

AUREA C. CHIAIA-HERNÁNDEZ R.

Research Output List

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PEER-REVIEWED PUBLICATIONS:

Unravelling contaminants in the Anthropocene using statistical analysis of LC-HRMS nontarget screening data as recorded in lake sediments

Aurea C. Chiaia-Hernández, Barbara F. Günthardt, Martin P. Frey, and Juliane Hollender

Environ. Sci. Technol., 2017, 51 (21), 12547-12556. <http://dx.doi.org/10.1021/acs.est.7b03357>

Long-term Persistence of Pesticides and TPs in Archived Agricultural Soil Samples and Comparison with Pesticide Application

Aurea C. Chiaia-Hernández, Armin Keller, Martin Krauss, Daniel Wächter, Christine Steinlin, Louise Camenzuli, and Juliane Hollender

Environ. Sci. Technol., 2017, 51 (18), pp 10642-10651. <http://dx.doi.org/10.1021/acs.est.7b02529>

A Mixture of Environmental Organic Contaminants in Lake Sediments affect Hatching of *Daphnia* Resting Eggs

Markus Moest, Aurea C. Chiaia-Hernández, Martin P. Frey, Juliane Hollender and Piet Spaak

Environ. Toxicol. Chem. 2015, 34 (2), pp 338-345. <http://dx.doi.org/10.1002/etc.2808>

Suspect and nontarget screening approaches to identify organic contaminant records in lake sediments

Aurea C. Chiaia-Hernández, Emma L. Schymanski, Praveen Kumar, Heinz P. Singer and Juliane Hollender. Anal. Bioanal. Chem. 2014, 406 (28), pp 7323-7335.

<http://dx.doi.org/10.1007/s00216-014-8166-0>

Bioaccumulation of Organic Contaminants from Sediments in *Daphnia* Resting Eggs

Aurea C. Chiaia-Hernández, Roman Ashauer, Markus Moest, Tobias Hollingshaus, Piet Spaak and Juliane Hollender

Environ. Sci. Technol., 2013, 47 (18), pp 10667–10675. <http://dx.doi.org/10.1021/es401763d>

Screening of Lake Sediments for Emerging Contaminants by Liquid Chromatography Atmospheric Pressure Photoionization and Electrospray Ionization Couple to High Resolution Mass Spectrometry

Aurea C. Chiaia-Hernández, Martin Krauss and Juliane Hollender

Environ. Sci. Technol., 2012, 47(2), pp 976-986. <http://dx.doi.org/10.1021/es303888v>

Interpreting Methamphetamine Levels in a High-Use Community

Aurea C. Chiaia-Hernández, Caleb Banta-Green and Jennifer A. Field
Environ. Sci. and Pollut. R., 2011, 18 (9), pp 1471-1477. <https://doi.org/10.1007/s11356-011-0495-3>

The spatial epidemiology of cocaine, methamphetamine and 3,4-methylenedioxymethamphetamine (MDMA) use: a demonstration using a population measure of community drug load derived from municipal wastewater
Caleb J. Banta-Green, Jennifer A. Field, Aurea C. Chiaia, Daniel L. Sudakin, Laura Power, Luc de Montigny
Addiction, 2009, 104 (11), pp 1874-1880. <http://dx.doi.org/10.1111/j.1360-0443.2009.02678.x>

Eliminating Solid Phase Extraction with Large-Volume Injection LC/MS/MS: Analysis of Illicit and Legal Drugs and Human Urine Indicators in US Wastewaters
Aurea C. Chiaia, Caleb Banta Green and Jennifer A. Field
Environ. Sci. Technol., 2008, 42 (23), pp 8841–8848. <http://dx.doi.org/10.1021/es802309v>

Occurrence and Mass Flows of Fluorochemicals in the Glatt Valley Watershed, Switzerland
Carin A Huset, Aurea C. Chiaia, Douglas F Barofsky, Niels Jonkers, Hans-Peter E. Kohler, Christoph Ort, Walter Giger, and Jennifer A Field
Environ. Sci. Technol., 2008, 42 (17), pp 6369–6377. <http://dx.doi.org/10.1021/es703062f>

