

2007 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) Mohammed Abed Hossain, Hiroaki Furumai, Fumiuki Nakajima, and Rupak Kumar Aryal (2007) Heavy metals speciation in sediment accumulated within an infiltration facility and evaluation of metal retention properties of underlying soil, *Water Science & Technology*, Vol.56, No.11, pp.81-89.
- (2) Ikuro Kasuga, Fumiuki Nakajima, and Hiroaki Furumai (2007) Diversity of Catechol 2,3-Dioxygenase Genes of Bacteria Responding to Dissolved Organic Matter Derived from Different Sources in a Eutrophic Lake, *FEMS Microbiology Ecology*, Vol.61, No.3, pp.449-458.
- (3) Musikavong C., Wattanachira Suraphong, Nakajima F., Furumai H. (2007) Three dimensional fluorescent spectroscopy analysis for the evaluation of organic matter removal from industrial estate wastewater by stabilization ponds, *Water Science & Technology*, 55(11), pp.201-210.
- (4) Shoko Iwai, Futoshi Kurisu, Hidetoshi Urakawa, Osami Yagi, and Hiroaki Furumai (2007) Development of a 60-mer oligonucleotide microarray on the basis of benzene monooxygenase gene diversity, *Applied Microbiology and Biotechnology*, Vol.75, No.4, pp.929-939.
- (5) Rupak Kumar Aryal, Hiroaki Furumai, and Mohammed Abed Hossain (2007) Vertical distribution and speciation of heavy metals in stormwater infiltration facilities: possible heavy metals release to groundwater, *Water Practice & Technology*, Vol.2, No.2, on-line journal; <http://www.iwaponline.com/wpt/002/wpt0020052.htm>.
- (6) Michio Murakami, Fumiuki Nakajima, Hiroaki Furumai, Bunbunoshin Tomiyasu, and Masanori Owari (2007) Identification of particles containing chromium and lead in road dust and soakaway sediment by electron probe microanalyser, *Chemosphere*, Vol.67, No.10, pp.2000-2010.
- (7) Akihiro Nagaiwa, Katsushi Settsu, Fumiuki Nakajima and Hiroaki Furumai (2007) Identification of sewer pipes to be cleaned for reduction of CSO pollutant load, *Water Science & Technology*, Vol.55, No.4, pp.75-83.
- (8) Rupak Kumar Aryal, Hiroaki Furumai, and Fumiuki Nakajima, and Jinadasa H.K.P.K. (2007) The role of inter-event time definition and recovery of initial/depression loss for the accuracy in quantitative simulations of highway runoff, *Urban Water Journal*, Vol.4, No.1, pp.53-58.
- (9) Limpiyakorn T., Sakamoto Y., Kurisu F. and Yagi O. (2007) Effects of ammonia and nitrite on communities and populations of ammonia-oxidizing bacteria in laboratory-scale continuous-flow reactors, *FEMS Microbiology Ecology*, Vol.60, No.3, pp.501-512.
- (10) Ikuro Kasuga, Dai Shimazaki, and Shoichi Kunikane (2007) Influence of backwashing on microbial community in biofilm developed on biological activated carbon in an advanced drinking water purification plant, *Water Science & Technology*, Vol.55, No.8-9, pp.173-180.

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- (1) 辻幸志, 藤田昌史, 金元載, 真名垣聰, 中島典之, 古米弘明(2007)晴天時に住宅地域から排出された生活廃水中のLASの動態, *水環境学会誌*, Vol.30, No.10, pp.579-583.
- (2) 小松俊哉, 真部良章, 姫野修司, 原田新, 村上道夫, 古米弘明(2007)全国河川水の変異原性生成能

の分布および一般水質項目・河川特性との関連性、水環境学会誌、Vol.30, No.8, pp.433–440.

- (3) 長岩明弘, 古米弘明, 中島典之, 斗成聰一(2007)上流管路の水質を時系列入力情報とした合流改善のためのオンライン負荷量予測モデルの検討, 用水と廃水, Vol.49, No.6, pp.487–494.
- (4) 藤田昌史, 辻幸志, 和田真澄, 古米弘明(2007)外乱応答実験を利用した生物学的リン除去プロセスを組み込んだASM3のキャリブレーション, 用水と廃水, Vol.49, No.3, pp.50–58.

