

**Second announcement  
Programme and call for registration**

## **EURADOS Annual Meeting AM2009**

**Braunschweig, 26-30 January 2009**



**The AM2009 includes:**

- Workshop "Cosmic Radiation and Aircrew Exposure"**
- 3<sup>rd</sup> EURADOS Winter School "Low-Dose Radiation Effects"**
- Meeting "Intercomparison 2008 on whole body dosimeters"**
- Meetings of EURADOS Working Groups**
- EURADOS General Assembly and Council Meeting**



## Invitation

Since 2002 EURADOS Annual Meetings (AM) are key elements in the agenda of the community working in the field of ionising radiation dosimetry. It has become a tradition to combine statutory actions of EURADOS with meetings of EURADOS Working Groups and with symposia or workshops dedicated to a topic of particular importance. More recently, the EURADOS Winter School was included to respond to the need for training in the field of radiation dosimetry.

The AM2009 will be organized in the week from 26 to 30 January 2009 at the Physikalisch-Technische Bundesanstalt in Braunschweig, Germany. The key events this year are the Workshop "Cosmic Radiation and Aircrew Exposure" and the 3<sup>rd</sup> EURADOS Winter School "Low-Dose Radiation Effects". It is planned to provide all presentations of these two events on the EURADOS website and to publish the contributions to the Workshop in a peer-reviewed scientific journal.

This second announcement shows the overall programme as well as the topics and speakers of the presentations during the Winter School and the Workshop. We encourage you to register and to book your hotel. Please note the reduced fee for early registration before 15 December.

We hope to see many colleagues from the EURADOS network and also many other persons interested in the topics of AM2009 in Braunschweig.

Helmut Schuhmacher  
Chairperson EURADOS

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## Important dates

Deadline for early registration	15 December 2008
Final announcement to registered participants	15 January 2009
EURADOS Annual Meeting 2009	26-30 January 2009

## Overall programme

### EURADOS Annual Meeting 2009



Time	Monday 26.1.2009	Tuesday 27.1.2009	Wednesday 28.1.2009	Thursday 29.1.2009	Friday 30.1.2009	Time
08:30-09:00	Registration	Registration	Registration	Registration		08:30-09:00
09:00-09:30						09:00-09:30
09:30-10:00	WG meetings	IC2008 <sup>1)</sup> WG meetings	3rd EURADOS Winter School <sup>3)</sup>	Workshop <sup>4)</sup>	Workshop	09:30-10:00
10:00-10:30		Coffee break	Coffee break	Coffee break	Coffee break	10:00-10:30
10:30-11:00	Coffee break					10:30-11:00
11:00-11:30						11:00-11:30
11:30-12:00	WG meetings	IC2008 WG meetings	3rd EURADOS Winter School	Workshop	Workshop	11:30-12:00
12:00-12:30						12:00-12:30
12:30-13:00	Lunch	Lunch	Lunch	Lunch	Lunch/Departure	12:30-13:00
13:00-13:30						13:00-13:30
13:30-14:00						13:30-14:00
14:00-14:30	WG meetings	IM2010 <sup>2)</sup> WG meetings	3rd EURADOS Winter School	Workshop	EURADOS Council or Executive Board meeting (optional)	14:00-14:30
14:30-15:00		Coffee break	Coffee break			14:30-15:00
15:00-15:30						15:00-15:30
15:30-16:00						15:30-16:00
16:00-16:30			EURADOS General Assembly	lab visits	Coffee break	16:00-16:30
16:30-17:00	WG meetings	EURADOS Council			Workshop	16:30-17:00
17:00-17:30						17:00-17:30
17:30-18:00						17:30-18:00
18:00-18:30			guided city tour		EURADOS Council	18:00-18:30
18:30-19:00						18:30-19:00

<sup>1)</sup> EURADOS Intercomparison 2008 on whole body dosimeters

<sup>2)</sup> Scient. committee for Workshop on Individual Monitoring 2010

<sup>3)</sup> Topic: low-dose radiation effects

<sup>4)</sup> Topic: cosmic radiation and aircrew exposure

Conference Dinner

## EURADOS Working Group meetings

The table lists the Working Group meetings on 26 and/or 27 January 2009

For details please contact the responsible chairperson.

