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Dear Colleagues and Friends,

on behalf of the National Scientific Committee and the International Advisory Board, it’s a great pleasure and honor to welcome you to Firenze, Italy, for the 36th International Symposium on Halogenated Persistent Organic Pollutants DIOXIN 2016.

The idea of the Symposium, was born in Rome in 1979 when some scientists convened to discuss about the 1976 Seveso accident and the Dioxin related problems. Now, 40 years after Seveso we gather in Firenze. During these years the Dioxin Symposia have greatly contributed, year by year, to the knowledge of dioxin and POPs and their relation to health and environment.

In relation to this 40th occurrence we have paid special attention to the young people introducing three “5 minutes” students’ oral communications in plenary session after each morning plenary lecture and a young researcher selected presentation (if available) in every session. We hope to have contributed to make “Dioxin 2016 Firenze” a memorable meeting even if the merit of this will be yours.

There will be almost 600 abstracts presented from 47 Countries, which have been distributed in seven topics in five concurrent sessions plus an eighth special session with different ten topics including “Seveso”.

We hope that this Symposium will contribute, following paths of the proceeding ones, to increase our knowledge about POPs and their effects on health and environment, as well to give value both to the work of all scientists and strength and acuteness especially to the young ones.

In addition to all of you, we have many to thank: the Institutions for their auspices, in particular the Universities of Milan Bicocca and of Milan and of Florence, the Government of Region Lombardia where Seveso is situated, the Italian Institute of Health, the Italian Ministry of the Environment, all the members of the different Committees and the Board, the chairs and co-chairs for their great help. And last but not least, the sponsors, the exhibitors and the vendors for their support and their seminars.

We are gathering in Firenze, one of the cradles of Renaissance. The Opening Lecture on Sunday will highlight this; we invite you to test the cultural atmosphere of the city. In addition to the informal reception on Sunday, we have organized a concert in San Lorenzo Basilica, one of the most relevant churches of the Renaissance period, on Monday evening which we hope you will enjoy.

We welcome you and deeply hope that you will have a great time in Firenze at Dioxin 2016!

Paolo Mocarelli and Paolo Brambilla
Symposium Chairs
COMMITTEES

SYMPOSIUM CHAIRS
Paolo Mocarelli, University of Milan Bicocca, Italy
Paolo Brambilla, University of Milan Bicocca, Monza - Desio Hospital, Italy

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Stephen H. Safe, Texas A and M University, USA
João Vicente de Assunção, University of São Paulo, Brazil
Jae-Ho Yang, Catholic University of Daegu, Korea
Minghui Zheng, Chinese Academy of Sciences, Peoples’s Republic of China

NATIONAL SCIENTIFIC COMMITTEE
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Pier Alberto Bertazzi - Università degli Studi di Milano
Laura Bonati - Università degli Studi Milano Bicocca
Alessandra Cincinelli - Università degli Studi di Firenze
Simonetta Corsolini - Università degli Studi di Siena
Elena De Felip - Istituto Superiore di Sanità, Roma
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Silvio Garattini - Istituto di Ricerche Farmacologiche Mario Negri, Milano
Ettore Guerriero - Istituto sull’Inquinamento Atmosferico CNR - Roma
Giampiero Scortichini - Istituto Zooprofilattico Sperimentale, Perugia
Werner Tirler - Eco-Research, Bolzano
CHAIRS AND CO-CHAIRS

Alaee Mehran
Andreas Sjodin
Ballarini-Denti Antonio
Becher Georg
Bertazzi Pier Alberto
Birnbaum Linda
Bouwman Hindrik
Brambilla Gianfranco
Brambilla Paolo
Bussian Bernd
Calafat Antonio
Calaprice Chiara
Castro Jiménez Javier
Ceci Roberta
Chang Moo-Been
Chen Shejun
Ciesa Flavio
Cincinelli Alessandra
Corsolini Simonetta
Covaci Adrian
de Boer Jacob
De Wit Cynthia
Denison Michael S.
Eskenazi Brenda
Esposito Vittorio
Falandysz Jerzey
Fiedler Heidelore
Focant Jean-Francois
Germansderfer Phil
Gerthoux Piermario
Grandjean Philippe
Harner Tom

Harrad Stuart
Hayes Tyrone
Hayward Douglas
Hunt Gary
Jiang Guibin
Jiménez Begoña
Jones Gareth Rhys
Jun Huang
Koppe Janna
Kupryianchyk Darya
Leonards Pim
Letcher Robert
Lind Monica
Lohmann Nina
Luo Xiaojun
Makey Colleen
Malish Rainer
Marian Pavuk
Marúya Keith
Mocarelli Paolo
Morita Masatoshi
Mosca Silvia
Muir Tom Betty
Müller Jochen
Nakano Takesi
Olie Kees
Olukunle Olubiyi
Paolini Valerio
Patterson Donald
Petreas Myrto
Pizzochero Ana Carolina
Polder Anuschka

Pozo Karla
Protano Carmela
Qadir Abdul
Ratola Nuno
Reiner Eric
Ricci Marina
Riviere Gilles
Roos Ann
Rose Martin
Saha Mahua
Schecter Arnold
Scortichini Giampiero
Shaw Susan
Shirkhan Hamid
Sun Yangzhao
Thomsen Cathrine
Tirler Werner
Torres João Paulo
Van den Berg Martin
Van Hoeymissen Jan
Vecchiato Marco
Venier Marta
Vetter Walter
Vicente de Assunção João
Warner Marcella
Weber Roland
Webster Thomas F.
Yang Jae-Ho
Zalko Daniel
Zheng Minghui
Abad Esteban
Adesina Olusola
ADU-KUMI SAM
Akortia Eric
Alcama Cecilia
Ames Jennifer
Amo-Gonzalez Mario
Antignac Jean-Philippe
Arisawa Kokichi
Arkenbout Abel
Aylward Lesa
Baduel Christine
Banks Andrew
Barber Jonathan
Bernsman Thorsten
Bidleman Terry F.
Birnbaum Linda S
Blum Arlene
Brambilla Gianfranco
Bramwell Lindsay
Bramson Sicco
Braune Birgit
Briels Nathalie
Brumovský Miroslav
Bussian Bernd
Butryn Deena
Calaprice Chiara
Can-Guven Emine
Cappellini Fabrizio
Cariou Ronan
Carlsson Pernilla
Cavaleri d’Oro Luca
Chang Moo-Been
Chen Zhiliang
Choo Gyojin
Chu Van Hai
Ciesa Flavio
Cochran Jack
Consonni Dario
Cosgrove John R.
Dahlberg Anna Karin
Dar Tajwar
De Assuncao Joao Vicente
de Boer Jacob
De Paola Massimiliano
Demirtepe Hale
Dervilly-Pinel Gaud
Desforges Jean-Pierre
Diaz-Ferrero Jordi
Dlugosz Bogdan Z
Dominguez-Morueco Noelia
Dorman Frank L
Duca Radu Corneliu
Dumanoglu Yetkin
Dunnick June
Eppe Gauthier
Eriksson Ulrika
Eskenazi Brenda
Faxonel Suzanne
Fernandes Alwyn
Fernie Kim
Fiedler Heidelore
Frederiksen Marie
Gan Jay
Geng Dawei
Gevao Bondi
Glynn Anders
Grandjean Philippe
Grova Nathalie
Guzzonato Antonella
Haedrich Johannes
Halloum Wafaa
Harrad Stuart
Haug Line Småstuen
Hayward Douglas
Helaleh Murad
Hennig Bernhard
Herzke Dorte
Heyddecke Franziska
Hoffman Kate
Hoogenboom Ron
Huang Jun
Idialu Ofure Ruth
Ingelido Anna Maria
Ionas Alin Constantin
Ismail Iqbal Mohammad Ibrahim
Jensen Allan Astrup
Jeon Yunsun
Ji Long-jie
Johansson Jana
Jones Gareth Rhys
Kademoglu Katerina
Kaserzon Sarit
Ki Yong Kim
Kim Da-Hye
Klanova Jana
Knudsen Gabriel
Koch Christoph
Koppe Anna G.
Koskela Antti
Kuang Jiangmeng
Kukucka Petr
Kupryianchyk Darya
Kylin Henrik
Lacorte Silvia
Lammel Gerhard
Leonards Pim
Letcher Robert James
Li Hai-Ling
Li Jing
Li Sumei
Li Yi Na
Li Yi-Fan
Lind Monica
Lindeman Avery
LIU Xiaotu
Liu Xin
Löchner Dominique
Løseth Mari Engvig
Lu Mengnan
Lucattini Luisa
Luo Xiao-Jun
Machado Torres Joao Paulo
<table>
<thead>
<tr>
<th>Presenters</th>
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<tbody>
<tr>
<td>Makey Colleen</td>
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<tr>
<td>Malik Riffat Naseem</td>
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<td>Malisch Rainer</td>
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<td>Malycheva Svetlana V.</td>
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<td>Mao Shuduan</td>
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<td>Maruya Keith</td>
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<td>Matsukami Hidenori</td>
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<td>Mendez Annelle</td>
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<td>Moche Wolfgang</td>
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<td>Mosallanejad Sara</td>
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<td>Phillips Allison</td>
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<td>Saha Mahua</td>
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<td>Swiegelaar Caitlin</td>
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<td>Trnovec Tomas</td>
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<td>Tsai Pei Chun</td>
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<td>Tsui Mirabelle Mei Po</td>
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<td>Van Langenhove Kersten</td>
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<td>Van Leeuwen Stefan</td>
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<td>van Mourik Louise</td>
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<td>Vorkamp Katrin</td>
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<td>Wahl Kerstin</td>
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<td>Wahlang Banrida</td>
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<td>Warner Marcella</td>
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<td>Warner Nicholas Alexander</td>
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<td>Wong Fiona</td>
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<td>Xu Fuchao</td>
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<td>Yamashita Nobuyoshi</td>
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<td>Yamazaki Eriko</td>
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<td>Yuan Bo</td>
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<td>Zennegg Markus</td>
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<td>Zhang Qinghua</td>
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<td>Zhao Zhonghua</td>
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<td>Zhu Lingyan</td>
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</tbody>
</table>

**Colour Legend of the detailed Scientific Program**

- Student: 🔴
- Young Researcher: 🔵

More information about Speakers and presentations available in the Symposium App
Venue

Congress and Exhibition Center
Piazza Adua, 1
FIRENZE
www.firenzefiera.it

Located in the heart of Florence, it is only a few steps away from the Santa Maria Novella Railway Station and only 5 km from the Amerigo Vespucci Airport. The Venue offers two buildings: Palazzo dei Congressi and Palazzo degli Affari.

Palazzo dei Congressi
Located in the 19th century Villa Vittoria, Palazzo dei Congressi boasts a prestigious auditorium which can host up to 1,000 people, with 920 square meters available for exhibitions, as well as various halls.

Palazzo dei Congressi will host: Michelangelo Auditorium, Exhibition and posters Areas, Onice Room, Raffaello Room.

Palazzo degli Affari
Designed by Architect Pierluigi Spadolini, the modern Palazzo degli Affari has a multifunctional and flexible structure and is built on 5 floors, with an overall capacity of 1,800 people.

Palazzo degli Affari will host: Leonardo Room, Galileo Room, Giotto Room.

Limonaià
Limonaià will host the Media Desk and the Cloakroom.

Wi-Fi Connection

Wi-Fi connection will be available in all the building; please find DIOXIN2016 on the network, and insert your password: dioxin2016
About Firenze

In the basin crossed by the Arno River, stands the magnificent City of Florence, one of the most beautiful cities in Europe, filled with historical relics and artistic masterpieces by the greatest masters of Humanism and the Renaissance. Because of its monuments, churches and palaces, Florence historical center has an outstanding universal value and was classified as a World Heritage Site by UNESCO.

More Firenze’s info:

Leisure and Culture: http://www.firenzemusei.it/
Interactive Map: http://www.italyguides.it/en/tuscany/florence/interactive-map-of-florence#!/catid=34

Firenze Card

For the Accompanying persons, the city of Florence has a special tourist card, which is called Firenze Card. It is valid for 72 hours and provides you the admission to 72 museums, villas and historical gardens located in Florence and in the surrounding area.

Firenze Card costs € 72,00, you can purchase it at some of the museums and at the tourist information offices: Piazza Stazione 4 (from Monday to Saturday 9:00 -19:00, Sunday and holidays 9:00-14:00), via Cavour 1r (from Monday to Friday 9:00-13:00, closed on Saturday and Sunday) and online.

Purchasers of Firenze Card have priority access to museums provided they enter the reserved entrance; the validity of the card starts at the first museum you visit.
Every card includes free access to museums for a second person or more if younger than 18 (EU citizens only).

The Firenze Card has also a PLUS version.

With the Firenze Card + (Firenze Card Plus) you get more services: you can travel with all city buses for 3 days (the day of the first use and the following two days until midnight), you have free WIFI for 72 hours and commercial partners with discounts and offers. The Firenze Card Plus costs only € 5,00 and you can buy it only if you have the Firenze Card.

Organizing Secretariat

MZ CONGRESSI srl
Via Carlo Farini 81,
20159 Milano - Italy

www.mzcongressi.com
**USEFUL INFORMATION**

**Official Language**
The official language of the Symposium is English. Simultaneous translation will not be provided.

**Currency**
Since 2002, the currency used in Italy is the euro. One euro is divided up into 100 euro-cents. There are eight different coins (1 cent, 2 cents, 5 cents, 10 cents, 20 cents, 50 cents 1€ and 2€) and seven notes (5, 10, 20, 50, 100, 200 and 500 euros).

**Climate**
In Florence, in August the average daily highs range is from 28-31°C but temperatures cool off during the evening. Moreover, rain is very rare during this month.

**Electricity**
In Italy the electrical current is 220 volts AC (50 Hz). Electrical sockets comply with European regulations. In most hotels you will find adaptors for different types of plugs.

**Safety**
Firenze is as safe as any other European tourist city. Participants are advised to take the usual prudent precautions.

**Useful telephone numbers**

- **Emergency**: +39 112
- **Airport**: +39 055 30615
- **Radio Taxi**: +39 055 4390
  +39 055 4242
REGISTRATION

The registration desk will be located at the entrance of the Symposium Center and will be opened during the following hours:

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
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<tbody>
<tr>
<td>Sunday - August 28th</td>
<td>14:00 - 19:00</td>
</tr>
<tr>
<td>Monday - August 29th</td>
<td>8:00 - 18:00</td>
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<tr>
<td>Tuesday - August 30th</td>
<td>8:30 - 18:00</td>
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<tr>
<td>Wednesday - August 31st</td>
<td>8:30 - 12:30</td>
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<tr>
<td>Thursday - September 1st</td>
<td>8:30 - 18:00</td>
</tr>
<tr>
<td>Friday - September 2nd</td>
<td>8:30 - 13:00</td>
</tr>
</tbody>
</table>

Participants wishing to register onsite, may carry out their registration at the registration desk.
The prices below are in Euros (€) and local payment will be through credit card or cash.

Onsite registration

<table>
<thead>
<tr>
<th>Category</th>
<th>Price (€) (incl. 22% vat)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Registration</td>
<td>1200 (€ 983,61 + 22% vat)</td>
</tr>
<tr>
<td>Student Registration</td>
<td>700 (€ 573,77 + 22% vat)</td>
</tr>
<tr>
<td>Accompanying Person</td>
<td>300 (€ 245,90 + 22% vat)</td>
</tr>
<tr>
<td>Daily Fee Registration</td>
<td>370 (€ 303,28 + 22% vat)</td>
</tr>
</tbody>
</table>

REGISTRATION FEE FOR PARTICIPANTS INCLUDES:

- Symposium bag and information package
- Admission to all sessions throughout the Symposium
- Admission to the exhibition area throughout the Symposium
- Coffee, tea, refreshments and lunches during breaks throughout the Symposium
- Possibility to submit abstracts
- Abstracts book (USB)
- Certificate of attendance
- Opening Ceremony and Welcome Reception on Sunday
- Private Concert on Monday

DAILY FEE INCLUDES:

- Symposium bag and information package
- Admission to all sessions throughout the Symposium
- Admission to the exhibition area throughout the Symposium
- Coffee, tea, refreshments and lunches during breaks for the day of the registration
- Possibility to submit abstracts
- Abstracts book (USB)
- Certificate of attendance for the day of registration

ACCOMPANYING PERSONS’ FEE INCLUDES:

- Admission to the exhibition area throughout the Symposium
- Coffee, tea, refreshments and lunches during breaks throughout the Symposium
- Opening Ceremony and Welcome reception on Sunday
- Private Concert on Monday
INSTRUCTIONS FOR PRESENTERS

Oral Presentations

Presenters are allotted 15 minutes total presentation time (13 minutes for the presentation and 2 minutes for discussion and questions). In an effort to synchronize the parallel sessions, session chairs have been instructed to retain a strict control of this time schedule.

