

Name:	Craig Colten
Department/Institute:	Department of Geography and Anthropology
Acad. title:	Prof. Dr.
Full Address:	Louisiana State University, Department of Geography and Anthropology, Baton Rouge, LA 70803

Biographical sketches

Educational background

Ph.D., Syracuse University, 1984.

Research Interests

Environmental Historical Geography
 Urban Environments
 Louisiana and the South

Selected publications

Robert W.Kates, Craig Colten, Shirley Laksa, and Stephen Leatherman. 2006. "Reconstruction of New Orleans following Hurricane Katrina: A Research Perspective," Proceedings of the National Academy of Sciences 103 (40): 14653-14660.

Colten, Craig. 2006. "Contesting Pollution in Dixie: The Case of Corney Creek" Journal of Southern History 72: 605-634.

Colten, Craig E. 2005. An Unnatural Metropolis: Wrestling New Orleans from Nature. Baton Rouge: LSU Press.

Colten, Craig E. 2002. "Basin Street Blues: Drainage and Environmental Equity in New Orleans, 1890-1930." Journal of Historical Geography 28: 237-57.

Colten, Craig E. 2002. "Reintroducing Nature to the City: Wetlands in New Orleans." Environmental History 7: 226-46.

Colten, Craig E., editor and contributor. 2000. Transforming New Orleans and Its Environs: Centuries of Change. Pittsburgh: University of Pittsburgh Press.

Honors and Activities

2007- Editor, Geographical Review.

2006 Media Achievement Award, Association of American Geographers.

2005 J.B. Jackson Prize, Association of American Geographers (awarded 2006).

2002- Editorial Board, Environmental History.

Name:	Tzahi Cath
Department/Institute:	Environmental Science and Engineering
Acad. title:	Assistant Professor
Full Address:	Colorado School of Mines, Golden, CO 80401-1887, USA

Biographical sketches

Research Interests

Scarcity of potable water will continue to be one of the main problems humanity faces in the 21st century. Based on the current trend, membrane processes will continue to be a leading technology for water and wastewater treatment practices, particularly due to its high product quality, reduced waste production, and smaller space requirements.

My main field of research is membrane processes for water purification, wastewater reclamation, and desalination. My current focus is on the understanding and implementation of membrane contactor processes (forward osmosis and membrane distillation) and pressure-driven membrane processes (reverse osmosis, nanofiltration, ultrafiltration, and microfiltration) in various reuse and zero-liquid-discharge applications.

Through the links provided above, you can see my current research activities, publications, and more links to various resources. You may contact me for more information about my research and to learn more about our new water research center (AQWATEC).

Name:	Alan Decho
Department/Institute:	Dept. Environmental Health Sciences
Acad. title:	Professor; Director, Microbial Interactions Laboratory
Full Address:	University of South Carolina Columbia, SC 29208

Biographical sketches

Professional Experience

2003: Professor, Environmental Health Sciences, USC
 1998: Associate Professor, Environmental Health Sciences, USC
 1995: Associate Faculty, School of the Environment, USC
 1994: Associate Faculty, Marine Sciences Program, USC
 1994: Assistant Professor, Environmental Health Sciences, USC
 1989-93: Post-doctoral researcher, USGS, Menlo Park, Calif.
 1988-92: Post-Doctoral researcher: Marine Sciences, SUNY- Stony Brook, NY
 1987-88: Post-Doctoral researcher, CSIRO Marine Laboratories, Queensland, Australia

Research Interests

Dr. Decho's laboratory focuses on attached microbial communities, called "BIOFILMS". Biofilms form when bacteria and other microorganisms attach to a surface and surround themselves in protective coatings of extracellular polymers (EPS), and begin organizing and communicating with each other. These properties make the biofilm a "resistant refugia" for bacteria, one that is able to resist natural stressors, and most antimicrobial agents. Biofilm formation is important to the fundamental functioning of natural systems, but is also critical to environmental and engineered systems (e.g. bioavailability of contaminants, metal corrosion, spread of pathogens), and biomedical processes (e.g. hospital-acquired and persistent infections, biofouling of implant devices, cancer, engineered drug delivery).

