

2016 水環境制御研究室 研究業績一覧

○ 学術雑誌論文/Peer-reviewed papers

* 英文雑誌

- (1) Jatuwat Sangsanonta, Dang The Dan, Tran Thi Viet Nga, Hiroyuki Katayama and Hiroaki Furumai (2016) Detection of pepper mild mottle virus as an indicator for drinking water quality in Hanoi, Vietnam, in large volume of water after household treatment, *Journal of Environmental Science and Health, Part A: Toxic/Hazardous Substances and Environmental Engineering*, Vol.51, No.13, pp.1100-1106.
- (2) Parinda Thayanukul, Futoshi Kurisu, Ikuro Kasuga, and Hiroaki Furumai (2016) Characterization of biodegradable organic matter in reclaimed water using a bacterial growth fingerprint assay, *Water Science and Technology: Water Supply*, Vol.16(5), 1255-1265.
- (3) Ikuro Kasuga, Futoshi Kurisu and Hiroaki Furumai (2016) Identification of bacteria assimilating formaldehyde in biological activated carbon filter by means of DNA stable isotope probing and next-generation sequencing, *Water Science and Technology: Water Supply*, Vol.16(4), 915-921.
- (4) Tatsuya Asami, Hiroyuki Katayama, Jason Robert Torrey, Chettiyappan Visvanathan, and Hiroaki Furumai (2016) Evaluation of virus removal efficiency of coagulation-sedimentation and rapid sand filtration processes in a drinking water treatment plant in Bangkok, Thailand, *Water Research*, Vol.101, 84-94.
- (5) Phungsai Phanwatt, Futoshi Kurisu, Ikuro Kasuga and Hiroaki Furumai (2016) Molecular characterization of low molecular weight dissolved organic matter in water reclamation processes using Orbitrap mass spectrometry, *Water Research*, Vol.100, pp.526-536.
- (6) Shwetha Acharya, Futoshi Kurisu, Ikuro Kasuga, Hiroaki Furumai (2016) Chlorine dose determines bacterial community structure of subsequent regrowth in reclaimed water, *Journal of Water and Environment Technology*, Vol.14, No.1, pp.15-24. [The WET Excellent Paper Award]

* 和文雑誌

- (1) 賀須井直規, 春日郁朗, 栗栖太, 片山浩之, 古米弘明 (2016) 下水管内堆積物の動態モデル解析を用いた清掃水投入による雨天時越流負荷削減量の評価, *土木学会論文集(G)*, III_153-III_160.
- (2) 永野雄一, Nguyen Bac Giang, Pham Khac Lieu, 古米弘明 (2016) フェ旧市街地中央運河における糞便汚染状況調査と汚染水塊の挙動解析, *土木学会論文集(G)*, III_169-III_177.

○ 国際学会発表/Presentations at International Conferences

- (1) Ikuro Kasuga, Vitharuch Yuthawong, Futoshi Kurisu, and Hiroaki Furumai (2017) Molecular source tracking of dissolved organic matter in a hypereutrophic lake by Orbitrap mass spectrometry, ASLO2017 Aquatic Sciences Meeting. (26 February-3 March, Hawaii, USA) [Oral]
- (2) Vitharuch Yuthawong, Ikuro Kasuga, Futoshi Kurisu, and Hiroaki Furumai (2017) Application of Orbitrap mass spectrometry to reveal low molecular weight dissolved organic matter responsible for

- COD in a eutrophic lake, ASLO2017 Aquatic Sciences Meeting, No.150. (26 February-3 March, Hawaii, USA) [Poster]
- (3) Shwetha Acharya, Futoshi Kurisu, Ikuro Kasuga, and Hiroaki Furumai (2016) Chlorine dose alters community of regrowing bacteria in reclaimed water, MEWE and Biofilms IWA Specialist Conference, pp.96-97. (4-7 September, Copenhagen, Denmark) [Oral]
 - (4) Ikuro Kasuga, Hitomi Nakamura, Futoshi Kurisu, and Hiroaki Furumai (2016) Characterization of residual microbial growth potential in drinking water treated by ozonation and biological activated carbon, MEWE and Biofilms IWA Specialist Conference, L14, pp.380-381. (4-7 September, Copenhagen, Denmark) [Poster]
 - (5) Phanwat Phungsai, Shwetha Acharya, Futoshi Kurisu, Ikuro Kasuga, and Hiroaki Furumai (2016) Tracking dissolved organic matter removed after microbial regrowth in chlorinated reclaimed water by using Orbitrap mass spectrometry, MEWE and Biofilms IWA Specialist Conference, L03, pp.358-359. (4-7 September, Copenhagen, Denmark) [Poster]
 - (6) Miyu Suzuki, Ikuro Kasuga, Futoshi Kurisu, and Hiroaki Furumai (2016) Depth profiles of microbial community in a full-scale biological activated carbon filter for drinking water treatment, MEWE and Biofilms IWA Specialist Conference, L16, pp.384-385. (4-7 September, Copenhagen, Denmark) [Poster]
 - (7) Yoshihiro Ishii, Futoshi Kurisu, Ikuro Kasuga, and Hiroaki Furumai (2016) Growth of *Escherichia coli* and change in dissolved organic carbons in urban river waters, MEWE and Biofilms IWA Specialist Conference, N04, pp.424-425. (4-7 September, Copenhagen, Denmark) [Poster]
 - (8) Futoshi Kurisu, Yuichiro Misumi, Ikuro Kasuga, and Hiroaki Furumai (2016) Microbial indicators to estimate contribution of in-sewer deposit in combined sewer overflow, MEWE and Biofilms IWA Specialist Conference, N07, pp.430-431. (4-7 September, Copenhagen, Denmark) [Poster]
 - (9) Phanwat Phungsai, Futoshi Kurisu, Ikuro Kasuga, and Hiroaki Furumai (2016) Reproducibility of Orbitrap mass spectrometry in unknown screening analysis of dissolved organic matter in environmental water samples, Water and Environment Technology Conference 2016, 1A-09, p.5. (27-28 August, Chuo University, Tokyo) [Poster] [WET excellent presentation award]
 - (10) Yuthawong Vitharuch, Ikuro Kasuga, Futoshi Kurisu, and Hiroaki Furumai (2016) Comparison of low molecular weight dissolved organic matter compositions between in Lake Inba and Kashima River by Orbitrap mass spectrometry, Water and Environment Technology Conference 2016, 2A-02, p.19. (27-28 August, Chuo University, Tokyo) [Poster]