The official format of the presentation is via data projector using Microsoft Power Point. All presenters must bring their presentation on a USB memory stick and load their presentations via Media Desk. Presenters will not be allowed to connect their own computers to the data projector at the Symposium.

It is the responsibility of the individual presenters (not the organizer) to ensure their presentations are uploaded at Media Desk at least 1 hour prior to the beginning of the session and to test their presentation before uploading.

Media Desk
Technicians will be available at the media desk (the media desk is located in the Limonaia, see the symposium map) to assist you with uploading your presentation to the correct session at the following times:

<table>
<thead>
<tr>
<th>Day</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sunday - August 28th</td>
<td>14:00 - 19:00</td>
</tr>
<tr>
<td>Monday - August 29th</td>
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<td>Thursday - September 1st</td>
<td>8:30 - 18:00</td>
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<tr>
<td>Friday - September 2nd</td>
<td>9:00 - 12:00</td>
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</tbody>
</table>

Poster Presentations

Poster presenters have to display their poster on the correct board placed within the exhibition area that features their poster number.

Posters may be fixed from 08:30 of the day of the presentation and must be removed after 18:00 of the same day. Organizing Secretariat will not be responsible for poster left in the poster area after 18:00.

Each Poster Presenter will be available at his poster and answer to all questions during the Poster Sessions.

The posters being presented each day are listed on Monday, Tuesday and Thursday in this program book.

Poster Session 1
Monday August 29th, 2016
12:15 - 13:00

Poster Session 2
Tuesday August 30th, 2016
12:15 - 13:00

Poster Session 3
Thursday September 1st, 2016
12:15 - 13:00
**STUDENT AWARDS**

The Otto Hutzinger Student Award

Year 2016 is the 40th anniversary on which in the laboratory of Prof. Hutzinger in Amsterdam was found that chlorinated dioxins and dibenzofurans are formed in municipal waste incinerators. Both the Seveso accident and this discovery had a large impact on science and society and determined, for the first time ever in the world, a deep revision of relationships between humans, industry and environment.

The Otto Hutzinger Student Award is presented for outstanding student presentations at the annual Dioxin Symposium to acknowledge their scientific contribution to the field of halogenated persistent organic pollutants.

This Award honors Professor Otto Hutzinger as the initiator of the DIOXIN Symposia and his continuing interest as a teacher and researcher committed to moving science forward and to stimulating young students and the next generation of scientists.

The Otto Hutzinger Student Awards (six Awards in total) will be presented by the International Advisory Board of the Dioxin Symposium on Friday September 2nd, 2016.

The Award consists of a plaque reflecting a local aspect of the current year’s Dioxin Symposium and a cash check. The winners’ names will be published on the Symposium’s website www.dioxin2016firenze.org after the event.
SIDE MEETINGS

All side meeting will be held at the conference venue.
Lunch will be served inside the dedicated meeting rooms.

Monday 29th August

Thermo Scientific Side Meeting
Time: 13:00 - 13:45
Room: LEONARDO ROOM

NEW DualData XL DFS Magnetic Sector GC-HRMS: Discover the Gold Standard in Productivity
Discover how to analyze more samples in the same time
• DualData XL DFS Magnetic Sector GC-HRMS – technical overview – Heinz Mehlmann (Application Specialist Trace MS, Organic Mass Spectrometry, Thermo Fisher Scientific, Bremen)
• DualData XL DFS Magnetic Sector GC-HRMS – customer presentation

Tuesday 30th August

Agilent Technologies Side Meeting
Time: 13:00 – 13:45
Room: RAFFAELLO ROOM

- Implementation and Evaluation of Hydrogen as a GC carrier gas for the rapid analysis of PCDD/Fs using the novel High Efficiency Ion Source of the 7010 GC/QQQ - Frank Neugebauer (Head of the R&D Department at Eurofins GfA Lab Service GmbH)
- Extract to Vial – Automated; Evaluation of LCTech’s latest unattended procedure for automatic overnight preparation of samples for Dioxin analysis - Angelika Köpf (Head of Sales. LCTech GmbH)

Thursday 30th August

Miura Side Meeting
Time: 13:00 - 13:45
Room: LEONARDO ROOM

- A new environmental source of PCB in a pig farming - Mr. Philippe Marchand (LABERCA in France)
- Are you being served? “The benefits of the 2nd generation clean-up system in a high throughput laboratory” - Mr. Marcel Bruggeman (NofaLab in the Netherland)
- A new gold standard for Dioxin analysis : “An efficient clean-up system together with a new Triple Quadrupole GC-MS/MS” - Mr. Haruhiko Miyagawa (Shimadzu in Japan)
- DIOXIN ANALYSIS PIECE of CAKE ? “All that glitters is not gold!”, Mr. Wim Traag (DSP-Systems in the Netherlands)
**Social Program**

Opening Ceremony on Sunday and Tuscany Welcome Reception**
Sunday - August 28\textsuperscript{th} - 18:00
Michelangelo Auditorium

**Attendance to this ceremony is included in the registration

Private Concert on Monday**
Monday - 29\textsuperscript{th} August - 19:00
San Lorenzo Basilica - Piazza di San Lorenzo 9
The impressive San Lorenzo Basilica and its masterpieces will open the doors exclusively for DIOXIN guests for a private concert

**Attendance to this ceremony is included in the registration fee
Gala Dinner on Thursday

Thursday - September 1st - 20.00
Palazzo Borghese - Via Ghibellina 110, Firenze
Price per person € 100,00 (10% vat included)
Tickets are available at the Registration Desk

Palazzo Borghese, a pearl hidden in the heart of Florence, opens its doors to host the Dioxin Conference Gala Dinner. Palazzo Borghese became the beautiful venue it is today at the end of its last reconstruction in the 16th century. Located in the middle of the historic centre of Florence, very close to the Duomo, Piazza Santa Croce and Piazza della Signoria, Palazzo Borghese is one of the most striking examples of neoclassic architecture of the Tuscan capital. Although it preserves an impressive facade, this building often passes unnoticed.

Once inside, however, the beauty and the pomp are dazzling: the imposing honour staircase leads to the noble floor. The heart of the building is formed by the Mirror Room and the Monumental Gallery, which is a true architectural and artistic jewel: two hundred square meters of frescoes, plasters, bas-reliefs, niches, statues, columns and draperies. Today Palazzo Borghese remains one of the most remarkable buildings in the city, ideal for top events.
**Special Tours on Wednesday afternoon**

Wednesday afternoon is always dedicated to lose yourself in the beauties of the country that is hosting you. We have selected six different itineraries both inside and outside the city of Florence, to some fascinating locations. You will discover world famous museums, enchanting villages, picturesque and relaxing landscapes and lovely, unforgettable hillsides covered with vineyards, with Romanesque churches, elegant villas and castles, ancient farmhouses scattered throughout; you will taste their wines and typical products. All these experiences will become part of your most unforgettable memories. **All tours will depart from the Symposium Venue.**

**Uffizi Gallery**

- **Departure Time:** 15:00
- **Guided tour will last approx 1 hour, afterwards time at disposal**
- **Official Guides**
- **Price per Person:** 30 € *(22% VAT included)*

You can’t leave Florence without visiting one of the most important art galleries in the world. Here you can admire numerous works of art by Botticelli, Michelangelo, Leonardo da Vinci, Raffaello, Giotto, Cimabue, Masaccio and many others with your private guide. Among the precious exhibition halls of the Gallery, the most renowned one contains the refined works by Botticelli, among which the absolute masterpieces: “Primavera” and “Birth of Venus”. The latter painting, the icon of the museum, represents the allegory of the birth of the goddess emerging from the sea foam and symbolizes the ideal of beauty as an expression of purity and spiritual quality, typical of the Renaissance Neo-Platonism aesthetics. At the end of the tour you can remain in the museum to further explore at your leisure.

**Accademia Gallery**

- **Departure Time:** 15:00
- **Guided tour will last approx 1 hour, afterwards time at disposal**
- **Official Guide**
- **Price per Person:** 30 € *(22% VAT included)*

Total immersion in the art of Michelangelo, as your guide introduces you to his most renowned masterpiece, the David, and other important works, such as his Prisoners, St. Matthew and the Palestrina Pietà. Young Michelangelo sculpted the David out of a huge block of rough marble in three years, creating an imposing statue of absolute beauty, an iconic Renaissance figure: a magnificent young man at the height of his physical vigour. Admire this masterpiece and be dazzled by the absolute beauty and perfection of this sculpted nude, together with the intense expression of the face, recalling the fierce independence of the Florentine Republic, which the sculptor wanted to express when commissioned this symbol of the town’s success in 1494.
Special Tours on Wednesday afternoon

BEST OF CHIANTI CLASSICO TOUR with WINE TASTING in an Ancient Villa

- Departure Time: 13:30
- Duration of the tour: half day
- Official Guide
- Price per Person: 50€ (22% VAT included)

Explore one of the most suggestive areas of Tuscany, known all over the world for its excellent wine and its countryside of unrivalled charm, where woods alternate with vineyards and olive groves, in a landscape dotted with Romanesque churches, farmhouses, villas and castles of rare beauty. Once leaving Florence, you will first stop in a historical Villa and wine estate, located in the heart of the Chianti region, to taste 3 prestigious wines and the extra-virgin olive oil produced, accompanied by local snacks. Leaving the winery, you will then reach the medieval village of Greve in Chianti. Here you will have free time to admire the famous main square of the ancient "market" with its characteristic arcades, browsing through the local artisan shops.

BEST OF CHIANTI CLASSICO TOUR with WINE TASTING in an Ancient Castle

- Departure Time: 13:30
- Duration of the tour: half day
- Official Guide
- Price per Person: 50€ (22% VAT included)

Explore one of the most suggestive areas of Tuscany, known all over the world for its excellent wine and its countryside of unrivalled charm, where woods alternate with vineyards and olive groves, in a landscape dotted with Romanesque churches, farmhouses, villas and castles of rare beauty. Leaving Florence, you will first stop in one of the most famous wine-growing estates of the Chianti area, to taste 3 excellent wines produced accompanied by local snacks. Leaving the castle, you will then reach the medieval village of Greve in Chianti. Here you will have free time to admire the famous main square of the ancient "market" with its characteristic arcades, browsing through the local artisan shops.
Special Tours on Wednesday afternoon

PISA - Piazza dei Miracoli

Departure Time: 13:30
Duration of the tour half day
Official Guide
Price per Person: 40€
(22% VAT included)

A splendid excursion through the fertile and picturesque Tuscan countryside to the historic university city of Pisa, famous for its architectural beauty. Upon your arrival in Pisa, your private guide will take you on a thorough outdoor guided walking tour of the enchanting Piazza dei Miracoli and its monuments. You will be dazzled by this marvelous square which is dominated by the Cathedral, a model of the distinctive Pisan Romanesque architecture, the celebrated Leaning Tower and the round-shaped Baptistery surrounded by its suggestive columned arcades.
At the end of the guided tour, you will return to Florence.

LUCCA

Lucca is a wonderful jewel enclosed within imposing 16th century walls, protecting the city center from the outside and to keep untouched its unrivalled beauty. Named “the city of a hundred churches”, Lucca is able to astonish and seduce every tourist, thanks to its perfectly kept historical center, its stunning monuments and the immediate sensation of serenity given to all its visitors. Take the opportunity to discover this “not to be missed” Tuscan city, located between Pisa and Florence. Upon your arrival, you will meet your private guide will lead you for a pleasant stroll along its narrow streets, breathing its unique atmosphere and admiring the beauty of its monuments, as the amazing Piazza Anfiteatro, the Torre Guinigi, the Duomo di San Martino and the typical “antique dealers’ street”.

Departure Time: 13:30
Duration of the tour half day
Official Guide
Price per Person: 35€
(22% VAT included)
OPENING CEREMONY
AND
WELCOME RECEPTION
Sunday, 28th August 2016, 18:00
Michelangelo Auditorium, Symposium Venue

Symposium Chairs Welcome Addresses
Prof. Paolo Mocarelli
Prof. Paolo Brambilla

Local Authority Welcome Address
Prof. Luigi Dei
Magnifico Rettore, Università di Firenze

OPENING LECTURE
Mons. Timothy Verdon
“Care for the Body and Care for the Soul: Hospitals and Social Assistance in Florence in the Middle Ages and Renaissance”

Tuscany Welcome Reception
in the Garden
**Students Plenary**

A characteristic of the Dioxin 2016 Firenze is the special attention given to younger generations, both Students and Young Researchers. In the Scientific Program you will find presentations given both by Students and Young Researchers, respectively colored in **RED** and **BLUE**. In addition, three selected PhD Students will present their work after the morning plenary sessions, according to the following **calendar**:

**Monday 29th August 2016**

**Chairs:** Begoña Jiménez - Jean Francois Focant

1.1006  
**Wahlang Banrida et al.**  
Polychlorinated biphenyls affect the hepatic-peripheral vascular axis suggesting a novel mechanism for persistent organic pollutants

3.3009  
**Mengnan Lu et al.**  
Formation of PXDD/Fs (Cl or Br) in non-combustion treatment of POPs contaminated soil and its prevention

4.7003  
**Stubleski Jordan et al.**  
Comparison of the trends in PFAS concentrations obtained from a 10 year longitudinal cohort investigation to general cross-sectional and retrospective population based studies

**Tuesday 30th August 2016**

**Chairs:** Jean Francois Focant - Jae Ho Yang

8.1003  
**Ames Jennifer et al.**  
Prenatal Dioxin Exposure and Neurocognitive Functioning in the Seveso Second Generation Study

3.1005  
**Dar Tajwar et al.**  
Formation of Toxic Species in Oxidation of 4-Chlorothiophenol

4.2011  
**Geng Dawei et al.**  
Temporal Trends of Polychlorinated Biphenyls, Organochlorine Pesticides and Polybrominated Diphenyl Ethers in Osprey Eggs in Sweden over the years 1966 – 2013

**Wednesday 31st August 2016**

**Chairs:** Alaee Mehran - Begoña Jiménez

2.1010  
**Da-Hye Kim et al.**  
development of extraction method for the analysis of Perfluoroalkyl Substances in human hair

3.1008  
**Mosallanejad Sara et al.**  
Catalyst activation effect for formation of PCDD/Fs in incineration

4.1009  
**Sharma Brij Mohan et al.**  
Fate and distribution of perfluoroalkyl substances (PFAS) in water resources from Ganges River basin: emissions and human exposure

**Thursday 1st September 2016**

**Chairs:** Jae Ho Yang - Alaee Mehran

4.5026  
**Liu Xiaotu et al.**  
Assessment of exposure to Halogenated Flame Retardants via dermal absorption

4.1007  
**Brumovský Miroslav et al.**  
Perfluoroalkyl acids in the surface waters of the Western Mediterranean Sea