○ 国際学会発表/Presentations at International Conferences

- (1) Futoshi Kurisu, Seigen Kawashima, Ikuro Kasuga, and Hiroaki Furumai (2007) Analysis of Urban Water Problems in Medan City, Indonesia, The 5th International Symposium on Southeast Asian Water Environment (7-9 Nov, Chiang Mai, Thailand) [Oral]
- (2) Weon-Jae Kim, Satoshi Managaki, Hiroaki Furumai, Fumiayuki Nakajima (2007) Diurnal fluctuation of indicator microorganisms and intestinal viruses in combined sewer system, 2nd IWA - ASPIRE Asia-Pacific Regional Group Conference & Exhibition, file name in Conference CD: 186.pdf. (Oct, Perth, Australia) [Oral]
- (3) Mohammed Abed Hossain, Hiroaki Furumai, Fumiayuki Nakajima (2007) Competitive adsorption of heavy metals in soil underlying an infiltration facility installed in urban area, 2nd IWA - ASPIRE Asia-Pacific Regional Group Conference & Exhibition, file name in Conference CD: P031.pdf. (Oct, Perth, Australia) [Poster]
- (4) G.G.Tushara Chaminda, Fumiayuki Nakajima, Hiroaki Furumai (2007) Heavy metal (Zn and Cu) complexation and molecular size distribution in wastewater treatment plant effluent, 2nd IWA - ASPIRE Asia-Pacific Regional Group Conference & Exhibition, file name in Conference CD: 015.pdf. (Oct, Perth, Australia) [Oral]
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- (6) Rupak Kumar Aryal, Hiroaki Furumai, Fumiayuki Nakajima, and Mohammed Abed Hossain (2007) Possible threat of groundwater contamination due to prolonged deposition of sediment in infiltration facilities in Tokyo, Proc. 2nd International Workshop on Rainwater and Reclaimed Water for Urban Sustainable Water Use, pp.31-43. (Oct, Kyoto, Japan) [Oral]
- (7) Hiroaki Furumai and Fumiayuki Nakajima (2007) Behavior of urban non-point pollutants and rainwater infiltration, Proc. 2nd International Workshop on Rainwater and Reclaimed Water for Urban Sustainable Water Use, pp.7-20. (Oct, Kyoto, Japan) [Oral]
- (8) Zang Kaisai, Futoshi Kurisu, Ikuro Kasuga, and Hiroaki Furumai (2007) In situ phylogenetic identification of estrone-degrading bacteria in activated sludge, Proc. 2nd International Workshop on Rainwater and Reclaimed Water for Urban Sustainable Water Use. (Oct, Kyoto, Japan) [Poster]
- (9) Akihiro Nagaiwa, Hiroaki Furumai, Fumiayuki Nakajima, and Souichi Tonari (2007) Pollutant load prediction for RTC by system identification model using time-series monitored data, Proceedings of NOVATECH 2007, pp.785-792. (June, Lyon, France) [Oral]
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Lyon, France) [Oral]

- (11) Shoko Iwai, Futoshi Kurisu, Hidetoshi Urakawa, Ikuro Kasuga, Osami Yagi, and Hiroaki Furumai (2007) An oligonucleotide microarray for analysis of benzene oxygenase genes in soils, The 107th Genral Meeting of American Society for Microbiology, Q-362, p.184. (May, Toronto, Canada) [Poster]