WG Meetings	Chairperson	
WG2 - harmonisation of individual monitoring	V. Kamenopoulou	vkamenop@eeae.gr
WG3 - environmental dosimetry	S. Neumaier	stefan.neumaier@ptb.de
WG5+8 - aircrew dosim./complex radiat. fields	J-F. Bottollier/ F. Spurny	jeanfrancois.bottollier@irsn.fr spurny@ujf.cas.cz
WG6 - computational dosimetry	G. Gualdrini	guald@bologna.enea.it
WG7 - internal dosimetry	M.A. Lopez	ma.lopez@ciemat.es
WG9 - dosimetry of medical staff	F. d'Errico	francesco.derrico@ing.unipi.it
WG10 - retrospective dosimetry	P. Fattibene	paola.fattibene@iss.it

### 3<sup>rd</sup> EURADOS Winter School "Low-Dose Radiation Effects"

28. January 2009

#### Scope:

The 3<sup>rd</sup> EURADOS Winter School is dedicated to the question: What do we know about the risk of low-dose radiation to humans and what are the scientific tools to address this issue? The risk of being exposed to low doses of ionising radiation represents a fundamental aspect of radiation protection. Quantification of this risk is a challenging interdisciplinary task and still a matter of research.

The series of EURADOS Winter Schools provides an opportunity for non-specialists to gain knowledge in selected topics of general interest in the field of radiation dosimetry. It allows those not working in that particular field to get insight in state-of-the-art techniques and new scientific developments, and it is also well suited for those starting to work in this area. The topic is covered by tutorial lectures given by renowned experts.

Participants of the Winter School will receive a certificate of attendance.

3 <sup>rd</sup> EURADOS Winter School "Low-Dose Radiation Effects"		
Wednesday, 28 January 2009		
Time	Speaker	Topic (provisional title)
<b>Radiobiology</b>		
09:00 - 09:40	D. Harder (DE)	Introduction to low-dose radiation effects
09:40 - 10:10	N.N.	Areas of research in low-dose radiobiology
10:10 - 10:40		<i>coffee break</i>
<b>Epidemiology</b>		
10:40 - 11:20	H. Zeeb (IMBEI, DE)	Introduction to epidemiology
11:20 - 11:50	W. Zhang (HPA, UK)	Studies on atomic bomb survivors - cancer and non-cancer diseases
11:50 - 12:20	M. Timarche (IRSN, FR)	Lung cancer after radon exposure - uranium miners and general population
12:20 - 13:30		<i>lunch</i>
13:30 - 14:00	P. Jacob (HMGU, DE)	Moderate dose and low dose rate exposures - epidemiological studies on occupational and environmental exposures
14:00 - 14:30	R. Shore (RERF, Japan)	Recent cataract studies
<b>Implementation</b>		
14:30 - 15:00	W.U. Müller (UKE, DE)	Implications for radiation protection regulations

#### Organisation:

Filip Vanhavere (SCK-CEN, Belgium)  
 Werner Rühm (HMGU, Germany)  
 Ulrich Giesen (PTB, Germany)

## Workshop "Cosmic Radiation and Aircrew Exposure"

29 – 30. January 2009

### Scope:

The workshop will present the status of radiation protection of aircrew who are exposed to secondary cosmic radiation. It will also provide a forum for representatives of regulatory organisations, airlines and aircrew organisations to discuss their needs and to become informed about recent developments.

It is the aim of the workshop to bring together people from different communities; those who measure cosmic radiation, carry out dose assessments, do risk estimates, may be exposed to secondary cosmic radiation, employ aircrew and/or are involved in the regulatory framework.

