

Statement for the candidature as IAD presidency in 2010

In the last years I learned a lot about the positive aspects of the IAD, a network of enthusiastic scientists sharing ideas and challenges within the Danube River Basin. Joining this group and meeting regularly helps to keep the understanding for the various aspects of research and environmental issues throughout the river basin, the world's most international river basin harbouring a diversity of species and human communities.

The long history of this association and its importance within the Danube River Basin changed over the last decades, still its value can be clearly seen and developments in the recent years led to a more structured association currently supported by more than 12 Danube countries. The IAD has also observer status in the ICPDR and thus, is also involved in current developments regarding the economic development and environmental pressures. Regarding these issues a scientific sound and critical voice can support wise solutions seeking for long term sustainability in the river basin and the Black Sea.

Considering these aspects I am prepared to support this positive development by my candidature for IAD presidency. It is a pleasure to follow Ivana Teodorovic as she gave the IAD a "new" face and showed the importance of cooperation throughout the river basin, still filling this position with the same enthusiasm and positive energy is the challenge for who ever will follow.

In my understanding the positive development of the recent years need to be continued, such as the start of a training network for young scientists, the cooperation within the DRB and the science based cooperation with other river basins in Europe and around the world. Clearly, IAD need to support capacity building in research and education by initiating training workshops for young scientists and support mobility and research cooperation. We can also use the IAD conferences to initiate exchange with scientists from other river basins, the 2010 conference is an excellent example in that respect. Hence, I do see that the continuation of the successful development path of IAD is the premier aim for the coming years. Beside this strategy to strengthen the scientific capacity in the DRB, the IAD as network of experts can contribute to recent and future challenges in terms of sustainable development strategies in the DRB, in the view of sound environmental science. Here, I suggest to use IAD as an active communication network and recent developments e.g. along the Lower Danube showed the importance of active IAD members. So, finally keeping the IAD "wheel" turning based on the strategies developed are the plans I want to share with all IAD members. Counting on a strong team within IAD (with the Vice president, the general secretary, the EGL's and the editor of Danube News) I do see fruitful perspectives for the continuation of IAD and I hope I can contribute to this development, at least a bit.

March 22nd 2010, Vienna

Thomas Hein
Boku, Vienna & WasserCluster Lunz

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Education

- Jan. 2007 Habilitation in Limnology, 2007
Thesis: “*Complexity of riverine landscapes: Hydrological exchange controls biogeochemical cycling*” (University of Nat. Res. and Appl. Life Sciences).
- Dec. 1999 Ph.D. in Limnology, 1999
Thesis: “*Controlling factors for the productivity in river-floodplain systems*” (supervisor: Prof. F. Schiemer University of Vienna and Prof. G. Herndl, NIOZ, Netherlands).
- Sept. 1993 Msc. in Zoology and Plant Physiology
Thesis: “*Hydrologische Vernetzung – Schlüsselfaktor für Auensysteme ?*“ (University of Vienna)

Research Experience

- since Aug. 2008 Managing director of the research institute Wasserkluster Lunz
- since June 2005 Leader of the working group “BioFrames” at the Wasserkluster Lunz
- since June 2005 Assistant professor at the Institute of Hydrobiology and Aquatic Ecosystem Management
- 2000 - 2005 Research Fellow at the Institute of Ecology and Conservation Biology, Department of Limnology, Austria.
- 1997 - 2000 Research Associate at the Inst. of Zoology (University of Vienna)
- 1996 General Secretary of the IGL, Austrian Limnological Association at the University of Vienna, Austria.

Teaching Experience

- Since 2006 Seminar Nutrient dynamics in riverine landscapes: ecological functioning and societal implications at the University of Nat. Res. and Appl. Life Sciences, Vienna.
- Since 2005 Introductory lecture in Limnology (together with F. Schiemer) at the University of Vienna
- Since 2001 Organization and lecturer of the international postgraduate lectures on limnology (IPGL):
Floodplains with emphasis on the situation in the Danube River Basin:
Ecology – Human pressure - Management
- since 2000 Lecturer (University Vienna)
Nutrient and matter cycles in riverine landscapes (2h)
Project course: *Floodplain Ecology* in large rivers (3h)
Introductory lecture „Struktur und Funktion limnischer Ökosysteme“ (3h)
- 1993 - 1998: Teaching Assistant (University of Vienna): *Ecology of Floodplains*