8.10016  
**Sharkey Martin et al.**  
Brominated Flame Retardants in Irish waste streams – XRF screening suitability and first results
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00</td>
<td>Plenary Session</td>
<td>Michelangelo</td>
</tr>
<tr>
<td>09:05</td>
<td>Dioxin and human health. 40 years of learning from Seveso</td>
<td>Auditorium</td>
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<tr>
<td></td>
<td><em>Paolo Mocarelli</em></td>
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<tr>
<td>09:50</td>
<td>Students Plenary - see page 22</td>
<td>Michelangelo</td>
</tr>
<tr>
<td>10:15</td>
<td>COFFEE BREAK and Exhibition</td>
<td>Exhibition Area</td>
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<tr>
<td>10:45</td>
<td></td>
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<tr>
<td>10:45</td>
<td>Analytical, Screening and Confirmatory Methods</td>
<td>Michelangelo</td>
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<tr>
<td>10:50</td>
<td><em>Is Exposure to PFASs a New Concern for Humans and Wildlife?</em></td>
<td>Raffaello Room</td>
</tr>
<tr>
<td>11:00</td>
<td><em>Seveso Accident: 1976 - 2016</em></td>
<td>Leonardo Room</td>
</tr>
<tr>
<td>11:15</td>
<td><em>Formation Mechanisms of unintentional POPs</em></td>
<td>Galileo Room</td>
</tr>
<tr>
<td>11:30</td>
<td><em>Levels in the Environment (Air, Soil, Water)</em></td>
<td>Giotto Room</td>
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<tr>
<td>12:15</td>
<td>Poster Session 1</td>
<td>Galleries</td>
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<tr>
<td>13:00</td>
<td>LUNCH TIME and Exhibition</td>
<td>Leonardo Room</td>
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<tr>
<td>13:00</td>
<td>Side Meeting Thermo Scientific</td>
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<tr>
<td>14:00</td>
<td>Plenary Session</td>
<td>Michelangelo</td>
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<tr>
<td>14:05</td>
<td><em>Back to the Future of Dioxin Analyses</em></td>
<td>Auditorium</td>
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<td></td>
<td><em>Donald Patterson - Jean-Francois Focant</em></td>
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<tr>
<td>14:50</td>
<td>Analytical, Screening and Confirmatory Methods</td>
<td>Michelangelo</td>
</tr>
<tr>
<td>15:00</td>
<td><em>Is Exposure to PFASs a New Concern for Humans and Wildlife?</em></td>
<td>Raffaello Room</td>
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<tr>
<td>15:10</td>
<td><em>Human Exposure</em></td>
<td>Leonardo Room</td>
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<tr>
<td>15:25</td>
<td><em>Risk Assessment and Policies</em></td>
<td>Galileo Room</td>
</tr>
<tr>
<td>15:40</td>
<td><em>Levels in Wildlife</em></td>
<td>Giotto Room</td>
</tr>
<tr>
<td>16:00</td>
<td>COFFEE BREAK and Exhibition</td>
<td>Exhibition Area</td>
</tr>
<tr>
<td>16:30</td>
<td>Analytical, Screening and Confirmatory Methods</td>
<td>Michelangelo</td>
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<tr>
<td>16:35</td>
<td><em>Is Exposure to PFASs a New Concern for Humans and Wildlife?</em></td>
<td>Raffaello Room</td>
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<tr>
<td>16:50</td>
<td><em>Levels in Food and Feed</em></td>
<td>Leonardo Room</td>
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<tr>
<td>17:05</td>
<td><em>Environmental Food Security</em></td>
<td>Galileo Room</td>
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<tr>
<td>17:20</td>
<td><em>Levels in Wildlife</em></td>
<td>Giotto Room</td>
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<tr>
<td>19:00</td>
<td>Private Concert in San Lorenzo Basilica</td>
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<tr>
<td>Time</td>
<td>Room</td>
<td>Subject</td>
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<tr>
<td>10:45</td>
<td>Michelangelo</td>
<td>2.1017 Pushing the Limits: Bioassay Performance at Low Levels of Contamination in Food Samples based on “Third Generation” Recombinant H4L7.Sc2 Rat Hepatoma Cells</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10:45 2.1010 Development of extraction method for the Analysis of Perfluoroalkyl Substances in human hair</td>
</tr>
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<td>10:45 2.1043 PCDD/Fs vapour-particle partitioning in a workplace atmosphere after a fire</td>
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<tr>
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<td>10:45 2.1008 Influences of Chromatographic Separation and Detection Methods – Results of Eurl Proficiency Test On Determination of PCDD/FS and PCBs in Feed</td>
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<td>11:30 2.1040 Assessment of Results for the 2nd Interlaboratory Study of POPs Laboratories</td>
</tr>
<tr>
<td>12:00</td>
<td>Raffaello</td>
<td>11:00 8.6016 Human Biomonitoring of Perfluorinated Substances in Adults Exposed to Contaminated Drinking Water in Regione Veneto (Italy)</td>
</tr>
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<td>11:00 8.6002 Spatial and temporal trends of Perfluoroalkyl substances in swedish herring</td>
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<td>11:45 8.6023 Highly fluorinated chemicals (PFASs): Do the benefits justify the harm?</td>
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<td>12:00 8.6019 New insights into PFAS immunotoxicity</td>
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</table>
### Seveso Accident: 1976 – 2016

**Chairs:** Paolo Brambilla - Brenda Eskenazi

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:45</td>
<td>8.1007</td>
<td>Cohort study of the population exposed to dioxin after the Seveso, Italy accident: Mortality (1976-2013) and cancer incidence (1977-2012) preliminary results</td>
<td>D. Consonni, P.A. Bertazzi, L. Cavaleri D’Oro, M. Rognoni, R. Sindaco, R. Cacace, A.C. Pesatori</td>
</tr>
<tr>
<td>11:00</td>
<td>8.1008</td>
<td>Prevalence of Diabetes Mellitus in the Seveso, Italy Cohort 2006-2014</td>
<td>L. Cavaleri d’Oro, M. Rognoni, D. Consonni, A.C. Pesatori, P.A. Bertazzi</td>
</tr>
</tbody>
</table>

### Formation Mechanisms of unintentional POPs

**Chairs:** Takeshi Nakano - Werner Tirler

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Authors</th>
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</thead>
<tbody>
<tr>
<td>10:45</td>
<td>3.1001</td>
<td>Chlorine and Copper Analyses to the Effect of the molecular structure of carbon on the mechanism of Chlorination</td>
<td>A. Toda, T. Fujimori, K. Shiota, M. Takaoka</td>
</tr>
<tr>
<td>11:00</td>
<td>3.1003</td>
<td>Potential sources of Environmentally Relevant Impurities found in technical mixtures of PFOS and PFOA replacement products</td>
<td>N. Riddell, R. Mcrindle, A. Mcalees, B. Chittim</td>
</tr>
<tr>
<td>11:30</td>
<td>3.1007</td>
<td>Effect of Ball Milling Time on PCDD/Fs Formation</td>
<td>I. Mubeen, A. Buekens, S. Lu, J. Yan</td>
</tr>
<tr>
<td>11:45</td>
<td>3.1008</td>
<td>Catalyst activation effect for formation of PCDD/Fs in incineration</td>
<td>S. Mosallanejad, M. Altarawneh, E. Kennedy, M. Stockenhuber, S. Jansson, B. Dlugogorski</td>
</tr>
<tr>
<td>12:00</td>
<td>3.1004</td>
<td>Inhibition effects on chlorinated aromatic compounds by nitrogen and sulphur compounds in iron ore sintering process</td>
<td>Y. Sun, Z. Xiong, J. Xu, X. Zeng, Y. Zhang</td>
</tr>
</tbody>
</table>
10:45
Levels in the Environment
(Air, Soil, Water)

Giotto Room
Chairs: Gary Hunt - Valerio Paolini

10:45
Fate and distribution of perfluoroalkyl substances (PFAS) in water resources from Ganges River basin: Emissions and human exposure


11:00
Presence and fate of persistent organic pollutants in fiber bank sediments in a coastal area of the Baltic Sea

A.K. Dahlberg, L. Vogel, K. Wiberg, A. Apler, S. Josefsson

11:15
Ubiquitous occurrence of PCB 11 in the environment

Q. Zhang, X. Li, P. Wang, H. Shang, C. Zhu

11:30
POPs Monitoring Techniques and Results from Frequent Monitoring of Ambient Air at Super Site, Japan


11:45
Environmental and human exposure to Polybrominated diphenyl ethers derived from e-waste recycling in Karachi, Pakistan

R.N. Malik, M. Iqbal, J.H. Syed, J. Li, G. Zhang
<table>
<thead>
<tr>
<th>Time</th>
<th>Room</th>
<th>Session Title</th>
<th>Authors</th>
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</thead>
<tbody>
<tr>
<td>15:00</td>
<td>Michelangelo</td>
<td>Analytical, Screening and Confirmatory Methods</td>
<td>Chairs: Jerzey Falandysz, Chiara Calaprice</td>
</tr>
<tr>
<td>15:00</td>
<td>2.1044</td>
<td>2.1044 Quantitative analysis of Mixed Halogen Dioxins and furans in fire debris utilizing atmospheric pressure Ionization Gas Chromatography-Triple Quadrupole Mass Spectrometry (APGC-MS/MS)</td>
<td>F.L. Dorman, K.L. Organtini, A.L. Myers, K.J. Jobst, E.J. Reiner, B. Ross, A. Ladak, L. Mullin, D. Stevens</td>
</tr>
<tr>
<td>15:30</td>
<td>2.1003</td>
<td>2.1003 An assessment of an oribital trapping mass spectrometer for the measurement of 2,3,7,8-chlorine substituted dioxins and dibenzo furans in foods</td>
<td>D.G. Hayward</td>
</tr>
<tr>
<td>15:45</td>
<td></td>
<td>2.1015 Non-targeted screening as a tool for the identification of chemicals in dust and profiling of the differences between indoor environments</td>
<td>A.C. Ionas, P. Booij, L. Melymuk, P. Karaskova, C.P. Codling, M. Vernier, M. Diamond, J. Klanova</td>
</tr>
<tr>
<td>15:00</td>
<td>Raffaello</td>
<td>Is Exposure to PFASs a New Concern for Humans and Wildlife?</td>
<td>Chairs: Susan Shaw, Gianfranco Brambilla</td>
</tr>
<tr>
<td>15:00</td>
<td>8.6009</td>
<td>8.6009 Perfluoroalkyl substances; levels and profiles in human serum, plasma, and whole blood in a Norwegian cohort</td>
<td>S. Poothong, E. Lundanes, C. Thomsen, L.S. Haug</td>
</tr>
<tr>
<td>15:15</td>
<td>8.6008</td>
<td>8.6008 PFCAs, PFSAs and FOSA in harbour porpoises (Phocoena phocoena) stranded or bycaught in the UK during 2012-2014</td>
<td>J.L. Barber, A. Papachilitzou, S. Losada, P. Bersudier, R. Deaville, A. Brownlow, R. Penrose, P.D. Jepson, R.J. Law</td>
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### Monday 29th August 2016

#### Human Exposure

<table>
<thead>
<tr>
<th>Time</th>
<th>Room</th>
<th>Session</th>
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<tbody>
<tr>
<td>15:00</td>
<td>Leonardo</td>
<td>4.5013 Exposure routes and risk assessment of Phthalates for University Students in China</td>
</tr>
<tr>
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<td><strong>H. Li, L. Liu, Z. Zhang, W. Ma, W. Song, C. Huo, Y. Li</strong></td>
</tr>
<tr>
<td>15:15</td>
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<td>4.5027 Non-target and suspect screening for organic substances in indoor dust for human exposure assessment</td>
</tr>
<tr>
<td>15:30</td>
<td></td>
<td>4.5024 Prenatal exposure to OCPs, PCBs, BFRs, PFASs, Dioxin-like compounds -potential health risks to Tanzanian infants</td>
</tr>
<tr>
<td>15:45</td>
<td></td>
<td>4.5010 Temporal trends of PCDD/Fs and PCBs in mother’s milk in Sweden – are the current maternal body burdens safe for the fetus?</td>
</tr>
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<td><strong>A. Glynn, M. Aune, U. Fridén, S. Lignell, P.O. Darnerud, A. Bignert</strong></td>
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#### Risk Assessment and Policies

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<tr>
<th>Time</th>
<th>Room</th>
<th>Session</th>
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</thead>
<tbody>
<tr>
<td>15:00</td>
<td>Galileo</td>
<td>5.3001 Suppression of PCDD/F during Thermal Desorption of PCB-contaminated Soil</td>
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<td><strong>Z. Zhao, M. Ni, X. Li, A. Buekens</strong></td>
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<td>15:15</td>
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<td>5.3002 Soil washing as a potential remediation technology for Dioxin contaminated soils in southern Vietnam</td>
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<td>15:30</td>
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<td>5.3004 Long-term assessment of PCB emissions from large scrap metal recycling plants in the Flemish region, Belgium</td>
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<td><strong>J. Van Hoeymissen, M. Blondeel, P. Bernaert</strong></td>
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<td>15:45</td>
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<td>5.2004 Biomonitoring and source tracking of Dioxins in the Netherlands</td>
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<td><strong>A. Arkenbout</strong></td>
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<td>15:00</td>
<td>Levels in Wildlife</td>
<td>Giotto Room</td>
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<td>15:15</td>
<td>4.2007 Brominated Flame Retardants (BFR) in eggs from birds of Prey from Southern Germany, 2014</td>
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<td>15:45</td>
<td>4.2009 Accumulation and body distribution of parabens and their metabolites among organ samples collected from marine mammals in Korea</td>
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<tr>
<td>16:00</td>
<td>4.2006 First findings of the presence of PCDD/Fs and PCBs in fish species from the Sava river basin</td>
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<td>16:30</td>
<td>Analytical, Screening and Confirmatory Methods</td>
<td>Michelangelo</td>
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<tr>
<td>16:30</td>
<td>2.1042 Revisited sample preparation approach for Dioxin Measurements in human serum Samples</td>
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<td>16:45</td>
<td>2.1032 Determination of Dioxin/PCB and BDE In one Automatic System with different sample clean-up column settings</td>
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<td>17:00</td>
<td>2.1034 Options for analysing chlorinated paraffins in environmental matrices</td>
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<td>17:15</td>
<td>2.1031 Extraction strategy for target and non-target analysis of environmental contaminants in biological matrices using GC-MS/MS and LC QTOF-MS/MS</td>
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<td>16:30</td>
<td>Raffaello</td>
<td>Is Exposure to PFASs a New Concern for Humans and Wildlife?</td>
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<td>Leonardo</td>
<td>Levels in Food and Feed</td>
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### Environmental Food Security

**Galileo Room**

**Chairs:**
- Roland Weber
- Giampiero Scortichini

#### 16:30
- **5.4002** Occurrence of selected perfluorooacids in muscle and liver from wild boar: relevance for food safety/food security issues
  - G. Brambilla, C. Testa, G. Fedrizzi

#### 16:45
- **5.4003** Presence of PCDD/Fs and PCBs in Bonito (Sarda sarda)

#### 17:00
- **5.4004** The need for adequate soil standards and systematic assessment of POPs contaminated sites for food and feed safety
  - R. Weber, L. Bell, A. Watson, A. Winski, B. De Borst, J. Vijgen

#### 17:15
- **5.4006** Environmental quality and food safety: biomarkers of persistent organic pollutants exposure
  - G. Scortichini, G. Diletti, G. Brambilla, L. Candela, R. Ceci, A. Conte, S.P. De Filippis, A. Di Sandro

### Levels in Wildlife

**Giotto Room**

**Chairs:**
- Minghui Zheng
- Walter Vetter

#### 16:30
- **4.2002** Characteristic formation of hydroxylated phenanthrene metabolites in fish (Sebastes Schlegelii) organs exposed to phenanthrene
  - K.Y. Kim, J.H. Jung, U.H. Yim, J.E. Oh

#### 16:45
- **4.2005** Brominated flame retardants, dechlorane related compounds, ΣPCDD and ΣPCDF determination in whitemouth croakers (micropogonias furnieri) from southeast Brazilian region
  - A.C. Pizzochero, A. De La Torre, P. Sanz, O. Malm, K. Das, P.R. Dorneles, M.A. Martínez

#### 17:00
- **4.2013** Spatial and time trends of Dioxins and PCBs in cod livers from the North Sea
  - S. van Leeuwen, R. Hoogenboom, M. Kotterman

#### 17:15
- **4.2001** Occurrence of Bisphenol Analogues and Trophic Magnification of Bisphenol S in the Food Web of Taihu Lake, China
  - L. Zhu, H. Jin, C. Zhang
Toxicology - Advances in Toxicology of POPs (including mechanistic aspects)

1.1005
Bisphenol A and its halogenated derivatives induce apelin expression which acts as mitogenic factor in human epithelial ovarian cancer cell

