Gunno Renman's CV

Current position

Professor Emeritus (from 2020-01-01) of Land and Water Resources with emphasis on Ecological Engineering at the KTH Royal Institute of Technology, School of Architecture and the Built Environment, Department of Sustainable Development, Environmental Science and Engineering.

E-mail: gunno@kth.se; Phone: +46-8-790 6350, Mobile: +46-70-6413932

Degrees

Docent, Land Improvement and Drainage, Land and Water Resources Engineering, KTH, 1995
PhD, Ecology, Umeå University, 1986
Master of Science in Biology, Chemistry & Geosciences, Umeå University 1976

Academic and industrial merits

Honorary Professor at Warsaw University of Life Sciences – SGGW, Poland, 2012
Visiting Professor at Warsaw University of Life Sciences – SGGW, Poland, from 1999 to 2002
Consultant and Co-founder of Bioptech AB, Hallstavik, 2006-2015
Consultant, Nordisk Ekoteknik AB, Solna, 1999–2001
Senior Lecturer, Land and Water Resources Engineering, KTH, 1996-2010
Senior Lecturer, Land Improvement and Drainage, KTH, 1986-1995
Senior Lecturer/Adjunct, Umeå University, 1982-1986

Elected positions and appointments

Member of steering group regulated rivers at Vattenfall AB, 1987-1992
Member of the Faculty council, School of Surveing, KTH, 1989-1992
Director of studies, 1986-1993, Vice Head, 1989-1992, Department of Land Improvement & Drainage, KTH
Member of the board, Sorbeco AB, 1998-2000
Expert at the Swedish National Agency for Higher Education, 2007

Expert and opponent assignments at Chalmers University of Technology, Karlstad University, Luleå Technical University, KTH, Swedish University of Agriculture Sciences, Uppsala University, Linköping University, The University of Edinburgh,

Tartu University, Warsaw University of Life Sciences, University of Helsinki, University of Salford.
Member of Editorial Board; Polish Journal of Environmental Studies; Annals of Warsaw Agricultural University – Land Reclamation

Prize and awards

Winner of the International Technological Competition "Treatment of stormwater" SORBUS (together with Magnus Alfredsson, NCC AB, Mikael Melin VAP projekt, Pontus Schwalbe, Globe Water), 1999.

In accordance to the act of Warsaw University of Life Sciences, the Honorary WAU Badge was conferred on Dr Gunno Renman in 2003 (Certificate No. 880/2003).

Winner of Zennström Green Mentorship Award 2014 as co-founder of the company Bioptech.

Lecturing and research

As a PhD student, I worked as an assistant in ecology and environmental protection exercises. Later on, before I received my PhD degree I had positions as adjunct and senior lecture in the mentioned topics. At KTH I was responsible for several courses related to environmental technology and planning in the study programs of surveying, civil and environmental engineering. I teached PhD students in advanced courses and was advisor for about 80 MSc degree projects.

I was main supervisor for 13 students and co-supervisor of two students to a PhD degree. Moreover, of 12 students received the degree of licentiate under my supervision. My publications clearly reflect my research profile over the years (see https://scholar.google.com/scholar?hl=sv&as_sdt=0%2C5&q=Gunno+Renman&btnG=).

My H-index is currently 25 and number of citations 2626.

Selected examples of publications for the past 10 years (2023 papers under review)

Hamisi, R., Renman, A., **Renman, G**., Wörman, A., & Thunvik, R. (2022). Long-term phosphorus sorption and leaching in sand filters for onsite treatment systems. *Science of the Total Environment*, 833, 155254.

Renman, A., & **Renman, G**. (2022). Removal of Phosphorus from Hypolimnetic Lake Water by Reactive Filter Material in a Recirculating System—Laboratory Trial. *Water*, 14(5), 819.

Hamisi, R., Renman, A., **Renman, G**., Wörman, A., & Thunvik, R. (2022). Performance of a tidal flow constructed wetland used for post-treatment of on-site wastewater in cold climate. *Journal of Water Process Engineering*, 47, 102679.

Wikstrom, J., Bonaglia, S., Ramo, R., **Renman, G**., Walve, J., Hedberg, J., & Gunnarsson, J. S. (2021). Sediment remediation with new composite sorbent amendments to sequester phosphorus, organic contaminants, and metals. *Environmental Science & Technology*, 55(17), 11937-11947.

Zuo, M., **Renman, G**., Gustafsson, J. P., & Klysubun, W. (2018). Dual slag filters for enhanced phosphorus removal from domestic waste water: performance and mechanisms. *Environmental Science and Pollution Research*, 25, 7391-7400.

Blum, K. M., Andersson, P. L., **Renman, G.,** Ahrens, L., Gros, M., Wiberg, K., & Haglund, P. (2017). Non-target screening and prioritization of potentially persistent, bioaccumulating and toxic domestic wastewater contaminants and their removal in on-site and large-scale sewage treatment plants. *Science of the Total Environment*, 575, 265-275.

Zuo, M., **Renman, G**., Gustafsson, J. P., & Renman, A. (2015). Phosphorus removal performance and speciation in virgin and modified argon oxygen decarburisation slag designed for wastewater treatment. *Water Research*, 87, 271-281.

Nilsson, C., Lakshmanan, R., **Renman, G**., & Rajarao, G. K. (2013). Efficacy of reactive mineral-based sorbents for phosphate, bacteria, nitrogen and TOC removal–Column experiment in recirculation batch mode. *Water research*, 47(14), 5165-5175.

Patent

My research has resulted into four patents and two products so far:
”Purification plant for waste water”. Inventors Ingvar Hubinette, Uppsala, Gunno Renman. Patent numbers EP1574481-A1; NO200501206-A; SE200400580-A; SE527399-C2
“Sorbus”. Treatment system for stormwater (Swedish patent). I developed the technology and developed and introduced the filter media Polonite® which has been tested in the system.
“Purification seepage water from a disposal site” (EOL method). Inventors P. Schwalbe, G. Renman, H. Lind, G. Tham. I was inventor especially of the part CCW (compact constructed wetland). Patent number SE9701379-A.
“Method and device for purification of wastewater”. WO/2007/131522. Inventors Hans-Olof Thilander and Gunno Renman.

I developed the filter products Polonite® and Sorbulite® for wastewater treatment. These products was manufactured by Ecofiltration Nordic AB (previous name Bioptech AB). Today, manufactured by Polonite Nordic AB.

The compact wastewater treatment plant BIOP® was developed by me in cooperation with the company Bioptech AB (from 2016 Ecofiltration Nordic AB and SVARAB)