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Calendar**Lean agenda and more focus**

2 The stronger focus on the topics of a reduced Workplan of the Commission-Juncker is presently taking shape. When considering policy development on Climate Action and Energy this happens at considerable pace. The present urgency to increase the EU's energy security requires policies which are in line with those on climate, in particular increased energy efficiency and renewable sources of energy. Such an integrated approach supports and confirms a strong position of the EU in the negotiations towards a Climate Agreement in Paris.

3 Such integrated action would also be welcome when applied to climate and air quality. It requires policies which address the short-lived greenhouse gases and the accompanying formation of organic particles; such policies will have a higher effectiveness in protecting human health against particulate air pollution than the present lenient mass-based metrics.

4 Seemingly in anticipation, this Newsletter contains announcements for several scientific conferences with relevance for such policies. At the short term, the fifth EFCA-symposium on Ultrafine Particles takes place in Brussels (4-5 May).



7 The programme includes Keynote addresses on respectively:
Health effects of ultrafine particles (*Annette Peters, Helmholtz Zentrum München*);
Nucleation of ultrafine particles in the atmosphere (*Markku Kulmala, University of Helsinki*);
Ultrafine particles in the urban atmosphere (*Roy Harrison, University of Birmingham*);
Dramatic increase projected in mortality attributed to fine particulate matter, notably in Asia (*Jos Lelieveld, Max Planck Institute for Chemistry, Mainz*).

8 The complete programme for UFP-5 can be found in this Newsletter which also shows announcements for events later this year.

Developments in EU policy

Lean agenda

The intention of the new Commission to concentrate on deliverable legislation has resulted in a Decision to withdraw 73 proposals which has now been published in the Official Journal. The topics vary over the full field of European policies; with respect to atmospheric problems there is just one withdrawal. It concerns a proposal to extend the Sulphur Emissions Control Area regulation for shipping in the Baltic Sea with a similar one on NO_x emissions. This will require tough negotiations within international bodies, such as the International Maritime Organisation and affects a sector which in recent years has been hard hit by the economic crisis and is still suffering.

More information: http://europa.eu/rapid/press-release_IP-15-4567_en.htm

EU Energy Union

Much attention is presently going to the political, financial and technical aspects of a European Energy Union. The political dimension is set against the background of the Russian-Ukrainian tensions where the EU and its Member States take their responsibility with efforts to keep the situation under control and maintain energy security in Europe.

Strategy framework

On 25 February the Commission approved the Strategic framework for the Energy Union. At several occasions the Commission provided details of the EU Energy Union.

In a speech on 17 March Vice-president Šefčovič explained its key elements:

- Securing energy supply; the present dependence on imports from outside the EU (53%) is to be reduced
- A single energy market which allows energy to flow freely across EU countries

- Increasing energy efficiency and investing in renewable sources of energy

The three elements go together. To give an example: an overall gain in energy efficiency could reduce gas imports by 2.6%.

New specific actions of the Commission to make this effective the include:

- Improving energy efficiencies of buildings
- Creating Smart Cities: making the local levels aware of the options and their feasibility
- Developing a technology and innovation strategy

The Commission will support its strategy by financial support.

More information: http://europa.eu/rapid/press-release_SPEECH-15-4621_en.htm

Infrastructure

Its implementation is already taking shape and requires a variety of measures. The urgency to reduce the high dependence on energy sources from outside the EU makes it necessary to assist parties in the market, e.g. to speed up the realisation of a European energy grid. To that end a Connecting European Facility has been founded: a multi-annual funding programme for improvements in Europe's transport, energy and digital networks. Of a total budget of €33 billion, an amount €5.85 has been allocated to energy for the period 2014 – 2020.

On 5 March €100 million was released for projects to connect European energy networks.

More information: http://europa.eu/rapid/press-release_MEMO-15-4554_en.htm ;

http://europa.eu/rapid/press-release_IP-15-4560_en.htm

Road transport

In a speech on 27 January Commissioner Cañete (Climate Action and Energy) discussed for an industrial audience the Commissions' ambitions for road transport with respect to greenhouse gas emissions after 2020, including the long-term goal of 60% reduction in 2050. On the latter he mentioned that it will be necessary to include global shipping and aviation then.

His main message was that progressive innovation is required and so make tighter emission standards achievable.

