

## CURRICULUM VITAE

Name: Kazuo YAMAMOTO  
Nationality: Japanese  
Date of Birth: July 3, 1954  
Present status: Professor, Environmental Science Center,  
The University of Tokyo

### **Educational background**

April 1973 - March 1977 Undergraduate program, Department of Urban Engineering,  
The University of Tokyo  
April 1977 - March 1979 Master's Program, Department of Urban Engineering, The  
University of Tokyo.  
April 1979 - April 1981 Doctoral program, Department of Urban Engineering, The  
University of Tokyo.

March 1983 Doctor of Engineering (PhD equivalent), The University of Tokyo  
title of doctoral dissertation: Basic studies on biological wastewater treatment in  
rotating biological contactors

### **Academic career:**

May 1981 - March 1983 Research associate, Department of Urban Engineering, The  
University of Tokyo.  
April 1983 - March 1984 Research associate, Department of Civil Engineering, Tohoku  
University  
April 1984 - March 1985 Lecturer, Department of Urban Engineering, The University of  
Tokyo.  
April 1985 - August 1995 Associate professor, Department of Urban Engineering, The  
University of Tokyo.  
\*May 1987 - August 1989: Assistant professor (promoted to associate professor in 1989),  
Environmental Engineering Division, Asian Institute of Technology, Bangkok, Thailand,  
seconded by Japanese Government.  
August 1995 – present Professor in charge of graduate program, Department of Urban  
Engineering, Graduate School of Engineering, The University of  
Tokyo.  
January 1996 - present Professor, Environmental Science Center, The University of  
Tokyo.

October 7 – December 31, 2013 Visiting Professor, Asian Institute of Technology

## **Administrative experiences in academic sector**

### **The University of Tokyo**

-**Director**, Environmental Science Center (2003-2007)

[Note: Environmental Science Center was established in 1975 as a university-wide center on a similar rank with institutes and was recognized and set by the ministerial ordinance (Ministry of Education, Science and Culture) in 1993]

-Member, Council of the heads of faculties, institutes and centers (2003-2007)

-Member, Hongo Campus planning committee (2003-2007)

-Member, Safety Supervision Committee (2003-2007)

-Chairperson, Editorial Committee, University Environmental Safety Guideline 2005

-Secretary (UT side), AGS (Alliance for Global Sustainability) (1996-1998)

[Note: AGS was established in 1996 by the leadership of the presidents of UT, MIT (Massachusetts Institute of Technology) and ETH (Eidgenössische Technische Hochschule)]

-**Member, Standing Committee**, Graduate School of Engineering (2002-2003, 2011-2012)

-Professor in charge (Head), Graduate Program of Urban Engineering (2002-2003, 2011-2012)

-Chairperson, Entrance examination committee, Graduate program, Department of Urban Engineering (2002-2003, 2011-2012)

-Member, Education Council, Graduate School of Engineering (2008 to date)

-Member, Hongo Campus traffic management committee (2008 to date)

-**Adviser to the President**, The University of Tokyo (2010-2011)

-Member, Alumni Office (2010-2011)

-Member, Barrier-free Support Office (2010-2011)

-Member, the President's Awarding committee (2010-2011)

-Chairperson of an inspection committee on an academic harassment-related case (2010-2011)

-Senior Advisor to the President, Asian Institute of Technology (October 7 – December 31, 2013)

### **Other academic societies**

-**President, Japan Society of Waste Management Experts (2005-2006)**

-Vice president, Japan Society of Waste management Expert (2004-2005)

-Member, Executive Board, Japan Society of Waste Management Expert (2000-2008)

- **President, Head of Executive Board, Japan Society of Material Cycle and Waste Management (2008-2010)**

-Member, Executive Board, Japan Society of Material Cycle and Waste Management (2008 to date)

-**President, The Academic Consociation of Environmental Safety and Waste Management (2007-2009)**

-Vice President, The Academic Consociation of Environmental Safety and Waste Management (2005-2007)

-Executive Director, The Academic Consociation of Environmental Safety and Waste Management (1997-2009)

-Adviser, The Academic Consociation of Environmental Safety and Waste Management (2009 to date)

-Inspector, Japan Institute of Environmental Statistics (2005 to 2012)

-Member of Executive Board, Japan Institute of environmental Statistics (2013 to date)

## **Administrative experiences in other organizations**

- President (Chair of Board of Directors), Water Reuse Promotion Center (2009 to date)
- Vice Chair of Board of Directors, The Japan Containers and Packaging Recycling Association (2007)
- Chair of Board of Directors, The Japan Containers and Packaging Recycling Association (2008)
- Member, Board of Directors, Japan Environmental Facilities Manufactures Association (2005 to date)
- Member, Planning & Management Committee, Industrial Waste Management Enterprise Development Foundation (2010 to date)
- Member, Executive Board, Environmental Engineering Professor's Association, Japan (2003-2008)

## **Board of Trustee member of various organizations**

- Japan Education Center of Environmental Sanitation (2008 to date)
- Japan Waste Management & 3R Research Foundation (2011 to date)
- Kurita Water and Environment Foundation (2007 to date)
- River Foundation (2013 to date)
- Society of Environmental Science, Japan (2003-2007)
- The Japan Containers and Packaging Recycling Association (2009 to date)