<b>Workshop</b> <b>"Cosmic Radiation and Aircrew Exposure"</b> <b>Thursday 29 January 2009</b>		
Time	Speaker	Topic (provisional title)
<b>General Introduction</b>		
09:00 - 09:30	G. Reitz	The radiation field in the atmosphere
09:30 - 10:00	H. Zeeb/G. Hammer	Epidemiological investigations of aircrew
10:00 - 10:20	G. Dietze	Implications of the new ICRP recommendations on aircrew doses
10:20 - 10:40	P. Beck	European Research Projects on Aircrew Dosimetry during the last Solar Cycle – an Overview
10:40 - 11:10		<i>Coffee break</i>
<b>Dose and dose rate measurements</b>		
11:10 - 11:40	M. Meier	Dosimetry of Cosmic Radiation at Aviation Altitudes
11:40 - 12:00	W. Rühm	Continuous Measurements of Cosmic Radiation at Low Atmospheric Shielding (altitude 2650 m)
12:00 - 12:20	De Angelis	Study on radiation onboard airline flights
12:20 - 12:40	C. Dyer, Ian Getley	Dose rate measurements
12:40 - 14:00		<i>Lunch</i>
<b>Dose assessment of aircrew</b>		
14:00 - 14:20	V. Mares	EPCARD.NET – Major improvements compared to EPCARD 3.34
14:20 - 14:40	Felsberger/O'Brien	FREE
14:40 - 15:00	N.N.	PCAIRE
15:00 - 15:20	C. Dyer	QARM
15:20 - 15:40	I. Clairand	The french solution: SIEVERT
15:40 - 16:00	M. Latocha	AVIDOS – An Accredited Programm Package for Aviation Dosimetry
16:00 - 16:30		<i>Coffee break</i>
<b>Practical aspects of aircrew dosimetry</b>		
16:30 - 16:50	M. Meier	Implementation of the German Radiation Protection Ordinance (Lufthansa Group)
16:50 - 17:10	G. Desmaris	Operational dose assessment at Air France
17:10 - 17:30	Dominguez-Mompell	The implementation of radiation protection in airline routine at IBERIA L.A.E
17:30 - 17:50	F. Spurny	Aircraft crew individual dosimetry monitoring in Czech Republic experience 1998 – 2008

<b>Workshop</b> <b>"Cosmic Radiation and Aircrew Exposure"</b> <b>Friday 30 January 2009</b>		
Time	Speaker	Topic (provisional title)
<b>Solar Particle Events</b>		
09:00 - 09:30	E. Flückiger	Solar particle events and the influence on aircrew doses
09:30 - 09:50	P. Beck	Measurements during Solar Storm Periods
09:50 - 10:10	D. Matthiä	Calculation of doses during SPE
10:10 - 10:30	C. Dyer	Observations and calculations of SPE
10:30 - 11:00		<i>Coffee break</i>
11:00 - 11:20	A. Al Anid, B.J. Lewis, L.G.I. Bennet	Modelling of Aircrew Radiation Exposure During Solar Particle Events
11:20 - 11:40	N. Fuller	The SIGLE model
11:40 - 12:00	W. Rühm	Continuous Measurements of Cosmic Radiation at Low Geomagnetic (79 deg N) Shielding
<b>European Aspects on Aircrew Dosimetry</b>		
12:00 - 12:20	J.F. Bottollier Depois	Code Comparison of EURADOS WG5
12:20 - 12:40	G. Meotti	AR/EASA Cosmic Radiation Requirements
12:40 - 13:00	S. Thierfeldt	Evaluation of Implementation of Radiation Protection Measures for Aircrew in the European Union

