

-CURRICULUM VITAE-

Masahiro Tokumura, Ph.D.

Assistant Professor

Laboratory of Physical Chemistry,
Graduate Division of Nutritional and Environmental Sciences,
University of Shizuoka

Address : 52-1 Yada, Suruga-ku, Shizuoka 422-8526, Japan

Tel : +81-54-264-5783

E-mail : tokumura@u-shizuoka-ken.ac.jp

Website : <https://sites.google.com/site/mtokumura88/>
<http://dfns.u-shizuoka-ken.ac.jp/labs/phychem/>

Education

Doctor of Engineering, Toyo University, Kawagoe, Japan, 2010.

Mater of Engineering, Toyo University, Kawagoe, Japan, 2007.

Bachelor of Engineering, Toyo University, Kawagoe, Japan, 2005.

Employment

University of Shizuoka, Graduate Division of Nutritional and Environmental Sciences, 2016-present

Yokohama National University, Faculty of Environment and Information Sciences, 2012-2016

The University of Tokyo, Graduate School of Frontier Sciences, 2010-2012

Journal articles

- 1) Umma Salma, Anwar Hossain, Md. Shafiujjaman, Yuri Nishimura, **Masahiro Tokumura**, Rumi Tanoue, Tatsuya Kunisue, Kozo Watanabe, Mohammad Raknuzzaman, Kazushi Noro, Takashi Amagai, Masakazu Makino, Occurrence, Risks, and Mitigation of Antibiotic Pollution in Bangladeshi Aquaculture Systems, *Environmental Chemistry and Ecotoxicology*, 7, 351-363, 2025.
- 2) Umma Salma, Yuri Nishimura, **Masahiro Tokumura**, Anwar Hossain, Kozo Watanabe, Kazushi Noro, Mohammad Raknuzzaman, Takashi Amagai, Masakazu Makino, Occurrence, seasonal variation, and environmental risk of multiclass antibiotics in the urban surface water of the Buriganga River, Bangladesh, *Chemosphere*, 370, 143956, 2025.
- 3) Anwar Hossain, Yuri Nishimura, Umma Salma, **Masahiro Tokumura**, Takahiro Nishino, Mohammad Raknuzzaman, Kazushi Noro, Kozo Watanabe, Takashi Amagai, Masakazu Makino, Effects of Water Matrices on the Removal of Oxytetracycline Antibiotic and Total Organic Carbon (TOC) using Four Different Oxidation Processes, *Results in Engineering*, 24, 103183, 2024.
- 4) Md. Khadimull Bashar, Kazushi Noro, Qi Wang, **Masahiro Tokumura**, Ikuko Mori, Ryo Omagari, Mohammad Raknuzzaman, Anwar Hossain, M. Rafiqul Islam, Mahmud Hossain, Shofiqul Islam, Takashi Amagai, Trace metal contaminations in Bangladeshi rice: their concentration and risk assessment, *Water, Air, & Soil Pollution*, 235, 592, 2024.
- 5) Mai Shindo, Maho Ishida, **Masahiro Tokumura**, Qi Wang, Yuichi Miyake, Takashi Amagai, Masakazu Makino, Determination of Potential Dermal Exposure Rates of Phosphorus Flame Retardants via the Direct Contact with a Car Seat using Artificial Skin, *Chemosphere*, 353, 141555, 2024.
- 6) **Masahiro Tokumura**, Jumpei Miyazaki, Mahmud Hossain, Anwar Hossain, Mohammad Raknuzzaman, Qi Wang, Yuichi Miyake, Takashi Amagai, Shigeki Masunaga, Shofiqul Islam, Muhammad Rafiqul Islam, Masakazu Makino, Evaluation of the potentials of rice varieties and water management practices for reducing human health risks associated with polluted river water irrigated rice in Bangladesh, *Science of the Total Environment*, 171244, 2024.
- 7) Ryo Omagari, Qi Wang, Yoko Kai, Kazushi Noro, **Masahiro Tokumura**, Yasuhiro Fukushima, Yoshihiro Suzuki, Yuichi Miyake, Takashi Amagai, Development of a novel chamber for evaluating the performance of passive air samplers according to ISO 16107, *Air Quality, Atmosphere & Health*, 2023.
- 8) Md Khadimull Bashar, Kazushi Noro, Qi Wang, **Masahiro Tokumura**, Ikuko Mori, Mohammad Raknuzzaman, Anwar Hossain, Takashi Amagai, Spatiotemporal distribution and pollution assessment of trace metals in the Buriganga River, Bangladesh, *Journal of Water and Health*, 21, 815-825, 2023.
- 9) **Masahiro Tokumura**, Kana OMORI, Mayu SUZUKI, Masakazu MAKINO, Removal of Formaldehyde by Iron-immobilized fabric, *Japanese Journal of Clinical Ecology*, in press, 2023.