## **Expertizing Experiences (selected)**

- Expert Member, National University Education & Research Evaluation Committee, National Institution for Academic Degrees and University Evaluation, Japan (2007-2008)
- Member, Advisory Committee on Research for 3R Systems/Evaluation/Statistical-technics, National Institute for Environmental Studies (2009-2011)
- External Evaluation Member, Center for Environmental Nano and Bio Engineering, Hokkaido University (2011)
- Member, Evaluation Committee, Creative Research Institution, Hokkaido University (2012)
- Member, 6<sup>th</sup> Division, Environmental Research Planning Committee, Ministry of Environment, The Government of Japan (2010 to 2013)
- Expert Member, Joint Committee on Waste Recycling (3R), Central Environmental Council (Ministry of Environment) and Industrial Structure Council (Ministry of Economy, Trade and Industry), The government of Japan (2004-2009)
- Expert Member, Jokaso (on-site wastewater treatment systems) Expert Committee, Central Environmental Council, Ministry of Environment, The government of Japan (2005 to date)
- Chairperson, National Certification Examination Committee on Jokaso Kanrishi (O & M manager), Japan Education Center of Environmental Sanitation (2004 to date)
- Member, Water Resources Development Division, National Land Council, Ministry of Land, Infrastructure, Transportation and Tourism, The Government of Japan (2003 to date)
- Adviser, Japan Environmental Sanitation Center (2010 to date)
- Member of Technology Committee, Steel Foundation for Environmental Protection Technology (2007 to date)
- Expert Member, Technical Evaluation Committee on Municipal Solid Waste Incinerators,

Clean Association of Tokyo23 (Waste Disposal of Tokyo's 23 Cities) (2008 to date)

- Chair, Selection Committee of Treatment Processes and the Construction/ O&M business enterprise for New Solid Waste Incineration Plant, Hujimi Sanitation Association, Mitaka and Chofu cities (2009-2010)

### **National R&D project management**

-Sub project leader in charge of Technology R&D part, R&D for Water-saving and Eco-friendly Water Recycle Technology, NEDO (New Energy and Industrial Technology Development Organization) [Research periods: 2009-2013, Participating organizations: 10 enterprises, 10 universities & research institutes, Budget: app. 10 billion JPY]

### **Academic association membership and scientific activities related to the associations:**

-Fellow Member, Japan Society of Material Cycle & Waste Management (JSWCWM), Chief Editor of Journal of Material Cycles and Waste Management(2005-2012))

-Member, International Water Association (IWA), **IWA Fellow** (2010 to date), Chairperson of Membrane Technology Specialist Group (MTSG) (1997-1999), Managing Committee Member of MTSG (to date)

-Member, The Academic Consociation of Environmental Safety and Waste Management

-Member, Japan Society of Civil Engineers, Chairperson of editorial board committee, 7<sup>th</sup> division, Journal JSCE (2008-2010)

-Editorial Committee Member, Civil & Environment Core Textbook Series, Corona Publishing Co. Ltd.

-Editorial Board Member, Frontiers of Environmental Science & Engineering (China)

-Member of Japan Water Works Association

-Member of The Membrane Society of Japan

-Member of Society of Environmental Science, Japan,

-Editorial Board Member of Monthly Journal Jokaso

-Member of Inverse Manufacturing Forum

-Member of Institute of Environmental Statistics

-Visiting Professor (2010-2011), The Institute of Statistical Mathematics

## **Educational Experiences**

### **Regular Course Taught (past and present)**

The University of Tokyo

[Graduate program]

**Membrane Technology for Water and Wastewater Treatment**

**Solid Waste Management**

Advanced course in Physicochemical Water Treatment (in Japanese)

Advanced course in Water Treatment Technology (in Japanese)

[Undergraduate program (in Japanese)]

Environmental Fluid Dynamics

Applied Hydraulics

Solid Waste Management

Material Cycle and Solid Waste Management

Mathematics for Urban Engineering

Outlines of Urban & Environmental Engineering

Frontier in Environmental Engineering

[University training course]

**Environment and Safety** (5 times in Japanese, **2 times in English per year**)

Asian Institute of Technology

**EV 7 Biological Processes**

**EV18 Marine Environment and Related Ecosystems**

**EV27 Water Quality Management**

### **Advising experiences (UT & AIT)**

Cumulative Number of advisees as of March, 2013(graduate program)

**Master Course: 74** advisees

(Japan 45, Thailand 6, China 5, Taiwan 3, Korea 2, Myanmar 2, Malaysia 2, Indonesia 2, Brazil 2, Sri Lanka 1, Vietnam 1, Nepal 1, Bangladesh 1, Pakistan 1)

**PhD Course: 48** advisees

(Japan 15, Thailand 12, China 5, Korea 5, Bangladesh 3, Sri Lanka 2, Philippine 2, Malaysia 1, Vietnam 1, France 1, Sweden 1)

### **On-going R&D projects**

- R&D for Water Reuse Technology in Tropical Regions (Science and Technology Research Partnership for Sustainable Development (SATREPS), JST/JICA)

Project Leader: **Kazuo Yamamoto**

Collaborating Organizations:

Japan side: The University of Tokyo, Tohoku University, Waseda University, Ritsumeikan University, Yamagata University

Thai side: Environmental Research & Training Center, DEQP/MoNRE, Chulalongkorn University, Kasetsart University, Mahidol University, AIT

Period: 2009-2013 (Sep.)

Budget: app. 500 million JPY

-Resources productive membrane integral system for sewage in 'Mega-ton Water System(Funding Program for World-leading Innovative R&D on Science and Technology(FIRST), The Cabinet office/JSPS/NEDO)'

Subtheme leader: **Kazuo Yamamoto**

Collaborating Organizations: The University of Tokyo, Hokkaido University, Water Reuse Promotion Center, Japan Sewage Works Agency, Tokyo Metropolitan Government (Sewage Works Bureau), Toray, Mitsubishi Rayon

Period: 2010 -2013

Budget: app. 300 million JPY

### **AWARDS**

-**Hirose Award** for a young researcher, Japan Society on Water Pollution Research (Presently JSWE), March, 1990

-**Yuko Award** (Best paper award), Japan Water Works Association, May 1995

-**Water Ronbun Prize** for an excellent scientific paper, Monthly Journal Mizu, April, 1997

-**Ronbun Award** for excellent scientific papers, Japan Society on Water Environment, June 2004.

-**Sidney Loeb Award 2008** for the invention of the submerged membrane bioreactor concept,

European Desalination Society, November, 2008.

-**Membrane Technology Award** as the first awardee from Membrane Technology Specialist Group, IWA, September 2009.

