

## Curriculum Vitae

### Personal Details:

*Name* : Rabindra Raj Giri  
*Date of birth* : 1967/09/17  
*Nationality* : Nepali  
*Gender* : Male  
*Permanent address* : Kathmandu Metropolitan City-35, Sinamangal, Kathmandu, Nepal.  
*Contact* : rabindra.giri@aitm.edu.np  
+977-1-5552376 (ext. 1701), +977-9860101955 (mobile)

### Academic History:

- (1) Ph.D., Environmental Engineering, Saitama University, Saitama, Japan (2002).
- (2) Master, Environmental Engineering, Asian Institute of Technology (AIT), Bangkok, Thailand (1999).
- (3) Bachelor, Civil Engineering, National Institute of Technology (NIT), Jamshedpur, India (1992).

### Professional History:

#### (A) May 2014 to date

*Employer:* Asian Institute of Technology & Management (AITM), Lalitpur, Nepal  
*Position:* Head & Senior Faculty Member, Department of Civil Engineering.  
*Responsibilities:* Planning, budgeting, interdepartmental coordination, Research & Development, teaching relevant courses in the institute.

#### (B) April 2012 to March 2014

*Employer:* Osaka Sangyo University, Osaka, Japan  
*Position:* Invited lecturer  
*Responsibilities:* Research on advanced oxidation technologies for emerging organic contaminants (e.g., PFCs, PPCPs) for water/wastewater treatment, lecturing/guiding undergraduate/graduate students in laboratory classes.

#### (C) April 2004 to March 2012

*Employer:* Osaka Sangyo University, Osaka, Japan  
*Position:* Researcher  
*Responsibilities:* Research on advanced oxidation technologies for emerging organic contaminants (e.g., PFCs, PPCPs) for water/wastewater treatment, lecturing/guiding undergraduate/graduate students in laboratory classes.

#### (D) October 2002 to September 2003

*Employer:* Saitama University, Japan  
*Position:* Research Engineer  
*Responsibilities:* Research (laboratory tests/computer simulations) on organic contaminant movements in the subsurface.

**(E) February 1995 to December 1997**

*Employer:* SNS Pvt. Ltd., Kathmandu, Nepal.  
*Position:* Civil Engineer  
*Responsibilities:* Construction of two multi-storeyed commercial complexes with basements in Putalisadak, Kathmandu, Nepal.

**(F) May 1994 to January 1995**

*Employer:* AEDA Consulting Group Pvt. Ltd., Kathmandu, Nepal.  
*Position:* Civil Engineer  
*Responsibilities:* Construction of multi-storeyed commercial complexes for Nepal Rastra Bank, Baluwatar, Kathmandu, Nepal.

**(G) April 1993 to January 1994**

*Employer:* SILT Consultant Pvt. Ltd., Kathmandu, Nepal  
*Position:* Civil Engineer  
*Responsibilities:* Civil maintenance of a small hydropower power project in Bhojpur, Nepal.

**Language Skill:**

- English → Excellent (listening, reading, writing & speaking): Second language.
- Nepali → Excellent (listening, reading, writing & speaking): Mother tongue.
- Hindi → Fluent (listening, reading, writing & speaking).
- Japanese → Good (listening & speaking).

**Professional Affiliations:**

- Member, International Water Association (IWA)
- Member, Asian Institute of Technology (AIT) Alumni Association
- Life member, Nepal Engineers' Association (NEA)

**Fellowship Awards:**

- (1) Japanese Government (MEXT) fellowship for Ph.D. course (1999 to 2002).
- (2) Asian Institute of Technology (AIT) fellowship for Masters course (1998 to 1999).
- (3) Technical Cooperation Scheme (TCS) Colombo Plan fellowship for undergraduate course (1988 to 1992).

**Publications & Presentations:**

**(A) Peer-reviewed Journal Articles**

- (1) **R. R. Giri**, H. Ozaki, X. Guo, R. Takanami and S. Taniguchi (2014). Efficacies of UVC and VUV photolysis for mineralization of pharmaceutical compounds in mixed aqueous solution. *Desalination and Water Treatment* (in press).
- (2) **R. R. Giri**, H. Ozaki, X. Guo, R. Takanami and S. Taniguchi (2014). Significance of water quality and radiation wavelength for UV photolysis of PhCs in simulated mixed solutions. *Central European Journal of Chemistry*, 12(6), 659-671.
- (3) **R. R. Giri**, H. Ozaki, X. Guo, R. Takanami and S. Taniguchi (2013). Oxidative-reductive photodecomposition of perfluorooctanoic acid in water. *International Journal of Environmental Science and Technology* (in press, published online: May 25, 2013).