#### Organisation:

F. Wissmann (PTB, Germany)  
 J.-F. Bottollier-Depois (IRSN, France)  
 J. Wadsack (LBA, Germany)

#### Scientific Committee:

P. Beck (ARC, Austria)  
 J.-F. Bottollier-Depois (IRSN, France)  
 C. Dyer (QinetiQ, United Kingdom)  
 E. Flückiger (UB, Switzerland)  
 R. Johnston (AHU, United Kingdom)  
 V. Mares (HMGU, Germany)  
 G. Meotti (IFALPA, Italy)  
 G. Reitz (DLR, Germany)  
 W. Rühm (HMGU, Germany)  
 F. Spurny (NPI/CAS, Czech Republic)  
 F. Wissmann (PTB, Germany)

## Venue and transportation

The EURADOS Annual Meeting 2009 (26 – 30 January 2009) takes place at the

Physikalisch-Technische Bundesanstalt  
Bundesallee 100  
D-38116 Braunschweig

The Working Group meetings take place in different seminar rooms of the *Vieweg Building*.

The Winter School, Workshop and General Assembly take place in the lecture hall of the *Kohlrausch Building*.

Registration will be done at the *Vieweg Building* on Monday and Tuesday, and in the *Kohlrausch Building* on Wednesday and Thursday.

Details on the PTB campus can be found at [www.ptb.de](http://www.ptb.de) or by downloading the map [www.ptb.de/de/zieleaufgaben/standorte/gelaendeplan\\_bs.pdf](http://www.ptb.de/de/zieleaufgaben/standorte/gelaendeplan_bs.pdf)

## Transportation to Braunschweig:

Braunschweig can be conveniently reached by train and airplane. The closest major airport is the Hannover airport ([www.hannover-airport.de](http://www.hannover-airport.de)).

For the transfer from Hannover airport to Braunschweig you can use public transportation or a shuttle car service.

**Public transportation:** The tram (S5) is starting directly from the airport and will bring you to the Hannover main station within 20 minutes. You should then take the train to Braunschweig (within 30 minutes). Costs for the transfer from Hannover airport to Braunschweig: 18,50 €.

For departure and arrival times between Hannover airport and Braunschweig train station see [www.bahn.de/international/view/en/index.shtml](http://www.bahn.de/international/view/en/index.shtml)

Transfer from Braunschweig train station to the city centre and PTB is possible by public bus or taxi.

**Shuttle:** You can directly contact the shuttle car service 'Airporthopper':

Phone: +49 531 612121  
Fax: +49 531 610846  
Email: [info@airporthopper.de](mailto:info@airporthopper.de)  
Internet: [www.airporthopper.de](http://www.airporthopper.de)

and indicate 'EURADOS 2009' when making your reservation for the shuttle. Costs for the transfer from Hannover airport to Braunschweig are 42,- € (total one way) for 1-3 persons and 54,- € for 5-8 persons. The amount has to be paid directly to the driver (only cash).

Further shuttle services are available in the arrival area of the Hannover airport, see <http://www.hannover-airport.de/transfer.html?&L=1>

## Local transportation:

The transfer during the week (hotel → PTB, PTB → hotel) is included in the conference fee. Details will be announced to registered participants in the final announcement.

## Registration

Registration should be done online via [www.eurados.org](http://www.eurados.org) or directly at [www.ptb.de/en/org/6/EURADOS/reg\\_eurados\\_am2009.htm](http://www.ptb.de/en/org/6/EURADOS/reg_eurados_am2009.htm)

## Conference fee

The fee for the entire Annual Meeting 2009, the Winter School and the Workshop, which includes proceedings, local transportation, coffee breaks, lunches and conference dinner:

<p><b>early payment, registration and payment received latest 15 Dec</b></p> <p>Full Fee: 350 € Reduced Fee: 250 €<sup>(1)</sup></p>	<p><b>late payment, after 15 Dec</b></p> <p>Full Fee: 450 € Reduced Fee: 350 €<sup>(1)</sup></p>
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<sup>(1)</sup> For participants from sponsoring institutions only. To date are eligible for the reduced fee: ARC Seibersdorf, CEA Saclay, CIEMAT Madrid, ENEA Bologna, GAEC Ag. Paraskevi, HZM Neuherberg, IFJ Krakow, IRH Belgrade, IRSN Fontenay-aux-Roses, ITN Lisboa, Landauer EUROPE, NRG Arnhem, Polytechnico di Milano, PSI Villigen, RPII Dublin, SCK-CEN Mol, UP Catalunya, VT Nuclear Services Ltd.

