

CURRICULUM VITAE

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KEY QUALIFICATIONS

Petter D. Jenssen is a full professor of environmental engineering and has developed a new 5 year program in «green» civil engineering. He is currently developing two parallel MSc programs in Nepal and Pakistan in Sustainable Water Sanitation, Health and Development. He has headed development of nature based and alternative sewage system design in Norway. He has initiated and headed a 4 year, 40mNOK, national research program entitled «Natural systems technology for wastewater treatment». Several of these treatment alternatives are highly interesting in developing countries. Since 1996 he has organized an annual international summer-course in alternative wastewater treatment with highly qualified lecturers from Norway and abroad. He also hosted the third international conference on “Ecological engineering for wastewater treatment” in 1999. In addition to wastewater treatment he has research experience in: hazardous waste site evaluation and risk assessment, water supply and pollution transport in groundwater, pollution from agriculture and agricultural drainage. He has been invited to give several keynote lectures at international conferences. He has work/project experience from China, Cuba, Estonia, Ecuador, Greenland, India, Malaysia, Nepal, Pakistan, Russia, Switzerland, Slovenia and United States.

SUPERVISION OF PhD STUDENTS

Year finished, name: topic

1998 Trond Mæhlum: (main supervisor) Constructed wetland design
1998 Tong Zhu: (main supervisor) Constructed wetland treatment processes
1999 Geir Ausland: (main supervisor) Hydraulic aspects of wastewater infiltration
1999 Tor K. Stevik (co-supervisor): Bacteria removal in biofilters
2006 Fadi Suliman: (main supervisor) Hydraulic performance of constructed wetlands
2006 Kinga Adam: (main supervisor) Phosphorus removal in natural systems
2006 Bahadar Nawab (co-supervisor): Cultural and technical aspects of sanitation in developing countries
2009 Razak Seidu: (co-supervisor) Health risk evaluations in wastewater handling in Ghana
2012 Erik Johannessen (co-supervisor) Optimizing phosphorus removal in on-site wastewater treatment facilities
2013 Ragnhildur Gunnarsdottir (co-supervisor) Wastewater treatment in Greenland – dry composting and biogas
2013 Andreea Oarga (co-supervisor) Blackwater treatment and reuse

Year to finish, name: topic

2015 Manoj Pandey: (main supervisor) Constructed wetlands - process and design adaption
2015 Daniel Todt: (main supervisor) Nutrient recycling from high concentration wastewater

PROJECT LEADER EXPERIENCE (Major projects)

1993 – 1997 Natural systems technology program (40mNOK) *Project leader/technical coordinator*
1996 - 2001 Development of Filtralite. (1mNOK) Industrial Project with NTNU/SINTEF and industry. *Project leader for the UMB and member of the project expert group*

2001 - 2005 Wastewater treatment in filter beds, Nordic industrial project (2,8mNOK). *Project leader for the Norwegian part and member of the project steering committee.*

2009 – 2012 EU project: Development of an innovative sanitation and wastewater treatment system for remote located tourist facilities.(1.2m Euro) Grant agreement no.: 232274. *Technical manager*.

2009 - 2014 Development of MSc program in “Sustainable Water and Sanitation, Health, and Development” (5.9mNOK, NOMA funded), *Program coordinator UiN*

SOME SPECIAL ASSIGNMENTS AND APPOINTMENTS

- 1999 Head of the organizing committee for the Fourth International Conference on "Ecological Engineering for Wastewater Treatment - Managing the wastewater resource", Ås Norway June 7 -11.
- 2001 Invited speaker at the 2nd Nordic-Japan Environmental Conference, November 5-6, 2001, Nagano, Japan .
- 2004 Invited speaker to the UN conference CSD-12 Sustainable Water and Sanitation, New York, April 27.
- 2005 Responsible for organizing a learning centre titled “Women and Sanitation” at the UN conference on Water Sanitation and Human Settlement, CSD-13, New York, April 20. The learning centre was financed by the Norwegian Ministry of Foreign Affairs
- 2005 Member of WHO expert panel for writing and evaluation of new Guidelines for the Safe reuse of Excreta and Greywater in Agriculture
- 2006 Invited by Norwegian authorities to give a scientific presentation on Sustainable sanitation and green buildings for Chinas Vice Prime-minister during his visit to Norway.
- 2009 Keynote speaker: Third Specialist Conference on Decentralized Water and Wastewater, Kathmandu November 11-13, 2009, IWA
- 2011 Keynote speaker: 28th Alaska Health Summit, Anchorage January 10-13, 2011
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SOME PUBLICATIONS