- 10) Jun-na FUNAMIZU, Yuta GORO, **Masahiro Tokumura** A, Kenta YAMADA, Masakazu MAKINO, A Study on Neuro-Irreversible Factor of Dechlorinated Products for Chlorpyrifos, Indoor Environment, in press, 2023.
- 11) Mohammad Raknuzzaman, Md. Habibullah-Al-Mamun, Anwar Hossain, **Masahiro Tokumura**, Shigeki Masunaga, Organ-specific accumulation of trace metals in Hilsa shad (*Tenualosa ilisha*) from Bangladesh and human health risk assessment, *Journal of Environmental Exposure Assessment*, 1, 4, 2022.
- 12) Kosuke MURAMATSU, **Masahiro Tokumura**, Qi WANG, Ryutaro ISHIBASHI, Takanori AMBO, Masakazu MINAGAWA, Yuichi MIYAKE, Takashi AMAGAI, Masakazu MAKINO, Mechanism of Carbon Material to Enhance Removal of Azo-dye by Photo-Fenton Process, *Environmental Science*, 35, 103-112, 2022.
- 13) Kento Sei, Qi Wang, **Masahiro Tokumura**, Shinji Suzuki, Yuichi Miyake, Takashi Amagai, Polycyclic Aromatic Hydrocarbons and Their Halogenated Derivatives in a Traditional Smoke-dried Fish Product in Japan—Occurrence and Countermeasures, *Journal of Agricultural and Food Chemistry*, 1, 960-966, 2021.
- 14) **Masahiro Tokumura**, Naohide Shinohara, Misae Kazama, Kazuhiro Hashimoto, Yuji Kawakami, Evaluation of a Fenton Reaction-based Fungicide for Disinfection of Moldy Houses in the Evacuation Zone of the Great East Japan Earthquake: Lab and field tests, *Journal of Environmental Chemical Engineering*, 9, 105485, 2021.
- 15) Qi Wang, **Masahiro Tokumura**, Yuichi Miyake, Takashi Amagai, Optimization of method for extracting 46 volatile organic compounds (VOCs) from an activated carbon-silica gel active sampler to evaluate indoor work environments, *Air Quality, Atmosphere & Health*, 14, 1341-1348, 2021.
- 16) Kento Sei, Qi Wang, **Masahiro Tokumura**, Anwar Hossain, Mohammad Raknuzzaman, Yuichi Miyake, Takashi Amagai, Occurrence, Occurrence, potential source, and cancer risk of PM_{2.5}-bound polycyclic aromatic hydrocarbons and their halogenated derivatives in Shizuoka, Japan, and Dhaka, *Environmental Research*, 196, 110909, 2021.
- 17) Kento Sei, Qi Wang, **Masahiro Tokumura**, Yuichi Miyake, Takashi Amagai, Accurate and Ultrasensitive Determination of 72 Parent and Halogenated Polycyclic Aromatic Hydrocarbons in a Variety of Environmental Samples via Gas Chromatography–Triple Quadrupole Mass Spectrometry, *Chemosphere*, 271, 129535, 2021.