Persons from dosimetry services which participated in the EURADOS Intercomparison 2008 may take part without payment if they attend only in the IC2008 Meeting on 27 January.

## Local organisation

Helmut Schuhmacher  
Burkhard Wiegel  
Frank Wissmann  
Heinke Harms  
Brigitte Heise

## Contact

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Fax: +49 (0)531 592 6505  
Email: [Office@eurados.org](mailto:Office@eurados.org) or [Heinke.Harms@ptb.de](mailto:Heinke.Harms@ptb.de)

## Hotel information

A number of rooms have been reserved at hotels in Braunschweig for participants of the AM2009. The special rate indicated below applies for registration before 15 December 2008 on a first-come first-served basis. Please contact the hotel directly and indicate "EURADOS 2009" when making the registration.

### 'Frühlingshotel'

Bankplatz 7  
38100 Braunschweig  
Tel.: +49 (0) 531-24 32 10  
Fax: +49 (0) 531-243 21 599  
E-Mail: [info@fruehlingshotel.de](mailto:info@fruehlingshotel.de)  
Internet: [www.fruehlingshotel.de](http://www.fruehlingshotel.de)  
Price: **58,- €** (single room, breakfast included)

### Hotel 'Wartburg'

Rennelbergstr. 12  
38114 Braunschweig  
Tel.: +49 (0) 531-50 00 11  
Fax: +49 (0) 531-50 76 29  
E-Mail: [info@hotelwartburg.de](mailto:info@hotelwartburg.de)  
Internet: [www.hotelwartburg.de](http://www.hotelwartburg.de)  
Price: **62,- €** (single room, breakfast included)

### Hotel 'Lessinghof'

Okerstr. 13  
D-38100 Braunschweig  
Tel.: +49 (0) 531-24 16-0  
Fax: +49 (0) 531-24 16-222  
E-Mail: [info@hotel-lessing-hof.de](mailto:info@hotel-lessing-hof.de)  
Internet: [www.hotel-lessing-hof.de](http://www.hotel-lessing-hof.de)  
Price: **67,- €** (single room, breakfast included)

### Ringhotel 'Deutsches Haus'

Ruhfäutchenplatz 1  
D-38100 Braunschweig  
Tel.: +49 (0) 531-12 00-0  
Fax: +49 (0) 531-12 00-444  
E-Mail: [resi@ringhotel-braunschweig.de](mailto:resi@ringhotel-braunschweig.de)  
Internet: [www.ringhotel-deutscheshaus.de](http://www.ringhotel-deutscheshaus.de)  
Price: **74,- €** (single room, breakfast included)

### Hotel 'Mövenpick Braunschweig'

Jöddenstr. 3 (Welfenhof)  
38100 Braunschweig  
Tel.: +49 (0) 531 48 17-0  
Fax: +49 (0) 531 4817-551  
E-Mail: [hotel.braunschweig@moevenpick.com](mailto:hotel.braunschweig@moevenpick.com)  
Internet: [www.moevenpick-braunschweig.com](http://www.moevenpick-braunschweig.com)  
Price: **91,- €** (single room), **16,- €** (breakfast)

Information about the city of Braunschweig, including online booking of hotels, can be found at:

<http://www.braunschweig.de/english/>

### EURADOS sponsors

EURADOS acknowledges financial support from the following institutions:



Institute of Occupational and Radiological Health, Belgrade

Politecnico di Milano