- Adam, K., Krogstad, T., Suliman, F. & Jenssen, P.D. (2005). Phosphorus sorption by Filtralite PTM - Small scale box experiment.. *J. Environmental Science and Health* 40 (6-7)1239-1250
- Browne W. and P.D. Jenssen (2005) Exceeding tertiary standards with a pond/reed bed system in Norway. *Wat. Sci. Tech.*, 51, (9) 299-306.
- Jenssen, P.D. and Siegrist, R..L., 1990. Technology assessment of wastewater treatment by soil infiltration systems. *Wat. Sci. Tech.*, 22 (3/4) pp. 83-92.
- Jenssen, P. D., T. Krogstad A. M. Paruch T. Mæhlum, K. Adam, C. A. Arias, A. Heistad, L. Jonsson, D. Hellström, H. Brix, M. Yli-Halla, L. Vråle, M. Valve, (2010). Filter bed systems treating domestic wastewater in the Nordic countries – performance and reuse of filter media. *Ecol. Eng.* 36, 1651-1659.
- Gunnarsdóttira, R., K. Müller, P. E. Jensen, P.D., Jenssen, and A. Villumsen, (2012). Effect of Long-Term Freezing and Freeze–Thaw Cycles on Indigenous and Inoculated Microorganisms in Dewatered Blackwater. *Environ. Sci. Technol.*, 46, 12408–12416.
- Gunnarsdóttira, R., P. D. Jenssen, P. E. Jensen, A. Villumsen, R. Kallenborn, (2013). A review of wastewater handling in the Arctic with special reference to pharmaceuticals and personal care products (PPCPs) and microbial pollution. *Ecol. Eng.*, 50, 76– 85.
- Gunnarsdóttira, R., Heiske, S., P. E. Jensen, A. Villumsen, P. D. Jenssen, (2014). Effect of anaerobiosis (**biogas** digestion) on indigenous microorganisms in blackwater with fish offal as co-substrate. Submitted to *Water Research*.
- Heistad, A., A.M. Paruch, L. Vråle, K. Adam and P.D. Jenssen (2006). A high- performance compact filter system treating domestic wastewater. *Ecol. Eng.*, 28, 374-379.
- Nawab, B., Nyborg, I. L. P., Esser, K. B. & Jenssen, P. D. 2006. Cultural preferences in ecological sanitation systems in North West Frontier Province, Pakistan. *Journal of Environmental Psychology*, 26 (3) 236-246.
- Oarga A., Bulc G. T., Jenssen D. P., Mulec J., 2012: Monitoring of microbial indicator groups in organically heavily loaded wastewater treatment systems by using RIDA@COUNT kits. *Fresenius Env. Bull.* 21 (12a) 3886-3893.
- Paruch A.M, T. Krogstad, P. D. Jenssen. (2007). Application of used wetland filter media in agriculture – control of heavy metal contents and faecal contamination *Ecohydrology Hydrobiology*, 7 (3-4) 243-253.
- Pandey, M.K. , P. D. Jenssen, T. Krogstad, & S. Jonasson (2013) Comparison of vertical and horizontal flow planted and unplanted subsurface flow wetlands treating municipal wastewater. *Wat. Sci. Tech.*, In Press.
- Seidu, R., Heistad, A., Jenssen, P. D., Stenstöm, T.-A., Amoah, P., and Drechsel, P. (2008). "Quantification of the health risk associated with wastewater reuse in Accra, Ghana: a contribution toward local guidelines." *Journal of Water and Health*, 6 (4) 461–471.