- 18) Misato Masuda, Qi Wang, **Masahiro Tokumura**, Yuichi Miyake, Takashi Amagai, Quantification of brominated polycyclic aromatic hydrocarbons in environmental samples by liquid chromatography tandem mass spectrometry with atmospheric pressure photoionization and post-column infusion of dopant (LC-DA-APPI-MS/MS), *Analytical Sciences*, 36, 1105-1111, 2020.
- 19) Misato Masuda, Qi Wang, **Masahiro Tokumura**, Yuichi Miyake, Takashi Amagai, Risk assessment of polycyclic aromatic hydrocarbons and their chlorinated derivatives produced during cooking and released in exhaust gas, *Ecotoxicology and Environmental Safety*, 197, 110592, 2020.
- 20) Kosuke Muramatsu, **Masahiro Tokumura**, Qi Wang, Yuichi Miyake, Takashi Amagai, Masakazu Makino, Mitigation of the inhibitory effects of co-existing substances on the Fenton process by UV light irradiation, *Journal of Environmental Science and Health, Part A*, 55, 730-738, 2020.
- 21) **Masahiro Tokumura**, Shiori Nitta, Tomomi Hayashi, Rina Yamaguchi, Qi Wang, Yuichi Miyake, Takashi Amagai, Masakazu Makino, Probabilistic Exposure Assessment of Aggregate Rates of Dermal Exposure of Japanese Women and Children to Parabens in Personal Care Products, *Chemosphere*, 239, 124704, 2020.
- 22) Atsushi Mizukoshi, Kenichi Azuma, Shigehiro Sugiyama, Daisuke Tanaka, Masashi Inoue, **Masahiro Tokumura**, Jiro Okumura, Effects of reduced pressure on the reaction between ozone and limonene in a simulated aircraft cabin environment, *Building and Environment*, 163, 106320, 2019.
- 23) Misato Masuda, Qi Wang, **Masahiro Tokumura**, Yuichi Miyake, Takashi Amagai, Simultaneous determination of polycyclic aromatic hydrocarbons and their chlorinated derivatives in grilled foods, *Ecotoxicology and Environmental Safety*, 178, 188-194, 2019.
- 24) **Masahiro Tokumura**, Makiko Seo, Qi Wang, Yuichi Miyake, Takashi Amagai, Masakazu Makino, Dermal Exposure to Plasticizers in Nail Polishes: An Alternative Major Exposure Pathway of Phosphorus-Based Compounds, *Chemosphere*, 226, 316-320, 2019.
- 25) **Masahiro Tokumura**, Sayaka Ogo, Kazunari Kume, Kosuke Muramatsu, Qi Wang, Yuichi Miyake, Takashi Amagai, Masakazu Makino, Comparison of Rates of Direct and Indirect Migration of Phosphorus Flame Retardants from Flame-Retardant-Treated Polyester Curtains to Indoor Dust, *Ecotoxicology and Environmental Safety*, 169, 464-469, 2019.
- 26) Md. Habibullah-Al-Mamun, Md. Kawser Ahmed, Md. Saiful Islam, **Masahiro Tokumura**, Shigeki Masunaga, Occurrence, distribution and possible sources of polychlorinated biphenyls (PCBs) in the surface water from the Bay of Bengal coast of Bangladesh, *Ecotoxicology and Environmental Safety*, 167, 450-458, 2019.