-**Consociation Award**, The Academic Consociation of Environmental Safety and Waste Management, October 2009

-**Environment Minister Award (R&D)**, Ministry of Environment, October 2010.

-**Water Prize**, Monthly Journal Mizu, May, 2012

-**Ronbun Award** for the excellent scientific paper in Year 2012, Japan Society of Material Cycle and Waste Management, Japan Society of Material Cycle and Waste Management, May 2013.

-**Academic Award**, Japan Society on Water Environment, June, 2013.

## Publication List

### 1. Papers published in peer-reviewed journals

The following 100 papers in two categories are listed on the Web of Science, showing 1828 times cited according to the Web.

#### 1.1 Membrane related research listed in Web of Science

Descending order of <times cited as of March 19, 2013> from Web of Science

**Total 1353 times cited in 64 papers: the average times cited of 21.1 per paper.**

	Membrane related topic	Times cited
1	<b>Yamamoto,K.</b> , Hiasa,M., Mahmood,T. and Matsuo,T.(1989), Direct solid liquid separation using hollow fiber membrane in an activated aeration tank, <i>Water Science and Technology</i> , Vol.21, No.4-5, 43-54.	<b>257</b>
2	Chiemchaisri,C., <b>Yamamoto,K.</b> and Vigneswaran,S.(1993), Household membrane bioreactor in domestic wastewater treatment, <i>Water Science and Technology</i> , Vol.27,No.1,171-178.	<b>91</b>
3	Chiemchaisri,C., Wong,Y.K., Uruse,T. and <b>Yamamoto,K.</b> (1992), Organic stabilization and nitrogen removal in membrane separation bioreactor for domestic wastewater treatment, <i>Water Science and Technology</i> , Vol.25, No.10, 231-240 (selected and reprinted in <i>Filtration &amp; Separation</i> (1993), Vol.30, No.3,247-252)	<b>85</b>
4	Zhang, B., <b>Yamamoto, K.</b> , Ohgaki, S., and Kamiko, N. (1997), Floc size distribution and bacterial activities in membrane separation activated sludge process for small-scale wastewater treatment and reclamation, <i>Water Science and Technology</i> , Vol.35, No.6, 37-44.	<b>64</b>
5	Chiemchaisri,C. and <b>Yamamoto,K.</b> (1994), Performance of membrane separation bioreactor at various temperatures for domestic wastewater treatment, <i>Journal of Membrane Science</i> , Vol.87,119-129	<b>57</b>
6	Uruse, T., Oh J.I., and <b>Yamamoto, K.</b> (1998), Effect of pH on rejection of different species of arsenic by nanofiltration , <i>Desalination</i> , 117, 11-18.	<b>55</b>
7	Uruse,T, <b>Yamamoto,K.</b> , and Ohgaki S.(1996), Effect of pore structure of membranes and module configuration on virus retention, <i>Journal of Membrane Science</i> , Vo..115, 21-29.	<b>49</b>

8	<b>Yamamoto,K.</b> and Win,K.M.(1991), Tannery wastewater treatment using a sequencing batch membrane reactor, <i>Water Science and Technology</i> , Vol.23, No.7-9,1639-1648.	<b>38</b>
9	Hai FI, <b>Yamamoto K</b> and Fukushi K (2006) Development of a submerged membrane fungi reactor for textile wastewater treatment, <i>Desalination</i> , 192(1-3), 315-322.	<b>37</b>
10	Monthon Thanuttamavong, <b>Kazuo Yamamoto</b> , Jeong Ik Oh, Kwang Ho Choo and Sang June Choi (2002) Rejection characteristics of organic and inorganic pollutants by ultra-low pressure nanofiltration of surface water for drinking water treatment, <i>Desalination</i> , 145(1-3), 257-264.	<b>34</b>
11	Dharmappa,H.B., Verink,J., Aim,R.B., <b>Yamamoto,K.</b> and Vigneswaran,S.(1992), A comprehensive model for cross-flow filtration incorporating polydispersity of the effluent, <i>Journal of Membrane Science</i> , Vol.65, 173-185	<b>30</b>
12	Luxmy, B.S., Nakajima, F., and <b>Yamamoto, K.</b> (2000), Analysis of bacterial community in membrane separation Bioreactors by fluorescent in situ hybridization (FISH) and denaturing gradient gel electrophoresis (DGGE) techniques, <i>Water Science and Technology</i> , 41, 10/11,259-268.	<b>29</b>
13	Oh, J.I., <b>Yamamoto, K.</b> , Kitawaki, H., Nakao, S., Sugawara, T., Rahman, M.M., and Rahman M.H. (2000), Application of low-pressure nanofiltration coupled with a bicycle pump for the treatment of arsenic-contaminated groundwater, <i>Desalination</i> , 13, 307-314.	<b>27</b>
14	Gemunu Herath, <b>Kazuo Yamamoto</b> and Taro Urase (1999) Removal of Viruses by Microfiltration Membranes at Different Solution Environments, <i>Water Science and Technology</i> , 40(4-5), 331-338.	<b>27</b>
15	Chiemchaisri,C. and <b>Yamamoto,K.</b> (1993), Biological nitrogen removal under low temperature in a membrane separation bioreactor, <i>Water Science and Technology</i> , Vol.28,No.10,325-333.	<b>27</b>
16	Choi J.H., Dockko, S., Fukushi K., and <b>Yamamoto K.</b> (2002), A novel application of a submerged nanofiltration membrane bioreactor (NF MBR) for wastewater treatment, <i>Desalination</i> , 146, 413-420.	<b>26</b>
17	Rhatanatamskul, C., <b>Yamamoto, K.</b> , Urase, T., and Ohgaki, S.(1996), Effect of operation conditions on rejection of anionic pollutants in water environment by nanofiltration especially in very low pressure range, <i>Water Science and Technology</i> , Vol.34, No.9,149-156.	<b>23</b>
18	Ratanatamskul,C., Urase,T. and <b>Yamamoto,K</b> (1998), Description of behavior in rejection of pollutants in ultra-low pressure nanofiltration, <i>Water Science and Technology</i> , 38,4/5,453-462.	<b>21</b>
19	Urase,T., <b>Yamamoto,K.</b> and Ohgaki,S.(1994), Effect of pore size distribution of ultrafiltration membranes on virus rejection in cross flow conditions, <i>Water Science and Technology</i> , Vol.30, No.9, 199-208.	<b>20</b>
20	Ozaki, N., and <b>Yamamoto,K.</b> (2001) Hydraulic effects on sludge	<b>19</b>

