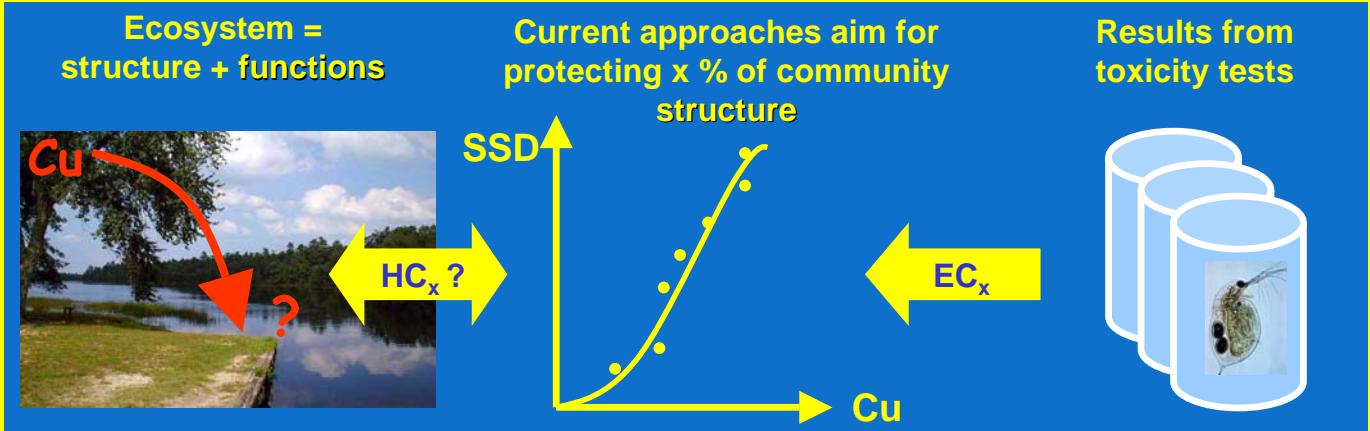


F. De Laender(1,2), K.A.C. De Schampelaere(1),
P.A. Vanrolleghem(2), C.R. Janssen(1)

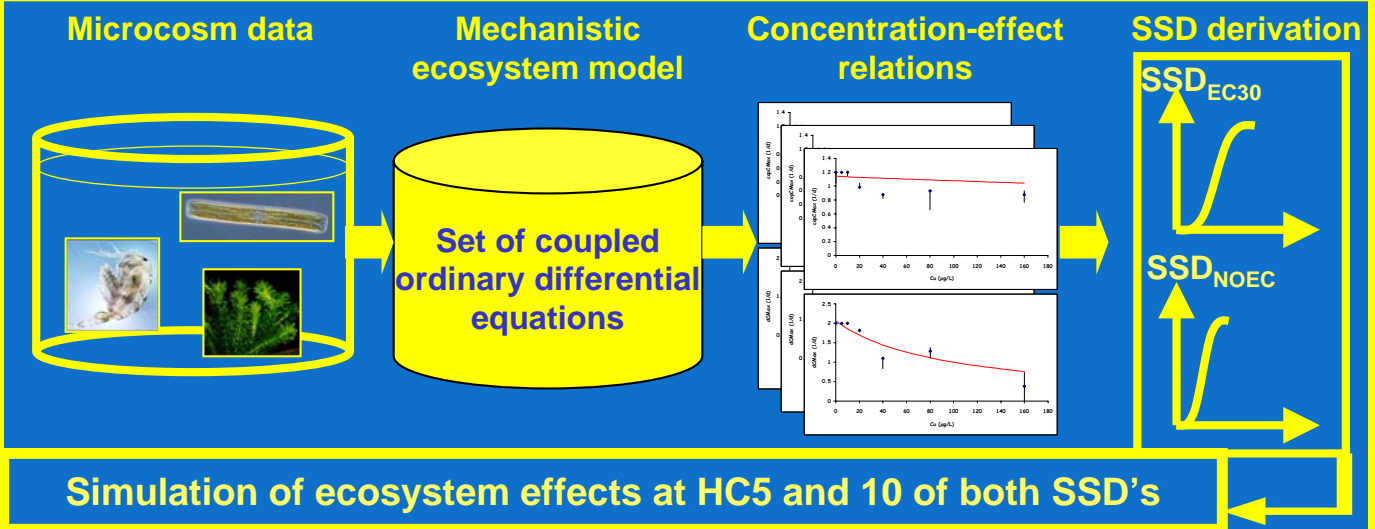
(1)Laboratory of Environmental Toxicology and Aquatic Ecology, Ghent University, J. Plateaustraat 22, B-9000 Ghent, Belgium,
(2)BIOMATH, Departement of Applied Mathematics, Biometrics and Process Control, Ghent University, Coupure Links 653, B-9000 Ghent, Belgium,
contact: frederik.delaender@UGent.be

Introduction



Are SSD's also capable of protecting ecosystem functions like invertebrate ingestion and community respiration?

Methodology



Simulation of ecosystem effects at HC5 and 10 of both SSD's

Results

Reference situation:	SSD based on	Chosen percentile	Community Ingestion (mg/L/d)	Community Respiration (mg/L/d)	Cu _{diss} (µg/L)
• Ingestion: 0.02-0.06 mg/L/d	NOEC	5 th	0.050	5.31	6
• Respiration: 4.5-5 mg/L/d	NOEC	10 th	0.050	5.31	8
So both functions are protected even if EC30's would be used	EC30	5 th	0.035	4.91	12
	EC30	10 th	0.035	4.91	27

Ecosystem functions are less sensitive to copper than its structure and are therefore protected by the SSD approach, which is based on structure