- 27) Mohammad Raknuzzaman, Md. Habibullah-Al-Mamun, Md. Kawser Ahmed, **Masahiro Tokumura**, Shigeki Masunga, Monitoring of seasonal variation of some trace metals concentration in surface water collected from the coastal area of Bangladesh, *Journal of Biodiversity Conservation and Bioresource Management*, 4, 67-80, 2018.
- 28) Md. Habibullah-Al-Mamun, Md. Kawser Ahmed, Md. Saiful Islam, Anwar Hossain, **Masahiro Tokumura**, Shigeki Masunaga, Polychlorinated biphenyls (PCBs) in commonly consumed seafood from the coastal area of Bangladesh: occurrence, distribution and human health implications, *Environmental Science and Pollution Research*, 2018.
- 29) Md. Habibullah-Al-Mamun, Md. Kawser Ahmed, Md. Saiful Islam, **Masahiro Tokumura**, Shigeki Masunaga, Distribution of polycyclic aromatic hydrocarbons (PAHs) in commonly consumed seafood from coastal areas of Bangladesh and associated human health implications, *Environmental Geochemistry and Health*, 2018.
- 30) Md. Habibullah-Al-Mamun, Md. Kawser Ahmed, Md. Saiful Islam, **Masahiro Tokumura**, Shigeki Masunaga, Seasonal-spatial distributions, congener profile and risk assessment of polychlorinated biphenyls (PCBs) in the surficial sediments from the coastal area of Bangladesh, *Soil and Sediment Contamination: An International Journal*, 28, 28-50, 2018.
- 31) Yuichi Miyake, **Masahiro Tokumura**, Qi Wang, Takashi Amagai, Yasuhiro Takegawa, Yoko Yamagishi, Sayaka Ogo, Kazunari Kume, Takeshi Kobayashi, Shinji Takasu, Kumiko Ogawa, Kurunthachalam Kannan, Identification of Novel Phosphorus-Based Flame Retardants in Curtains Purchased in Japan Using Orbitrap Mass Spectrometry, *Environmental Science & Technology Letters*, 5, 448-455, 2018.
- 32) Kouichi Tatsu, Toshiyuki Naito, **Masahiro Tokumura**, Kunihiro Hoshino, Takahiro Iwasaki, Hideto Jinno, Shinsuke Usui, Akihiro Nagao, Study on the quantitative evaluation method of SVOC in a vehicle cabin using the passive method, *Journal of the Human-Environment System*, 20, 11-18, 2018.
- 33) **Masahiro Tokumura**, Yuichi Miyake, Qi Wang, Hayato Nakayama, Takashi Amagai, Sayaka Ogo, Kazunari Kume, Takeshi Kobayashi, Shinji Takasu, Kumiko Ogawa, Methods for the analysis of organophosphate flame retardants- A comparison among GC-EI-MS, GC-NCI-MS, LC-ESI-MS/MS, and LC-APCI-MS/MS, *Journal of Environmental Science and Health, Part A*, 53, 475-481, 2018.
- 34) Naohide Shinohara, **Masahiro Tokumura**, U Yanagi, Indoor fungal levels in temporary houses occupied following the Great East Japan Earthquake of 2011, *Building and Environment*, 129, 26-34, 2018.
- 35) Qi Wang, Yuichi Miyake, **Masahiro Tokumura**, Takashi Amagai, Yuichi Horii, Kiyoshi Nojiri, Nobutoshi Ohtsuka, Effects of characteristics of waste incinerator on emission rate of halogenated polycyclic aromatic hydrocarbon into environments, *Science of the Total Environment*, 625, 633-639, 2018.
- 36) Makoto Sekine, **Masahiro Tokumura**, Mohammad Raknuzzaman, Md. Kawser Ahmed, Muhammad Rafiqul Islam, Shigeki Masunaga, Development of Method for Quantitative Determination of Water Arsenic by Field Test Kit, *Fundamental and Applied Agriculture*, 3, 340-346, 2018.
- 37) Makoto Sekine, **Masahiro Tokumura**, Mohammad Raknuzzaman, Md. Habibullah-Al-Mamun, Md. Kawser Ahmed, Muhammad Rafiqul Islam, Yuichi Miyake, Takashi Amagai, Shigeki Masunaga, Effect of Cooking on Arsenic Reduction in Two Rainfed Rice Varieties of Bangladesh and Their Health Risk Assessment, *Chemical Science International Journal*, 21, 1-7, 2017.
- 38) Yuichi Miyake, **Masahiro Tokumura**, Qi Wang, Takashi Amagai, Yuichi Horii, Kurunthachalam Kannan, Mechanism of Formation of Chlorinated Pyrene during Combustion of Polyvinyl Chloride, *Environmental Science & Technology*, 51, 14100-14106, 2017.
- 39) Qi Wang, **Masahiro Tokumura**, Yuichi Miyake, Takashi Amagai, Yuichi Horii, Kotaro Minomo, Kiyoshi Nojiri, Nobutoshi Ohtsuka, Effects of Annual Emission Rates of Halogenated Polycyclic Aromatic Hydrocarbons from Waste Incinerators on Atmospheric Concentrations, *Environmental Science*, 30, 336-345, 2017.
- 40) Yuichi Miyake, **Masahiro Tokumura**, Hayato Nakayama, Qi Wang, Takashi Amagai, Sayaka Ogo, Kazunari Kume, Takeshi Kobayashi, Shinji Takasu, Kumiko Ogawa, Kurunthachalam Kannan, Simultaneous Determination of Brominated and Phosphorus Flame Retardants in Flame-Retarded Polyester Curtains, *Science of the Total Environment*, 601-602, 1333-1339, 2017.
- 41) Yuichi Miyake, **Masahiro Tokumura**, Qi Wang, Takashi Amagai, Yuichi Horii, Rate of Hexabromocyclododecane Decomposition and Production of Brominated Polycyclic Aromatic Hydrocarbons During Combustion in a Pilot-scale Incinerator, *Journal of Environmental Sciences*, 61, 91-96, 2017.
- 42) Naohide Shinohara, **Masahiro Tokumura**, Kazuhiro Hashimoto, Katsuyoshi Asano, Yuji Kawakami, Fungal levels in houses in the Fukushima Daiichi nuclear power plant evacuation zone after the Great East Japan