	accumulation on membrane surface in crossflow filtration. <i>Water Research</i> , 35, 13, 3137-3146.	
21	Urase T, Salequzzaman M, Kobayashi S, Matsuo T, <b>Yamamoto K</b> , and Suzuki N (1997), Effect of high concentration of organic and inorganic matters in landfill leachate on the treatment of heavy metals in very low concentration level, <i>Water Science and Technology</i> , 36: (12) 349-356.	19
22	Zhang, B. and <b>Yamamoto, K.</b> (1996), Seasonal changes of microbial population and activities in a building wastewater reuse system using a membrane separation activated sludge process. <i>Water Science and Technology</i> , Vol.34, No.5-6,295-302.	19
23	Faisal Ibney Hai, <b>Kazuo Yamamoto</b> , Fumiyuki Nakajima, Kensuke Fukushi (2008) Removal of structurally different dyes in submerged membrane fungi reactor-biosorption/ PAC-adsorption, membrane retention and biodegradation, <i>Journal of Membrane Science</i> , 325(1), 395-403.	17
24	Jae-Hoon Choi, Sang Hyon Lee, Kensuke Fukushi and <b>Kazuo Yamamoto</b> (2007) Comparison of sludge characteristics and PCR-DGGE based microbial diversity of nanofiltration and microfiltration membrane bioreactors, <i>Chemosphere</i> , 67(8), 1543-1550.	17
25	Hai FI, <b>Yamamoto K</b> , Fukushi K (2005) Different fouling modes of submerged hollow- fiber and flat-sheet membranes induced by high strength wastewater with concurrent biofouling, <i>Desalination</i> , 180(1-3), 89-97.	16
26	Jae-Hoon Choi, Kensuke Fukushi and <b>Kazuo Yamamoto</b> (2007) A submerged nano- filtration membrane bioreactor for domestic wastewater treatment: the performance of cellulose acetate nanofiltration membranes for long-term operation, <i>Separation and Purification Technology</i> , 52(3), 470-4	15
27	Wong, Y.K., <b>Yamamoto, K.</b> and Ohgaki, S. (1992), Optimal fiber spacing in externally pressurized hollow fiber module for solid liquid separation, <i>Water Science and Technology</i> , Vol.26, No.5-6, 1245-1254.	14
28	Faisal Ibney Hai, <b>Kazuo Yamamoto</b> , Fumiyuki Nakajima, Kensuke Fukushi (2011) Bioaugmented membrane bioreactor (MBR) with a GAC-packed zone for high rate textile wastewater treatment, <i>Water Research</i> , Vol.45, No.6, pp.2199-2206.	13
29	Faisal Ibney Hai, <b>Kazuo Yamamoto</b> , Kensuke Fukushi, Fumiyuki Nakajima (2008) Fouling resistant compact hollow-fiber module with spacer for submerged membrane bioreactor treating high strength industrial wastewater, <i>Journal of Membrane Science</i> , 317(1-2), 34-42.	12
30	Choi J.H., Fukushi K. and <b>Yamamoto K.</b> (2005) Comparison of treatment efficiency of submerged nanofiltration membrane bioreactors using cellulose triacetate and polyamide membrane, <i>Water Science &amp; Technology</i> , 51(6-7), 305-312.	12
31	Oh J.I., Lee S.H. and <b>Yamamoto K.</b> (2004) Relationship between molar	12



	volume and rejection of arsenic species in groundwater by low-pressure nanofiltration process, <i>Journal of Membrane Science</i> , 234(1-2), 167-175.	
32	Urase,T., <b>Yamamoto,K.</b> and Ohgaki,S.(1993),Evaluation of virus removal in membrane separation processes using coliphage Q $\beta$ , <i>Water Science and Technology</i> , Vol.28,No.7,9-15.	12
33	Luxmy., B.S., Kubo, T., and <b>Yamamoto.,K.</b> (2001), Sludge reduction potential of metazoa in membrane bioreactors, <i>Water Science &amp; Technology</i> , Vol. 44, 10, 197-202.	11
34	Faisal Ibney Hai, <b>Kazuo Yamamoto</b> , Fumiyuki Nakajima, Kensuke Fukushi (2009) Factors governing performance of continuous fungal reactor during non-sterile operation – The case of a membrane bioreactor treating textile wastewater, <i>Chemosphere</i> , 74, 810-817.	10
35	Gemunu Herath, <b>Kazuo Yamamoto</b> and Taro Urase (1998) Mechanism of bacterial and viral transport through microfiltration membranes, <i>Water Science and Technology</i> , 38(4-5), 489-496.	10
36	Choi J.H., Fukushi, K., <b>Yamamoto, K.</b> (2008) A stude on the removal of organic acids from wastewaters using nanofiltration membranes, <i>Separation and Purification</i> , 59,1 17-25	9
37	Xing CH, <b>Yamamoto K</b> , Fukushi K (2006) Performance of an inclined-plate membrane bioreactor at zero excess sludge discharge, <i>Journal of Membrane Science</i> , 275(1-2), 175-186.	9
38	Gemunu Herath, <b>Kazuo Yamamoto</b> and Taro Urase (2000) The effect of suction velocity on concentration polarization in microfiltration membranes under turbulent flow conditions, <i>Journal of Membrane Science</i> , 169(2), 175-183.	9
39	C. Ratanatamskul, C. Chiemchaisri and <b>K. Yamamoto</b> (1995) The use of a zeolite-iron column for residual ammonia and phosphorus removal in the effluent from a membrane process as an on-site small-scale domestic wastewater treatment, <i>Water Science and Technology</i> , 31(9), 145-152.	9
40	JI Oh, T Urase, H Kitawaki, MM Rahman, MH Rhahman and <b>K Yamamoto</b> (2000) Modeling of arsenic rejection considering affinity and steric hindrance effect in nanofiltration membranes, <i>Water Science &amp; Technology</i> , 42(3-4), 173-180.	8
41	Luxmy Begum Shaila, Fumiyuki Nakajima and <b>Kazuo Yamamoto</b> (2000) Predators grazing effect on the bacterial size distribution and floc size variation in the membrane- separated activated sludge, <i>Water Science &amp; Technology</i> , 42(3-4), 211-217.	8
42	Wei, C.H., Huang, X., Ben Aim R., <b>Yamamoto, K.</b> , Amy, G. (2011) Critical flux and chemical cleaning-in place during the long-term operation of a pilot-scale submerged membrane bioreactore for municipal wastewater	7