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- (1) 高橋仁, 栗栖太, 春日郁朗, 古米弘明(2007)RNA arbitrarily primed PCR(RAP-PCR)法による活性汚泥微生物群の遺伝子発現解析の試み, 第44回環境工学研究フォーラム講演集, pp.60-62. (11.16-18, 山口) [ポスター]
- (2) 飛野智宏, 栗栖太, 春日郁朗, 古米弘明(2007)ランダムゲノムライブラリを用いたアイソトープアレイによる基質特異的な細菌の検出, 第44回環境工学研究フォーラム講演集, pp.230-232. (11.16-18, 山口) [ポスター]
- (3) 古米弘明, 中島典之(2007)都市ノンポイント汚染物質の動態評価・モデル解析, Proc. 2nd International Workshop on Rainwater and Reclaimed Water for Urban Sustainable Water Use, pp.229-233. (10月, 京都) [口頭]
- (4) Zang Kaisai, Futoshi Kurisu, Ikuro Kasuga, and Hiroaki Furumai(2007)In situ identification of estrone-degrading microorganisms belonging to Betaproteobacteria in activated sludge, 第23回日本微生物生態学会講演要旨集, p.73. (9.15-18, 松山) [口頭]
- (5) 馴欣, 栗栖太, 春日郁朗, 古米弘明(2007)水溶性切削油廃液処理プロセスからの好気好熱性ジシクロヘキシリアミン分解細菌の分離, 第23回日本微生物生態学会講演要旨集, p.74. (9.15-18, 松山) [口頭]
- (6) 長岩明弘, 古米弘明, 中島典之, 斗成聰一(2007)合流式下水道雨天時越流負荷制御のためのオンライン流量予測モデルの精緻化, 第44回下水道研究発表会講演集, pp.277-279. (7.24-26, 東京) [口頭]
- (7) 金元載, 真名垣聰, 古米弘明, 中島典之(2007)晴天時合流式下水水質の時間変動特性を考慮したCSO汚濁負荷量の評価, 第44回下水道研究発表会講演集, pp.286-288. (7.24-26, 東京) [口頭]
- (8) 小村 拓也, 諸泉 利嗣, 大久保 賢治, 小野 芳朗, 谷口 守, 古米 弘明(2007)アジアの大都市における水資源賦存量の推定, 水文・水資源学会2007年度研究発表会要旨集, P-47. (7.25) [ポスター]
- (9) G.G.Tushara Chaminda, 中島典之, 古米弘明, 春日郁朗, 栗栖太(2007)都市下水処理水中の亜鉛の化学形態と錯体の分子サイズ分布, 第16回環境化学討論会講演要旨集, pp.712-713 (6.20-22, 北九州) [ポスター]
- (10) 春日郁朗, 島崎大, 国包章一(2007)培養法と分子生物学的手法による生物活性炭槽内の従属栄養細菌の評価, 第58回全国水道研究発表会講演集, p.614-615. (5.23-26, 釧路) [口頭]
- (11) 藤田誠, 村上道夫, 春日郁朗, 栗栖太, 古米弘明(2007)雨水浸透枠における道路排水中の形態別重金属の吸脱着特性の解析, 第41回日本水環境学会年会講演集, p.9. (3.15-17, 大阪) [口頭]
- (12) 高橋亮介, 栗栖太, 春日郁朗, 古米弘明, 岩井祥子, 矢木修身(2007)16S-23S rDNAスペーサー領域を用いた*Janibacter terrae*近縁株の特異的検出とダイオキシン類分解能の評価, 第41回日本水環境学会年会講演集, p.50. (3.15-17, 大阪) [口頭]
- (13) 岩井祥子, 栗栖太, 浦川秀敏, 春日郁朗, 矢木修身, 古米弘明(2007)マイクロアレイによる土壤中ベンゼン酸化遺伝子の網羅的検出, 第41回日本水環境学会年会講演集, p.54. (3.15-17, 大阪) [口頭]
- (14) 村上道夫, 佐藤修之, 篠原裕之, 高田秀重, 古米弘明(2007)土壤浸透による道路排水中フッ素系界面活性剤および重金属類の除去, 第41回日本水環境学会年会講演集, p.102. (3.15-17, 大阪) [口頭]
- (15) 和田健男, 栗栖太, 春日郁朗, 矢木修身, 古米弘明(2007)クロロエチレン類脱塩素化集積培養系の脱塩素化活性に及ぼす酸化還元電位の影響, 第41回日本水環境学会年会講演集, p.165. (3.15-17, 大阪) [口頭]
- (16) 細見暁彦, 春日郁朗, 栗栖太, 古米弘明(2007)多摩川における微細有機物の動態に及ぼす下水処理

- 水流入及び河川構造物の影響, 第 41 回日本水環境学会年会講演集, p.346. (3.15-17, 大阪) [口頭]
- (17) 真名垣聰, 金元載, 古米弘明, 高田秀重, 中島典之(2007)人の排泄行動を考慮した生下水中における抗生物質の 24 時間変動の特性評価, 第 41 回水環境学会年会講演集, p.392. (3.15-17, 大阪) [口頭]
- (18) 酒井名朋子, 栗栖太, 中島典之, 山本和夫, 矢木修身(2007)新規 Syntrophobacterales 目類縁菌の嫌気ベンゼン分解微生物培養系における挙動解析, 第 41 回水環境学会年会講演集, p.53. (3.15-17, 大阪) [口頭]
- (19) 毛利紫乃, 原田新, 佐藤修之, 小松俊哉, 田中宏明, 小野芳朗, 古米弘明(2007)都市水資源の合理的利用のための水質リスクの新規評価手法, 第 41 回日本水環境学会年会講演集, p.414. (3.15-17, 大阪) [口頭]
- (20) 藤田昌史, 辻幸志, 古米弘明(2007)都市下水に洗濯洗剤を強制添加して連続運転した嫌気好気活性汚泥のリン放出活性の変化, 第 41 回日本水環境学会年会講演集, p.444. (3.15-17, 大阪) [口頭]
- (21) 辻幸志, 藤田昌史, 古米弘明(2007.3)嫌気条件下において LAS と AE から生成した酢酸のリン放出への寄与, 第 41 回日本水環境学会年会講演集, p.445. (3.15-17, 大阪) [口頭]
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- (4) Shinohara H., Tanishima T., Kojima S., Managaki S., Takada H., Nakada N., Tanaka H., Nakajima F. and Furumai H.: Water-soluble organic micro-pollutants in municipal wastewater and their removal during advanced treatment, Southeast Asian Water Environment 2, 311-318, IWA Publishing, 2007.
- (5) 古米弘明(分担執筆) (2007) 河川の水質と生態系—新しい河川環境創出に向けて(大垣真一郎監修、財団法人河川環境管理財団編), 技報堂出版.

○ その他記事/Other Articles

- (1) 古米弘明 (2007) [インタビュー] 行政が踏まえるべき視点と考え方特別 (キャンペーン企画:更新が必要! 円滑に水道の更新事業を進めるために(Part2)), 水道公論, 43(5), pp.33-46.