Selected publications

- Decho, A.W. , T. Kawaguchi, M.A. Allison, E. Louchard, R.P. Reid, C. Stephens, K. Voss, R. Wheatcroft, B.B. Taylor. 2003. Sediment properties influencing up-welling spectral reflectance signatures: The biofilm gel effect. *Limnology Oceanography* 48: 431-443.
- Reid, R.P., P. Visscher, A.W. Decho, et al. 2000. The role of microbes in accretion, lamination, and early lithification of modern marine stromatolites. *Nature* 406: 989-992.
- Decho, A.W. 2000. Microbial Biofilms in Intertidal Systems: an Overview. *Continental Shelf Research* 20: 1257-1273.
- Decho, A.W., & T. Kawaguchi. 1999. Confocal Imaging of in situ natural microbial communities and their extracellular polymeric secretions (EPS) using nanoplast resin. *BioTechniques* 27 (6): 1246-1252.
- Decho, A.W. 1990. Microbial exopolymer secretions in ocean environments: their role(s) in food webs and marine processes. *Oceanography Marine Biology Annual Reviews* 28: 73-154.

Name:	Dana W. Kolpin
Department/Institute:	Emerging Contaminants Project
Acad. title:	Dr.
Full Address:	U.S. Geological Survey, Iowa City, Iowa 52244

Biographical sketches

Education

1986-88 University of Iowa Geology, M.S.
1980-84 Iowa State University Geology, B.S.

Professional Experience

1996-present Research Hydrologist, U.S. Geological Survey
1988-1996 Hydrologist, U.S. Geological Survey
1984-1988 Hydrologic Technician, U.S. Geological Survey

Scientific Leadership

- Project chief of USGS research on emerging contaminants in the environment. (1999 to present) (<http://toxics.usgs.gov/regional/emc/index.html>).
- Editorial Board for the journal Science of the Total Environment (1998 to present).
- Member of the organizing committee for conference "International Conference on Analysis of Emerging Contaminants in the Environment", March 7-9, 2007, York, United Kingdom (www.EmCon2007.com)
- Member of the organizing committee of the workshop "Endocrine Disruptors and Pharmaceutically Active Compounds in Drinking Water" April 19-21, 2000, Chicago, IL (sponsored by the AWWA Research Foundation).

Research Interests

Dana Kolpin is a research hydrologist for the U.S. Geological Survey in Iowa City, IA. His research interests include the occurrence of pesticides, pharmaceuticals, and other emerging contaminants in the environment. He has published over 100 papers and reports on environmental contaminants. He has been the project chief of the USGS Toxic Program's Emerging Contaminants Project since 1998.

Name:	Eberhard Morgenroth
Department/Institute:	Department of Civil and Environmental Engineering
Acad. title:	Prof. Dr.
Full Address:	University of Illinois at Urbana-Champaign, Department of Civil and Environmental Engineering, Urbana, IL 61801

Biographical sketches

Eberhard Morgenroth holds a M.S. (University of California 1994), Dip.-Ing. (Technical University of Hamburg-Harburg 1995), and Ph.D. (Technical University of Munich 1998), all in civil and environmental engineering. He has been on the faculty of the department of Civil and Environmental Engineering at the University of Illinois since 2000. He has also has a joint appointment in the Department of Civil and Environmental Engineering and the Department of Animal Sciences since 2000. Since 2001 he is a faculty affiliate in the Environmental Council. Dr. Morgenroth has taught graduate and undergraduate courses in biological water and wastewater treatment, mathematical modeling of microbiological processes, and environmental biotechnology. Dr. Morgenroth's research focuses on the influence of dynamic reactor operation on the performance of biological treatment processes. Specific areas of interest include the hydrolysis of particulate organic matter in biofilms, the influence of growth conditions and reactor operation on mass transport in biofilms, detachment processes in biofilm reactors, long term starvation of bacteria, dynamic response of bacteria to rapid changes of environmental conditions. Process application can range from municipal and industrial wastewater treatment, treatment of animal wastes, to biological air treatment. The goal of his research is to develop mechanistically based models, which allow for predictions of biological treatment processes under transient conditions. Dr. Morgenroth is a member of Association of the International Water Association, the Water Environment Federation, the American Society for Microbiology, the Environmental Engineering and Science Professors, and the Abwassertechnische Vereinigung. He serves as the chairman for the Environmental Engineering Education specialist group of the International Water Association. He also serves as an editor for the journals Water Research and Water Science & Technology. In 2002 Dr. Morgenroth was the recipient of an NSF Faculty Early Career Development Program (CAREER) Award.