PEER-REVIEWED CONFERENCE PROCEEDINGS

Tracing of micropollutants sources in urban receiving waters based on sediment fingerprinting.
Anna E., Sikorska, Andreas Scheidegger, Aurea C Chiaia-Hernández, Juliane Hollender, Joerg Rieckermann, *In Proceedings of 2007 of Conference Proceeding of the 9th International Conference on Urban Drainage Modelling, Belgrade, Serbia, 2012*

ADDITIONAL PUBLICATIONS AND PUBLISHED ABSTRACTS:

Conference Report - International conference on contaminated sediments, Monte Verità, Ascona, Switzerland—ContaSed

Aurea C Chiaia-Hernández and Walter Giger
ESPR, 2016, 23(11), 10304-10307. <http://dx.doi.org/10.1007/s11356-016-6700-7>

Editorial - Recent sediments: environmental chemistry, ecotoxicology and engineering
Christian Bogdal, Aurea C Chiaia-Hernández and Walter Giger
ESPR, 2016, 23(11):10301-3. <http://dx.doi.org/10.1007/s11356-016-6719-9>

Conference Report - International Conference on Contaminated Sediments - ContaSed 2015, Monte Verità, Ascona, Switzerland
Aurea C Chiaia-Hernández and Walter Giger
Chimia 2015; 69(7-8):488-90. <http://dx.doi.org/10.2533/chimia.2015.488>

Mass Flow of fluorochemicals in the Glatt River valley (2009)

Carin A Huset, Aurea C Chiaia, Douglas F Barofsky, Niels Jonkers, Hans-Peter E Kohler, Walter Giger, and Jennifer A Field

In Abstracts of The American Chemical Society, Boston, MA

Community burdens of methamphetamine and other illicit drugs. (2007)

Aurea C Chiaia, Caleb Banta-Green, Laura Power, Dan L Sudakin, Jennifer A Field

In Abstracts of the 6th International Conference on Pharmaceuticals and Endocrine Disrupting Chemicals in Water, Costa Mesa, CA

Determination of illicit drugs and biomarkers in raw municipal wastewater influent as a tool for drug epidemiology. (2007)

Aurea C Chiaia, Daniel L Sudakin, Caleb Banta-Green, Jennifer A Field

In Abstracts of The American Chemical Society, Boston, MA

ORAL CONTRIBUTIONS TO CONFERENCES (2 INVITED, TOTAL 16):

June 2017: Platform presentation at the 16th EuCheMS International Conference on Chemistry and the Environment (ICCE 2017), Oslo, Norway (2 presentations)

“Prioritizing relevant nontarget contaminants using statistical analysis of LC-HRMS data of lake sediments”

Aurea C. Chiaia-Hernández, B. F. Günthardt, Martin P. Frey and J. Hollender

“Top-down and bottom-up approaches to identify organic contaminants in soils”

Aurea C. Chiaia-Hernández, Armin Keller, Daniel Wächter, Martin Krauss, Greta Stieger, Martin Scheringer, Thomas D. Bucheli, and Juliane Hollender

May 2016: Platform presentation at the Non-Target Screening Conference, Monte Verità, Ascona, Switzerland

“Temporal Trend Analysis on LC-HRMS Measurements of Lake Sediments to Prioritize Organic Contaminants”

Aurea C. Chiaia-Hernández, B. F. Günthardt, A. Müller, E. L. Schymanski and J. Hollender

September 2015: Platform presentation at the 15th EuCheMS International Conference on Chemistry and the Environment (ICCE 2015), Leipzig, Germany

“Early identification of organic contaminants by a multimedia fate model and high resolution mass spectrometry”

Aurea C. Chiaia-Hernández, Greta Stieger, Martin Scheringer, Thomas D. Bucheli, Armin Keller, Daniel Wächter, Juliane Hollender