M. Hoffmann, E. Fiedor, A. Ptak

1.1009
Metabolism Of 2,2’,3,4,4’,5,6’-Heptachlorobiphenyl (Cb182) by rat, guinea pig and human liver microsomes

C. Ohta, Y. Fuji, K. Haraguchi, Y. Kato, O. Kimura, T. Endo, N. Koga

1.1010
Induction of Hepatic T4 Transporters by Polychlorinated Biphenyl in rats


1.1011
Binding specificity of diverse AhR ligands interpreted by Molecular Modeling

S. Giani Tagliabue, A.A. Soshilov, M.S. Denison, L. Bonati

1.1012
Deciphering the AhR:ARNT Dimerization Process: How to Assembly the Functional Puzzle of Interacting Interfaces.

D. Corrada, A.A. Soshilov, M.S. Denison, L. Bonati

1.1013
Higher Brominated Congeners of Coplanar Polybrominated and/or Chlorinated Biphenyls Exhibit High Cytochrome P450 induction

H. Kakutani, T. Yuzuriha, T. Nakao, S. Ohta

1.1014
Effects of Dioxin on Neuronal Acetylcholineserase Activity during Ngf-Induced Neuronal Differentiation

Y. Chen, L. Xu, T. Xu, H.Q. Xie, H. Fu, B. Zhao

1.1020
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD) Treatment in Adulthood Causes Urothelial Carcinoma in Male Nkx3.1+/−; Pten+/− Mice

R.W. Moore, A.J. Schneider, T.M. Lin, R.E. Peterson

S1.1004
Neurotoxic effects of chemical UV-filter benzophenone-3 involve apoptosis and abnormal estrogen receptor signaling

A. Wnuk, J. Rzemieniec, M. Kajta

S1.1005
Application of PBPK/PD model for assessing risk to children focusing on PFOS related developmental effect

R. Prasad Sharma, M. Schuhmacher, V. Kumar

S1.1006
Transcriptome analyses of an ultraviolet absorber, 2-(2’-hydroxy-3’,5’-di-tert-butylphenyl)benzotriazole in rats


S1.1007
Preventive effects of imperatorin on PFHxS-induced neuronal apoptosis via inhibition of intracellular calcium-mediated ERK pathway

Y.J. Lee, E. Lee, S. Choi, J. Yang

S1.1008
In vitro toxicological assessment of main dietary polybrominated diphenyl ethers congeners

S. Tait, C. La Rocca, M. Perugini

S1.1009
Toxicological effects of polybrominated diphenyl ethers on zebrafish embryos


S1.1010
In utero and lactational TCDD exposure increases prostatic estrogen receptor alpha expression and secondary complications associated with bladder outlet obstruction in mice

E. Ricke, R. Moore, R. Peterson, C. Vezina, W. Ricke

S1.1011
Cytochrome P450-inhibitory activity of parabens, phthalates and benzotriazoles

K. Sugihara, H. Ozaki, Y. Watanabe, S. Ohta, S. Kitamura

S1.1012
Preliminary results on the use of bioanalytical tools to explore the toxic potential of long-, medium- and short-chained chlorinated paraffin mixtures

L. Weij, L. Van Mourik, J. Tang, P. Leonards, J. De Boer, C. Gaus

S1.1014
Why don’t all ah receptor ligands produce the same spectrum of toxic and biological effects: an alternative hypothesis?

M.S. Denison
Wildlife in Toxicology

6.3001
Protective effects of melatonin on rat ovarian damage caused by chronic TCDD exposure: an electron microscopic investigation of TCDD effects

S. Gül, B. Yigitcan, M. Gül, A. Yildiz

S1.2001
Effects of BDE-209 and aquaculture effluents on antioxidative response systems of Avicennia marina, a true mangrove plant species

S. Farzana, N.F. Tam

S1.2002
Effects of BDE-209 and aquaculture effluents on antioxidative response systems of Avicennia marina, a true mangrove plant species

S. Farzana, N.F.Y. Tam

S1.2003
In vitro and in silico approaches for assessing the activation of Baikal seal estrogen receptors by OH-PCBs

Y. Yoshinouchi, M. Hirano, K. Nomiyama, S. Tanabe, E. Kim, H. Iwata

S1.2004
Impossex in gastropods associated with TBT and DBT in sediments from the Atlantic coast of South Africa

N. Roos, H. Bouwman, A. Averbuj

S1.3001
Pilot study on PCB and PCDD/F levels and biomarkers association in relation to body mass index in a group of Italian population

C. La Rocca, S. Tait, B. Bergamasco, F.P. Serpe, G. Diletti, G. Messina, G. Scortichini, M. Monda, M. Esposito

S1.3002
The Effect of Persistent Organic Pollutants on Immune Response to Vaccination in Infants

Á.V. Eiriksdóttir, K. Ólafsdóttir

Analysis and substance-specific aspects

Analytical, Screening and Confirmatory Methods

2.1001
LC - MS/MS determination of tetrabromobisphenol-A in indoor dust of e-waste recycling sites

O. Abafe, A. Stark, B. Martincigh

2.1005
Determination of perfluorinated organic compounds in Baltic Sea fish

I. Wójcik, A. Grochowalski, W. Krzymiński, M. Rybka, T. Kalicki

2.1012
Active indoor air sampling of organochlorinated persistent pollutants and polycyclic aromatic hydrocarbons

B. Henkelmann, A. Dreyer, K. Schramm

2.1014
Developing a Unified Extraction Technique for Foodstuffs

J.C. Archer, R.G. Jenkins Jr.

2.1016
Simultaneous analysis of Dioxins, PCBS, and PBDES with a fully automated sample preparation system (ii: validation)

H. Fujita, K. Inaba, K. Yamamoto

2.1018
Screening and quantification of bromine and BFRs in office equipment in Pretoria, South Africa using X-RAY florescence and GC-MS

S. Nkabinde, O. Olukunle, P. Daso

2.1019
Automated low background solid phase extraction of perfluorinated compounds in water

R. Addink, P. Germansderfer, H. Shir Khan, T. Hall

2.1020
AUTOMATED GPC CLEAN-UP in enviromental samples: method performance determination and study of the effects of column calibration and durability over POP’s real samples recoveries


2.1021
Analyzing Multi-Class Persistent Organic Pollutants (OCPs, PCBs, PBDEs, and PAHs) in Food Matrices in a Single Injection by APGC-MS/MS

M. Rousseau, S. Fortier, E. Mccall, L. Gagnon

2.1022
Development of analytical method for the determination of PCDD/FS in human serum by high resolution gas chromatography – high resolution mass spectrometry (HRGC/HRMS)

N.X. Truong, T.K. Sau

2.1023
Use of the Multi-Increment Sampling Method for Confirmation of Remedial Activities at the Environmental Remediation of Dioxin Contamination at Danang Airport, Danang, Vietnam

A. Sayers-Fay, P.M. Nguyen, M. Patterson, T.K. Sau, T.D. Hung, K. Sorenson Jr., A. Lopez, R. Chichakli
Artificial neural network estimation of Dioxin-like PCBS from inorganic pollutants in agricultural soil

M.G. Bonelli, P. Benedetti, M. Ferrini, E. Guerriero, A. Manni

Application of Orbitrap HRAM Mass Spectrometry to untargeted identification of NBFRs and their metabolites

K.H. Nguyen, A.P. Ganci, M. Abdallah, T. Moehring, S. Harrad

Comprehensive analysis of house dust using GC×GC-HRTOFMS and in-house software


Comparison of the selectivity of ionic liquid stationary phases for the analysis of pahs

L.M. Sidisky, D. Shollenberger, J. Desorce, G. Serrano, G. Baney

A low cost effective clean-up method for dioxin analysis

K. Kedikoglou, D. Costopoulou, I. Vassiliadou, L. Leondiadis

Novel GC separation characteristics for 209 PCB congeners – the HT8-PCB column revisited

F. Neugebauer, J. Soehler, M. Opel

Levels of Dioxins/Furans in sludges of four different wastewater treatment plants

O. Canli, H. Demir, M.S. Binici

Biomonitoring of GC and LC amenable environmental contaminants using a single MS platform

L. Mullin, A. Ladak, G. Cleland, I. Ericson Jogsten

Rapid determination of persistent organic pollutants (POPs) in various food matrices using GC/ECD and GC/MS/MS


Analytical Methods for Phosphorus Flame Retardants – A Comparison among GC-EI-MS, GC-NCI-MS, and LC-APCI-MS/MS


Inter-conversion and evaluation of various indicator PCB schemes for fish measurements


Screening of developers (bisphenol A and replacements) in thermal printed paper with different analysis techniques

M.K. Björnsdotter, W. Jonker, J. Kool, A. Ballesteros-gomez

Identification of brominated impurities in TBBPA flame retarded plastics by combining isotope pattern and mass defect cluster analysis

A. Ballesteros-gómez, J. Ballesteros, X. Ortiz, W. Jonker, R. Helmus, K.J. Jobst, J.R. Parsons, E.J. Reiner

Data Processing Based on Exact Mass Spectra for Non-Target Monitoring by Using GCxGC/HRTofMS

S. Hashimoto, T. Ieda, Y. Zushi, Y. Takazawa, K. Tanabe, Y. Shibata

Using GC-MS/MS as a Confirmatory Method for PCDD/Fs and Dioxin-Like PCBs in Food and Feed

R. Law, T. Albertini

Development and application of the selective screening method for chlorinated and brominated dioxins in waste and environmental samples by using the CALUX assays: brominated dioxins tend to be detected at various stages during brominated flame-retard


Development and optimization of a gas chromatography-atmospheric pressure chemical ionization tandem mass spectrometry method for the analysis of polybrominated diphenyl ethers

M. Brits, J. De Vos, J. Weiss, E. Rohwer, J. De Boer
S2.1011
Analysis of hydroxylated sulfur-containing PCB metabolites formed from MeSO-PCB and MeSO2-PCB by rat liver microsomes

H. Kuroki, T. Shima, K. Tazuya-murayama, S. Kitamura, A. Toda

S2.1012
Trace determination of polychlorinated dibenzo-p-dioxins and dibenzofurans in environmental samples using gas chromatography triple quadrupole mass spectrometry with a new high efficiency EI source

W. Wang, C. Xu, L. Gao, S. Zhou

S2.1013
The application of molecularly imprinted membrane-passive sampling devices (MIM-PSD) for monitoring of polychlorinated biphenyls (PCBS) in aquatic environments of South Africa

D. Mkhize, T. Msagati, L. Quinn, B. Mambha, V. Wepener

S2.1014
Chromatographic separation of PCB congeners allowing accurate quantification of seven indicator PCBs; successful application in South African environmental matrices

L. Quinn, D. Mkhize, C. Swiegelaar, H. Bouwman, T. Msagati, V. Wepener

S2.1015
Investigating natural and xenohormones with the BG1LUC4E2 CALUX BIOASSAY: estrogenicity of pure compounds and mixtures

T. Vandermarken, F. Gossiaux, M.S. Denison, K. Croes, L. Goeyens, K. Van Langenhove, M. Elskens

S2.1016
Supercritical Fluid Chromatography/Mass Spectrometry: Negative Ion APCI Mechanisms Associated with the Analysis of Halogenated Environmental Contaminants

N. Riddell, B. Van Bavel, I. Ericson Jogsten, R. Mcrindle, A. Mcalees, B. Chittim

S2.1017
A confirmatory method for the quantification of PCDD/Fs and PCBs in Food and Feed using a pre-configured GC-Ms/Ms Dioxin Analyzer in compliance with EU regulation 589/214 and 709/2014

J. Riener, C. Kandaswamy, J. Westland

S2.1018
Method development to prioritize emerging contaminants in seafood using target and non-target screening analysis with GC/Q-TOF

L. Sunggyu, C. Minkyu, M. Hyo-bang

2.2002
An on-line turbulent flow chromatography-liquid chromatography coupled to tandem mass spectrometry method for the simultaneous analysis of 14 organophosphorus flame retardants in environmental and biotic matrices

M. Giulio, E. Eljarrat, E. Capri, D. Barceló

2.2004
Identification of dechloranes by gas chromatography coupled to tandem mass spectrometry with atmospheric pressure chemical ionisation (GC-APCI-MS/MS)

F. Mertes, P. Uciechowski, A. Loa, L. Rink, K.W. Schramm

2.2005
Ready to use EROD assay by cryo-preserved cells and quantification by standard addition method

F. Mertes, P. Uciechowski, A. Loa, L. Rink, K.W. Schramm

2.2006
Fast gas chromatography coupled to tandem mass spectrometry using atmospheric pressure chemical ionisation for brominated flame retardants monitoring

E. Bichon, I. Guiffard, A. Vénisseau, E. Lesquin, V. Vaccher, A. Brossaude, P. Marchand, B. Le Bizec

2.2010
Polycyclic aromatic hydrocarbons in fatty food using HRGC-HRMS: fapas results

B. Angelone, M. Gasparini, E. Ferretti

2.2012
Clean-up method for the detection of polybrominated diphenyl ethers (PBDE) in food and human biomonitoring samples

M. Albrecht, K. Büchner, B. Hilger, F. Stindl

2.2014
From sample to vial: total solution for POPs analysis in sea food

R. Addink, P. Germansderfer, T. Hall, H. Shirkhan

2.2015
Improving the chromatographic capabilities of an atmospheric pressure chemical ionisation source

G.R. Jones, D. Douce

2.2018
Dualdata magnetic sector GC-HRMS: latest developments for maximum productivity of dioxin and pops analysis

H. Mehlmann, D. Krumwiede
A novel method for non-destructive quantification of Deca-bromodiphenyl ether in new plastic goods: DIP-HRMS

A. Guzzonato, H. Mehlmann, D. Krumwiede, S. Harrad

Hydrogen as carrier gas for the analysis of Polychlorinated Dioxins and Furans (PCDD/Fs) by GC-MS/MS in food and feed samples

S. Lang, F. Neugebauer

Annual profiles of volatile methylsiloxanes in atmospheric environment in Saitama, Japan

Y. Horii, M. Motegi, K. Minomo, N. Ohtsuka, K. Nojiri, N. Yamashita

Analytical methodology for determination of diphenylamine antioxidants in wastewater / biosolids and sediment

Z. Zhang, E. Sverko, C. Marvin, K. Jobst, S.A. Smyth

Harnessing the efficiency of N2 as a GC carrier gas with an atmospheric MS source

L. Mullin, A. Ladak, F. Dorman, J. Cochran

A fast and sensitive method for the simultaneous analysis of a wide range of per- and polyfluoroalkyl substances in indoor dust using on-line solid phase extraction-ultrahigh performance liquid chromatography-time-of-flight-mass spectrometry

J.A. Padilla-sánchez, L.S. Haug

A rapid and efficient extraction and clean-up methodology for organohalogen cocktails from large and high-lipid adipose samples of Arctic marine mammals

J. Desforges, I. Eulaers, L. Periard, R. Dietz, R. Letcher

Simultaneous analysis of multiple contaminants in urine: bisphenol A, metabolites of phthalates and polycyclic aromatic hydrocarbons

K. Urbancova, D. Lankova, K. Bacova, J. Hajšlová, J. Pulkrova

Flame retardants in human blood serum: integration of “novel” halogenated flame retardants into multi-analyte method

A. Švarcová, T. Gramblicka, D. Lanková, A. Vincíková, J. Hajšlová, J. Pulkrova

Investigating the in-vitro metabolism of NBFRs by trout liver microsomes using a high resolution accurate mass benchtop Orbitrap mass spectrometer

A.P. Ganci, M.A. Abdallah, K.H. Nguyen, T. Moehring, S. Harrad

Rapid and automatic method for simultaneous determination of sixteen polycyclic aromatic hydrocarbons by online solid-phase extraction coupled with ultra-high performance liquid chromatography

F. Guo, Z. Rao, N. Zhan, C. Liu, Z. Yang, X. Guo

Method optimization for Rapid Analysis of Brominated Flame Retardants in Polymers: with DART-Orbitrap HRAM

A. Guzzonato, O. Scheibner, T. Arrey, T. Moehring, S. Harrad

Development of analytical methodology UAE–HS-SPME for organochlorine pesticides analysis in water using eva passive sampler’s by GC-MS/MS

D.C. Diana Cardenas, F.T. Felipe Tucca, C.M. Claudia Mardones, R.B. Ricardo Barra

Fully automatic method for the determination of POPs in Air – Pilot Study

C.S. Ng, P.O. Tang, P.K. Chan

Accumulation and tissue distribution of ingested α-hexabromocyclododecane (α-HBCDD) in broiler chicken (Gallus domesticus)