Name:	Robin M. Overstreet
Department/Institute:	Marine Parasitology and Pathobiology
Acad. title:	Prof. Dr.
Full Address:	The University of Southern Mississippi, Department of Coastal Sciences, Marine Parasitology and Pathobiology, Ocean Springs, MS 39564

Biographical sketches

Educational background

- 1968 Ph.D. - The University of Miami, Institute of Marine Sciences. Marine Biology.
- 1966 M.S. Degree - The University of Miami, Institute of Marine Sciences, Marine Biology.
- 1963 B.A. Degree - The University of Oregon. General Biology.

Research Interests

- Specific Research Programs. I have responsibility to three program areas: 1) parasitology and diseases, 2) aquaculture and fisheries science, and 3) environmental biology and neoplasms. In some aspects, these areas overlap and in other studies they are independent.
- My research areas involving parasites and diseases are numerous and constitute my primary field of responsibility. They include taxonomy, systematics, development and life histories, diagnoses and management of diseases, ecology, pathogenesis and host-parasite relationships, and public health. I am involved with a wide array of agents including viruses, bacteria, fungi, and numerous protozoan and metazoan groups. In future taxonomic and systematic studies, I hope to emphasize digeneans, nematodes, myxosporans, coccidians, microsporans, and haplosporans. For other types of studies, I will be involved with all parasitic groups; most of my academic and service obligations also involve all the above general areas of interest.
- Aquaculture and fisheries science involvement includes both applied and basic areas. My interests in aquaculture concern viral and other diseases of penaeid shrimps; other crustaceans such as crayfishes and blue crabs; and finfishes, including local and other species with a present emphasis on the red snapper, mullets, and small fish models. Whereas most of my research involves parasites and diseases, my interests also include biology of the animals and culture techniques. Directly or indirectly, I utilize that information or various contacts for service and educational obligations. My interests in other areas of fisheries include the biology of fishes (both finfishes and shellfishes), with an emphasis on local species collected on a routine basis. Most of my research has involved migration, health, reproduction, rearing, diets, and associations and interactions with other fishes, crustaceans, and molluscs and sometimes their symbionts.
- My interests in environmental biology and neoplasms involve both field and laboratory studies. Initially those studies not involving a parasite were restricted to descriptive aspects of affected animals in the local environment. Whereas much of my work has involved infectious agents, some has involved the influence of natural or manmade conditions or agents on aquatic animals. Since 1975, I have been conducting experimental studies to determine the effect of carcinogens or other toxicants on fishes and shrimps. My involvement has included rearing and maintaining healthy animals as well as designing experiments and assessing the effects of toxicants or perturbations. For my toxicology input, mostly I am involved with better defining small fish models. For my parasitological input, I am establishing various host-parasite associations in "model" fishes as indicators of environmental health. This aspect of my work also involves field and laboratory studies and treats the effects of both biotic and abiotic factors on the parasite associations.

Name:	John Pardue
Department/Institute:	Louisiana Water Resources Research Institute
Acad. title:	Prof. Dr.
Full Address:	Louisiana State University, Louisiana Water Resources Research Institute, Baton Rouge, Louisiana 70803

Biographical sketches

Educational background

1992	Ph.D. (Civil Engineering) Louisiana State University
1987	M.S. (Marine Sciences) Louisiana State University
1983	B.S. (Biology) cum laude, Rhodes College, Memphis, TN

Employment History

2002-present	Director, Louisiana Water Resources Research Institute, College of Engineering, Louisiana State University
1998-present	Elizabeth Howell Stewart Emerging Leader Professorship, College of Engineering, Louisiana State University
1998-present	Associate Professor (with tenure) Department of Civil & Environmental Engineering, Louisiana State University
1995-1998	Assistant Professor, Department of Civil & Environmental Engineering, Louisiana State University
1992-1995	Assistant Professor-Research, Wetland Biogeochemistry Institute, Louisiana State University