Other Experience

- Jun. 2002 Groundwater management course (Peak course at the EAWAG Zuerich)
- Nov. 2001 License examination and certificate as a consulting engineer (Austrian Federal Economic Chamber)
- May 2001 Organization of a public exhibition during the Austrian science week: "New life along our urban rivers".
- Jan. 2000 successful pre-selection test for research positions at the EU commission (KOM/R/A/1999)
- Mar. 1993 Study period in Lyon, France (ERASMUS Network in Aquatic Ecology)

Scientific Awards

- 2007 Science award of Lower Austria
2003 Theodor Koerner Award (Austria)

Major Research Areas and Interests

Limnology, wetland/floodplain ecology, nutrient and matter dynamics, landscape ecology
Interaction between fluvial dynamics and ecosystem processes, nutrient management
Interactions between aquatic and terrestrial ecosystems (catchment approach)
Development of conservation and restoration strategies for riverine landscapes
Implementation of nature conservation and nutrient management issues in river basin management

Invited Workshops (participation) and organization

- Technical Meeting "The application of isotope techniques for water quality assessment and management, focusing on nutrient management, in rivers". Technical meeting at the IAEA in Vienna, October 2007.
- Final Wetlands Workshop of the UNDP/GEF Danube Regional Project - Wetlands and nutrient retention. Workshop held in Tulcea, Ro, April 2007.
- Technical Meeting „Isotope Techniques for Understanding the Water Quality Impacts of Wetlands“. Technical meeting at the IAEA in Vienna, October 2005.

Invited lectures (since 2007)

2009:

- Nitrogen cycling in riverine wetlands. Plenary lecture International Workshop on "Microbiology of River associated Wetlands" May 2009 Schloss Crieven, Germany.
- Riverine wetlands in the Danube River Basin: status, challenges and future perspectives. Invited lecture 10th Croatian Biological Congress Osijek, Croatia.

2007:

- Wetland restoration and potential effects for nutrient retention - examples from the Danube River Basin. Invited presentation ECRR Workshop Budapest, September 2007.

International presentations (since 2007)

2009:

- Hein T., Bondar-Kunze E., Manuel Felkl, Helmut Habersack, Matthias Mair, Lunz, G. Pinay, Fritz Schiemer, and Michael Tritthart. Effects of hydromorphological changes on nitrogen and carbon dynamics in a regulated river floodplain system of the Danube River, Austria. ISRS - First Triennial Meeting - July 12-17, 2009, Tampa, USA.

- Hein, T., Bondar-Kunze, E., Felkl, M., Mair, M., Tritthart, M., Welti, N.D.; Nutrient cycling in complex river floodplain systems: Water and sediment processes. American Society of Limnology and Oceanography, 25.01.-30.01.2009, Nice, France.
- Bondar-Kunze, E., Ganglbauer, A., Tritthart, M., Hein, T. Influence of water level fluctuations on biomass development and primary production of riverine microphytobenthos and their role in the carbon cycling in fluvial landscapes. American Society of Limnology and Oceanography, 25.01.-30.01.2009, Nice, France.
- Welti, N.D.; Bondar-Kunze, E., Pinay, G., Hein, T. Nutrient transformations within two floodplains of the Danube River: Effects of restoration. American Society of Limnology and Oceanography, 25.01.-30.01.2009, Nice, France.
- 2008:
- Hein T., Baart I., Blaschke A. P., Haberer C., Haidvogel G., Hohensinner S., Preiner S., Reckendorfer W., Reiter K., Schuh B., Stanzer G., Weigelhofer G.: Optima Lobau: Future scenarios for a sustainable management perspective of an urban floodplain. 4th ECRR Conference on River Restoration, Venice June 2008.
- 2007:
- Hein T.: Effects of river restoration on nutrient dynamics in floodplains and potential impacts on main channel conditions. IAEA, invited presentation, Oct. 2007.
- Welti N., Bondar-Kunze, E. & Hein T. (2007): Denitrification in floodplains along the Danube river with various levels of conductivity. Annual meeting of the Cost action 856, topic: Denitrification, basic research and its applications in wetlands, Ljubljana, Slovenia September 2007.
- Bondar-Kunze, E., Preiner S., Schiemer, F. & Hein T. (2007): Phytobenthos development and productivity and the effect of short term desiccation along shorelines of a large river. AquaFluo, International conference, Novi Hrad May 2007.
- Hein T., Baart I., Blaschke A. P., Haidvogel G., Hohensinner S., Preiner S., Reiter K., Schuh B., Weigelhofer G. (2007): What are potential options for a sustainable management perspective for a MaB reserve, the Lobau. Invited presentation at the 2nd international conference on protected areas EWA and IWA, Dubrovnik April 2007.