- (4) X. Chen, H. Ozaki, **R. R. Giri**, S. Taniguchi and R. Takanami (2012). Distribution and diffusion behaviors of perfluorinated compounds with low-pressure reverse osmosis membranes. *Journal of Water and Environment Technology*, 10(4), 449-461.
- (5) **R. R. Giri**, H. Ozaki, T. Okada, S. Taniguchi and R. Takanami (2012). Factors influencing UV photodecomposition of perfluorooctanoic acid in water. *Chemical Engineering Journal*, 180, 197-203.
- (6) R. Takanami, H. Ozaki, **R. R. Giri**, S. Taniguchi and S. Hayashi (2012). Antiviral drugs zanamivir and oseltamivir found in wastewater and surface water in Osaka, Japan. *Journal of Water and Environment Technology*, 10(1), 57-68.
- (7) **R. R. Giri**, H. Ozaki, T. Okada, S. Takikita, S. Taniguchi and R. Takanami (2011). Water matrix effect on UV photodegradation of perfluorooctanoic acid. *Water Science and Technology*, 64(10), 1980-1986.
- (8) **R. R. Giri**, H. Ozaki, T. Morigaki, S. Taniguchi and R. Takanami (2011). UV photolysis of perfluorooctanoic acid (PFOA) in dilute aqueous solution. *Water Science and Technology*, 63(2), 276-282.
- (9) **R. R. Giri**, H. Ozaki, Y. Takayanagi, S. Taniguchi and R. Takanami (2011). Efficacy of ultraviolet radiation and hydrogen peroxide oxidation to eliminate large number of pharmaceutical compounds in mixed solution. *International Journal of Environmental Science and Technology*, 8(1), 19-30.
- (10) R. Takanami, H. Ozaki, **R. R. Giri**, S. Taniguchi and S. Hayashi (2010). Detection of antiviral drugs oseltamivir phosphate and oseltamivir carboxylate in Neyu River, Osaka, Japan. *Journal of Water and Environment Technology*, 8(4), 363-372.
- (11) **R. R. Giri**, H. Ozaki, S. Ota, S. Taniguchi and R. Takanami (2010). Influence of inorganic solids on photocatalytic oxidation of 2,4-dichlorophenoxyacetic acid with UV and TiO<sub>2</sub> fiber in aqueous solution. *Desalination*, 255 (1-3), 9-14.
- (12) **R. R. Giri**, H. Ozaki, R. Takanami and S. Taniguchi (2008). A novel use of TiO<sub>2</sub> fiber for photocatalytic ozonation of 2,4-dichlorophenoxyacetic acid in aqueous solution. *Journal of Environmental Sciences*, 20(9), 1138-1145.
- (13) **R. R. Giri**, H. Ozaki, R. Takanami and S. Taniguchi (2008). Heterogeneous photocatalytic ozonation of 2,4-D in dilute aqueous solution with TiO<sub>2</sub> fiber. *Water Science and Technology*, 58(1), 207-216.
- (14) **R. R. Giri**, H. Ozaki, S. Taniguchi and R. Takanami (2008). Photocatalytic ozonation of 2,4-dichlorophenoxyacetic acid in water with a new TiO<sub>2</sub> fiber. *International Journal of Environmental Science and Technology*, 5(1), 17-26.
- (15) **R. R. Giri**, H. Ozaki, T. Ishida, R. Takanami and S. Taniguchi (2007). Synergy of ozonation and photocatalysis to mineralize low concentration 2,4-D in aqueous solution. *Chemosphere*, 66, 1610-1617.
- (16) Y. Terashima, H. Ozaki, **R. R. Giri**, T. Tano, S. Nakatsuji, R. Takanami and S. Taniguchi (2006). Photocatalytic oxidation of low concentration 2,4-D solution with new TiO<sub>2</sub> fiber catalyst in a continuous flow reactor. *Water Science and Technology*, 54(8), 55-63.
- (17) **R. R. Giri**, J. Takeuchi and H. Ozaki (2006). Biodegradation of domestic wastewater under the simulated conditions of Thailand. *Water and Environment Journal*, 20(3), 169-176.

- (18) **R. R. Giri**, H. Ozaki and J. Takeuchi (2006). An alternative to domestic wastewater treatment in Bangkok. *Asian Journal of Water, Environment and Pollution*, 3(1), 77-82.
- (19) H. Ozaki, S. Taniguchi, R. Takanami, N. Shimomukai, T. Hamasaki, M. Sugahara and **R. R. Giri** (2005). Quantification of dioxin in the sieved fraction of river sediment. *Water Science and Technology*, 52(9), 225-233.
- (20) **R. R. Giri**, J. Takeuchi and H. Ozaki (2005). Influence of night soil contamination on activated sludge microbial in Bangkok, Thailand. *Ecological Engineering*, 25(4), 395-404.
- (21) **R. R. Giri**, K. Sato, A. Wada, Y. Takano and T. Sasaki (2002). A simulation study of aqueous and gas phase DNAPL migration in unsaturated urban elements. *Journal of Hydrosience and Hydraulic Engineering*, Japan Society of Civil Engineers, 20(2), 51-69.
- (22) K. Sato, A. Wada, T. Sasaki and **R. R. Giri** (2001). A numerical approach to simulate heat and mass budgets in the topsoil and lower atmosphere for different land-use conditions. *Journal of Hydrosience and Hydraulic Engineering*, 19(2), 31-46.