Earthquake, *Journal of the Air & Waste Management Association*, 67, 1106-1114, 2017.

- 43) **Masahiro Tokumura**, Kouich Tatsu, Rurika Hatayama, Shigeki Masunaga, A Simulation Study to Evaluate the Feasibility of a Simple Car Cabin Air Cleaning Device Using Windshield Washer Fluid as a Wet Scrubber, *Environmental Science*, 30, 171-183, 2017.
- 44) Md. Saiful Islam, Md. Habibullah-Al-Mamun, Feng Ye, **Masahiro Tokumura**, Shigeki Masunaga, Chemical speciation of trace metals in the industrial sludge of Dhaka City, Bangladesh, *Water Science and Technology*, 76, 256-267, 2017.
- 45) Md. Habibullah-Al-Mamun, Md. Kawser Ahmed, Mohammad Raknuzzaman, Md. Saiful Islam, Mir Mohammad Ali, **Masahiro Tokumura**, Shigeki Masunaga, Occurrence and assessment of perfluoroalkyl acids (PFAAs) in commonly consumed seafood from the coastal area of Bangladesh, *Marine Pollution Bulletin*, 124, 775-785, 2017.
- 46) Yuichi Miyake, **Masahiro Tokumura**, Qi Wang, Zhiwei Wang, Takashi Amagai, Comparison of the Volatile Organic Compound Recovery Rates of Commercial Active Samplers for Evaluation of Indoor Air Quality in Work Environments, *Air Quality, Atmosphere & Health*, 10, 737-746, 2017.
- 47) **Masahiro Tokumura**, Kouichi Tatsu, Rurika Hatayama, Shigeki Masunaga, A Simulation Study to Evaluate the Feasibility of a Simple Car Cabin Air Cleaning Device Using Windshield Washer Fluid as a Wet Scrubber, *Environmental Science*, 30, 171-183, 2017.
- 48) **Masahiro Tokumura**, Yuki Yamatori, Rurika Hatayama, Youichi Negishi, Shigeki Masunaga, Screening and Source Identification of Hazardous Substances in Car Indoor Dust Using Marker Elements by Field Emission Electron Probe Micro Analyzer, *Environmental Science*, 30, 34-43, 2017.
- 49) **Masahiro Tokumura**, Rurika Hatayama, Kouichi Tatsu, Toshiyuki Naito, Tetsuya Takeda, Mohammad Raknuzzaman, Md. Habibullah-Al-Mamun, Shigeki Masunaga, Organophosphate Flame Retardants in the Indoor Air and Dust in Cars in Japan, *Environmental Monitoring and Assessment*, 189: 48, 2017.
- 50) Md. Habibullah-Al-Mamun, Md. Kawser Ahmed, Mohammad Raknuzzaman, Md. Saiful Islam, Junya Negishi, Shihori Nakamichi, Makoto Sekine, **Masahiro Tokumura**, Shigeki Masunaga, Occurrence and distribution of perfluoroalkyl acids (PFAAs) in surface water and sediment of a tropical coastal area (Bay of Bengal coast, Bangladesh), *Science of the Total Environment*, 571, 1089-1104, 2016.
