The assessment of greenhouse gases and air pollutants (indirect GHGs) emitted to and removed from the atmosphere ranks high on the political and scientific agendas. Building on the UN climate process, the international community strives to address the long-term challenge of climate change collectively and comprehensively, and to take concrete and timely action that proves sustainable and robust in the future. Under the umbrella of the UN Framework Convention on Climate Change, country parties to the Convention have, since the mid-1990s, published annual or periodic inventories of emissions and removals, and continued to do so after the Kyoto Protocol to the Convention ceased in 2012. Policymakers use these inventories to develop strategies and policies for emission reductions and to track the progress of those strategies and policies. Regulatory agencies and corporations rely on emission inventories to establish compliance records, where formal commitments to limit emissions exist.

The 4th International Workshop on Uncertainty in Atmospheric Emissions is jointly organized by: the Systems Research Institute of the Polish Academy of Sciences, the Austrian-based International Institute for Applied Systems Analysis, and the Lviv Polytechnic National University.

The Workshop follows up and expands on the scope of the earlier Uncertainty Workshops - the 1st Workshop in 2004 in Warsaw, Poland; the 2nd Workshop in 2007 in Laxenburg, Austria; and the 3rd Workshop in 2010 in Lviv, Ukraine.
TOPICS
- Achieving accurate and precise emission inventories
- Integrating uncertainty across spatial scales (local to global)
- Integrating uncertainty across temporal scales (diagnostic and prognostic)
- Reconciling uncertainty bottom-up and top-down
- Integrating uncertainty across systems scales (e.g., across GHGs, direct and indirect; sources versus sinks; risk of induced versus chance of avoided impacts, etc.)
- Verifying GHG emissions to support international climate agreements
- Complying with GHG emission limitations and reductions
- Uncertainty in trading emissions
- Communicating and valuing uncertainty (today and in the future)
- Integrating uncertainty into decision-making
- Advanced systems analysis techniques of handling uncertainty.

COMMITTEE

STEERING COMMITTEE:
Zbigniew NAHORSKI (Polish Academy of Sciences, PL) – Chair
Matthias JONAS (International Institute for Applied Systems Analysis, AT)
Rostyslav BUN (Lviv Polytechnic National University, UA)

SCIENTIFIC COMMITTEE:
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Olgierd HRYNIEWICZ (Polish Academy of Sciences, PL)
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Kazimierz RÓŻAŃSKI (AGH University of Science and Technology in Cracow, PL)
Dmitry SCHEPASCHENKO (International Institute for Applied Systems Analysis, AT)
Anatoly SHVIDENKO (International Institute for Applied Systems Analysis, AT)
Jacek SKOŚKIEWICZ (National Centre for Emissions Management, PL)
Philippe THUNIS (EC Joint Research Centre Ispra, EU)
Marialuisa VOLTA (University of Brescia, IT)

ABSTRACT SUBMISSION
Authors are invited and encouraged to submit abstracts for the Workshop.
Abstracts are assembled until 15th August 2015. The authors of accepted abstracts will be notified on an ongoing basis.
Abstracts of maximum one-page (A4) should be submitted electronically to 4thUncertWS@ibspan.waw.pl
The abstract must be written in English (official Workshop language). Please use .docx format, 12pt Times New Roman font, and single spacing.

DEADLINES
until 15th August 2015 Ongoing notification of abstract acceptance
15th September 2015 Deadline for short paper submission
7-9th October 2015 Deadline for early-bird registration
Workshop dates
PUBLICATIONS

PUBLISHED OUTCOME:
The authors of accepted abstracts will be invited to deliver short papers of 5-6 pages (A4) to be published in the Workshop Proceedings. The deadline for the submission of short papers is 15th September 2015.

Short papers presented at the 4th Workshop may be selected for publication in a peer-reviewed international journal. The authors of selected papers will be invited to extend their papers after the Workshop, details of which are forthcoming.