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<tr>
<td>2.3004</td>
<td>Enantiomer-specific accumulation and depuration of α-hexabromocyclododecane (α-HBCDD) in broiler chickens (Gallus domesticus) as a tool to identify contamination sources</td>
<td><strong>E. Omer</strong>, R. Cariou, E. Baéza, E. Domínguez-romero, C. Souchet, A. Vénisseau, P. Marchand, G. Deröllypinel, B. Le Bizec, A. Travel, C. Jondreville</td>
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<td>2.3016</td>
<td>New approach to PBDEs analysis: comparison of high and low resolution mass spectrometry</td>
<td><strong>N. Cortés-francisco</strong>, I. Beguinastain, A. Rúbies, F. Centrich, M. Granados</td>
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<td>2.4001</td>
<td>Environmental and human health consequences of DDT used in South Africa for malaria control</td>
<td><strong>H. Bouwman</strong>, H. Kylin, R. Bornman</td>
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<td>2.5001</td>
<td>The use of GC-MSMS as a tool to analyse different soot for possible POPs emitted from engines and stoves</td>
<td><strong>S. Erik</strong>, S. Mikko, O. Henna</td>
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<td>2.5002</td>
<td>Comprehensive analysis of heavily OCDD contaminated soil</td>
<td><strong>A. Shelepchikov</strong>, E. Brodsky</td>
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<td>S2.3002</td>
<td>Polybrominated Diphenyl Ethers and Polychlorinated Biphenyls in Dust from Cars, Homes, and Offices in Lagos, Nigeria</td>
<td><strong>T. Oluseyi</strong>, S. Harrad, M. Abdallah</td>
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<tr>
<td>S2.3004</td>
<td>Responses of microbial communities during anaerobic degradation of BDE-153 in four types of aquatic sediments</td>
<td><strong>Y. Pan</strong>, N.F.Y. Tam</td>
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<tr>
<td>S2.3005</td>
<td>Concentrations of “Legacy” and Novel Brominated Flame Retardants in living room dust from Europe, North America and Jordan</td>
<td><strong>J. Kuang</strong>, Y. Ma, Y. Carrizales, S. Harrad</td>
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<tr>
<td>S2.3006</td>
<td>Rapid separation of HBCDD enantiomers using supercritical fluid chromatography</td>
<td><strong>L. Mullin</strong>, R. Cariou, E. Omer, E. McCall, J. Burgess</td>
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Your laboratory is being challenged to expand the scope of ultimate sensitivity analysis. Don’t let complex matrices and low concentration levels stand in the way. The fast-track to simplifying your most complex analyses with highly repeatable results awaits at waters.com/XEVO-TQXS

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<tr>
<td>09:00</td>
<td>Plenary Session</td>
<td>Michelangelo Auditorium</td>
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<tr>
<td>09:45</td>
<td>Advances in Toxicology of Dioxins POPs</td>
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<td><em>Michael Denison - Martin van den Berg</em></td>
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<td>09:50</td>
<td>Students Plenary - see page 22</td>
<td>Michelangelo Auditorium</td>
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<tr>
<td>10:15</td>
<td>COFFEE BREAK and Exhibition</td>
<td>Exhibition Area</td>
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<tr>
<td>10:45</td>
<td>Advances in Passive and Other Sampling Strategies</td>
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<tr>
<td>11:00</td>
<td>Advances in Toxicology of POPs (including mechanistic aspects)</td>
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<tr>
<td>11:15</td>
<td>Human Exposure</td>
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<td>11:30</td>
<td>Application of BAT/BEP to reduce or eliminate POPs</td>
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<td>11:45</td>
<td>Levels in the Environment (Air, Soil, Water)</td>
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<tr>
<td>12:15</td>
<td>Poster Session 2</td>
<td>Galleries</td>
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<tr>
<td>13:00</td>
<td>LUNCH TIME and Exhibition</td>
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<tr>
<td>13:00</td>
<td>Side Meeting Agilent Technologies</td>
<td>Raffaello Room</td>
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<tr>
<td>13:45</td>
<td>Plenary Session</td>
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<tr>
<td>14:00</td>
<td>Metabolomics, POPs and endocrine disruption</td>
<td>Michelangelo Auditorium</td>
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<tr>
<td>14:45</td>
<td><em>Daniel Zalko</em></td>
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<tr>
<td>15:00</td>
<td>Analytical, Screening and Confirmatory Methods</td>
<td>Michelangelo Auditorium</td>
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<tr>
<td>15:45</td>
<td>Is Exposure to PFASs a New Concern for Humans and Wildlife?</td>
<td>Raffaello Room</td>
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<tr>
<td>16:00</td>
<td>Levels in Food and Feed</td>
<td>Leonardo Room</td>
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<tr>
<td>16:15</td>
<td>Application of BAT/BEP to reduce or eliminate POPs</td>
<td>Galileo Room</td>
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<td>16:30</td>
<td>Wildlife Toxicology</td>
<td>Giotto Room</td>
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<td>16:45</td>
<td>COFFEE BREAK and Exhibition</td>
<td>Exhibition Area</td>
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### Tuesday 30th August 2016

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<thead>
<tr>
<th>Time</th>
<th>Michelangelo Auditorium</th>
<th>Advances in Passive and Other Sampling Strategies</th>
<th>Raffaello Room</th>
<th>Advances in Toxicology of POPs (including mechanistic aspects)</th>
</tr>
</thead>
</table>
| 10:45 | **Chairs:** Tom Harner - Karla Pozo | **8.5001** Chlorinated Pesticides and Natural Brominated Anisoles in Air at Three Northern Baltic Stations  
*T. Bidleman, H. Laudon, O. Nygren, S. Svanberg, M. Tysklind* | **10:45** | **1.1006** Polychlorinated biphenyls affect the hepatic-peripheral vascular axis suggesting a novel mechanism for persistent organic pollutants  
*B. Wahlang, J. Perkins, M. Petriello, J. Hoffman, B. Hennig* |
| 11:00 | **8.5004** Polycyclic Aromatic Hydrocarbons in Asian Atmosphere  
*Y. Li, W. Hong, H. Jia, W. Li, W. Ma* | | **11:00** | **6.2001** Tribromophenol and Polybrominated Diphenyl Ethers (PBDEs) in Human Placental Tissues and Their Associations with Thyroid Hormones, Thyroid Deiodinase and Thyroid Sulfotransferase Activities  
*H. Stapleton, C. Leonetti, C. Butt, K. Hoffman, M.L. Miranda* |
| 11:15 | **8.5005** Sampling artifacts and uncertainties in active and passive air sampling, and the implications for comparison of measurements of SVOCs in air  
*M. De Paola* |
| 11:30 | **8.5011** Functionalized glass fiber filters for the simultaneous sampling of vapour and particle phase PCDD/Fs and dl-PCBs  
*V. Paolini, E. Guerriero, P. Benedetti, S. Mosca, M. Cerasa, M. Rotatori, A. Bacaloni* | | **11:30** | **1.1004** Hepatic Toxic/Carcinogenic Activity of Pentabromodiphenyl Ethers  
*J. Dunnick, D. Morgan, H. Cunny, A. Brix* |
| 11:45 | **8.5002** SPME with Performance Reference Compounds for in situ Measurement of DDT and Metabolites in Ocean Water  
*J. Gan, K. Lin, W. Lao, K. Maruya* | | **11:45** | **1.1008** Temporary trend of serum levels of dioxin-like substances in adults living in a highly polluted region  
| 12:00 | **8.5010** A Passive Sampling Tool For Time Integrative Monitoring Of Perfluoralkyl Substances In Aqueous Environments  
*S. Kaserzon, Y. Li, C. Baduel, C. Godlonton, J. Mueller* | | **12:00** | **1.1015** Assessment of polybrominated diphenyl ethers in human adipose tissue from Qatari population  
*M. Helaleh, N. Al Tamimi, A. Latiffa, M. El-rayes, M.H. Thomas* |
10:45
**Human Exposure**

**Leonardo Room**

**Chairs:**
Kees Olie - Gilles Riviere

- **4.5008**
PbDE metabolism to OH-BDEs: Investigation of CYP 2B6 Mechanistic Variability

  **D. Butryn,** M.S. Gross, C. Lai-har, B. Mcgarrigle, A. Schecter, J.R. Olson, D.S. Aga

- **4.5022**
In vitro oral bioaccessibility of FRs in indoor dust using Tenax-TA® assisted colon-extended physiologically based extraction test (CE-PBET) coupled with a dialysis membrane method

  **K. Kademoglou,** A.C. Williams, C.D. Collins

- **4.5023**
PBDEs and NBFRs levels and trends in house dust and association with human milk

  **M. Frederiksen,** K. Vorkamp, J.B. Nielsen, L.S. Sørensen, M. Thomsen, L.E. Knudsen

- **4.5029**
Cartography of persistent organic pollutants in serum and adipose tissue of French women with deep infiltrating endometriosis

  **J. Antignac,** S. Ploteau, J.P. Antignac, C. Volteau, P. Marchand, A. Vénisseau, V. Vacher, B. Le Bizec

- **4.5001**
Exposure to PCB and PCDD/F of the vegetation population in France

  **G. Riviere,** S. Fleury, N. Bemrah

- **4.5009**
The survey of the exposure to dioxins and other chemical compounds in humans (IV) - Dioxins and other chemical compounds concentration in human bodies of general public in Japan and intake survey from food


10:45
**Application of BAT/BEP to reduce or eliminate POPs**

**Galileo Room**

**Chairs:**
Roland Weber - Moo-been Chang

- **3.3004**
Ozone-enhanced oxidation of PCDD/Fs over CNTs supported catalysts

  **Y. Peng,** S. Lu, R. Zhao, A. Buekens

- **3.3009**
Formation of PXDD/Fs (Cl or Br) in Non-combustion Treatment of POPs Contaminated Soil and Its Prevention

  **M. Lu,** T. Lv, G. Cagnotto, K. Zhang, S. Sheng, C. Wu, J. Huang, G. Yu

- **3.3006**
Field Study Of Pccd/Fs Destruction Performance In Co-Processing Fly Ash From Municipal Solid Waste Incineration

  **Z. Peng,** C. Xinhua, Y. Sun

- **3.2007**
1996 To 2016 – Twenty Years of Application And Experiences With Continuous Sampling Of Dioxin Emissions

  **J. Reinmann**

- **3.3007**
A Sustainable Solution for Hbdcd Containing Ps Foam via a Dissolving Technique with Bromine Recovery

  **L. Tange,** M. Schlummer, E. Meuwissen, R. Eberstaller-Kostiakova, D. Richterova, D. Jureckova, H. Patayova

- **3.3014**
Characterization of PCDD/Fs and PCBs emitted from two woodchip boilers in Taiwan

  **M. Chang,** S. Bai, S. Chang, J. Duh, F. Sung, J. Su
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<tr>
<td>10:45</td>
<td>Levels in the Environment (Air, Soil, Water)</td>
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<td>12:15</td>
<td>Chairs: Joao Vicente de Assuncao Mahua Saha</td>
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</table>

- **10:45**  
  4.1023 Examination of Pcd/F Outliers in Soil Background Studies Provides Insights into Historic Sources  
  *W. Shields, M. Edwards, C. Monti, L. Royer*

- **11:00**  
  4.1007 Perfluoroalkyl Acids in the Surface Waters of the Western Mediterranean Sea  
  *M. Brumovský, P. Kardsková, M. Borghini, L. Nizzetto*

- **11:15**  
  4.1014 Understanding bioaccumulation and biotransformation processes of high priority contaminants in fiber banks sediments in the northern Baltic Sea  
  *D. Kupryianchyk, C. Yath, T. Bidleman, H. Larsson, P. Liljelind, A. Andersson, O. Rowe, J. Wikner, P. Haglund, M. Tysklind*

- **11:30**  
  4.1028 Spatial and seasonal variations of Polycyclic Aromatic Hydrocarbons (Pahs) and Polychlorinated Biphenyls (Pcbs) in air and Soil of Kutahya, Turkey  
  *Y. Dumanoglu, M. Odabasi, E.O. Gaga*

- **11:45**  
  4.1015 The Legacy of Persistent Organic Pollutants at the Yanomami Indigenous People Land, Brazilian Amazon  
  *J. P. Machado Torres, Y. Guida, R. Meire, F.B. Machado Torres, J. Goes, J. Figueiredo, A. Goes, C. Silva, T. Yamane, P. Santos*

- **12:00**  
  4.1002 The Study and Differentiate of Pcd/Fs Distribution from Herbicide used in Vietnam War and that created from Medical Waste Incinerators  
  *V. Chu, T.A. Mai*
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<tr>
<th>Time</th>
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<th>Room</th>
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<th>Chairs</th>
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<tbody>
<tr>
<td>15:00</td>
<td>Analytical, Screening and Confirmatory Methods</td>
<td>Guibin Jiang - Silvia Mosca</td>
<td>Michelangelo Auditorium</td>
<td>Is Exposure to PFASs a New Concern for Humans and Wildlife?</td>
<td>Monica Lind - Jacob de Boer</td>
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<td>15:00</td>
<td>2.1037</td>
<td>Endocrine activity in waste and river waters from the Brussels Region, Belgium using the BG1Luc4E2 CALUX bioassay</td>
<td>8.6003</td>
<td>Exposure of Norwegian toddlers to perfluoroalkyl substances (PFAS): the association with breastfeeding and maternal PFAS concentrations</td>
<td>L. Haug, E. Papadopoulou, A. Sabaredzovic, E. Namork, U.C. Nygaard, B. Granum</td>
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<tr>
<td>15:15</td>
<td>2.1002</td>
<td>Alternative sulphuric acid pre-treatment and silica based solvent change demonstrated for lard and fish oil analysed by EROD-bioassay</td>
<td>8.6006</td>
<td>Effects of weathering on PFASs used in durable water repellence of outdoor clothing</td>
<td>J. de Boer, I. Van Der Veen, A. Hanning, J. Weiss, P. Leonards</td>
</tr>
<tr>
<td>15:30</td>
<td>2.1038</td>
<td>Measurement uncertainty estimation for Laboratories performing PCDD/F and PCB analysis by isotope dilution mass spectrometry</td>
<td>8.6001</td>
<td>Are perfluorinated compounds a concern in South Africa? Current levels detected in wild bird eggs</td>
<td>C. Swiegelaar, L. Quinn, D. Prevo-o-franzen, H. Bouwman</td>
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<tr>
<td>15:45</td>
<td>2.1013</td>
<td>Congener Patterns of Polychlorinated Dibenzo-P-Dioxins and Dibenzofurans as a Useful Aid to Source Identification During Food Contamination Incidents</td>
<td>8.6010</td>
<td>Serum PFOS Levels are related to an increased biological age as calculated by Dna methylation analysis</td>
<td>M. Lind, S. Salihovic, B. Van Bavel, E. Lampa, L. Lind</td>
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<td>Time</td>
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<td>15:00</td>
<td>Leonardo</td>
<td>Levels in Food and Feed</td>
<td>Martin Rose - Nina Lohmann</td>
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<td>15:15</td>
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<td>4.3006  Determination of PCDD/Fs and PCBs in blood of bovine animals and comparison with concentrations in the corresponding meat</td>
<td>K. Wahl, A. Schaechtele, J. Haedrich, K. Djuchin, R. Malisch</td>
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<td>15:30</td>
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<td>4.3010  The Occurrence of New or Candidate Stockholm POPs In Food</td>
<td>A. Fernandes, D. Mortimer, M. Rose, F. Smith, Z. Turford, S. Panton</td>
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<tr>
<td>15:00</td>
<td>Galileo</td>
<td>Application of BAT/BEP to reduce or eliminate POPs</td>
<td>Huang Jun - Piermario Gerthoux</td>
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<td>3.3002  Sequestration of Polychlorinated biphenyls from aqueous solutions using activated carbons</td>
<td>O.R. Idialu, A. Fletcher, C. Davidson, L. Gibson</td>
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<td>15:30</td>
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<td>3.4001  Effect of calcium oxide and aluminum additives on mechanochemical degradation of PCDD/Fs in fly ash</td>
<td>Z. Chen, S. Lu, Q. Mao, J. Yan</td>
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</table>
15:00  Wildlife Toxicology  
Giotto Room  
Chairs: Torres Joao Paolo Carmela Protano