Publications

Cum. IMP: > 30; citations: > 300

I. Referred Journals since 2004 (30 in total, 21 SCI listed)

I.1. Journals

- Bondar-Kunze, E., Preiner, S., Schiemer, F., Weigelhofer, G., **Hein, T.*** (2009) Effect of enhanced water exchange on ecosystem functions in backwaters of an urban floodplain. *Aquatic Sciences* 71(4): 437-447.
- Lair, G.J., F. Zehetner, M.H. Gerzabek, M. Fiebig, C.A.M. van Gestel, S. Hohensinner, **T. Hein**, P. Hsu, K.C. Jones, G. Jordan, A.A. Koelmans, A. Poot, D.M.E. Slijkerman, K.U. Totsche, J.A.C. Barth, E. Bondar-Kunze (2009) How do riverine floodplains change over time and what does that mean for contaminant behavior? An interdisciplinary analysis. *Environ. Pollution* 157(12):3336-3346.
- Schagerl, M., Drozdowski, I., Angeler, D.G., **Hein, T.**, Preiner, S. (2009) Water age – a major factor controlling phytoplankton community structure in a reconnected dynamic floodplain (Danube, Regelsbrunn, Austria). *J. Limnol.* 68(2): 274-287.
- Hohensinner, S., Herrnegger, M., Blaschke, A.P., Haberer, C., Haidvogel, G., **Hein T.**, Jungwirth, M. & Weiss, M. (2008) Type-specific reference conditions of fluvial landscapes: a search in the past by 3D-reconstruction. *Catena*, 75: 200-215.

* Author for correspondence

- Zehetner, F., Lair, G. J., Maringer, F.-J., Gerzabek M. H. & **T. Hein** (2008): From sediment to soil: floodplain phosphorus 3 transformations at the Danube River. *Biogeochemistry*, 88, 117-126.
- Peduzzi, P., F. Aspetsberger, **T. Hein**, F. Huber, S. Kargl, B. Luef, 2008: Dissolved organic matter (DOM) and bacterial growth in floodplains of the River Danube under varying hydrological connectivity. *Fundamental and Applied Limnology*, 171 (1): 49-61.
- Preiner S., Drozdowski I., Schiemer F. & **T. Hein***, 2008: The importance of a re-connected side-arm system for the carbon cycling of the River Danube, Austria. *Freshwater Biology*, 53: 238-252.
- Zweimüller, I., Zessner M. & **T. Hein**, 2008: Effects of climate change on nitrate transport in a large river: the Austrian Danube as an example. *Hydrological Processes*, 22(7): 1022-1036.
- Schiemer, F., **Hein**, T. & W. Reckendorfer (2007): Ecohydrology, key-concept for large river restoration. *Ecohydrology and Hydrobiology*, 101-111.
- B. Luef, F. Aspetsberger, **T. Hein**, F. Huber, P. Peduzzi, 2007: Impact of hydrology on free-living and particle-associated microorganisms in a river floodplain system (Danube, Austria). *Freshwater Biology*, 52, 1043-1057.
- Bondar E., Kucera-Hirzinger V., Preiner S., Weigelhofer G., Schiemer F. & **T. Hein*** 2007: The Impact of an Artificial Water Enhancement Scheme on Trophic Levels and the Biological Activity in an Urban Backwater System in Vienna (Austria). *Internat. Rev. Hydrobiol.*, 92(4-5), 413-427.
- C. Winter, **T. Hein**, G. Kavka, R. L. Mach, A. H. Farnleitner, 2007: Longitudinal Changes In The Bacterial Community Composition Of The Danube River: A Whole River Approach. *Applied and Environmental Microbiology*, 73(2), 421-431.
- Hein** T., Preiner S. & K. Tockner, 2006: Limnological concepts as the basis to understanding river networks: Perspectives for the Danube. *Archiv f. Hydrobiologie, Supplementbände* 158, 4, 557-576.
- Riedler P., Baranyi C., **Hein** T., Keckeis S. & M. Schagerl: 2006: Abiotic and biotic control of phytoplankton development in dynamic side-arms of the River Danube. *Archiv f. Hydrobiologie, Supplementbände* 158, 4, 577-594.
- Hein** T., Blaschke A. P., Haidvogel G., Hohensinner S., Kucera-Hirzinger V., Muhar S., Preiner S., Reiter K., Schuh B., Weigelhofer G., & I. Zsuffa, 2006: Optimised management strategies for the Biosphere reserve Lobau, Austria - based on a multi criteria decision support system: using ecohydrological model approaches. *Ecohydrology and Hydrobiology*, 6, 25-36.
- Schiemer F., **Hein** T. & P. Peduzzi 2006: Hydrological control of system characteristics of floodplain lakes. *Ecohydrology and Hydrobiology*, 6, 7-18.
- Hein** T., Reckendorfer W., Thorp J. & F. Schiemer, 2005: The importance of altered hydrologic retention in large regulated rivers: examples from the Austrian Danube. *Archiv f. Hydrobiologie, Large Rivers* 15: 425-442.
- Hein** T., Baranyi C., Reckendorfer W. & F. Schiemer, 2004: The impact of surface water exchange on the hydrochemistry and particulate matter dynamics in floodplains along the River Danube, Austria. *Sci. of the Total Envir.*, 328, 207-218.