Research Interests

We have developed an approach for passively treating groundwater contaminated with chlorinated solvents in treatment wetlands. High activities of halo-respiring bacteria have been observed in Phragmites marshes fringing the Aberdeen Proving Ground in Maryland. The activity of these organisms results in rapid attenuation of the chlorinated solvents in the marshes. Based on this natural scenario, we have developed design criteria for treatment wetlands for treating these persistent groundwater contaminants. Our greenhouse systems have dechlorinated chlorinated ethenes and ethanes from mg/L concentrations to below detection over very short (10's of cm) travel distances within the peat soil. Our research has focused on the composition of the organic matter in the commercially available peats and compost materials and their ability to provide H₂ to the halo-respiring populations. Our existing microbial culture, developed from upflow greenhouse experiments using groundwater from a Connecticut Superfund site, is being studied to better understand why such high reductive dechlorination rates can be maintained. Based on the design criteria developed in our laboratory, a number of pilot and full-scale applications of the technology are being planned at sites around the country. We have also investigated the uptake of desorption-resistant organic contaminants by wetland plants. Desorption of organic contaminants from sediments has long been observed to be biphasic; one portion desorbs rapidly but another fraction exhibits considerable hysteresis and is desorption-resistant. In our uptake studies wetland plants were able to access the desorption-resistant fraction but uptake was lower than contaminants in the readily desorbed phase. Uptake was well-predicted by a simple model that incorporate both the readily-desorbed and desorption-resistant terms. The analysis approach may lead to a better prediction of phytoremediation success at hazardous waste sites.

Name:	David Quanrud
Department/Institute:	Office of Arid Lands Studies
Acad. title:	Prof. Dr.
Full Address:	The University of Arizona, Office of Arid Lands Studies, Tucson, Arizona 85719

Biographical sketches

Dr. Quanrud joined The University of Arizona's Office of Arid Lands Studies in 2002. Born in Rochester, Minnesota, he earned his B.S. in geology from Iowa State University and his M.S. and Ph.D. degrees in hydrology from the University of Arizona in 1995 and 2000, respectively.

His research includes projects in the areas of water reclamation and water conservation. Current projects are investigating presence and fate of emerging contaminants, including endocrine disrupting compounds, in wastewater and reclaimed water during treatment in natural and engineered systems. The presence and fate of emerging contaminants in biosolids during land application is an expanding area of research. He was previously involved in studies on the use of constructed wetlands for the treatment of wastewater and the removal of contaminants from wastewater in multi-species constructed ecosystems. A research program testing evapotranspiration-based irrigation control technology is underway at parks in Pima County.

Project Involvement

- Assessing Animal Manure/Compost Applications on Irrigated Agricultural Fields for Nutrient Planning
- Constructed Ecosystems Research Facility
- "Smart" Irrigation Controllers in Tucson, Arizona
- Attenuation of Estrogenic Activity in Reclaimed Water and Stormwater During Impoundment in Natural Systems
- Estrogenic Activity in Reclaimed Water and Stormwater
- Investigation of Soil Aquifer Treatment for Sustainable Water Reuse
- Measurement of Estrogenic Activity in Sludges and Biosolids
- Pharmaceutically Active Compounds: Fate in Sludges and Biosolids Derived from Wastewater Treatment
- Tree Growth and Nutrient Status in a Water Harvesting System Using Potable and Reclaimed Water

Name:	Harry Ridgway
Department/Institute:	AquaMem Scientific Consultants
Acad. title:	Dr.
Full Address:	AquaMem Scientific Consultants, Rodeo, New Mexico 88056