15:00  Effects of dietary PBDE-47 exposure on the marine gastropod Crepidula onyx  
B. Po, J. Chiu, R. Wu

15:15  In vitro immunotoxicity of blubber-derived contaminant cocktails in freshly collected lymphocytes from seals, dolphins and polar bears  

15:30  Epigenetic changes upon multi-residue exposure to polycyclic aromatic hydrocarbons  

15:45  Oxidative stress responses in relationship to persistent organic pollutants (POPs) levels in the feathers and blood of predatory birds from Pakistan  

16:30  Analytical, Screening and Confirmatory Methods  
Michelangelo Auditorium  
Chairs: Rainer Malisch Douglas Hayward

16:30  Challenges in Enantioseparation and Data Management of Chiral Pops in environmental studies  
E. Can-Guven, K. Gedik, P.B. Kurt-karakus

16:45  The next stage of international standardization of PFASs measurements in water samples  
N. Yamashita, S. Taniyasu, E. Reiner, E. Yamazaki

17:00  High throughput bioanalytical screening of inland waters of Southern California  

17:15  Do PCDD/PCDF standard solutions used in bioassay- or mass spectrometry-based dioxin analysis pose a risk as potentially acutely toxic to lab personnel?  
R. Malisch, M.S. Denison, H. Fiedler, P. Fuerst, R. Hoogenboom, A. Schaechtele, D. Schrenk
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<tr>
<td>16:30</td>
<td>Integrating Exposure, Toxicology and Epidemiology</td>
<td>Onice</td>
<td>Chairs: Janna Koppe, Tom Betty Muir</td>
<td>B. Hennig, M. Petriello</td>
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<td>16:30</td>
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<td>Healthful nutrition and increased physical activity can modulate Pop Toxicity through direct and epigenetic regulatory mechanism</td>
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<td>17:00</td>
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<td>Contrasts of applied dose exposure and effect levels from integrated toxicology and epidemiology studies: associations of dosing amounts, internal doses, life stage, and sex for the thyroid effect category</td>
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<td>17:15</td>
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<td>T. Muir, J. Michalek, R. Palmer</td>
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**Leonardo Room**

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<td>16:30</td>
<td>Rep Estimates of Dl Activity for Dioxins, Furans, and Dl-Pcbs in Adults Based on two thyroid outcomes and Cyp1a1and 1b1 gene expression in blood assessed 12 years apart</td>
<td>Leonardo</td>
<td>Chairs: Martin van den Berg, Pim Leonards</td>
<td>T. Trnovec, S. Wimmerova, B. Drabna, L. Palkovicova Murinova, M. Van Duursen, R. Canton, K. Van Ede, V. Kostriakova, D. Richterova, D. Jureckova, H. Patayova</td>
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<tr>
<td>16:45</td>
<td>Evaluation of the relative health risk impact of atmospheric Pcd/d/Fs In Pm2.5 in Taiwan</td>
<td>Leonardo</td>
<td>Chairs: Martin van den Berg, Pim Leonards</td>
<td>Y.N. Li, Y.T. Liu, W.T. Hsu, Y.W. Chen, Y.Y. Sung, K.H. Chi</td>
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<tr>
<td>17:00</td>
<td>Positive correlation between Polychlorinated biphenyls (PCBs) and type 2 Diabetes in Saudi adults</td>
<td>Leonardo</td>
<td>Chairs: Martin van den Berg, Pim Leonards</td>
<td>I.M.I. Ismail, H.M.S. Al-bar, N. Ali</td>
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<tr>
<td>17:15</td>
<td>Developmental neurotoxicity assessment of chemical mixtures in children</td>
<td>Leonardo</td>
<td>Chairs: Martin van den Berg, Pim Leonards</td>
<td>P. Leonards, M. Dingemans</td>
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</table>
4.6003 Chemical and physical Sinks simulated by a lagrangian travelling box model for selected Pops over the Aegean in summer 2012

M.D. Mulder, Y. Dumanoglu, P. Přibylova, A. Sofuoglu, S.C. Sofuoglu, G. Lammel

4.6004 Derivation of background values in soils for persistent organic compounds (PCBs, PCDD/Fs, DDx)


4.6005 Modeling hydrological and biogeochemical controls of the dissipation of p,p’-DDT from soils


4.6002 Disparate impacts of pesticide use in banana cultivation: a disconnect between production regions and consumers

A. Mendez, L. Castillo, C. Rupert, C. Ng

4.1006 Environmental discharge of Perfluoroalkyl substances by two great earthquakes in Japan. The great east Japan Earthquake in 2011 and the Kumamoto Earthquake in 2016

E. Yamazaki, N. Yamashita, S. Taniyasu, Y. Miyazawa, T. Gama, K. Kannan

4.1038 PBDEs and trace metals in soil samples from an electronic waste recycling and dump site at Agbogbloshie, Accra, Ghana

E. Akortia, J. Okonkwo

4.1012 Spatial variation of PAHs and PCBs in coastal air, seawater, and sediments in a heavily industrialized region

M. Odabasi, Y. Dumanoglu, M. Kara, H. Altıok, T. Elbir, A. Bayram

4.1029 Passive sampling of Pbcs and Pbdes in Turkey’s atmosphere

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<td>Welcome and introduction to the EFSA Special session</td>
<td>R. Hoogenboom</td>
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<td>16:35</td>
<td>EFSA’s risk assessments on persistent organic pollutants: an overview of past and on-going assessments</td>
<td>L. Ramos Bordajandi</td>
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<td>16:50</td>
<td>EFSA’s data collection on Dioxins and its use for exposure assessment</td>
<td>J. A. Gómez Ruiz</td>
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<td>17:05</td>
<td>Health Based Guidance value for dioxin: A toxicokinetic modelling perspective</td>
<td>M. Zeilmaker</td>
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<td>17:20</td>
<td>The U.S. Environmental Protection Agency’s human health hazard assessment of 2,3,7,8-TCDD</td>
<td>B. Hawkins</td>
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<td>17:35</td>
<td>Impact of EFSA risk assessments on persistent organic pollutants at EU Member State level. The FSAI experience</td>
<td>C. Tlustos</td>
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<tr>
<td>17:50</td>
<td>Risk management of halogenated persistent pollutants at EU level</td>
<td>F. Verstraete</td>
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<tr>
<td>18:05</td>
<td>Concluding remarks and end of meeting</td>
<td>R. Hoogenboom</td>
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<td>18:10</td>
<td>EFSA Networking Cocktail served by the Galleria on First Floor</td>
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</table>
EFSA’s scientific advice helps to protect consumers, animals and the environment from food and feed related risks.

To hear more about EFSA join us at DIOXIN 2016 on 30 August 2016:
16.30 - 18.10  Info session
18.10 - 19.00  Networking cocktail
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<th>Session</th>
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<td>4.1005</td>
<td>Evaluation of seasonal variation of PCDDS/PCDFS' concentration in the ambient air by using passive monitoring method</td>
<td>S. Trinh Khac, T. Nghiem Xuan</td>
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<td>4.1011</td>
<td>Antibiotic potential and cytotoxicity of halogenated carbazoles present in German soils</td>
<td>M. Mandelshtam, K.I. Mohr, J. Wink, F. Mertes, K.W. Schramm</td>
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<td>4.1013</td>
<td>Ambient Air Altitude Profile of PAH, PCB and OCP Near Bolzano Determined by Virtual Organisms</td>
<td>M. Pandelova, F. Antritter, E. Feicht, M. Kirchner, B. Henkelmann, C. Corsten, S. Bernhöft, L. Verdi, C. Bachmann, K. Schramm</td>
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<td>4.1017</td>
<td>PCDD/Fs in surface sediments from Dongting Lake, China</td>
<td>H. Zhou, Q. Liu, J. Zhao, G. Zhao</td>
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<td>4.1018</td>
<td>Occurrence and distribution of organophosphorus flame retardants in urban river sediments in Hefei, China</td>
<td>L. Li, X. Hu, Y. Qiu*, S. Zhao, Z. Zhu, J. Zhao, Z. Lin</td>
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<tr>
<td>4.1019</td>
<td>Human Health Hazard and Risk due to Organochlorines in Urban Soils from Central India</td>
<td>B. Kumar, K. Sajwan, V. Verma, M. Mishra, C. Sharma, A. Akolkar</td>
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<td>4.1020</td>
<td>Levels and Distribution of Organochlorine Pesticides in Shangai Soil, China</td>
<td>N. Khammanee, J. He, Y. Qiu, C. Liu, Y. Zhou, N. Kungskulniti, Z. Zhu, J. Zhao, Z. Lin</td>
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<td>4.1027</td>
<td>Occurrence of chloronicotinyl insecticides in river waters in Saitama prefecture, Japan</td>
<td>N. Ohtsuka, K. Minome, M. Motegi, K. Nojiri, Y. Horii, S. Takemine</td>
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<td>4.1033</td>
<td>Seismic events as natural forcings of anthropogenic environmental impacts: the 1999 Mw 7.4 Izmit earthquake on the Marmara Sea as a case study for the definition of PCBs and PAHs redistribution dynamics</td>
<td>L.G. Bellucci, R. Piazza, S. Giuliani, L. Gasperini, A. Polonia, M. Vecchiato, M.N. Cagatay</td>
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<td>10:15</td>
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Wednesday 31st August 2016

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| 10:45 | Anniston Community Health Survey and other Cohorts<br>**Chairs:** Linda Birnbaum - Marian Pavuk<br>**Abstracts:**<br>10:45 8.7003 Exposure to Dioxins and Dioxin-Like compounds in a Follow-Up Study of the Anniston Community Health Survey (ACHS II) **L. Birnbaum, E. Yang, A. Sjodin, R. Jones, M. Lewin, M. Pavuk**<br>11:00 8.7002 Polychlorinated Biphenyls, Dioxins and Diabetes in the Anniston Cohort **M. Pavuk, E. Yang, M. Lewin, L. Birnbaum**<br>11:15 8.7004 Sensitive and specific liver injury Biomarkers: elevated liver disease in organochlorine toxicant exposed residents of Anniston, AL **M. Pavuk, H. Clair, C. Pinkston, G. Brock, K. Falkner, R. Prough, M. Cave, L. Birnbaum**<br>11:30 8.7001 Interactions between Environmental Pollution and Nutrition-Based Biomarkers of Metabolic disease Risk in Residents of Anniston, Alabama **M. Petriello, J. Perkins, A. Morris, M. Sunkara, S. Soman, A. Stromberg, M. Pavuk, L. Birnbaum, B. Hennig**<br>11:45 8.7005 Linking PCB Congener Concentrations and Metabolomic Profiles in Anniston Residents: a Pilot Study **J.R. Cosgrove, B. Chandramouli, H. Butler, D.G. Patterson Jr., L.S. Birnbaum, M. Pavuk**<br>12:00 6.3003 Yusho still unsolved problem **R. Takeda**<br>10:45 POPs in waste streams: emissions and implications<br>**Chairs:** Stuart Harrad - Myrto Petreas<br>**Abstracts:**<br>10:45 8.10010 Management of Halogenated Flame Retarded Wastes in the United States – the Need for a Circular Economy Approach **A.E. Lindeman, S. Petty, A. Blum, S. Bellur, M.L. Diamond, D. Lucas, C.P. Koshland, R. Weber**<br>11:00 8.10014 Pushing the limits of hand-held X-ray fluorescence spectrometers to quantify BFRs in WEEE **A. Guzzonato, F. Puype, S. Harrad**<br>11:15 8.10018 The recycling of plastics containing brominated flame retardants leads to contamination of plastic children's toys **J. Strakova, J. Digangi**<br>11:30 8.10016 Brominated Flame Retardants in Irish Waste Streams – XRF Screening Suitability and First Results **M. Sharkey, H. Berresheim, M.A. Abdallah, S. Harrad**<br>11:45 8.10019 Emissions of Dioxins and PCBs from a Diesel Engine Using Used Lubricating Oil and Coconut Oil as Diesel Extenders **A. Banks, S. Stevanovic, M. Callen, L. Hearn, A. Zare, M. Rahman, Z. Ristovski, D. Haynes, J.F. Mueller**<br>12:00 8.10007 Fate and mass balance of PCB in municipal solid waste incinerators (MSWIs) **A.A. Jensen**
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<td>Alternative Flame Retardants</td>
<td>Galileo Room</td>
<td>Adrian Covaci - Robert Letcher</td>
<td>8.2007 Organophosphate Flame Retardants in the Great Lakes Atmosphere by A. Salamova, A. Peverly, M. Venier, R. Hites</td>
</tr>
<tr>
<td>11:00</td>
<td></td>
<td></td>
<td></td>
<td>8.2001 The bioaccumulation of SCCPs in an aquatic food chain from an pond contaminated by e-waste in South China by X. Luo, R. Sun, B. Mai</td>
</tr>
<tr>
<td>11:30</td>
<td></td>
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<td>8.2014 Endocrine disruption of sex and thyroid hormones by 1,2-dibromo-4-(1,2-dibromoethyl)cyclohexane (DBE-DBCH) in American kestrels by K. Fernie, S. Marteinson, V. Palace, R. Letcher</td>
</tr>
<tr>
<td>12:00</td>
<td></td>
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<td></td>
<td>8.2005 Using the parallelogram approach to estimate human percutaneous bioavailability for novel &amp; legacy brominated flame retardants by G. Knudsen, M. Hughes, S. Hall, J. M. Sanders, L. Birnbaum</td>
</tr>
</tbody>
</table>
### Exposure to POPs in Urban, Indoor and Workplace Environments

#### Giotto Room

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:45</td>
<td>4.4010</td>
<td>Human dermal absorption of chlorinated organophosphate flame retardants; implications for human exposure</td>
<td>S. Harrad, G. Pawar, M.A. Abdallah</td>
</tr>
<tr>
<td>11:00</td>
<td>4.4019</td>
<td>Electronics and electrical waste recycling: organics and metals in Vietnamese women</td>
<td>A. Schecter, J. Kincaid, H.T. Quynh, M. Ahmed, S. Rashid, K. Jawah, R. Crandall, M. Gagnier, L. Birnbaum</td>
</tr>
<tr>
<td>11:15</td>
<td>4.4021</td>
<td>An exposure assessment of Nigerians to polybrominated diphenyl ethers in dust samples collected from cars and the indoor microenvironment</td>
<td>O. Olukunle, J. Okonkwo, G. Wase, R. Shaito</td>
</tr>
<tr>
<td>11:45</td>
<td>4.4003</td>
<td>Spatial distribution of polycyclic aromatic hydrocarbon around a tertiary hospital medical waste incinerator</td>
<td>O. Adesina, J. Sonibare, A. Adejuwon</td>
</tr>
<tr>
<td>12:00</td>
<td>4.4018</td>
<td>Air Toxic Levels during the 2014 Fifa World Cup matches in Sao Paulo – Brazil</td>
<td>J.V. De Assuncao, M.F. Silva, H. Ribeiro, C.R. Pesquero</td>
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## Thursday, 1st September 2016