More information: http://europa.eu/rapid/press-release_SPEECH-15-3780_en.htm

Safer and eco-friendly lorries

On 10 March the Commission reported that the European Parliament had given final approval to revision of Directive 96/53/EC which sets rules for lorries. The new ruling will allow manufacturers to develop lorries which are more aerodynamic than the present brick-shaped types.

Apart from improving their fuel efficiency by 7-10% the new models will improve the drivers field of vision, while their shape is likely to decrease the severity of injuries to road users in a collision. The Directive is soon to be approved by the Council and the new types may enter the market between 2018 and 2020.

More information: http://europa.eu/rapid/press-release_STATEMENT-15-4586_en.htm

EEA Reports

Renewable energy in Europe - approximated recent growth and knock-on effects

Without the deployment of renewable energy since 2005, greenhouse gas emissions in 2012 could have been 7% higher than actual emissions. Renewable technologies also increase energy security, the report found. Without the additional use of renewable energy since 2005, the EU's consumption of fossil fuels would have been about 7% higher in 2012. The most substituted fuel was coal, where consumption would have been 13% higher, while natural gas use would have been 7% higher, at a time when European gas reserves are dwindling.

Technical report No 1/2015 Published 17 February 2015

SOER 2015 — The European environment — state and outlook 2015

Europe's environment and climate policies have delivered substantial benefits, improving the environment and quality of life, while driving innovation, job creation and growth. Despite these gains, Europe still faces a range of persistent and growing environmental challenges. Addressing them will require fundamental changes in the systems of production and consumption that are the root cause of environmental problems. The report can be viewed at: <http://www.eea.europa.eu/soer>
Published 3 March 2015

CLRTAP Reports

New study calls for accrued efforts to clean Europe's air

An analysis by IIASA of data from the EMEP network of the Convention on Long-Range Transboundary Air Pollution (CLRTAP) has revealed the hot spots of PM₁₀ across Europe. Without measures beyond the current legislation, safe levels of air pollution will not be reached in parts of Europe. In particular, in Bulgaria, the Czech Republic, northern Italy, southern Poland and Slovakia, as well as major European cities such as Milan, Paris, and Warsaw the population will remain at risk.

Press release of 26 February 2015:

<http://www.unece.org/info/media/news/environment/2015/new-study-calls-for-accrued-efforts-to-clean-europes-air/new-study-calls-for-accrued-efforts-to-clean-europes-air.html>

Air pollution puts cultural heritage at risk

Less in the news: the degradation of surfaces of historical buildings and monuments. An Italian study shows that only in Rome about 3600 buildings made of calcareous stone and 60 objects made of bronze are at risk of deterioration. The recent study found material loss as a result of air pollution to be between 5.2 and 5.9 $\mu\text{m}/\text{year}$ for marble and between 0.30 and 3.5 $\mu\text{m}/\text{year}$ for bronze.

In a different study on five monuments included in the UNESCO World Heritage List it was found that the rate of degradation had halved since 1987, due to improved air quality. NO_x and particulate matter are taking over for SO₂, however.

Press release of 13 March 2015:

<http://www.unece.org/info/media/news/environment/2015/new-study-calls-for-accrued-efforts-to-clean-europes-air/new-study-calls-for-accrued-efforts-to-clean-europes-air.html>

Ultrafine Particles: Air Quality and Climate

4-5 May 2015, Brussels – Programme - Registration

The UFP-series is a joint activity with our German member GUS e.V., the Confederation of European Environmental Engineering Societies (CEEES), and the Karlsruhe Institute of Technology KIT.

The first EFCA symposium on Ultrafine Particles took place in 2007. EFCA's main reason for this initiative was the uncertainty on preferred metrics for air quality aspects and the protection of human health against the effects of particulate matter. At UFP-5 EFCA aims to assess recent progress.

Please find below the complete programme on 4 and 5 May and information on how to register.



