pollution		Water & Sanitation		Water-Energy nexus		Integrated Catchment management	✓	Urban		Water trade		Water history	
Groundwater modelling		Purification		Water & Food		Water for energy		Integrated water resource management		Agricultural		Virtual water		Water wars	
Surface water modelling	✓	Hydrochemistry		Waterborne diseases		Energy for water		Water loss		Mine water		Privatisation		Water & Poverty	
Remote sensing	✓	Treatment		Drinking water		Water, Food & Energy		Reticulation & Supply		Industrial		Water as public good		Access to water	
		Desalination		Water purification				Transboundary water		Grey water		Right to water			
		Waste water								Green water		Bills & Laws			
		Sewage								Blue water		Affordability			
										Return water					
										Water sustainability					
										Competing water use					

Other (please specify)	land cover mapping and modelling
Research interests in water (supply 5 keywords)	evapotranspiration; run-off generation; land use and water; floods; remote sensing of water

Photo of yourself you woul to see on the Commission's website

Topics of last 10 publications

1	Estimating Scenario-based Impacts of Climate and Land Use Changes on Potential River Ecology of a Rainforest Catchment in Ghana, West Africa
2	Assessing Impacts of Land Use Changes on the Hydrology of a Lowland Rainforest Catchment in Ghana, West Africa
3	Assessing suitability of the ACRU hydrological model in a rainforest catchment in Ghana, West Africa
4	Scenario-based Impacts of Land Use and Climate Changes on the Hydrology of a Forested Catchment in Ghana, West Africa
5	Comparison of Object-Based Classifiers and Traditional Pixel-Based Classification Techniques using Landsat Imagery
6	Determination of Soil Erosion Vulnerability in the Lafa Basin of Ghana using RUSLE and GIS
7	Estimating potential future land use in the Bonsa catchment, Ghana, West Africa
8	Modelling Potential Future Urban Land Use Changes in the Sekondi-Takoradi Metropolitan Area, Ghana
9	Assessment of Positional Accuracies of UAV-Based Coordinates Derived from Orthophotos at Varying Times of the Day
10	Analysis of Land Cover Changes in the Bonsa Catchment, Ankobra Basin, Ghana

Publication links

1	http://www2.umat.edu.gh/git/index.php/git/article/view/267
2	https://www.mdpi.com/2073-4441/10/1/9
3	https://www.sciencedirect.com/science/article/pii/S1110492916301242
4	https://www.iiert.org/scenario-based-impacts-of-land-use-and-climate-changes-on-the-hydrology-of-a-forested-catchment-in-
5	http://www2.umat.edu.gh/git/index.php/git/article/view/319/0
6	https://www.iiert.org/determination-of-soil-erosion-vulnerability-in-the-lafa-basin-of-ghana-using-rusle-and-gis
7	http://www.sajg.org.za/index.php/sajg/article/view/594
8	http://www2.umat.edu.gh/git/index.php/git/article/view/266/0
9	https://www.sajg.org.za/index.php/sajg/article/viewFile/789/404
10	http://www.aloki.hu/pdf/1304_935955.pdf