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<tr>
<th>Time</th>
<th>Session</th>
<th>Location</th>
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<tbody>
<tr>
<td>09:00</td>
<td>Plenary Session&lt;br&gt;What is the meaning of Environmental Justice: does it still mean the same in the 21st Century?&lt;br&gt;&lt;i&gt;Tyrone Hayes&lt;/i&gt;</td>
<td>Michelangelo Auditorium</td>
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<tr>
<td>09:50</td>
<td>Students Plenary - see page 22</td>
<td>Michelangelo Auditorium</td>
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<tr>
<td>10:15</td>
<td>COFFEE BREAK and Exhibition</td>
<td>Exhibition Area</td>
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<tr>
<td>10:45</td>
<td>New methods of Analysis&lt;br&gt;Brominated Flame Retardants&lt;br&gt;POPs Transport, Distribution and Bioaccumulation in Remote Areas&lt;br&gt;Atmospheric Sources and Behavior of POPs&lt;br&gt;Biomonitoring</td>
<td>Michelangelo Auditorium&lt;br&gt;Raffaello Room&lt;br&gt;Leonardo Room&lt;br&gt;Galileo Room&lt;br&gt;Giotto Room</td>
</tr>
<tr>
<td>12:15</td>
<td>Poster Session 3</td>
<td>Galleries</td>
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<tr>
<td>13:00</td>
<td>LUNCH TIME and Exhibition</td>
<td>Gardens</td>
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<td>13:00</td>
<td>Side Meeting Miura</td>
<td>Leonardo Room</td>
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<td>14:00</td>
<td>Round Table&lt;br&gt;POPs in feed and food: the European perspective&lt;br&gt;&lt;i&gt;Chair: Giampiero Scortichini&lt;/i&gt;</td>
<td>Michelangelo Auditorium</td>
</tr>
<tr>
<td>15:00</td>
<td>New methods of Analysis&lt;br&gt;Brominated Flame Retardants&lt;br&gt;POPs Transport, Distribution and Bioaccumulation in Remote Areas&lt;br&gt;Atmospheric Sources and Behavior of POPs&lt;br&gt;Levels in the Environment (Air, Soil, Water)</td>
<td>Michelangelo Auditorium&lt;br&gt;Raffaello Room&lt;br&gt;Leonardo Room&lt;br&gt;Galileo Room&lt;br&gt;Giotto Room</td>
</tr>
<tr>
<td>16:00</td>
<td>COFFEE BREAK and Exhibition</td>
<td>Exhibition Area</td>
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<tr>
<td>16:30</td>
<td>New methods of Analysis&lt;br&gt;POPs in waste streams: emissions and implications&lt;br&gt;POPs Transport, Distribution and Bioaccumulation in Remote Areas&lt;br&gt;Regulation addressing POPs (all media)&lt;br&gt;Exposure to POPs in Urban, Indoor and Workplace Environments</td>
<td>Michelangelo Auditorium&lt;br&gt;Raffaello Room&lt;br&gt;Leonardo Room&lt;br&gt;Galileo Room&lt;br&gt;Giotto Room</td>
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<tr>
<td>20:00</td>
<td>Gala Dinner at Palazzo Borghese</td>
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<tr>
<td>Time</td>
<td>Michelangelo Auditorium Chairs: Jean Francois Focant - Flavio Ciesa</td>
<td>Raffaello Room Chairs: Marta Venier - Vittorio Esposito</td>
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<tr>
<td>10:45</td>
<td>New methods of Analysis</td>
<td>Brominated Flame Retardants</td>
</tr>
<tr>
<td>10:45</td>
<td>2.2026 Gas Chromatography – Atmospheric Pressure Ionization Mass Spectrometry with Helium and Nitrogen Carrier Gases for Fast Analysis of Brominated Diphenyl Ethers</td>
<td>2.3011 Flame retardants in furniture and building insulation foams: policies and implications in North America</td>
</tr>
<tr>
<td>11:00</td>
<td>2.2001 Zeolites as possible adsorbents for EN 1948 standard</td>
<td>2.3008 Methods to study the degradation of the polymeric brominated flame retardant PolyFR by UV irradiation</td>
</tr>
<tr>
<td>11:15</td>
<td>2.2025 Resolving interferences in the analysis of PCBS using an orbitrap GC-MS system</td>
<td>2.3012 Polybrominated diphenyl ethers (PBDEs) in articles in China</td>
</tr>
<tr>
<td></td>
<td><strong>F. Ciesa, L. D’ambrosio, A. Basso, K. Mair, V. Fellin, W. Tirler</strong></td>
<td><strong>S. Li, Y. Chen, N. Zhao, J. Li</strong></td>
</tr>
<tr>
<td>11:30</td>
<td>2.2008 Evaluating a rapid atmospheric pressure photoionization - mass spectrometry (APPI-MS) method for the detection of Polychlorinated Dibenzo-p-dioxins and Furans (PCDD/F) in real environmental samples collected within the vicinity of industrial incinerators</td>
<td>2.3014 Formation of PBDD/F precursors in gas-phase decomposition of tetrabromobisphenol A (TBBPA)</td>
</tr>
<tr>
<td></td>
<td><strong>M. Amo-Gonzalez, A. Alvaro, R. Mc Culloch, J.C. Del Catillo, M. Gomez, J. Marroquin, R. Cuesta</strong></td>
<td><strong>B.Z. Dlugogorski, A. Saeed, M. Altarawneh</strong></td>
</tr>
<tr>
<td>11:45</td>
<td>2.2028 Comparison of atmospheric pressure ionization gas chromatography-triple quadrupole mass spectrometry to traditional high-resolution mass spectrometry for the identification and quantification of Halogenated Dioxins and Furans</td>
<td>2.3015 Evaluation of remediation alternatives for reductive debromination of polybrominated diphenyl ethers in sediments</td>
</tr>
<tr>
<td>12:00</td>
<td>2.2009 High sample throughput in a modern dioxin laboratory using automated clean-up and dual acquisition GC-HRMS</td>
<td>2.3002 The occurrence of methoxylated/hydroxylated and parent PBDEs in marine environment of South Korea</td>
</tr>
</tbody>
</table>
10:45
POPs Transport, Distribution and Bioaccumulation in Remote Areas

Leonardo Room
Chairs: Cynthia De Wit Simonetta Corsolini

10:45
PCDD/F measurement at two high-altitude stations in Eastern Asia: evaluation of long-range transport and source apportionment of PCDD/FS during the Southeast Asia biomass burning event


11:00
Could the ratio between the PCB-11 and the indicator PCBs help to distinguish between local and long-range pollution in the polar environments?

M. Vecchiato, A. Gambaro, C. Barbante, R. Piazza

11:15
Novel brominated and chlorinated flame retardants – a review and assessment of their occurrence in the Arctic

K. Vorkamp, F.F. Rigét, J. Balmer, H. Hung, R. Letcher, C.A. De Wit

11:30
How does BDE-209 enter the arctic air? By the movement of air or particles?

Y. Li, L. Qiao, N. Ren, D. Mackay, R.W. Mack

11:45
Contaminants of Emerging Concern in the Arctic: an Assessment of Halogenated Natural Products

T.F. Bidleman, J.R. Kucklick, R.J. Letcher, L.M. Jantunen, F. Wang, H. Kylin

12:00
Screening Known Arctic Contaminants for the Next Generation of Persistent Organic Pollutants

E. Reppas-Chrysouvitsinos, M. Macleod

12:15

10:45
Atmospheric Sources and Behavior of POPs

Galileo Room
Chairs: Nuno Ratola Alessandra Cincinelli

10:45
Spatial and temporal variations in the atmospheric concentrations of “Stockholm Convention” organochlorine pesticides in Kuwait

B. Gevao, M. Porcelli, S. Rajagopalan, D. Khristian, M. Bahloul, J. Zafar

11:00
Multi-component determination of atmospheric semi-volatile organic compounds in Tarragona county, Catalonia, Spain


11:15
POP dispersion in the environment: wind selective sampling of different PM fractions up and downstream the prevailing wind-line of a potential emission source

W. Tirler, G. Angelucci, A. Basso, V. Donega, K. Mair, V. Fellin, G. Voto

11:30
Partitioning of atmospheric polycyclic aromatic hydrocarbons (PAHS) between vapor/solid (PM2.5) phases and source apportionment at different area in Taiwan


11:45
Passive air sampling to assess POP air concentrations in Spain

P. Sanz, A. De La Torre, I. Navarro, M.A. Martínez

12:00
Concentrations and source apportionment of atmospheric polycyclic aromatic hydrocarbons (PAHs) at a regional background site of East China

S. Mao, G. Zhong, Z. Cheng, J. Li, G. Zhang
### Thursday 1st September 2016

#### Biomonitoring

**Giotto Room**

**Chairs:**
Daniel Zalko - Cathrine Thomsen

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</thead>
<tbody>
<tr>
<td>11:00</td>
<td>4.7003</td>
<td>Comparison of the trends in PFAS concentrations obtained from a 10 year longitudinal cohort investigation to general cross-sectional and retrospective population based studies</td>
<td>J. Stubleski, S. Salihovic, L. Lind, P.M. Lind, A. Kärrman, B. Van Bavel</td>
</tr>
<tr>
<td>11:30</td>
<td>4.7008</td>
<td>Levels of selected per- and polyfluorinated alkyl substances (PFAs) in Swedish firefighters</td>
<td>P. Kukucka, J. Stubleski, M. Sejfic, A. Kärrman</td>
</tr>
<tr>
<td>11:45</td>
<td>4.7007</td>
<td>Impact of Stockholm Convention POPs in gull eggs from the Ebro Delta Natural Park</td>
<td>S. Lacorte, P. Zapata, R. Ballesteros, P. Colomer, M.G. Martrat, E. Abad, A. Bertolera, F.J. Santos</td>
</tr>
<tr>
<td>12:00</td>
<td>4.7005</td>
<td>POP Monitoring in Fish</td>
<td>W. Moche, M. Clara, K. Deutsch</td>
</tr>
</tbody>
</table>
### New methods of Analysis

**Michelangelo Auditorium**

**Chairs:** Eric Reiner - Gareth Rhys Jones

#### 15:00

2.2013 Estimation of the Limit of Detection (LOD) for Polychlorinated dibenzo-p-Dioxins and furans (PCDD/F) and non-ortho-polychlorinated biphenyls (cPCBs) on a Thermo Scientific DFS Magnetic Sector GC-HRMS using Splitless and Programmed Temperature Vaporiz


#### 15:15

2.2019 Quantifying short-chain chlorinated paraffin congener groups by mass spectra deconvolution and response factor calculation in atmospheric pressure chemical ionization high resolution mass spectrometry

_B. Yuan, C. Bogdal, U. Berger, M. Macleod, T. Alsberg, C. De Wit_

#### 15:30

2.2007 Development of preparation procedure based on in-cell PLE followed by GPC for the analysis of OPEs by GC-EI/APCI-MS/MS

_W. Halloum, R. Cariou, G. Dervilly-pinel, F. Jaber, F. Jaber, B. Le Bizec_

#### 15:45

2.2017 A high throughput, low cost and green approach to automated extraction, clean up, and concentration for same day POPs analysis

_H. Shirkhan, P. Germansderfer, R. Addink, T. Hall_

### Brominated Flame Retardants

**Raffaello Room**

**Chairs:** XiaoJun Luo - Hindrik Bouwman

#### 15:00

2.3006 Concentrations of "Legacy" and Novel Brominated Flame Retardants in matched samples of UK kitchen and living room/bedroom dust

_J. Kuang, Y. Ma, S. Harrad_

#### 15:15

2.3001 Photodegradation of the "novel" brominated flame retardant Tris-(2,4,6-tri-bromophenoxy)-s-triazine

_D. Lörchner, M. Koch, L.W. Kroh, R. Köppen_

#### 15:30

2.3009 LC-MS-based analytical method for quantification of selected brominated flame retardants in food commodities


#### 15:45

2.3007 Bioaccumulation of Legacy and Emerging Flame Retardants in the Great Lakes

_M. Venier, J. Guo, A. Salamova, R. Hites_
<table>
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<tr>
<th>Time</th>
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<th>Topic</th>
<th>Authors</th>
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</thead>
<tbody>
<tr>
<td>15:00</td>
<td>Leonardo</td>
<td>POPs Transport, Distribution and Bioaccumulation in Remote Areas</td>
<td>Chairs: Cynthia De Wit, Simonetta Corsolini</td>
</tr>
<tr>
<td>15:00</td>
<td></td>
<td>8.4008 Organophosphate esters: current knowledge on properties and environmental behaviour, fate and contamination from a multi-media perspective in the Arctic</td>
<td>R.J. Letcher, J. Balmer, D. Muir, C. De Wit</td>
</tr>
<tr>
<td>15:45</td>
<td></td>
<td>8.4004 Influence of planted forests on the transport and distribution of POPs: A case study in a remote forest farm of Hainan Island, China</td>
<td>X. Liu, J. Li, G. Zhang</td>
</tr>
<tr>
<td>15:00</td>
<td>Galileo</td>
<td>Atmospheric Sources and Behavior of POPs</td>
<td>Chairs: Nuno Ratola, Alessandra Cincinelli</td>
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<tr>
<td>15:00</td>
<td></td>
<td>8.3005 Southwest monsoon triggers re-volatilisation of persistent organic pollutants from soils in India</td>
<td>G. Lammel, C. Degrendele, S.S. Gunthe, Q. Mu, A. Muthalagu, O. Audy, P. Kukucka, M.D. Mulder, M. Octaviani, P. Shahpoury</td>
</tr>
<tr>
<td>15:15</td>
<td></td>
<td>8.3007 Predicting the gas/particle partitioning behavior of α- and β-HCH in atmosphere</td>
<td>L. Qiao, Y. Li, Z. Zhang, L. Liu, W. Song, P. Hu, W. Ma, F. Wang</td>
</tr>
<tr>
<td>15:30</td>
<td></td>
<td>8.3013 First field/modelling assessment of the atmospheric distribution of D5 in Portugal</td>
<td>N. Ratola, P. Jiménez-Guerrero</td>
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<tr>
<td>15:45</td>
<td></td>
<td>8.3010 Determination of the long-range atmospheric transport potential of perfluoroalkyl acids associated with sea spray aerosols</td>
<td>J. Johansson, M. Salter, I. Cousins</td>
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<tr>
<td>Time</td>
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<td>Chairs</td>
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<tr>
<td>15:00</td>
<td>Levels in the Environment (Air, Soil, Water)</td>
<td>Giotto Room</td>
<td><strong>Chairs:</strong> Jochen Müller, Darya Kupryianchyk</td>
</tr>
<tr>
<td>15:00</td>
<td>4.1008 Occurrence, distribution and fate of organic UV filters in coral communities</td>
<td>Giotto Room</td>
<td>M.M.P. Tsui, J.C.W. Lam, T.Y. Ng, P.O. Ang, M.B. Murphy, P.K.S. Lam</td>
</tr>
<tr>
<td>15:15</td>
<td>4.1022 POPs monitoring in Brazil and Italy using plastic resin pellets: comparative study between open ocean and enclosed sea</td>
<td>Giotto Room</td>
<td>M. Saha, S. Taniguchi, D. Abessa, H. Takada</td>
</tr>
<tr>
<td>15:45</td>
<td>4.1040 Source, emission and removal of perfluorinated compounds in a chrome plating industrial park in China</td>
<td>Giotto Room</td>
<td>J. Huang, Y. Qu, G. Yu, W. Li, W. Wang, Y. Liu</td>
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<tr>
<td>16:30</td>
<td>New methods of Analysis</td>
<td>Michelangelo</td>
<td><strong>Chairs:</strong> Andreas Sjodin, Hamid Shirkhan</td>
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<td>16:30</td>
<td>2.2021 Assessing the human internal exposure to PFRs via urine and serum: method validation study</td>
<td>Michelangelo</td>
<td>F. Xu, N. Van Den Eede, H. Neels, A. Covaci</td>
</tr>
<tr>
<td>16:45</td>
<td>2.2003 Fishing halogenated environmental contaminants in biota based on isotopic pattern and mass defect provided by HRMS profiling</td>
<td>Michelangelo</td>
<td>R. Cariou, E. Omer, A. Léon, G. Dervilly-pinel, B. Le Bizec</td>
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<tr>
<td>17:00</td>
<td>2.2011 High resolution accurate mass screening for persistent organic pollutants in food samples using GC-orbitrap mass spectrometry</td>
<td>Michelangelo</td>
<td>E. Abad, C. Cojocariu, M. Abalos, J. Saulo, P. Silcok</td>
</tr>
<tr>
<td>17:15</td>
<td>2.2016 Sub-Femtogram Detection of Dioxins and Furans using a New Tandem Quadrupole Mass Spectrometer</td>
<td>Michelangelo</td>
<td>G.R. Jones, D. Douce</td>
</tr>
</tbody>
</table>
### POPs in waste streams: emissions and implications

**Raffaello Room**

**Chairs:** Stuart Harrad - Myrto Petreas

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<tr>
<td>16:30</td>
<td>Occurrence of Dioxins and PCBs in a temporary storage site of earthquake and tsunami disaster wastes</td>
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<td></td>
<td><strong>H. Matsukami, N. Kajiwara, H. Takigami</strong></td>
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<tr>
<td>16:45</td>
<td>Effect of the Bailín Landfill dismantling (Sabiñánigo, Spain) on the HCH air concentration</td>
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<td><strong>P. Sanz, A. De La Torre, I. Navarro, M.A. Arjol, P. De Miguel, J. Fernandez, M.Á. Martinez</strong></td>
</tr>
<tr>
<td>17:00</td>
<td>Measurements trial and current status of brominated Dioxin emissions</td>
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<td><strong>S. Sakai, Y. Hirai, T. Ito, T. Miyazaki, T. Furumoto</strong></td>
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### POPs Transport, Distribution and Bioaccumulation in Remote Areas