PAST OUTCOMES:
The extended papers from the 1st Workshop were published in a special issue of Springer’s Water, Air & Soil Pollution: Focus 7(4-5), 2007 journal as well as a separate book by the same publisher: Accounting for Climate Change: Uncertainty in Greenhouse Gas Inventories — Verification, Compliance, and Trading.

A collection of extended papers presented at the 2nd Workshop was published in a special issue of Climatic Change 103 (1-2), 2010 journal as well as a separate book: Greenhouse Gas Inventories, Dealing With Uncertainty.

The extended papers from the 3rd Workshop were published in a special issue of Climatic Change 124 (3), 2014 journal as well as a separate book: Uncertainties in Greenhouse Gas Inventories: Expanding Our Perspective.

REGISTRATION FEE

The payment of a registration fee of €400 per participant is required. The fee covers participation, Workshop Proceedings, coffee breaks, lunches, and a conference dinner. A fee of €150 is required for an accompanying person and covers each of the above, except the Workshop Proceedings. The registration fee does not cover the accommodation which is at the participant’s own expense.

<table>
<thead>
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<th>Payment before 15th September 2015</th>
<th>Payment after 15th September 2015</th>
<th>Accompanying person</th>
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<td>€400</td>
<td>€450</td>
<td>€150</td>
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Banking Information:
Instytut Badań Systemowych PAN
ul. Newelska 6, 01-447 Warsaw, Poland

Bank Gospodarstwa Krajowego:
Account number: 09 1130 1017 0020 1463 5320 0002
IBAN Code: PL09 1130 1017 0020 1463 5320 0002
BIC/SWIFT: GOSKPLPW

*In the transfer please reference: 4th UncertWS
VENUE

Polish Academy of Arts and Sciences
Sławkowska 17
31-016 Cracow, Poland

The Polish Academy of Arts and Sciences is located in the heart of the Cracow Old Town. The Academy was founded in 1871 and has been serving as a scientific and cultural society for the entire Polish nation, gathering scholars across various disciplines.

PRACTICAL INFORMATION

- On-site registration will take place on Wednesday, the 7th of October before the Workshop starts. All participants will be provided with name tags and Workshop packages.
- Lunch will be provided on the days of the Workshop (7th to 9th of October, 2015). The conference dinner is planned for Thursday (8th of October) evening. The details of the dinner will be provided in due course.
- For those who may arrive earlier or wish to stay on after the Workshop has finished, the following website provides some sightseeing information including events taking place in Cracow: http://www.krakow.pl/english/
- More information can be found here: http://www.krakow.pl/english/visit_krakow/2601,g1owna.html
- Workshop participants should contact the hotels directly to make a reservation. Cracow is an attractive tourist and business destination, so early reservation of accommodation is highly recommended.

Grand Hotel (****)
Sławkowska 5/7, 31-014 Cracow
Phone: +48 12 424 09 00,
Email: hotel@grand.pl
http://www.grand.pl/

Hotel Unicus (****)
Sw. Marka 20, 31-020 Cracow
Phone: +48 12 433 71 11,
Email: recepcja@hotelunicus.pl
http://hotelunicus.pl/

Puro Kraków (****)
Ogrodowa 10, 31-155 Cracow
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http://en.purohotel.pl/krakow

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Plac Matejki 8, 31-157 Cracow
Phone: +48 12 422 47 37,
Email: biuro@matejkohotel.pl
http://www.matejkohotel.pl/eng/index.htm

Hotel Polski Pod Białym Orłem (***)
Pijarska 17, 31-015 Cracow
Phone: +48 12 422 11 44,
Email: hotel.polski@donimirski.com

Pigoniówka – Guesthouse of the Jagiellonian University
Garbarska 7a, 31-131 Cracow
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Straszewskiego 14, 31-101 Cracow
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SECRETARIAT

All correspondence should be addressed to:

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Please check our website for continual updates:

We look forward to receiving your abstracts and seeing you at the Workshop in Cracow.