	treatment, <i>Water Research</i> , 45, 2, 863-871.	
43	Chiemchaisri C. and <b>Yamamoto K.</b> (2005) Enhancement of oxygen transfer and nitrogen removal in a membrane separation bioreactor for domestic wastewater treatment, <i>Water Science &amp; Technology</i> , 51(10), 85-92.	7
44	Oskar Modin, Kensuke Fukushi, Kazuo Yamamoto (2008) Simultaneous removal of nitrate and pesticides from groundwater using a methane-fed membrane biofilm reactor (M-MBFR), <i>Water Science &amp; Technology</i> , 58(6), 1273-1279.	6
45	Srisukphun T., Chiemchaisri, C., Urase., T., <b>Yamamoto, K.</b> (2009) Experimentation and modeling of foulant interaction and reverse osmosis membrane fouling during textile wastewater reclamation, <i>Separation and Purification</i> , 68, 1, 37-49.	6
46	Choi JH, Fukushi K, Ng HY, <b>Yamamoto K</b> (2006) Evaluation of a long-term operation of a submerged nanofiltration membrane bioreactor (NF MBR) for advanced wastewater treatment, <i>Water Science &amp; Technology</i> , 53(6), 131-136.	6
47	Jinhua P, Fukushi K, <b>Yamamoto K</b> (2006) Bacterial community structure on membrane surface and characteristics of strains isolated from membrane surface in submerged membrane bioreactor, <i>Separation Science and Technology</i> , 41(7), 1527-1549	6
48	Oskar Modin, Kensuke Fukushi, Fumiyuki Nakajima, <b>Kazuo Yamamoto</b> (2010) Nitrate removal and biofilm characteristics in methanotrophic membrane biofilm reactors with various gas supply regimes, <i>Water Research</i> , Vol.44, No.1, pp.85-96.	5
49	Modin, O, Fukushi, K., Rabaey, K., Rozendal, RA, <b>Yamamoto, K.</b> (2011) Redistribution of wastewater alkalinity with a microbial fuel cell to support nitrification of reject water. <i>Water Research</i> , 45, 8, 2691-2699.	4
50	Chiemchaisri C., W. Chiemchaisri, P. Nindee, C.Y. Chang and <b>K. Yamamoto</b> (2011), Treatment performance and microbial characteristics in two-stage membrane bioreactor applied to partially stabilized leachate, <i>Water Science &amp; Technology</i> , 64(5), 1064-1072.	4
51	Khan MMT, Lewandowski, Z., Takizawa, S., Yamada, K., Katayama, H., <b>Yamamoto, K.</b> , Ohgaki, S.(2009). Continuous and efficient removal of THMs from river water using MF membrane combined with high dose of PAC. <i>Desalination</i> , 249, 2, 713-720.	4
52	Oskar Modin, Kensuke Fukushi, Fumiyuki Nakajima, <b>Kazuo Yamamoto</b> (2008) Performance of a membrane biofilm reactor for denitrification with methane, <i>Bioresource Technology</i> , 99, 8054-8060.	4
53	O. Modin, K. Fukushi, F. Nakajima, <b>K. Yamamoto</b> (2008) A membrane biofilm reactor achieves aerobic methane oxidation coupled to denitrification (AME-D) with high efficiency, <i>Water Science &amp; Technology</i> , 58(1), 83-87.	4