I.1. Book chapters, books, monographs since 2005

- Coops, H., Tockner, K., Amoros, C., **Hein**, T., & G. Quinn, 2006: Restoring lateral connections between rivers and floodplains: lessons from rehabilitation projects. *Ecological studies*. Springer Press. 190, 15-32.

* Author for correspondence

- Schiemer, F. & T. **Hein**, 2007: The ecological significance of hydraulic retention zones. In press P. Wood, D.M. Hannah and J.P. Sadler (eds.) Hydroecology and Ecohydrology: Past, Present and Future. J. Wiley & Sons, 405-420.
- Hein T.**, Bondar-Kunze E., Schiemer, F., Welte N. & G. Pinay, 2009: Effects of Ecological Restoration on Biogeochemical Processes in Complex Riverine Landscapes. In Ecological Restoration (eds. G. H. Pardue & T. K. Olvera), Nova Publishers.
- Hein T.**, Kucera-Hirzinger V., Preiner S., Schiemer F. & G. Weigelhofer 2009: Der Mensch und die Flusslandschaften - Rolle natürlicher Flusslandschaften: Status und Perspektiven im Donauraum. Facultas Verlag.
- Nike Sommerwerk, Christian Baumgartner, Jürg Bloesch, **Thomas Hein**, Ana Ostojic, Martin Schneider-Jacoby, Rosi Siber, Klement Tockner (2008): The Danube River Basin. Rivers of Europe.

I.2. conference proceedings since 2004 (in total > 20)