4 May

Opening

10.30 – 11.00

EFCA President, Conference Chairman and Representative of the State of Baden- Württemberg

Keynotes

Session A – 11.00 – 12.30

Session Chair: Thomas Leisner

Health effects of Ultrafine Particles – New evidence from epidemiological studies

Annette Peters, Helmholtz Zentrum München, Germany

Nucleation of ultrafine particles in the atmosphere

Markku Kulmala, University of Helsinki, Finland

Parallel Sessions B, C, D and E

Measurement, Chemistry and Modelling

Session B - 4 May, 13.45 – 15.25

Black carbon, total and size-resolved particle number concentrations in urban areas near Schiphol airport (The Netherlands)

Menno Keuken, TNO, Utrecht, the Netherlands

Modelling ultrafine particles concentrations at a street-level scale

Hans Hooyberghs, VITO, Mol, Belgium

Highly resolved ultrafine particle number concentration maps for the city of Zurich, Switzerland

Michael Müller, Empa, Dübendorf, Switzerland

Atmospheric composition measurements for improving the high resolution modelling of the Brussels urban atmosphere

Alexander Mangold, Royal Meteorological Institute of Belgium, Brussels, Belgium

Health effects

Session C - 4 May, 13.45– 15.25

Alveolar epithelial cells initiate nanoparticle-induced acute lung inflammation

Tobias Stöger, Helmholtz Zentrum München, Germany),

Automated exposure station for the air- liquid interface exposure of human lung cell cultures towards aerosols

Sonja Mülhopt, Karlsruhe Institute of Technology, Karlsruhe, Germany

Day-to-day variability of toxic events induced by organic compounds bound to size segregated atmospheric aerosol

Jan Topinka, Institute of Experimental Medicine AS CR, Prague, Czech Republic

Sources and Mitigation of Emissions

Session D - 4 May, 15.45 – 17.25

An estimation of the marine sources impact on PM₁₀ levels in Northern France

Cloe Roche, Université de Littoral Côte d'Opale (ULCO), Dunkerque, France

Ultra-low emission wood combustion by seamless adaptation of an electrostatic precipitator to a modern grate boiler

Hanss-Rodolf Paur, Karlsruhe Institute of Technology, Karlsruhe, Germany

On the status of discussion within the International Maritime Organization about the consideration of the impact on the Arctic of emissions of black carbon from international shipping

Peter Lauer, MAN Diesel & Turbo SE, Augsburg, Germany

Nanoparticle emissions from thermal desorption/regenerative oxidation of contaminated soils

Senem Ozgen, Politecnico di Milano, Milano, Italy

Measurement, Chemistry and Modelling

Session E - 4 May, 15.45 – 17.25

Investigating the chemical composition of sub-100 nm particles with chemical ionization mass spectrometry

Claudia Mohr, Karlsruhe Institute of Technology, Karlsruhe, Germany

Frequency of new particle formation events in high insolation urban environments

Xavier Querol, Institute of Environmental Assessment and Water Research (IDAEA), Barcelona, Spain

Role of fine and ultrafine particles in the formation of haze in Beijing, China

Klaus Schäfer, Karlsruhe Institute of Technology, Karlsruhe, Germany

BC monitoring as a proxy of the UFP concentration

Benjamin Bergmans, ISSeP, Liège, Belgium

Posters and Buffet

Session F - 4 May, 17.30 – 19.00

Comparison between ultrafine and fine particulate matter: chemical characterization and in vitro toxicity in human bronchial epithelial cells BEAS-2B

Frédéric Ledoux, Université du Littoral Côte d'Opale (UCEIV), Dunkerque, France

Measurement of ultrafine particles from small non-road engines under real-world operating conditions

Michal Vojtíšek-Lom, Technical University, Prague, Czech Republic

Water-soluble ions in PM_{2.5} particle fraction in Zagreb Air, Croatia

Mirjana Cackovic, Institute for Medical Research and Occupational Health, Zagreb, Croatia

Sources and distribution of ultrafine atmospheric aerosol measured in the city of Leicester (UK)

Sarkawt Hama, University of Leicester, Leicester, United Kingdom

Evaluation of the impact of sulfur poisoning on catalytic stripper technology

Jacob Swanson, Catalytic Instruments GmbH & Co. KG, Rosenheim, Germany

WMA statement on the prevention of air pollution due to vehicle emissions

Manfred Neuberger, Medical University of Vienna, Austria

Measuring 1-3 nm particles in urban air

Joonas Vanhanen, Airmodus Ltd., Helsinki, Finland

Health adverse effects within a population neighbouring a landfill: Cd and Pb impregnation, oxidative stress and nephrotoxicity