- 51) **Masahiro Tokumura**, Rurika Hatayama, Kouichi Tatsu, Toshiyuki Naito, Tetsuya Takeda, Mohammad Raknuzzaman, Md. Habibullah-Al-Mamun, Shigeki Masunaga, Car Indoor Air Pollution by Volatile Organic Compounds and Aldehydes in Japan, *AIMS Environmental Science*, 3, 362-381, 2016.
- 52) **Masahiro Tokumura**, Asato Sugawara, Mohammad Raknuzzaman, Md. Habibullah-Al-Mamun, Shigeki Masunaga, Comprehensive Study on Effects of Water Matrices on Removal of Pharmaceuticals by Three Different Kinds of Advanced Oxidation Processes, *Chemosphere*, 159, 317-325, 2016.
- 53) Mohammad Raknuzzaman, Md. Kawser Ahmed, Md. Saiful Islam, Md. Habibullah-Al-Mamun, **Masahiro Tokumura**, Makoto Sekine, Shigeki Masunga, Trace metal contamination in commercial fish and crustaceans collected from coastal area of Bangladesh and health risk assessment, *Environmental Science and Pollution Research*, 23, 17298-17310, 2016.
- 54) **Masahiro Tokumura**, Atsushi Mizukoshi, Miyuki Noguchi, Yuko Wada, Yuri Usami, Takako Yamaki, Yukio Yanagisawa, Removal of acetaldehyde gas using wet scrubber coupled with photo-Fenton reaction, *AIMS Environmental Science*, 3, 159-167, 2016.
- 55) Mohammad Raknuzzaman, Md. Kawser Ahmed, Md. Saiful Islam, Md. Habibullah-Al-Mamun, **Masahiro Tokumura**, Makoto Sekine, Shigeki Masunga, Assessment of trace metals in surface water and sediment corrected from polluted coastal area of Bangladesh., *Journal of Water and Environment Technology*, 14, 247-259, 2016.
- 56) Feng Ye, **Masahiro Tokumura**, Md. Saiful Islam, Yasuyuki Zushi, Jungkeun Oh, Shigeki Masunaga, Spatial distribution and importance of potential perfluoroalkyl acid precursors in urban rivers and sewage treatment plant effluent – Case study of Tama River, Japan, *Water Research*, 67, 77-85, 2014.
- 57) Hiroyuki Yoshino, **Masahiro Tokumura**, Yoshinori Kawase, Simultaneous removal of nitrate, hydrogen peroxide and phosphate in semiconductor acidic wastewater by zero-valent iron, *Journal of Environmental Science and Health, Part A*, 49, 998-1006, 2014.
- 58) **Masahiro Tokumura**, Yumi Tanebe, Yoshinori Kawase, Yukio Yanagisawa, Degradation and mineralization of Sulfamethoxazole by photo-Fenton reaction, *Journal of Japan Society on Water Environment*, 37, 129-138, 2014.
- 59) Naohide Shinohara, **Masahiro Tokumura**, Misae Kazama, Yasunori Yonemoto, Mayuko Yoshioka, Naoki Kagi, Kenichi Hasegawa, Hiroshi Yoshino, U Yanagi, Indoor air quality and thermal comfort in temporary houses occupied following the Great East Japan Earthquake, *Indoor Air*, 24, 425-437, 2014.