September 2015: Platform presentation at the 20th SETAC GLB, Zurich, Switzerland (Invited Speaker)

“Prioritizing organic contaminants in Swiss soils using environmental partitioning and high resolution mass spectrometry”

Aurea C. Chiaia-Hernández, Greta Stieger, Martin Scheringer, Thomas D. Bucheli, Armin Keller, Daniel Wächter, Juliane Hollender

March 2015: Platform presentation at the ContaSed2015, Monte Verità, Ascona, Switzerland
(Invited Speaker)

“Temporal records of organic contaminants in lake sediments and their impact on *Daphnia* populations”

Aurea C Chiaia-Hernández, R. Ashauer, M. Moest, P. Spaak and J. Hollender

May 2013: Platform presentation at the 23rd SETAC Europe Annual Meeting, Glasgow, Scotland, UK

“Can organic contaminants in lake sediments bioaccumulate in *Daphnia* resting eggs?”

Aurea C Chiaia-Hernández, Tobias Hollingshaus, Markus Moest, Piet Spaak and Juliane Hollender

May 2013: Poster presentation at the 23rd SETAC Europe Annual Meeting, Glasgow, Scotland, UK

“Target, suspect and non-target screening of lake sediments using HR-MS/MS”

Aurea C Chiaia-Hernández, Emma Schymanski, Heinz Singer, and Juliane Hollender

May 2012: Poster presentation at the 6th SETAC World Congress 2012, Berlin, Germany

“Bioaccumulation of Xenobiotics in *Daphnia* diapausing eggs” (2 presentations)

Aurea C Chiaia-Hernández, Tobias Hollingshaus, Markus Moest, Piet Spaak, and Juliane Hollender

“Target and Non-target screening of lake sediments using HR-MS/MS”

Aurea C Chiaia-Hernández, Heinz Singer, and Juliane Hollender

August 2011: Platform presentation at the EmCon 2011, Copenhagen, Denmark

“Screening of medium polar organic contaminants in lake sediments using LC-APPI-HR-MS and LC-ESI-HR-MS”

Aurea C Chiaia-Hernández, Heinz Singer and Juliane Hollender

November 2010: Platform presentation at the 27th IAEAC Symposium on LC/MS, Montreux, Switzerland

“Analysis of medium polar organic compounds in lake sediments using LC-APPI/ESI-HR-MS”

Aurea C Chiaia-Hernández, Joris Buiters, Heinz Singer and Juliane Hollender

June 2008: Poster presentation at Gordon Research Conference 2008 Environmental Sciences: Water, Holderness, NH

“Large Volume (1,800 µL) Injection HPLC/MS/MS for the Quantitative Determination of Illicit Drugs and Human Urinary Biomarkers in Municipal Wastewater”

Aurea C. Chiaia, Caleb Banta Green, Dan Sudakin, Laura Powers and Jennifer A. Field

March 2008: Platform presentation at SETAC Pacific North West 2008 Annual Meeting, Corvallis, OR

“Illicit Drugs and Biomarkers in Raw Wastewater: a New Tool for Drug Epidemiology”

Aurea C. Chiaia, Dan Sudakin, Laura Powers, Caleb Banta-Green, and Jennifer A. Field

November 2007: Platform presentation at SETAC North America 28th Annual Meeting, Milwaukee, WI

“Large-Volume Injection LC-ESI/MS: Development and Application to Fluorochemicals and Illicit Drugs in Municipal Wastewater”

Aurea C. Chiaia, Melissa M. Schultz, Carin A. Huset, Douglas F. Barofsky and Jennifer A. Field

October 2007: Platform presentation at the 6th International Conference on Pharmaceuticals and Endocrine Disrupting Chemicals in Water, Costa Mesa, CA

“Illicit Drugs and Biomarkers in Raw Wastewater: a New Tool for Drug Epidemiology”

Aurea C. Chiaia, Dan Sudakin, Laura Powers, Caleb Banta-Green, and Jennifer A. Field