Frédéric Ledoux, Université du Littoral Côte d'Opale (UCEIV), Dunkerque, France

5 May

Keynotes

Session G 09.00 – 10.30

Ultrafine particles in the urban atmosphere

Roy Harrison, University of Birmingham, United Kingdom

Dramatic increase projected in mortality attributable to fine particulate air pollution

Jos Lelieveld, Max Planck Institute for Chemistry, Mainz, Germany

Sessions H, I and J

Measurement Methods Session H - 5 May, 10.45– 12.25

Release of engineered nanoparticles during waste incineration

Inge-Maria Lang, Karlsruhe Institute of Technology, Karlsruhe, Germany

A new portable device for high time resolved measurements of wide range aerosol size distributions

Hans-Jürgen Grimm, Grimm Aerosol Technik, Ainring, Germany

Portable nanoparticle instrumentation for oncoming motor vehicle regulations

Luis Cachòn, Testo AG, Titisee-Neustadt, Germany

Determination of the filtering effect of airborne particles for a model of flow around a cylinder with a slit

Dorota Kaminski, Kamika Instruments, Warszawa, Poland

Monitoring and Exposure Session J - 5 May, 13.25– 15.05

Monitoring of UFP concentration and size distribution at four urban background sites in NW-Europe

Jeroen Staelens, Flemish Environment Agency (VMM), Antwerpen, Belgium

Near one km vertical profiles of ultrafine particles over the city of Barcelona, Spain

Monitoring and Exposure Session I - 5 May, 10.45– 12.25

Characterisation of exposure to ultrafine particles at traffic intersections

Prashant Kumar, University of Surrey, Guildford, United Kingdom

Personal exposure to ultrafine particles, Black Carbon and PM_{2.5} in different microenvironments

Jianwei Gu, University of Augsburg, Augsburg, Germany

The Measurement of Ultrafines & Black Carbon in Glasgow City Centre

David Sykes, Ricardo-AEA, Glasgow, United Kingdom

Ultrafine particles and black carbon exposure concentration levels along a pedestrian route

Giovanni Lonati, Politecnico di Milano, Italy

Xavier Querol, Institute of Environmental Assessment and Water Research (IDAEA), Barcelona, Spain

Ultrafine particle and black carbon measurements at an urban background site: a multi-technique monitoring approach

Giovanni Lonati, Politecnico di Milano, Italy

Monitoring black carbon concentrations with mobile devices in the city of Liège

Luc Bertrand, ISSEP, Liege Belgium

Concluding discussion and Closure 15.05 – 15.45

Conference Information

Venue

Representation of the State of Baden-Württemberg at the EU
Rue Belliard 60-62, B-1040 Brussels

Conference chairman

Thomas Leisner

Karlsruhe Institute of Technology (KIT)

Social Programme

A conference buffet has been arranged on 4th May at 17.30.

Conference secretariat

Karlsruhe Institute of Technology (KIT)

Mrs. Klara Langer

P.O. Box 3640, 76021 Karlsruhe, Germany

Phone: +49-721-6082-28591

Fax: +49-721-6082-23949

klara.langer@kit.edu

Registration and Accommodation

A Registration Form and all logistic details can be found at <http://ufp.efca.net>

Air Protection 2015



EFCA's Member CAPP published a First Announcement and Call for Papers for its 9th Croatian scientific and professional conference with international participation "Air Protection 2015". The conference will be in Poreč (Istria), 8-12 September 2015.

Topics for the conference include:

- Managing air quality – inspection and control
- Atmospheric emissions of pollutants
- Monitoring ambient air pollution
- Developing and testing measuring methods
- Estimating exposure and impact on health and the environment
- Asbestos in the air
- EFCA session on Particulate matter – sources, levels, content, policies



The Call for Papers closes on 30 April. The first announcement and Call for Papers can be found at:

<http://www.efca.net/efca2/index.php?page=upcoming-efca-events>

VDI Expert Forum on Atmospheric Chemistry – Tropospheric Aerosols

The Commission on Air Pollution Prevention VDI and DIN (Kommission Reinhaltung der Luft) is preparing its second Expert Forum on Atmospheric Chemistry which is to take place on 25 and 26 November 2015 in Berlin. The Forum will consider tropospheric aerosols this time; last year gaseous pollutants were addressed. The event is meant to produce a state-of-the-art on atmospheric processes of particle formation and their behaviour and consider their potential relevance for measurement methodology.