- Hein T.**, Baart I., Blaschke A. P., Habereeder C., Haidvogel G., Hohensinner S., Preiner S., Reckendorfer W., Reiter K., Schuh B., Stanzer G., Weigelhofer G. (2008): Optima Lobau: Future scenarios for a sustainable management perspective of an urban floodplain. Proceedings of the 4th ECRR Conference on River Restoration.
- Weigelhofer G., Makal, M., Muhar S., Preis S., Kreuzinger N., **Hein T.** (2008): PROFOR (Austria): Integrating the effects of stream structure on nutrient loading patterns in Management concepts for heavily modified streams. Proceedings of the 4th ECRR Conference on River Restoration.
- Preiner S., Baart I., Blaschke A. P., Habereeder C., **Hein T.** (2008): OPTIMA LOBAU: The effect of changing connectivity on aquatic primary producers. Proceedings of the 4th ECRR Conference on River Restoration.
- Hein T.**; Blaschke, A.P.; Haidvogel, G., Hohensinner, S.; Muhar, S.; Preiner, S.; Reiter, K.; Schuh, B.; Weigelhofer, G., Zsuffa, I. (2007): Urban floodplains - Optimised management strategies in the face of conflicting ecological and socio-economic demands . In: "Reducing the Vulnerability of Societies to Water Related Risks at the Basin Scale" (Proceedings of the third International Symposium on Integrated Water Resources Management, Bochum, Germany, September 2006). IAHS Publ. 317, p. 258-262.
- Hein T.**; Baart I.; Blaschke, A.P.; Haidvogel, G., Hohensinner, S.; Preiner, S.; Reiter, K.; Schuh, B.; Weigelhofer, G., (2007): What are potential options for a sustainable management perspective for an international protected floodplain area, the Lobau. Proceedings of the 2nd International EWA Conference, Dubrovnik.
- Baart I., Haidvogel G., Hohensinner S., Janauer G., Preiner S., **Hein T.** (2006): Macrophytes and aquatic neophytes in the floodplain Lobau during the last 160 years: temporal distribution. , Proceedings 36th International Conference of IAD. Austrian Committee Danube Research / IAD, 04.-08.2006, Vienna; ISBN: 978-3-9500723-2-7.
- Bondar E., Pinay G., Preiner S., Schiemer F. & **Hein T.** (2006): Hydromorphology controlling phytobenthos development and productivity along shorelines of a large river: experimental approach. Proceedings 36th International Conference of IAD. Austrian Committee Danube Research / IAD, 04.-08.2006, Vienna, 200-202; ISBN: 978-3-9500723-2-7.
- Farnleitner A.H., Winter C., **Hein T.**, Mach R.L. & Kavka G. (2006): Longitudinal Changes in the Bacterial Community of the Danube by 16S rDNA Profiling: A Whole River Approach. Proceedings 36th International Conference of IAD. Austrian Committee Danube Research / IAD, 04.-08.2006, Vienna, 200-202; ISBN: 978-3-9500723-2-7.
- Orlikowski D., G. Weigelhofer & **Hein T.** (2006): The impact of river water on groundwater quality in an urban floodplain area, the Lobau in Vienna. Proceedings 36th International

Conference of IAD. Austrian Committee Danube Research / IAD, 04.-08.2006, Vienna, 200-202; ISBN: 978-3-9500723-2-7.

- Preiner S., Baart I., Blaschke A.P., Bondar E., Haberer C., Zsuffa I. & **Hein T.** (2006): Impact of hydrological connectivity on primary production patterns of large river floodplains. Proceedings 36th International Conference of IAD. Austrian Committee Danube Research / IAD, 04.-08.2006, Vienna, 200-202; ISBN: 978-3-9500723-2-7.
- Weigelhofer G., Blaschke A., Haidvogel G., Hohensinner S., Reckendorfer W., Reiter K., Schuh B., **Hein T.** (2006): Optima Lobau: An interdisciplinary scientific approach evaluating future scenarios in an urban floodplain. Proceedings 36th International Conference of IAD. Austrian Committee Danube Research / IAD, Vienna, 04.-08.2006, Vienna, 55-60; ISBN: 978-3-9500723-2-7.
- Zornig H., Weigelhofer G., Kucera-Hirzinger V., **Hein T.**, Görnet B. & Schiemer F. (2006): Optima Lobau: An interdisciplinary scientific approach evaluating future scenarios in an urban floodplain. Proceedings 36th International Conference of IAD. Austrian Committee Danube Research / IAD, Vienna, 04.-08.2006, Vienna, 55-60; ISBN: 978-3-9500723-2-7.
- Schiemer, F., **Hein T.** & W. Reckendorfer (2004): Restoration Concepts for large rivers. Experiences from the Danube restoration project. pp. 219-230. IN: Proceedings of III International Meeting on Hydrological Restoration of Wetlands: Donana 2005. Ministry of Environment, Sevilla, Spain.