54	Srisukphun, T., Chiechaisri, C., Urase, T., <b>Yamamoto, K.</b> (2010) Foulant interaction and RO productivity in textile wastewater reclamation plant, <i>Desalination</i> , 250, 2,	3
55	Hai, F.I., <b>Yamamoto, K.</b> , Fukushi, K. (2006) Performance of newly developed hollow-fiber module with spacer in integrated anaerobic-aerobic fungi reactor treating textile wastewater, <i>Desalination</i> , 199(1-3), 305-307.	3
56	Theepharaksapan, S., Chiemchaisri, C., Chiemchaisri, W., <b>Yamamoto, K.</b> (2011). Removal of pollutants and reduction of bio-toxicity in a full scale chemical coagulation and reverse osmosis leachate treatment system. <i>Bioresource Technology</i> , 102, 9, 5381-5388.	2
57	P.M. Fontanos, <b>K. Yamamoto</b> , F. Nakajima and K. Fukushi (2010) Identification and Quantification of the Bacterial Community on the Surface of Polymeric Membranes at Various Stages of Biofouling Using Fluorescence <i>In Situ</i> Hybridization, <i>Separation Science and Technology</i> , Vol.45, No.7 , pp.904-910.	2
58	Boonyaroj, V., Chiemchaisri, C., Chiemchaisri, W., Theepharaksapan, S., <b>Yamamoto, K.</b> (2012) Toxic organic micro-pollutants removal mechanisms in long-term operated membrane bioreactor treating municipal solid waste leachate. <i>Bioresouce Technology</i> , 113, SI, 174-180.	1
59	Faisal Ibney Hai, <b>Kazuo Yamamoto</b> , Fumiyuki Nakajima, Kensuke Fukushi (2012) Application of a GAC-coated hollow fiber module to couple enzymatic degradation of dye on membrane to whole cell biodegradation within a membrane bioreactor, <i>Journal of Membrane Science</i> , 389, 67-75.	1
60	Srisukphun, T., Chiechaisri, C., <b>Yamamoto, K.</b> (2009), Modeling of RO flux decline in textile wastewater reclamation plants using variable fouling index. <i>Separation science and Technology</i> , 44, 8, 1704-1721.	1
61	Ratanatamskul, C., Glingeysorn, N., <b>Yamamoto, K.</b> , (2012) The BNR-MBR (biological nutrient removal from high-rise building in hot climate region. <i>Membrane Water Treatment</i> , 3, 2, SI, 133-140.	0
62	Boonyaroj V., C. Chiemchaisri, W. Chiemchaisri and <b>K. Yamamoto</b> (2012), Removal of organic micro-pollutants from solid waste landfill leachate in membrane bioreactor operated without excess sludge discharge, <i>Water Science &amp; Technology</i> , 66(8), 1774-1780.	0
63	Chitapornpan S., C. Chiemchaisri, W. Chiemchaisri, R. Honda and <b>K. Yamamoto</b> (2012), Photosynthetic bacteria production from food processing wastewater in sequencing batch and membrane photo-bioreactors, <i>Water Science &amp; Technology</i> , 65(3), 504-512.	0
64	P.M. Fontanos, <b>K. Yamamoto</b> and F. Nakajima (2011) Effect of upflow velocity on the performance of an inclined plate membrane bioreactor treating municipal wastewater, <i>Water Science &amp; Technology</i> , Vol.64, No.5, pp.1102-1107.	0

## 1.2 Other research listed in Web of Science

Descending order of <times cited as of March 19, 2013> from Web of Science

**Total 475 times cited in 36 papers: the average times cited of 13.2 per paper.**

	Other topics	Times cited
1	Hai, F.I, <b>Yamamoto, K.</b> and Fukushi, K. (2007) Hybrid treatment systems for dye wastewater, <i>Critical Reviews in Environmental Science and Technology</i> , 37, 315-377	<b>93</b>
2	Chetwittayachan,T., Shimazaki, D., and <b>Yamamoto, K.</b> (2002), A comparison of temporal variation of particle-bound polycyclic aromatic hydrocarbons (pPAHs) concentration in diferrent urban environments: Tokyo, Japan, and Bangkok, Thailand, <i>Atmospheric Environment</i> , 36, 2027-2037.	<b>65</b>
3	Sathasivan,A., Ohgaki,S., <b>Yamamoto,K.</b> and Kamiko,N (1997), Role of inorganic phosphorus in controlling regrowth in water distribution system, <i>Water Science and Technology</i> , Vol.35, No.8, 37-44.	<b>42</b>
4	Oskar Modin, Kensuke Fukushi and <b>Kazuo Yamamoto</b> (2007) Denitrification with methane as external carbon source, <i>Water Research</i> , 41(12), 2726-2738.	<b>27</b>
5	Kashimada,K., Kamiko,N., <b>Yamamoto,K.</b> and Ohgaki,S.(1996), Assesment of photoreactivation following ultraviolet light disinfection, <i>Water Science and Technology</i> , Vol.33, No.10-11,261-269.	<b>26</b>
6	Lee, G.H., Nunoura, T., Matsumura, Y., and <b>Yamamoto, K.</b> (2002), Comparison of the effects of the addition of NaOH on the decomposition of 2-chlorophenol and phenol in supercritical water and under supercritical water oxidation conditions. <i>Journal of Supercritical Fluids</i> 24, 239-250.	<b>24</b>
7	Matsumura, Y., Nunoura, T., Urase, T., and <b>Yamamoto, K.</b> (2000) Super critical oxidation of high concentrations of phenol. <i>Journal of Hazardous Materials</i> , B73, 245-254.	<b>23</b>
8	Segond N, Matsumura Y, and <b>Yamamoto K</b> (2002), Determination of ammonia oxidation rate in sub- and supercritical water, <i>Industrial &amp; Engineering Chemistry Research</i> , 41: (24) 6020-6027	<b>23</b>
9	Matsumura, Y., Urase, T., <b>Yamamoto, K.</b> , and Nunoura, T. (2002). Carbon catalyzed supercritical water oxidation of phenol, <i>Journal of Supercritical Fluid</i> , 22, 149-156.	<b>21</b>
10	Urase T, Salequzzaman M, Kobayashi S, Matsuo T, <b>Yamamoto K</b> , and Suzuki N (1997), Effect of high concentration of organic and inorganic matters in landfill leachate on the treatment of heavy metals in very low concentration level, <i>Water Science and Technology</i> , 36: (12) 349-356.	<b>19</b>
11	Nahoko Sakai, Futoshi Kurisu, Osami Yagi, Fumiyuki Nakajima and <b>Kazuo Yamamoto</b> (2009) Identification of putative benzene-degrading bacteria in methanogenic enrichment cultures, <i>Journal of Bioscience and Bioengineering</i> , Vol.108 No.6, pp.501-507.	<b>12</b>
12	Sriussadarporn C., <b>Yamamoto K.</b> , Fukushi K., and Shimazaki D. (2003) Comparison of DNADamage detected by plan comet assay in roadside and non-roadside environments, <i>Mutation Research</i> , 541, 31-44.	<b>12</b>