- 60) Waraluk Sabaikai, Makoto Sekine, **Masahiro Tokumura**, Yoshinori Kawase, UV light photo-Fenton degradation of polyphenols in oolong tea manufacturing wastewater, *Journal of Environmental Science and Health, Part A*, 49, 193-202, 2014.
- 61) **Masahiro Tokumura**, Makoto Sekine, Hao Huang, Shigeki Masunaga, Estimation of pharmaceutical removal in a sewage treatment plant -Model simulation based on laboratory test data-, *Journal of Water and Environment Technology*, 11, 529-538, 2013.
- 62) Naohide Shinohara, **Masahiro Tokumura**, Misae Kazama, Hiroyuki Yoshino, Seiji Ochiai, Atsushi Mizukoshi, Indoor air quality, air exchange rates, and radioactivity in new built temporary houses following the Great East Japan Earthquake in Minamisoma, Fukushima, *Indoor Air*, 23, 332-341, 2013.
- 63) **Masahiro Tokumura**, Mai Shibusawa, Yoshinori Kawase, Dynamic simulation of degradation of toluene in waste gas by the photo-Fenton reaction in a bubble column, *Chemical Engineering Science*, 100, 212-224, 2013.
- 64) **Masahiro Tokumura**, Rurika Hatayama, Yoshinori Kawase, Yukio Yanagisawa, Improving biodegradability of non-biodegradable compounds using photo-Fenton reaction, *Journal of Water and Environment Technology*, 11, 121-130, 2013.
- 65) **Masahiro Tokumura**, Risa Morito, Yoshinori Kawase, Photo-Fenton process for simultaneous colored wastewater treatment and electricity and hydrogen production, *Chemical Engineering Journal*, 221, 81-89, 2013.
- 66) Misako Handa, Yuson Lee, Mai Shibusawa, **Masahiro Tokumura**, Yoshinori Kawase, Removal and mineralization of VOCs in waste gas by the photo-Fenton reaction: Effects of dosage of the Fenton reagents on degradation of toluene gas in a bubble column photoreactor, *Journal of Chemical Technology and Biotechnology*, 88, 88-97, 2012.
- 67) **Masahiro Tokumura**, Yuko Wada, Yuri Usami, Takako Yamaki, Atsushi Mizukoshi, Miyuki Noguchi, Yukio Yanagisawa, Method of removal of volatile organic compounds by using wet scrubber coupled with photo-Fenton reaction -Preventing emission of by-products-, *Chemosphere*, 89, 1238-1242, 2012.
- 68) Makoto Sekine, Zeinab Salehi, **Masahiro Tokumura**, Yoshinori Kawase, Solar photo-Fenton process for the treatment of colored soft drink wastewater : Decolorization, mineralization and COD removal of oolong tea effluent, *J. Environ. Sci. Health, Part A*, 47, 2181-2189, 2012.
- 69) **Masahiro Tokumura**, Yuko Wada, Yuri Usami, Takako Yamaki, Atsushi Mizukoshi, Miyuki Noguchi, Yukio Yanagisawa, Air cleaning method using photo-Fenton reaction in gas-liquid contactor, *Indoor Environment*, 15, 27-38, 2012.
- 70) Mizuyo Sugiyama, Zeinab Salehi, **Masahiro Tokumura**, Yoshinori Kawase, Photocatalytic degradation of p-nitrophenol by zinc oxide particles, *Water Science & Technology*, 65, 1882-1886, 2012.
- 71) Erina Ono, **Masahiro Tokumura**, Yoshinori Kawase, Photo-Fenton degradation of nonionic surfactant and its mixture with cationic or anionic surfactant, *Journal of Environmental Science and Health, Part A*, 47, 1087-1095, 2012.
- 72) Ayana Shimizu, **Masahiro Tokumura**, Koshiro Nakajima, Yoshinori Kawase, Phenol removal using zero-valent iron powder in the presence of dissolved oxygen: roles of decomposition by the Fenton reaction and adsorption/precipitation, *Journal of Hazardous Materials*, 201-202, 60-67, 2012.
- 73) **Masahiro Tokumura**, Risa Morito, Rurika Hatayama, Yoshinori Kawase, Iron redox cycling in hydroxyl radical generation during the photo-Fenton oxidative degradation: Dynamic change of hydroxyl radical concentration, *Applied Catalysis B: Environmental*, 106, 565-576, 2011.
- 74) Takashi Katoh, **Masahiro Tokumura**, Hidemi Yoshikawa, Yoshinori Kawase, Dynamic simulation of multicomponent gas separation by hollow-fiber membrane module: Nonideal mixing flows in permeate and residue sides using the tanks-in-series model, *Separation and Purification Technology*, 76, 362-372, 2011.
- 75) Takuya Maezono, **Masahiro Tokumura**, Makoto Sekine, Yoshinori Kawase, Hydroxyl radical concentration profile in photo-Fenton oxidation process: Generation and consumption of hydroxyl radicals during the discoloration of azo-dye Orange II, *Chemosphere*, 82, 1422-1430, 2011.
- 76) **Masahiro Tokumura**, Makoto Sekine, Risa Morito and Yoshinori Kawase, Decolorization and Mineralization of Oolong Tea Polyphenols in Colored Soft Drink Wastewater by Photo Fenton Reaction, *Water Science & Technology*, 63, 1894-1898, 2011.
- 77) Yusuke Ishizuka, **Masahiro Tokumura**, Atsushi Mizukoshi, Miyuki Noguchi and Yukio Yanagisawa, Measurement of secondary products during oxidation reaction of terpenes with ozone based on the PTR-MS analysis: effects of coexistent carbonyl compounds, *International Journal of Environmental Research and Public Health*, 7, 3853-3870, 2010.