II. Selected other publications

- Zessner, M., Hein T. (2007): Die Au ist multifunktional, doch keine Kläranlage! Aqua-Press, 2/2007.
- Weigelhofer, G., Hohensinner, S. & T. Hein (2007): Optima Lobau - Lösungsansätze für das Management urbaner Auen. Österr. Wasser- und Abfallwirtschaft, 56.JG, 7/8, 1-3.
- Weigelhofer, G., Janac, P. & T. Hein, (2005): Erkenntnisse zur Ökologie aus dem Wasserwirtschaftlichen Versuch „Dotation Obere Lobau, Wien“ für eine nachhaltige Entwicklung urbaner Augewässer. Öster. Wasser- und Abfallwirtschaft 9-10, 16-19.
- Hein T., Baranyi C., Reckendorfer W. & F. Schiemer, 2004: Hydrochemical key parameters for the evaluation of restoration strategies in the Austrian Danube. Limnological reports of the International Association of Danube Research, 35, 65-73.
- Hein T., Baranyi C. & W. Reckendorfer, 2004: Einfluss von Öffnungsmaßnahmen auf die hydrochemische Situation und die planktischen Prozesse in einem dynamischen Ausystem. Verh. Zool.-Bot. Ges. Österreich 34, 31-46.
- Schiemer F., Reckendorfer W. & T. Hein, 2004: Erfahrungen mit Restaurierungsprogrammen am Beispiel der Donau. Verh. Zool.-Bot. Ges. Österreich 34, 1-18.

III. Selected scientific reports since 2004 (in total > 30)

- Velimirov B., Milosevic N., Hein T., Kavka G.G., Farnleitner A.H., Kirschner A.K.T. 2008: Variation pattern of ecological bacterial parameters in the Danube River: Are tributaries a determining factor? 96-105. In Liska I, Wagner F., Slobodnik J. (ed.) Joint Danube Survey, Final Scientific Report. ICPDR, 242 pp.
- Bondar, E., O. Gabriel, T. Hein, Gy. Jordan, V. Kucera-Hirzinger, M. Zessner 2007: Integration of the nutrient reduction function in riverine wetland management. Guidance document. UNDP/GEF Danube Regional Project, Component 4.3: Monitoring and assessment of nutrient retention capacities of riverine wetlands 32 pp.
- Tickner D., Hein T., Kroiss H., Seffer J., Weller P., Wiener S., Wolte I. & M. Zessner 2004: Monitoring and Assessment of Nutrient Removal Capacities of Riverine Wetlands. Report prepared by the WWF DCP for UNDP/GEF Danube Regional Project.

Outreach: Pressemeldungen (APA, Tageszeitungen, andere Medien)

APA article July 2007, Newspapers July 2007, radio interview Radio Nö und Radio Wien July 2007, Articles in Danube Watch, AquaPress and Aublick.

Project presentation in „dieUniversitaet-online.at“: R. Dreger (2005) „Lobau: Testgebiet für ökologischen Hochwasserschutz.

Optima Lobau – Vorstellung der FBK im Rahmen eines Berichts „Forschung zum Mitmachen: Wenn die Wissenschaft in die Schule geht...“ ProVision“ Ö1, Sendung Diagonal, June 2006.

„Optima Lobau – Projekt im Programm ProVision“ Ö1, Sendung Diagonal, March 2006.

„Die Lobau trocknet aus“ Aktuelle Nachrichten Radio Wien, April 2003.

Article in the science part of the weekly magazine “Profil”. No. 14, 30.03.2002, 155.

Project grants since 2004 (in total 21)

Granted

ProFor (ETC, EC, PI: T. Hein) 2009 – 2011. 240 kEur (total budget : 600 kEur)

WETWIN (FP7, EC, WP-leader T. Hein) 2008 – 2011. 260 kEur (total budget 2.4 MEur)

Lobau 2020 (MaB, Austrian Academy of Sciences, Hein Co-PI), 2008 – 2011. 150 kEur

Algal productivity in riverine wetlands (KIÖS, Austrian Academy of Science, PI: Hein), 2007-2009. 6 kEur

Monitoring Lobau (Municipal Authority of Vienna, Hein WP leader) 2005 – 2009, annually 25 kEur

Role of primary production in riverine landscapes (HSJS, PI: Hein) 2006 – 2007. 3.5 kEur

Monitoring and assessment of nutrient removal cap. in riverine wetlands (GEF/UNDP, PI: Hein) 2005 – 2007. 25 kEur