13	Izu. K., Nakajima., F., <b>Yamamoto, K.</b> , and Kurisu, F. (2001). Aeration conditions affecting growth of purple nonsulfur bacteria in an organic wastewater treatment process. <i>Systematic and Applied Microbiology</i> , 24, 294-302.	10
14	Nunoura T., Lee G.H., Matsumura Y. and <b>Yamamoto K.</b> (2003) Reaction engineering model for supercritical water oxidation of phenol catalyzed by activated carbon, <i>Industrial &amp; Engineering Chemistry Research</i> , 42(15), 3522-3531.	9
15	Nunoura, T., Lee, G.H., Matsumura, Y., and <b>Yamamoto, K.</b> (2002), Modeling of Supercritical water oxidation of phenol catalyzed by activated carbon, <i>Chemical Engineering Science</i> 57, 3061-3971.	9
16	Lee G, Nunoura T, Matsumura Y, and <b>Yamamoto K</b> (2002), Effects of a sodium hydroxide addition on the decomposition of 2-chlorophenol in supercritical water, <i>Industrial &amp; Engineering Chemistry Research</i> , 41: (22) 5427-5431.	8
17	S.M. Atiqul Islam, Kensuke Fukushi, <b>Kazuo Yamamoto</b> and Ganesh C. Saha (2007) Estimation of biological gasification potential of arsenic from contaminated natural soil by enumeration of arsenic methylating bacteria, <i>Archives of Environmental Contamination and Toxicology</i> , 52, 323-338	8
18	Nakajima,F.,Kamiko,N. and <b>Yamamoto,K.</b> (1997), Organic wastewater treatment without greenhouse gas emission by photosynthetic bacteria, <i>Water Science and Technology</i> , Vol.35, No.8, 285-291.	8
19	Nunoura T., Lee G., Matsumura Y. and <b>Yamamoto K.</b> (2003) Effect of carbonaceous materials on the oxidation of phenol in supercritical water: A preliminary study, <i>Industrial &amp; Engineering Chemistry Research</i> , 42(16), 3718-3720.	6
20	Zhirong Sun, Fumitake Takahashi, Yu Odaka, Kensuke Fukushi, Yoshito Oshima and <b>Kazuo Yamamoto</b> (2007) Effects of potassium alkalis and sodium alkalis on the dechlorination of o-chlorophenol in supercritical water, <i>Chemosphere</i> , 66(1), 151-157.	6
21	Oskar Modin, Kensuke Fukushi, Fumiyuki Nakajima, <b>Kazuo Yamamoto</b> (2010) Aerobic Methane Oxidation Coupled to Denitrification: Kinetics and Effect of Oxygen Supply, <i>Journal of Environmental Engineering</i> , Vol.136, No.2, pp.211-219.	5
22	Ryo Honda, Kensuke Fukushi and <b>Kazuo Yamamoto</b> (2006) Optimization of wastewater feeding for single-cell protein production in an anaerobic wastewater treatment process utilizing purple non-sulfur bacteria in mixed culture condition, <i>Journal of Biotechnology</i> , 125(4), 565-573.	5
23	S.M. Atiqul Islam, Kensuke Fukushi, <b>Kazuo Yamamoto</b> (2005) Development	3

	of an enumeration method for arsenic methylating bacteria from mixed culture samples. <i>Biotechnology Letters</i> , 27(23-24), 1885-1890	
24	Sunal, L., Kamiko, N., <b>Yamamoto, K.</b> and Ohgaki, S. (1995), Application of polymerase chain reaction to detect RNA coliphage Q $\beta$ in environmental water samples, <i>Water Science and Technology</i> , Vol.31, No.5-6, 383-390.	3
25	Lee GH, Nunoura T, Matsumura Y, and <b>Yamamoto K</b> (2001), Effects of salt, acid and base on the decomposition of 2-chlorophenol in supercritical water, <i>Chemistry Letters</i> (11) 1128-1129.	3
26	Lee, G.H., Nunoura, T., Matsumura, Y., and <b>Yamamoto, K.</b> (2002), Global kinetics of 2-chlorophenol disappearance with NaOH in supercritical water, <i>Journal of Chemical Engineering of Japan</i> , 35,	2
27	Takahashi, F., Zhirong, S., Fukushi, K, <b>Yamamoto, K.</b> (2012) Catalytic oxidation of acetic acid over sodium titanate synthesized hydrodynamically in supercritical water. <i>Journal Supercritical Fluids</i> , 61, 126-133	2
28	Khondoker Mahbub Hassan, Kensuke Fukushi, Fumiyuki Nakajima, <b>Kazuo Yamamoto</b> (2009) Bioleaching of arsenic in a drinking water treatment process, <i>Journal of Water Supply: Research and Technology - AQUA</i> , Vol.58(6), 395-404.	1
29	Hai Faisal I., Modin Oskar, <b>Yamamoto, K.</b> Fukushi, K, Nakajima. F. Long., D. Nghiem (2012) Pesticide removal by a mixed culture of bacteria and white-rot fungi, <i>Journal of the Taiwan Institute of Chemical Engineering</i> , 43(3), 459-462	0
30	Takahashi, F., Ohsima, Y., Fukushi, K., <b>Yamamoto, K.</b> (2012) Enhancement of oxidation of alkali metal acetate in supercritical water. <i>Chemistry Letters</i> , 41(3), 267-269.	0
31	Khondoker Mahbub Hassan, Kensuke Fukushi, Fumiyuki Nakajima, <b>Kazuo Yamamoto</b> (2012) Mathematical model predicting arsenic bioleaching in groundwater treatment, <i>Journal of Water Supply: Research and Technology - AQUA</i> , Vol.61(7), 427-434	0
32	Takahashi, F., Zhirong, S., Fukushi, K, <b>Yamamoto, K.</b> (2012) Enhanced removal of sodium salts supported by in-situ catalyst synthesis in a supercritical oxidation process. <i>Water Science and Technology</i> , 65(11), 2034-2041.	0
33	Asako Nishijima, Jun Nakatani, <b>Kazuo Yamamoto</b> , Fumiyuki Nakajima (2012) Life cycle assessment of integrated recycling schemes for plastic containers and packaging with consideration of resin composition, <i>Journal of</i>	0