- 78) **Masahiro Tokumura**, Risa Morito, Ayako Shimizu and Yoshinori Kawase, Innovative water treatment system coupled with energy production using photo-Fenton reaction, *Water Science & Technology*, 60, 2589-2597, 2009.
- 79) **Masahiro Tokumura**, Takashi Katoh, Hiroki Ohata and Yoshinori Kawase, Dynamic Modeling and Simulation of Ozonation in a Semibatch Bubble Column Reactor: Decolorization and Mineralization of Azo Dye Orange II by Ozone, *Industrial & Engineering Chemistry Research*, 48, 7965-7975, 2009.
- 80) **Masahiro Tokumura**, Hisato Katoh, Takashi Katoh, Hussein. T. Znad and Yoshinori Kawase, Solubilization of Excess Sludge in Activated Sludge Process using the Solar Photo-Fenton Reaction, *Journal of Hazardous Materials*, 162, 1390-1396, 2009.
- 81) Ryo Fukuda, **Masahiro Tokumura**, Hussin T. Znad and Yoshinori Kawase, Vapor generation from the impellers in boiling stirred tank reactors, *Chemical Engineering Research and Design*, 87, 452-459, 2009.
- 82) **Masahiro Tokumura**, Hussein T. Znad and Yoshinori Kawase, Decolorization of Dark Brown Colored Coffee Effluent by Solar Photo-Fenton Reaction: Effect of Solar Light Dose on Decolorization Kinetics, *Water Research*, 42, 4665-4673, 2008.
- 83) **Masahiro Tokumura**, Rina Nakajima, Hussin T. Znad and Yoshinori Kawase, Chemical Absorption Process for Degradation of VOC gas using Heterogeneous Gas-Liquid Photocatalytic Oxidation: Toluene Degradation by Photo-Fenton Reaction, *Chemosphere*, 73, 768-775, 2008.
- 84) **Masahiro Tokumura**, Mayumi Baba and Yoshinori Kawase, Dynamic modeling and simulation of absorption of carbon dioxide, *Chemical Engineering Science*, 62, 7305-7311, 2007.
- 85) Takehiko Matsumura, Daisuke Noshiroya, **Masahiro Tokumura**, Hussein T. Znad and Yoshinori Kawase, Simplified Model for the Hydrodynamics and Reaction Kinetics in a Gas-Liquid-Solid Three-Phase Fluidized-Bed Photocatalytic Reactor: Degradation of o-Cresol with Immobilized TiO₂, *Industrial & Engineering Chemistry Research*, 46, 2637-2647, 2007.
- 86) **Masahiro Tokumura**, Mizuyo Sekine, Maki Yoshinari, Hussein T. Znad and Yoshinori Kawase, Photo-Fenton process for excess sludge disintegration, *Process Biochemistry*, 42, 627-633, 2007.
- 87) Takafumi Uchiyama, Hiroyuki Kobayashi, Hussin T. Znad, **Masahiro Tokumura** and Yoshinori Kawase, Dynamic Performance of Ozonation Treatment for Nonionic Surfactants (Polyoxyethylene Alkyl Ether) in a Bubble Column Reactor, *Ozone: Science & Engineering*, 29, 65-72, 2007.
- 88) Wataru Minamidate, **Masahiro Tokumura**, Hussin T. Znad and Yoshinori Kawase, Photo degradation of o-Cresol in Water by the H₂O₂/UV Process, *Journal of Environmental Science and Health, Part A*, A41, 1543-1558, 2006.
- 89) Junpei Nishio, **Masahiro Tokumura**, Hussin T. Znad and Yoshinori Kawase, Photo catalytic decolorization of azo-dye with zinc oxide powder in an external UV light irradiation slurry photoreactor, *Journal of Hazardous Materials*, 138, 106-115, 2006.
- 90) Hussein T. Znad, **Masahiro Tokumura** and Yoshinori Kawase, Axial distribution of oxygen concentration in different airlift bioreactor scales: Mathematical modeling and simulation, *Chemical Engineering & Technology*, 29, 1042-1047, 2006
- 91) **Masahiro Tokumura**, Ayano Ohta, Hussein T. Znad and Yoshinori Kawase, UV light assisted decolorization of dark brown colored coffee effluent by photo-Fenton reaction, *Water Research*, 40, 3775-3784, 2006.
- 92) **Masahiro Tokumura**, Mayumi Baba, Hussein T. Znad and Yoshinori Kawase, Neutralization of the Acidified Seawater Effluent from the Flue Gas Desulfurization Process: Experimental Investigation, Dynamic Modeling, and Simulation, *Industrial & Engineering Chemistry Research*, 45, 6339-6348, 2006.
- 93) **Masahiro Tokumura**, Hussein T. Znad and Yoshinori Kawase, Modeling of an external light irradiation slurry photoreactor: UV light or sunlight-photo assisted Fenton discoloration of azo-dye Orange II with natural mineral tourmaline powder, *Chemical Engineering Science*, 61, 6361-6371, 2006.