Biographical sketches

Harry Ridgway received a Bachelor of Science in Microbiology (with a minor in Chemistry) in 1971 from San Diego State University and a PhD from Scripps Institute of Oceanography, La Jolla, California in 1976. His doctoral dissertation concerned the biochemical and ultrastructural basis of gliding locomotion in marine bacteria (e.g., *Flexibacter polymorphus*). After receiving his PhD, Dr. Ridgway spent two years at the University of California, San Diego engaged in postdoctoral research on the genetics and biochemistry of chemotaxis and motility in *Escherichia coli*. From 1978 and 1981, Dr. Ridgway conducted additional postdoctoral studies at the Irvine campus of the University of California on the occurrence, structure, and role of biofilms in potable water distribution systems. While at UC Irvine, Dr. Ridgway became interested in bacterial adhesion and biofilm formation on synthetic permselective reverse osmosis (RO) membranes used in seawater desalination and early wastewater reclamation applications. In 1981, Dr. Ridgway joined Orange County Water District in Southern California as Chief Research Microbiologist. OCWD is home to Water Factory 21, the world's first large-scale wastewater reuse facility based on advanced membrane treatment processes. From 1985 through mid 2002, Dr. Ridgway served as Research Director for OCWD. In this role he and his co-workers pioneered studies on the mechanism and dynamics of bacterial adhesion and biofilm formation on RO membrane surfaces. He worked with several large membrane companies over the years and the results of this work helped shape the current generation of commercial low-fouling, high-flux, thin-film composite RO membrane materials. More recently, Dr. Ridgway has created novel algorithms and programming code for building atomistic models of RO membrane materials, including fully aromatic randomly-crosslinked polyamides. The membrane models will help elucidate and clarify theoretical mechanisms of water and solute (contaminant) transport in membrane materials, as well as shed light on the molecular basis of organic foulant interactions with membrane surfaces. Dr. Ridgway's other research interests include the use of chemolithotrophic sulfur- and hydrogen-oxidizing bacteria for the removal of nitrate, perchlorate, and other contaminants from potable groundwater, artificial recharge of aquifers, bioremediation processes, and the use of molecular-genetic techniques for microbial pathogen detection. In 2002, Dr. Ridgway was awarded the Athalie Richardson Irvine Clarke Prize for his pioneering contributions in the area of membrane biofouling. In 2003, Dr. Ridgway formed AquaMem Scientific Consultants, a private consulting and research enterprise dedicated to the science and technology of water treatment by membrane processes. AquaMem currently has active national and international collaborations with several prominent universities and government entities.

Name:	Hans-Curt Flemming
Department/Institute:	Biofilm Centre
Acad. title:	Prof. Dr.
Full Address:	University of Duisburg-Essen / Campus Duisburg, Geibelstr. 41, D-47057 Duisburg

Biographical sketches

Born 1947 in Friedrichshafen

Education and professional experience

- 1968 - 1972: Study of chemistry in Stuttgart and Freiburg, Scholarship of Fritz ter Meer-Stiftung, Heinrich-Hörlein-Award of the German Biological Society
- 1972: Diploma in chemistry
- 1972 - 1977: Dissertation, Max-Planck-Institut für Immunbiologie, Freiburg: "Biosynthesis of O-Antigens in *E. coli*"
- 1977 - 1978: Postdoc, Max-Planck-Institut für Immunbiologie, Freiburg
- 1978 - 1994: Scientist: microbial problems in water treatment, Institut für Siedlungswasserbau, Univ. Stuttgart; establishment of a research group on biofouling and biofilm research
- 1993: Habilitation: "Biofilms", Universität Stuttgart
- 1994 - 1996: Establishment of the Department of Biotechnology, Institut für Wassergüte, TU München
- since 1996: Chair for Aquatic Microbiology, University of Duisburg;
Member of the board of scientific directors of the IWW Centre for Water, Mülheim/Ruhr
- 1997 - 1999: Visiting Professor, University of Queensland, Brisbane
- 1999 - 2001: Honorary Professor, University of Pretoria, South Africa
- since 2001: Managing Director of the Biofilm Centre
- since 2001: Concept, establishment and operation of the international Bachelor/Master curriculum "Water: Chemistry, Analysis, Microbiology"

Name:	Torsten C. Schmidt
Department/Institute:	Department of Chemistry, Instrumental Analysis
Acad. title:	Prof. Dr.
Full Address:	University of Duisburg-Essen / Campus Duisburg, Lotharstr. 1, D-47048 Duisburg