**Leonardo Room**

**Chairs:** Arnold Schecter - Marco Vecchiato

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<tr>
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<tbody>
<tr>
<td>16:30</td>
<td>Influence of Climate Change on Transport, Levels, and Effects of Contaminants in Northern Areas</td>
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<tr>
<td>16:45</td>
<td>Trends and patterns of Polybrominated diphenyl ethers in thick-billed Murre eggs from the Canadian Arctic</td>
</tr>
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<td><strong>B.M. Braune, R.J. Letcher, A.J. Gaston, H.G. Gilchrist, M.L. Mallory</strong></td>
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<tr>
<td>17:00</td>
<td>Organophosphate flame retardants and plasticizers in the atmosphere and snow of the North Atlantic and the Arctic</td>
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<td><strong>J. Li, Z. Xie, W. Mi, C. Tian, K. Emnis, R. Ebinghaus</strong></td>
</tr>
<tr>
<td>17:15</td>
<td>Biological factors regulate the uptake of airborne POPs in &quot;plants&quot; and the deposition of POPs to remote terrestrial ecosystems</td>
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<td><strong>H. Kylin, H. Bouwman</strong></td>
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</table>
### Regulation addressing POPs (all media)

**16:30**

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<tr>
<th>Session</th>
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<th>Abstract</th>
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<tr>
<td>7.1002</td>
<td>How policy makers and purchasers can reduce the use of harmful chemicals and prevent regrettable substitutions</td>
<td><strong>A. Blum, A. Lindeman, T. Collins, G. Goldenman, M. Miller, M. Diamond</strong></td>
</tr>
<tr>
<td>7.1003</td>
<td>Current methodical limit of long term emission sampling methods for the concentration of I-TEQ from PCDD/PCDFs</td>
<td><strong>T. Steiner</strong></td>
</tr>
<tr>
<td>7.1005</td>
<td>Situation analysis of the sound management of pops in Ghana in the frame of the Stockholm Convention</td>
<td><strong>S. Adu-Kumi, K.A. Asante, J.N. Hogarh, R. Weber</strong></td>
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</table>

### Exposure to POPs in Urban, Indoor and Workplace Environments

**16:30**

<table>
<thead>
<tr>
<th>Session</th>
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<th>Abstract</th>
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<tbody>
<tr>
<td>4.4020</td>
<td>Leakage of chlorinated paraffins from hand blenders sold on the Swedish market</td>
<td><strong>B. Yuan, J. Nyström, C.A. De Wit, Å. Bergman, A. Strid</strong></td>
</tr>
<tr>
<td>4.4011</td>
<td>Dioxin-like activities, halogenated flame retardants, organophosphate esters and chlorinated paraffins in dust from Australia, United Kingdom, Canada, Sweden and China</td>
<td><strong>F. Wong, G. Suzuki, C. Michinaka, B. Yuan, H. Takigami, C.A. De Wit</strong></td>
</tr>
<tr>
<td>4.4017</td>
<td>Kitchen stories: Polyhalogenated compounds in dishcloths after regular use in households</td>
<td><strong>W. Vetter, C. Gallistl, B. Lok, A. Schlienz</strong></td>
</tr>
<tr>
<td>4.4008</td>
<td>Precursor PFAS molecules (FTOHs and MeFOSAs) in air predict serum PFOA and PFOS levels in pregnant women</td>
<td><strong>C.M. Makey, T. Webster, J. Martin, M. Shoeib, T. Harner, A. Desilva, L. Dix-Cooper, G.M. Webster</strong></td>
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### Technology - Formation Mechanisms of unintentional POPs

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<tr>
<th>3.1002</th>
<th>Dominant distribution of dioxins and Dioxin-like compounds in particulate phase from cement kilns co-processing solid waste</th>
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<tr>
<th>3.1006</th>
<th>Pre-feasibility study on environmental Photolysis of Chloronaphthalenes</th>
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<tr>
<td><strong>N. Hanari</strong>, J. Falandysz, E. Yamazaki, N. Yamashita</td>
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<tr>
<th>S3.1001</th>
<th>Influence of heavy metals on formation of Dioxin-related compounds in e-waste open burning soil</th>
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<th>S3.1002</th>
<th>Study on Thermochemical Formation of Brominated Aromatic Compounds by using in situ X-ray Absorption fine structure</th>
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<th>3.2001</th>
<th>Trends in national emissions of dioxins in the Republic of Korea’s non-incineration plants</th>
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<tr>
<th>3.2003</th>
<th>Inventory of unintentionally producing and new persistent organic pollutants in Kazakhstan</th>
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<td><strong>S. Bayeshova</strong>, N. Gor</td>
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<th>3.2004</th>
<th>Investigation of persistent organic pollutant concentration and species distribution in water</th>
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<tr>
<td><strong>Jing-Min Duh</strong>, Yen-Fen Lee, Mei-Fen Lin, Ching-Lan Tsai, Chung-Ping Wu</td>
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<th>3.2005</th>
<th>Study of the formation of dioxins, furans and PCBs in the production of biochar and biooil from agricultural waste</th>
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<td><strong>J. Diaz-ferrero</strong>, E. Angel, R. Martí, O. Pou</td>
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<tr>
<th>3.2006</th>
<th>A review of emission factors of unintentional hexachlorobenzene and pentachlorobenzene from metal production</th>
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<tr>
<td><strong>W. Gong</strong>, H. Fiedler, B. Wang, J. Huang, G. Yu</td>
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<tr>
<th>3.3003</th>
<th>Reductive Degradation of Chlorophenol in Water-based Solvent Using Heterogeneous Catalyst Grafted by a Hydrophobic Reagent</th>
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<td><strong>T. Yoneda</strong></td>
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<th>3.3008</th>
<th>Mechanochemical destruction of POPs for useful oxyhalides production: A Waste-to-Materials approach</th>
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<td><strong>G. Cagnetta</strong>, J. Huang, M. Lu, G. Yu</td>
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<th>3.3012</th>
<th>Adsorption of PCDD/Fs on Graphite</th>
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<td><strong>W.W. Li</strong>, X.D. Li, M.F. Yu, I. Mubeen</td>
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<th>3.3013</th>
<th>Metal recovery from waste jewellery and electrical-electronic equipment: analysis of emissions profiles for the assessment of similarities between treatment plants</th>
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<th>S3.2002</th>
<th>Emission inventory for PCBs in Japan from 2003 to 2013</th>
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<tr>
<td><strong>Y. Hirai</strong>, Y. Fujiki, S. Sakai</td>
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<tr>
<th>S3.2003</th>
<th>Experimentation of a PCDD/Fs long-term sampling system at the sinter plant of a large steelworks in Taranto, Italy</th>
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<tr>
<td><strong>R. Giua</strong>, S. Ficocelli, C. Capoccia, A. Nicosia, V. Esposito, A. Maffei, D. Bruno, V. Ciambottini</td>
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<th>S3.3001</th>
<th>Degradation of halogenated xenobiotics by laccase-producing fungi isolated from Vietnam forests</th>
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<tr>
<th>5.1002</th>
<th>Monitoring of environmental contaminants in breast milk of the Lazio region</th>
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<tr>
<td><strong>F. Busico</strong>, A. Ubaldi, G. Mattei, S. Berretta, T. Mauti, G. Salvatori, V. Pannone, B. Neri</td>
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<tr>
<th>5.1004</th>
<th>Correlation between hand wiping concentrations and urinary metabolites levels of phthalates for children in kindergarten according to activity patterns in Korea</th>
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<td>5.1007</td>
<td>Estimated dietary intake and risk assessment of indicator PCBS from foodstuffs</td>
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<td>5.1009</td>
<td>Evaluation of the carcinogenic risks of exposure to POPs on human health Kyrgyz region (s. Shiel)</td>
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<td>5.1010</td>
<td>Evaluation of the carcinogenic risks of exposure to POPs on human health Kyrgyz region (s. Shiel)</td>
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<td>5.1001</td>
<td>Environmental Enantioselective Effects of Chiral Pesticides</td>
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<td>5.1002</td>
<td>Exposure risks and its implications for human health due to POPs emission from the pesticides burial grounds; a case study from the urban area of Pakistan</td>
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<td>5.1003</td>
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<td>5.2002</td>
<td>Deriving EDCs risk perception model using psychological effect variables in Korea</td>
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<td>5.3001</td>
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<td>Characterization of perfluorooalkyl and polyfluoroalkyl chemicals (PFASs) at a fire fighting training ground using LC-QTOF-MS/MS and implication to the surrounding environment</td>
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<td>5.3004</td>
<td>Is it possible to grow corn on PCDD/FS and PCBS contaminated land? preliminary results of an up-take study</td>
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<td>5.3005</td>
<td>Monitoring plan of environmental contaminants in sheep milk from areas next to an Italian Contaminated Site named “Aree industriali di Porto Torres e discarica di Calancio” (industrial areas of Porto Torres and landfill of Calancio) in Sardinia</td>
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**Regulation - Regulation addressing POPs (all media)**

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<td>7.1004</td>
<td>Challenges to implement Stockholm convention in relation to PBDES in developing countries, especially in Gruelac</td>
<td>L.V.T. Meneses, J.V. De Assuncao</td>
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**Alternative flame retardants**

**8.2003**
Brominated flame retardants in a wastewater treatment plant (WWTP) from Harbin, China: Levels, input source and mass loading  
**H. Qi, B. Li, Y. Jin, S. Sun, W. Li, N. Zhu, Y. Li, Z. Zhang, W. Ma**

**8.2004**
Determination of Octanol-air partition coefficients of organophosphate flame retardants (PFRS) as a function of temperature  
**B. Yaman, Y. Dumanoglu, M. Odabasi**

**8.2006**
Sensitive and reliable methodology for the simultaneous determination of dechloranes, PBDEs, and NBFRs in food and serum samples  
**C. Sales, G. Poma, G. Malarvannan, T. Portolés, J. Beltrán, A. Covaci**

**8.2008**
Occurrence of selected legacy and novel flame retardants in Canadian house dust  
**C. Kubwabo, X. Fan, P.E. Rasmussen**

**8.2009**
Emerging halogenated flame retardants and polybrominated diphenyl ethers in Saudi vehicle dust: Exposure assessment to drivers via dust ingestion  
**I.M.I. Ismail, J.M.A. Basahi, K. Shahzad, A. Nadeem**

**8.2012**
Occurrence of current used organophosphate flame retardants in the environment of developing countries: a short review  

**8.2013**
Investigating stress and immune status of Japanese quail (Coturnix japonica) chicks exposed to emerging flame retardants  
**M.E. Løseth, N. Briels, T.M. Ciesielski, A. Covaci, B.M. Jenssen, J.J. Weisser, V.L.B. Jaspers**

**8.2015**
Levels of polybrominated diphenyl ether (PBDE) and NON-PBDE flame retardants in chicken and fish samples from an electronic waste processing area in Northern Vietnam  

**S8.2001**
Polybrominated diphenyl ethers (PBDEs): Turning the corner in Great Lakes trout 1980 – 2014  
**T. Holsen, B. Crimmins, J. Pagano**

**S8.2002**
Photolytic breakdown products of the highly brominated flame retardant tetradecabromo-1,4-diphenoxybenzene are metabolized in vitro in model liver microsomal assays  
**G. Su, A. Greaves, R.J. Letcher**

**S8.2003**
In vitro biotransformation and kinetics of organophosphate triesters and diester metabolite formation using a model avian hepatic microsomal assay  
**A. Greaves, G. Su, R.J. Letcher**

**S8.2004**
Phosphorous flame retardants and plasticizers in Swedish market basket food samples and estimation of per capita intake  
**G. Poma, A. Glynn, G. Malarvannan, A. Covaci, P.O. Darnerud**

**S8.2005**
Trixylyl phosphate (TXP) – A substance of very high concern (SVHC) because of its CMR* properties  
**J.E. Johansen**

**S8.2006**
Interlaboratory calibration exercise for metabolites of organophosphate ester contaminants in human urine  
**A. Covaci, N. Van Den Eede, C.M. Butt, R.J. Letcher, G. Su, A.M. Calafat, N. Jayatilaka, C. Kubwabo, I. Kosarac, F. Yang, J. Ding, J. Park, S.E. Petropoulou, P. Behniwal, Y. Li, C. He, J. Mueller, H.M. Stapleton**

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**8.3011**
Monitoring of PCDD/F and PCB in ambient air and deposition at alpine summits  
**W. Moche, P. Bleuler, G. Jakobi, M. Kirchner, B. Niedermoser, M. Schaub, K. Schramm, P. Weiss**

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8.4019 Have the iceberg B15 affected the POPs bioaccumulation in the Ross Sea? The case of Trematomus bernacchii

S. Corsolini, A. Cincinelli, T. Martellini, D. Baroni, D. Randazzo

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S. Cotronei, K. Pozo, O. Audy, J. Nielsen, S. Corsolini

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8.6022 Removal Efficiency of Trace level Perfluorohexanoic Acid (PFHxA) by Loose Nanofiltration Membranes at Lab Scale
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Y. Lind, P. Kukucka, M. Johansson, A. Karrman

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8.10001 Emissions from pyrolysis and combustion of Automotive Shredder Residue
L. Rey, J.A. Conesa, I. Aracil, M.A. Garrido, N. Ortuño

8.10002 Gaseous emissions and ashes during the combustion of furniture waste.
A.I. Moreno, R. Font, J.A. Conesa

8.10003 Volatile and semivolatile compounds from the pyrolysis and combustion of viscoelastic memory foam
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8.10008 Extraction of phosphorus flame retardants from drinking water using automated solid phase extraction
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8.10015 The characteristic of PCDD/F in fine particle from flue gas and source apportionment via positive matrix factorization in Taiwan

8.10017 Determination of perfluorinated compounds (PFCS) in main chrome mist suppressants in Chinese market
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<td>S8.10002</td>
<td>Hazardous chemicals in packaging material, a downside of recycling?!</td>
<td>M. Abou-elwafa Abdallah, M. Sharkey, H. Berresheim, S. Harrad</td>
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<td>S8.10003</td>
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<td>M.A. Garrido, M.F. Gómez - Rico, R. Font</td>
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ESA-D is the German branch of the French company Environnement S.A (ESA). ESA is a worldwide operating company for the supply of Continuous Emission Monitoring systems (CEMs), Air Quality Monitoring Stations and Dust Monitors for Process and Monitoring application. ESA-D is the manufacturer of the QAL1 certified and MCerts approved dioxin emission monitoring system AMESA-D. Of this AMESA-D long-term sampling system for dioxins/furans and POP’s were installed in the last 20 years around 300 systems in waste incinerators, cement and power plants etc. With options the system is also suitable for sampling of e.g. heavy metals, mercury and fine dust. ESA-D provides also the AMESA-M for the long-term sampling of mercury, ambient air samplers and automatic isokinetic controllers for short term sampling applications.
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MasCom Technologies was founded in 1991 and has started with offering service and repair for HRMS from Thermo Fisher (former Finnigan MAT). Today MasCom refurbishes and sells mass-spectrometer and provides worldwide service and repair for ion trap MS, quadrupole MS, and high-resolution GC-MS systems from Thermo Fisher. For more than 20 years, almost exclusively MasCom offers service for the MAT95XL/XP instruments. In 2011, in cooperation with Thermo Fisher, the DFS was added to the list of instruments being serviced. MasCom also stocks spare parts for these instruments, which are available through MasCom’s on-line shop at www.mascom-bremen.de. The on-line shop for MS spare parts and consumables, opened in 2000, expanded until today with over 9000 different parts sold to more than 4000 customers worldwide. For more than 15 years, MasCom also manufactures secondary electron multipliers (SEM) and has become one of the world-leading manufacturer for multipliers.  
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MonitoringSystems GmbH manufactures and supplies sampling devices and equipment for fine dust, POPs (dioxins, PCBs, PAHs,...) and other environmentally hazardous pollutants to enable gaining of accurate data for stationary sources and ambient air, for long-term and short-term sampling, each in accordance to various standards.

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