Four sessions are being planned:

- Thermodynamics and new particle formation
- Process studies on surface and bulk particle chemistry
- State of the art in modelling the formation of secondary organic aerosol
- Particle emission inventories

Additional information is foreseen to be available this summer.

News from EFCA and its Members

EFCA Assembly meeting

The EFCA Assembly will meet in Brussels on 5 May, after closure of the UFP-symposium.

The agenda includes the Workplan for the next two years. The Assembly will also consider EFCA's budget and a new system for Membership fees which should secure sufficient income.

IUAPPA

The Union has planned an additional Board meeting this year which is to be held in connection with the EFCA-symposium on Ultrafine Particles, early May in Brussels. The meeting is meant to prepare for the 17th World Clean Air Congress in 2016 in Buan, South Korea and for the discussion of internal business.

Environmental Protection UK: Clean Air Alliance UK takes shape

EFCA's UK Member Environmental Protection UK has a tradition of over a century of action for the protection of human health and environment against air pollution. The persistent exceedance of some present EU limit values for air quality in UK cities – which is not uncommon across Europe – and the absence of sufficient response by the relevant authorities induced its Board to launch an initiative to accelerate progress in reducing air pollution. The Initiative has resulted in the foundation of the Clean Air Alliance UK. It is presently developing programmes for action which would stimulate the cooperation between local authorities, civil groups, business and the environmental industries, in developing and implementing steps for improving air quality. EPUK's president, John Murlis, is chairing the Alliance until a Chairman can be elected by alliance members at a general assembly, to be held later in the year.

Environmental Protection Scotland: Low Emission Strategy

Our Scottish Member EPS informed us on the publication of the [Scottish Government's Low Emission Strategy for Scotland](#). The Strategy is a comprehensive implementation plan of all type of actions and measures which together should result in meeting the EU Air Quality limits and hopefully surpass these targets which do not sufficiently protect our health. The Scottish Government also made connections with other aspects, in particular climate change and noise, in line with Scottish unique policy to prevent drawbacks of its environmental legislation in other compartments and furthering mutual co-benefits. The Strategy can be found at the link above and may of interest for those in Europe who face similar challenges.

The Scottish Government arranged a Consultation on their Strategy which can be found at: <http://www.gov.scot/Consultations/Current>; response from experts of other European countries will be welcome in particular. The Consultation runs until 10 April 2015. For contact on the Strategy: Dr Iain McLellan (iain.mclellan@ep-scotland.org.uk).

Calendar

CfP = Deadline Call for Papers

Environmental Technology for Impact
19-20 April 2015, Wageningen, Netherlands,
(<http://etei.org>)

5th EFCA-symposium on Ultrafine Particles – Air Quality and Climate,
4-5 May 2015, Brussels (<http://ufp.efca.net>)

ECCA 2015 – European Climate Adaptation
Conference
12-14 May, Copenhagen, Denmark.
<http://www.burchardt-apps.dk/ecca2015.eu/>

19th ETH-conference on Combustion Generated
Nanoparticles, Zurich, Switzerland,
28 June – 1 July 2015 (www.nanoparticles.ethz.ch)

International Scientific Conference – Our common
future under climate change
7-10 July 2015, Paris, France.
<http://www.commonfuture-paris2015.org/>

EAC 2015 – European Aerosol Conference
6-11 September 2015, Milan, Italy.
<http://www.eac2015.it/>

**Air Protection 2015 - 9th Croatian scientific and
professional conference**
8-12 September 2015, Poreč (Istria), Croatia

**2nd VDI Expert Forum on Atmospheric Chemistry
– Tropospheric Aerosols**
25-26 November 2015, Berlin, Germany

17th IUAPPA World Clean Air Congress.
25-30 September 2016, Bunan, South Korea
(www.iuappa.org)

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EFCA

President	Thomas Reichert (GUS e.V., Germany)
Vice-president	Vladimira Vadjic (CAPP, Croatia)
Vice-president	John Murlis (EPUK, UK)
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Secretary-general	Joop van Ham (VVM-CLAN, The Netherlands)

Newsletter

Editor Joop van Ham, VVM-CLAN

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European Federation of Clean Air and Environmental Protection Associations
Burg. Scholtenstraat 1, NL-2645 NL DELFGAUW
E-mail: info@efca.net
Fax: +31-15-261 3186
Website: www.efca.net