Biographical sketches

Dr. Torsten C. Schmidt, born 1968, studied chemistry in Marburg, Germany, and Edinburgh, UK. He received his diploma in chemistry in 1994, and his PhD in 1997. His thesis work was in the area of environmental analytical chemistry, dealing with new determination methods for aromatic amines in water. After a postdoctoral stay with Dr. K. Steinbach in the mass spectrometry section of the department of chemistry at the university of Marburg, he moved to EAWAG in Duebendorf, Switzerland in 1998, a water research institute strongly linked to ETH Zurich. Until 2000 he did there a post-doc in the chemistry department and continued to work 2001/2002 as research scientist in the contaminant hydrology group with Dr. S. Haderlein and Prof. R. Schwarzenbach. Focus of his research at EAWAG was the environmental assessment of polar fuel constituents. In 2002, he changed to the university of Tuebingen, Germany, where he established a new research group "Environmental chemistry and analysis" within the Center for Applied Geoscience. In 2006, he finished his habilitation on "Environmental chemistry of polar organic compounds in the water cycle", and accepted a call for the chair in instrumental analysis at the university Duisburg-Essen, where he commenced his work February 2006. So far, he (co)authored 40 papers in international peer-reviewed journals, and supervised about 20 diploma, master and PhD students.

His current research interests include:

- process-oriented environmental chemistry, in particular at interfaces:
- environmental forensics
- compound-specific isotope analysis: method development and applications
- solventless methods in extraction and chromatography

Name:	A.J.M. Smits
Department/Institute:	Faculty of Science, Institute for Science Innovation and Society, Centre for Sustainable Management of Resources
Acad. title:	Prof. Dr.
Full Address:	Radboud University Nijmegen, Toernooiveld 1 (P.O. Box 9010), NL-6500 GL Nijmegen

Biographical sketches

Toine Smits (1955) studied biology, with special attention to aquatic ecology, plant physiology and zoology. His PhD thesis concerns eco-physiological adaptations of nymphaeid water plants. During 1990-1995 he was employed as project leader at RIZA, Lelystad and Rijkswaterstaat Division East Arnhem (Ministry of Transport, Public Works & Water Management), The Netherlands. During this period he was responsible for various ecological rehabilitation programmes for the Rhine and its tributaries.

In 1995 he became head of the Department of Strategy, Environment and Spatial Planning of the Rijkswaterstaat Division East. This department coordinated the spatial planning and environmental project in the east Netherlands region. In 1996 he applied successfully for the endowed professorial chair "Nature Conservation of Stream Corridors" at the Radboud University of Nijmegen.

In 2000 Smits became head of the Department of Integrated River Basin Management of Rijkswaterstaat Division East Netherlands and expanded the endowed professorial chair at the Radboud University up to 0.6 fte.

At present Smits is head of the Centre for Sustainable Management of Resources at the Radboud University (0,6fte), occupies an endowed professorial chair at the Erasmus University of Rotterdam (Sustainable Water Management; 0,2fte) and is senior water management adviser of Rijkswaterstaat Division East Netherlands (Arnhem).

The combination of two universities and a professional water management organisation provides a multidisciplinary academic framework to address complex water management problems in river basins.

This unique combination of jobs has resulted in many scientific papers, contributions to newspapers, magazines, radio and television broadcasting etc. Apart from these scientific and professional related activities Prof Smits took the initiative to launch a new MSc Transnational Water Management in order to generate a new generation of international water managers. The MSc TWM was co-produced with the University of Duisburg-Essen (Germany).

Name:	Michael Spiteller
Department/Institute:	Institute of Environmental Research
Acad. title:	Prof. Dr. Dr. h. c.
Full Address:	University of Dortmund, Otto-Hahn-Str. 6, D-44227 Dortmund

Biographical sketches

Born 1954 in Herrsching, Ammersee (Germany)

During the time from 1972 until 1976 Prof. Spiteller studied chemistry at Georg-August University in Göttingen and completed his doctorate in 1979. Following this he was employed as scientific assistant at the Chair of Soil Science, Bayreuth and later was granted a DFG-scholarship and worked for the preparation of his postdoctoral qualification at the Institute for Soil Science, Göttingen. In 1985 he got the position of the Head of the Laboratory Working Group Soil-Water-Air at the Plant Protection Centre of the Bayer Inc., Monheim. In 1990 he was appointed an associated professor for soil science at the Forestry Department of the University Göttingen, and in 1993 he got a full professorship for environmental chemistry and environmental toxicology at the University Kassel. He was appointed as full professor for environmental chemistry and environmental analytic chemistry at the University Dortmund, and since that time he is holding the position as managing director of the Institute for Environmental Research at the University Dortmund. He compiled more than 330 publications, lectures, posters and book contribution, and he is co-editor of several scientific journals.