	<i>Material Cycles and Waste Management</i> , 14, 52-64.	
34	Honda R., J. Boonnorat, C. Chiemchaisri, W. Chiemchaisri and <b>K. Yamamoto</b> (2012), Carbon dioxide capture and nutrients removal utilizing treated sewage by concentrated microalgae cultivation in a membrane photobioreactor, <i>Bioresource Technology</i> , 125, 59-64.	0
35	Threedeach S., W. Chiemchaisri, T. Watanabe, C. Chiemchaisri, R. Honda, and <b>K. Yamamoto</b> (2012), Antibiotic resistance of <i>Escherichia coli</i> in leachates from municipal solid waste landfills: Comparison between semi-aerobic and anaerobic operations, <i>Bioresource Technology</i> , 113, 253-258.	0
36	Chitapornpan S., C. Chiemchaisri, W. Chiemchaisri, R. Honda and <b>K. Yamamoto</b> (2012), Photosynthetic bacteria production from food processing wastewater in sequencing batch and membrane photo-bioreactors, <i>Water Science &amp; Technology</i> , 65(3), 504-512.	0

**Note: Another 37 peer-reviewed papers written in Japanese or published in a book are shown in <http://www.envrisk.t.u-tokyo.ac.jp/e-publication.html>. Other about 300 papers have been published in the conference proceedings or poster presentations at international or domestic conferences (not shown)**

## 2. Book, Book Chapter, Edition

### 2.1 Book and book chapter

1. Matsuo, T. and Yamamoto, K. (1985), Mathematical models for the oxygen transfer processes in rotating biological contactors in "Mathematical Models in Biological Waste Water Treatment (Jorgensen, S.E. & Gromiec M.J. ed.)", Elsevier Science, 357-417.
2. Yamamoto, K. (1988), Kinetics of attached growth processes and activated sludge processes in "Solving Problems based on Manuals of Hydraulic Engineering", JSCE., 228-231.
3. Imai, S., Ikeda, S., Ito, G., Kiyozuka, M. and Yamamoto, K. (1992), How do we consume energy in water supply systems? in "Water Supply Systems in the Era of Global Environment", Gihodo (in Japanese).
4. Yamamoto, K. (1993), Membrane separation of activated sludge in "Microbiological Studies and Laboratories", Gihodo (in Japanese).
5. Yamamoto, K. (1993), Advanced treatment by membrane technology in "Advanced Technology on Separation and Refinement", Maruzen (in Japanese).
6. Yamamoto, K. (1993), Ultrafiltration and Microfiltration in "Handbook on Water Reuse Technology", Water Re-use Promotion Center (in Japanese).
7. Yamamoto, K. (1994), Advanced treatment by highly concentrated activated-sludge and membrane separation process, Contemporary Studies in Urban Planning and Environmental Management in Japan, Kajima Institute Publishing.
8. Fujita K., Yamamoto, K. and Takizawa, S. (1994), "Rapid Filtration, Biological Filtration and Membrane Filtration", Gihodo (in Japanese).

9. Yamamoto, K. (1996), Membrane Treatment(Chap.6.7) in "Suisitu Eiseigaku", Gihodo (in Japanese).
10. Yamamoto, K. (1998), Chapter on Ultrafiltration in "Mizu Shori Kanri Binran", Maruzen (in Japanese)
11. Yamamoto, K. (2008), Municipal Solid Waste Management for a Sustainable Society (Chap.5) in "Urban Environmental Management and Technology (Hanaki, K. ed.)", Springer.
12. Yamamoto, K.(2010), Water utilization technology using MBR (in Japanese) (Supervising editor, Chaps 1 and 7)
13. Prueksasit, T, Fukushi, K, and Yamamoto, K. (2010), Advanced Monitoring of Particle-Bound Polycyclic Aromatic Hydrocarbons (pPAHs) and Risk Assesement of Their Possible Human Exposure in Roadside Air Environment in Urban Area (Chap. 5) in 'Advanced Monitoring and Numerical Analysis of Coastal Water and Urban Air Environment (Furumai, H et.al ed.), Springer
14. Faisal I.H. and Yamamoto, K (2011) Membrane Biological Reactors, in Treatise on Water Science (Wilderer, P. ed.) Oxford, Academic Press.
15. Tomomi Hoshiko, Fumiuyuki Nakajima, Tassanee Prueksasit, Kazuo Yamamoto (2012) Health risk of exposure to vehicular emissions in wind-stagnant street canyons, In: Ventilating cities -Air-flow criteria for healthy and comfortable urban living- (Eds.: Shinsuke Kato and Kyosuke Hiyama), pp.59-95, Springer.
16. Tomomi Hoshiko, Kazuo Yamamoto, Fumiuyuki Nakajima and Tassanee Prueksasit: Temporal Variation of Particle Size Distribution of Polycyclic Aromatic Hydrocarbons at Different Roadside Air Environments in Bangkok, Thailand. In: Atmospheric Aerosols - Regional Characteristics - Chemistry and Physics (Edited by Hayder Abdul-Razzak), pp.29-46, InTech. ([open access](#))

## 2.2 Edition

1. Panswad,T., Polprasert,C. and Yamamoto,K. (1988), Water Pollution Control in Asia, Pergamon Press.
2. Yamamoto, K. (1999), Conference Proceedings, International Specialized Conference on Membrane Technology in Environmental Engineering, Tokyo, November 1-4, 1999.
3. Furumai, H, Sato, S, Kamata, M. and Yamamoto, K. (2010) Numerical Analysis of Coastal Water and Urban Air Environment, Springer
4. Faisal. I. H, Yamamoto, K., and Chung-Hak Lee (2014), Membrane Biological Reactors Theory, Modeling, Design, Management, and Applications to Wastewater Reuse, IWA Publishing

## Patents

- 1 Patent No. 3789446, In-site Catalyst for supercritical water oxidation and treatment process using the catalyst (in Japanese) (Inventors: **Yamamoto K.**, Takahashi, F., Fukushi, F., Oshima, Y.)
- 2 US Patent 7,311,833, Zero Excess Sludge Membrane Bioreactor (Inventors: **Yamamoto, K.** and Chuan-Hong Xing).