### **(B) Presentations in International Conferences**

- (1) **R. R. Giri**, H. Ozaki, X. Guo, R. Takanami and S. Taniguchi (2013). Efficacies of UVC and VUV photolysis for mineralization of pharmaceutical compounds in mixed aqueous solution. *The 5<sup>th</sup> IWA-ASPIRE Conference and Exhibition*, September 8-12, Daejeon, South Korea.
- (2) **R. R. Giri**, H. Ozaki, R. Takanami, S. Taniguchi and X. Guo (2012). Oxidative-reductive photodecomposition of perfluorooctanoic acid in water. *The 8<sup>th</sup> IWA World Water Congress and Exhibition*, September 16-21, Busan, South Korea.
- (3) **R. R. Giri**, H. Ozaki, T. Okada, S. Takikita, S. Taniguchi and R. Takanami (2011). Water matrix effect on UV photodegradation of perfluorooctanoic acid. *The 4<sup>th</sup> IWA-ASPIRE Conference and Exhibition*, October 2-6, Tokyo, Japan.
- (4) **R. R. Giri**, H. Ozaki, T. Morigaki, S. Taniguchi and R. Takanami (2010). UV photolysis of perfluorooctanoic acid (PFOA) in dilute aqueous solution. *The 7<sup>th</sup> IWA World Water Congress and Exhibition*, September 19-24, Montreal, Canada.
- (5) **R. R. Giri**, S. Ota, H. Ozaki, R. Takanami and S. Taniguchi (2009). Elimination of selected pharmaceuticals and personal care products (PPCPs) in mixed aqueous solution by different oxidation methods. *The 3<sup>rd</sup> Specialized Conference on Decentralized Water and Wastewater International Network*, November 10-13, Kathmandu, Nepal.
- (6) **R. R. Giri**, Y. Takayanagi, S. Taniguchi, R. Takanami and H. Ozaki (2009). Photochemical oxidation of pharmaceuticals and personal care products (PPCPs) in mixed aqueous solution using low pressure UV irradiation and hydrogen peroxide. *The 3<sup>rd</sup> IWA-ASPIRE Conference and Exhibition*, October 18-22, Taipei, Taiwan.
- (7) M. Hashimoto, S. Taniguchi, R. Takanami, **R. R. Giri** and H. Ozaki (2009). Oxidative degradation of 2,4-dichlorophenoxyacetic acid (2,4-D) in subcritical and supercritical waters. *The 3<sup>rd</sup> IWA-ASPIRE Conference and Exhibition*, October 18-22, Taipei, Taiwan.
- (8) **R. R. Giri**, H. Ozaki, R. Takanami and S. Taniguchi (2008). Heterogeneous photocatalytic ozonation of 2,4-D in dilute aqueous solution with TiO<sub>2</sub> fiber. *The 6<sup>th</sup> World Water Congress and Exhibition*, 7-12 September, Vienna, Austria.

- (9) R. R. Giri, Y. Shimada, S. Taniguchi, R. Takanami and H. Ozaki (2007). Photocatalytic ozonation of 2,4-dichlorophenoxyacetic acid with TiO<sub>2</sub> fiber catalyst. *The 2<sup>nd</sup> IWA-ASPIRE Conference and Exhibition*, October 28 to November 01, Perth, Australia.
- (10) R. R. Giri, Ozaki H. and Takeuchi J. (2005). An alternative to domestic wastewater treatment in Bangkok. *The 1<sup>st</sup> IWA-ASPIRE Conference and Exhibition*, July 10-15, Singapore.
- (11) R. R. Giri and K. Sato (2003) Effects of seasonal change on TCE vertical migration in vadose zone in bare soil. *The 30<sup>th</sup> IAHR Congress*, 24-29 August, Thessaloniki, Greece.
- (12) R. R. Giri, K. Sato and A. Wada (2001). Simulation of heat, moisture and DNAPL transport in different unsaturated land elements. *The 8<sup>th</sup> International Symposium on Flow Modeling and Turbulence Measurement (FMTM)*, December 4-6, Tokyo, Japan.