Name:	Bernd Sures
Department/Institute:	Department of Biology and Geography, Department of Applied Zoology / Hydrobiology
Acad. title:	Prof. Dr.
Full Address:	University of Duisburg-Essen / Campus Essen, Universitätsstr. 5, , D-45117 Essen

Biographical sketches

Education and academic career

- 1988 - 1993 Education in biology and chemistry for teachers ("Staatsexamen"), Ruhr-University of Bochum ;Title of the thesis: "Detection of lead in indigenous fish species and their parasites by atomic absorption spectrometry"
- June 1996 PhD examination at Zoology I, Ecology, University of Karlsruhe (TH), Title of the thesis: "Studies on heavy metal accumulation in helminths as compared with their aquatic hosts"
- June 2002 Habilitation in zoology at Zoology I, Ecology, University of Karlsruhe (TH), Title of the thesis: "Description of aquatic host-parasite-assemblages from an ecological and (eco-)toxicological point of view"

Professional experience

- 1991 - 1992 Chemistry teacher, Nursing school at the hospital in Herne
- 1993 - 1999 Scientific assistant, Zoology I, Ecology, University of Karlsruhe (TH)
- 1999 - 2004 Assistant Professor (C1), Zoology I, Ecology, University of Karlsruhe (TH)
- 2004 - 2006 Associate Professor (C2) Zoology I, Ecology, University of Karlsruhe (TH)
- since Sept. 2006 W 3-Professorship, Applied Zoology / Hydrobiology, University of Duisburg-Essen

Research Interests

Prof. Sures' research interests cover a broad range of topics in aquatic ecosciences comprising hydrobiology, parasitology, ecotoxicology and trace metal analysis. His overall aim is to investigate how a combination of common environmental stressors (e.g. pollution, parasites, etc.) affects populations of animals. He has different experiences, techniques and approaches available to investigate, understand and model populations of aquatic organisms which might help to identify factors that determine the integrity and health of ecosystems.

Name:	Thorsten Mietzel
Department/Institute:	Department of Civil Engineering, Institute of Waste management and waste technologies
Acad. title:	Dr.
Full Address:	University of Duisburg-Essen Universitätsstr. 5, 45117 Essen

Biographical sketches

Education and academic career

2001 Diploma Civil engineering: "A software monitor for intermittent bacteria contamination in urban river": University of Essen.

2007 PHD: "A new approach for estimating the efficiency of storm water treatment facilities": University of Duisburg-Essen.

Research interests

- Storm water treatment
- Storm water pollutant modelling
- Effectiveness of storm water treatment plants

Selected publications

Mietzel, T.; Klepischewski, K.; Weiss G. 2007. Development and verification of a general approach to describe the efficiency of vortex separators in combined sewer systems. *Water Science & Technology* Vol. 55, No. 4, pp 165–173.

Mietzel, T.; Frehamn, T.; Kutzner, R.; Becker, M.; Geiger, W. F. 2006. Practical measurement of stormwater events – Not a trivial task. *Proceedings of the 10th International Conference on Urban Drainage (10th ICUD)*, 21.–26.08.2005, Copenhagen/Denmark.

Frehmann, T.; Flores, C.; Luekewille, F.; Mietzel, T.; Spengler, B.; Geiger, W.F. 2005. Modelling of sedimentation and erosion in inline storage sewers for stormwater treatment. *Water Science & Technology* Vol 52 No 5 pp 151*158.

Frehmann, T.; Mietzel, T.; Kutzner, R.; Spengler, B.; Geiger, W.F. 2004. Monitoring in inline storage sewers for stormwater treatment to determine efficiencies. *Water Science & Technology* Vol. 50, No. 11, pp 89-96, 2004.