Role of benthic primary production in instream structures (BMVIT, Hein sub-WP leader) 2006 – 2008. 25 kEur

Study on ecological residual flow requirements in the Ybbs. (WienEnergie, coop. with BOKU / IHG PI: Hein) 2007 – 2009. 40 kEur

ProFoR Weinviertel, pilot phase (Government of Lower Austria, PI: Hein) 2006 – 2008. 36kEur

CANFlood. FWF P 19907-B17. 2007 – 2010. 272 kEur

Optimised management Lobau. ProVision (Ministry of Science, Education and Arts). 2005 – 2008. 280 kEur

Nutrient dynamics in the Kihansi River (LKEMP, GEF, Supervisor: Hein) 2004 – 2009. 85 kEur

Design, coordination and support of implementation of the project „Water enhancement scheme Dotation Lobau“. Municipal authority of Vienna. 2001 - 2005.

Design, coordination and support of implementation of the project ” Restoration River Wien: Dynamics of nutrients, suspended solids and organic matter of the flood control reservoirs Auhof-Retentionbecken with regard to the flood protection management”. Municipal authority of Vienna. 1999 – 2005

Professional Affiliations

International Association of Danube Research (IAD)

American Society of Limnology and Oceanography (L&O)

Society of Wetland Scientists (SWS)

International Association of Theoretical and Applied Limnology (SIL)

International Networking

Associated working group to the running Cost action 856 – Ecological Aspects of Denitrification, with Emphasis on Agriculture

Member of the core group of the Coordinated Research Project “Isotope Technique for Assessment of Hydrological Processes in Wetlands” of the IAEA 2006 – 2009
Expert group leader of the EG Biotic Processes of the IAD

Supervision of PhD students

- R. Ideva, since 2005: The hydrochemical situation of the Kihansi River and its influence on the Gorge ecosystem: impacts of a recently built reservoir. University of Vienna and University of Dar Es Salaam (co supervisor)
- I. Baart, since 2006: The historic, socioeconomic and ecological role of aquatic neophytes in Danube floodplains. University of Natural Resources and Applied Life Sciences, Vienna
- E. Bondar, since 2007: The impact of benthic algae on the nitrogen cycling in riverine wetlands. University of Natural Resources and Applied Life Sciences, Vienna.
- N. Welti, since 2007: Nitrogen cycling in restored and disturbed riverine wetlands, the small scale processes. University of Natural Resources and Applied Life Sciences, Vienna

Supervision of diploma students

- M. Edinger, 2009: Comparison of the water quality status of selected wetlands in the Danube River Basin. University of Vienna.
- A. Ganglbauer, since 2008: Phytobenthos development and disturbance response measured with pulsed amplitude modulated fluorescence. University of Vienna.
- M. Felkl, since 2008: Sediment characterisation of floodplain sediments. University of Vienna.
- M. Mair, 2009: Nitrogen cycling in wetland sediments influenced by different surface water exchange conditions University of Natural Resources and Applied Life Sciences, Vienna.
- M. Makal, since 2007: Nutrient uptake capacity in streams along a pressure gradient. University of Vienna.
- C. Leichtfried, 2008: Verteilung und Verfügbarkeit von Nährstoffen in unterschiedlich angebundenen Augewässern. University of Natural Resources and Applied Life Sciences, Vienna
- E. Bondar, 2006: Nutrient dynamics and biological activity in relation to an artificial water enhancement scheme in an urban backwater system in Vienna. University of Vienna.
- S. Preiner, 2005: The importance of a re-connected side-arm for the biogeochemical cycling of the River Danube in Austria. University of Vienna.
- U. Hager, 2002: Post- restoration nutrient and organic matter dynamics in an urban stream and its adjacent wetlands. University of Vienna.
- S. Glaser, 2001: Die renaturierten Retentionsbecken des Wienflusses: Untersuchung zur DOC und Ammonium Dynamik mittels Bioreaktoren. University of Vienna.
- F. Aspetsberger, 2000: Dynamics and utilization of particulate organic matter in the Danube River floodplain system. University of Vienna.

Personal data

Nationality: Austria
Date and place of birth: 27.09.1968, Vienna
Marital status: married, 3 children.