○ 国内学会発表/Presentations at Domestic Conferences

- (1) 賀須井直規, 春日郁朗, 栗栖太, 片山浩之, 古米弘明(2016) 下水管内堆積物の動態モデル解析を用いた清掃水投入による雨天時越流負荷削減量の評価, 第53回土木学会環境工学研究フォーラム, 土木学会論文集(G) III_153-III_160. (12.6-8, 北九州市・北九州国際会議場)【口頭】
- (2) 藤原直也, 栗栖太, 春日郁朗, 古米弘明(2016) 嫌気ベンゼン分解集積培養系を用いた実ベンゼン汚染土の浄化に対するクエン酸添加効果, 第53回土木学会環境工学研究フォーラム講演集, p.28. (12.6-8, 北九州市・北九州国際会議場)【ポスター】
- (3) 鈴木美有, 春日郁朗, 栗栖太, 古米弘明(2016) 生物活性炭ろ過層深度別ろ過水中の微生物群集構造の解析, 平成28年度水道研究発表会, pp.248-249. (11/9-11, 京都)【口頭】
- (4) 三角恭平, 春日郁朗, 栗栖太, 古米弘明(2016) 印旛沼の微生物ループにおける *Limnohabitans* 属の生態学的役割, 微生物生態学会第31回大会, P-102. (10/22-25, 横須賀)【ポスター】
- (5) 鈴木美有, 春日郁朗, 栗栖太, 古米弘明(2016) 浄水処理における生物活性炭ろ過水中の微生物群集構造の深度方向変化, 微生物生態学会第31回大会, P-012. (10/22-25, 横須賀)【ポスター】
- (6) 春日郁朗, 三角恭平, 栗栖太, 古米弘明(2016) 富栄養化が進行した印旛沼の微生物ループを構成する細菌群の多様性評価, 水圏微生物研究フォーラム2016(8.9-10, 東京大学)【ポスター】
- (7) 中村仁美, 春日郁朗, 栗栖太, 古米弘明(2016) 高度浄水処理における水道水の微生物増殖ポテンシャルの形成過程の評価, 第50回日本水環境学会年会, p.273. (3.16-18, 徳島)【口頭】
- (8) 井上健太郎, 片山浩之, 古米弘明(2016) 二枚貝および底泥の腸管系ウイルス蓄積状況に基づいたヒト糞便由来の汚染履歴評価, 第50回日本水環境学会年会, p.529. (3.16-18, 徳島)【ポスター】

- (9) Jason Torrey, Tatsuya Asami, Atsushi Hashimoto, Hiroyuki Katayama (2016) Evaluating virus removal efficiency in drinking water treatment plants with indigenous pepper mild mottle virus, 第50回日本水環境学会年会, p.463. (3.16-18, 徳島)【口頭】
- (10) 鈴木美有, 春日郁朗, 栗栖太, 古米弘明(2016)生物活性炭ろ過層深度方向における生分解性有機物の除去プロファイルと細菌相との関係, 第50回日本水環境学会年会, p.653. (3.16-18, 徳島)【ポスター】
- (11) 賀須井直規, 栗栖太, 片山浩之, 古米弘明(2016)下水道管内堆積物の輸送現象のモデル解析に基づく雨天時越流負荷削減手法の検討, 第50回日本水環境学会年会, p.648. (3.16-18, 徳島)【ポスター】
- (12) 石井淑大, 栗栖太, 春日郁朗, 片山浩之, 古米弘明(2016)都市河川水中における大腸菌の増殖と溶存有機物との関係, 第50回日本水環境学会年会, p.644. (3.16-18, 徳島)【ポスター】

○ 総説/Reviews

- (1) 春日郁朗, 栗栖太(2016)フーリエ変換質量分析計による未知スクリーニング分析を活用した水処理プロセスの評価, 水環境学会誌 特集“最新の質量分析技術による多物質分析”, Vol.39, No.10 pp.380-383.
- (2) 春日郁朗, 栗栖太(2016)流域レベルでの溶存有機物(DOM)管理に向けた新たな展開, 環境システム計測学会学会誌 EiCA 特集“新たな測定指標やセンサが拓く監視制御システム”, Vol.21, No.1, pp.2-6.

○ 受賞/Award

- Shwetha Acharya, Futoshi Kurisu, Ikuro Kasuga, Hiroaki Furumai (2016) Chlorine dose determines bacterial community structure of subsequent regrowth in reclaimed water, Journal of Water and Environment Technology, Vol.14, No.1, pp.15-24. [The WET Excellent Paper Award]
- Phanwat Phungsai, Futoshi Kurisu, Ikuro Kasuga, and Hiroaki Furumai (2016) Reproducibility of Orbitrap mass spectrometry in unknown screening analysis of dissolved organic matter in environmental water samples, Water and Environment Technology Conference 2016, 1A-09, p.5. (27-28 August, Chuo University, Tokyo) [Poster] [WET excellent presentation award]