

**HARMO 16 Poster programme**  
**16<sup>th</sup> International Conference on Harmonisation within Atmospheric Dispersion Modelling**  
**for Regulatory Purposes**  
**8-11 September 2014, Varna, Bulgaria**

<b>Poster session 1</b>	
<b>Topic 1: Model evaluation and quality assurance – model validation, model intercomparisons, model uncertainties and model sensitivities</b>	
H16-29	Application of the WRF-Chem model for a high ozone episode in SW Poland – preliminary results Kinga Wałaszek, Maciej Kryza, Małgorzata Werner
H16-44	Comparison of the WRF and SODAR derived planetary boundary layer height Maciej Kryza, Anetta Drzeniecka-Osiadacz, Małgorzata Werner, Paweł Netzel, Anthony J. Dore
H16-45	The uncertainty in modelled air concentrations of NO <sub>x</sub> due to choice of emission inventory Maciej Kryza, Magdalena Jóźwicka, Anthony J. Dore, Małgorzata Werner
H16-48	Operational source term estimation and ensemble prediction for the Grimsvoetn 2011 event C. Maurer, D. Arnold, R. Klöner and G. Wotawa
H16-49	Numerical study of the atmospheric composition climate of Bulgaria – validation of the computer simulation results Georgi Gadzhev, Kostadin Ganev, Nikolay Miloshev
H16-51	Validation of the atmospheric radionuclide transport model ARTM Cornelia Richter, Martin Sogalla, Harald Thielen
H16-54	Coupling WRF and CALMET models: Evaluation during 15-day case study in a Caribbean bay, Cuba J.A. Gonzalez, A. Hernandez-Garces, A. Rodriguez, S. Saavedra, J.J. Casares, L. Turtos, Y. Fonseca, L. Alvarez
H16-55	Validation and sensitivity analysis of ozone forecasts to air temperature and solar radiation Boštjan Grašič, Primož Mlakar, Marija Zlata Božnar
H16-56	Evaluation of the WRF/Chem based AQ forecast and its comparison with statistical ozone predictions Rahela Žabkar, Luka Honzak, Marko Rus
H16-72	Ozone forecasting using Gaussian processes and Perceptron neural networks Dejan Petelin, Primož Mlakar, Marija Zlata Božnar, Boštjan Grašič, Juš Kocijan
H16-74	VAST volcanic ash modelling and forecasting exercises: ensemble results from three atmospheric dispersion models Arnold, D., J. Bialek, C. O’Dowd, N. I. Kristiansen, D. Martin, C. Maurer, E. Miklos, F. Prata, R. Radulescu, E. Sollum, M. Sofiev, K. Stebel, A. Stohl, J. Vira, G.
H16-77	Application of WRF-Chem to forecasting PM <sub>10</sub> concentrations over Poland Małgorzata Werner, Maciej Kryza, Hanna Ojrzyńska, Carsten Skjøth, Kinga Wałaszek, Anthony J. Dore
H16-84	Hindcasting and verification of photochemical dispersion model CAMx for a long time period Marko Rus, Rahela Žabkar, Jure Cedilnik
H16-91	Comparison of FLEXPART-WRF and SINAC-AROME Lagrangian dispersion models: a case study for a nuclear incident Zita Ferenczi, Emese Homolya, Tamás Pázmándi, Péter Szántó
H16-97	Sensitivity analysis of individual VOC species to reduction of atmospheric ozone Kouhei Yamamoto, Kazuo Nakajima, Hikari Shimadera
H16-105	Comprehensive sensitivity analyses on air quality model performance for PM <sub>2.5</sub> simulation Hikari Shimadera, Hiroshi Hayami, Satoru Chatan, Tazuko Morikawa, Yu Morino, Toshimasa Ohara, Yasuaki Mori, Kazuyo Yamaji, Seiji Nakatsuka

H16-107	The Analysis On A Serious Air Pollution Process In Nanning Guo-lian Liao, Peng Zeng, Qi-jie Zhang, Peng Cheng, Peng Cheng, Yu-chun Mo
H16-117	The FMI emission inventory and source-receptor calculations at the Finnish eastern Border Marke Hongisto
H16-171	Evaluation of the performance of a mesoscale model in the simulation of sensible and latent heat turbulent fluxes Ana Graciela Ulke, Natalia Gattinoni, Gabriela Posse
H16-184	Mesoscale simulation of the meteorological profiles during the Sofia Experiment 2003 Hristina Kirova and Ekaterina Batchvarova
H16-189	Review of Important Acceptance Criteria, Considerations and Significance for an Effective Decision Support System for Nuclear Emergency Management Dhanesh B. Nagrale, Subrata Bera, Anuj Kumar Deo, R. S. Rao and Avinash J. Gaikwad
	<b>Topic 2: Environmental impact assessment: Air pollution management and decision support systems</b>
H16-20	Air Quality Management System of the town of Plovdiv – annual analysis for 2013 Dimitar Atanassov, Stefan Shilev, Elena Naydenova, Hristo Chervenkov, Tania Yankova
H16-42	Air monitoring network optimization method using chemical transport model and metaheuristics Shin Araki, Hikari Shimadera, Kouhei Yamamoto, Akira Kondo
H16-79	Differences in odour impact range of WWTP thermal drying plant for two various odour impact assessment approaches Piotr Sobczyński, Maria Skrętowicz, Izabela Sówka
H16-80	Influence of selected wastewater treatment processes odour emissions in terms of WWTP odour impact assessment Piotr Sobczyński, Maria Skrętowicz, Izabela Sówka
H16-126	Weather forecast in Sahel: parameterisation of convection and dust phenomena Moussa Touré
H16-150	Emissions reductions scenarios for Romanian metal production sector Mihaela Balanescu, Ecaterina Matei, Mirela Sohaciu, Cristian Predescu
H16-156	Impact of biogenic emissions on surface ozone concentration over a Mediterranean region Rita Cesari, Alberto Maurizi, Francesco Tampieri
H16-172	Techniques for smoothing hourly data for timely smog alerts announcements Roman Juras, Ondřej Vlcek, Josef Keder
H16-183	High-Mountain Air Monitoring at the Basic Environmental Observatory Moussala Christo Angelov, Nina Nikolova, Ivo Kalapov, Todor Arsov, Assen Tchorbadjieff, Aneta Boyadjieva
	<b>Topic 3: Use of modelling in support of EU air quality directives, including FAIRMODE</b>
H16-27	Extension and modification of the similarity format parameterization schemes over urban area Evgeni Syrakov, Kostadin Ganev
H16-81	Impact of Prognostic Meteorological Data Introduction to Local Air Quality Modeling Jana Krajčovičová, Jana Matejovičová, Martin Kremler
H16-181	Simulation of air pollution in the cross-border region Bulgaria –Turkey Dimitar Syrakov, Maria Prodanova, Valeri Nikolov, Ilker Oruc, Emilia Georgieva, Kiril Slavov
	<b>Topic 4: Parametrization of physical processes in mesoscale meteorology relevant for air quality modelling</b>
H16-16	Developing a new upper air measurement method in alpine deep valleys Michel Vuillermoz, Lorenzo Frassy, Fabrizio Diotri, Giordano Pession, Umberto Morra di Cella, Manuela Zublena, Tiziana Magri
H16-18	Results of meteorological measurement campaign at the top of Monte Emilius in Aosta Valley (3.559 m) Michel Vuillermoz, Lorenzo Frassy, Sara Pittavino, Marco Pignet, Christian Tibone, Giordano Pession, Manuela Zublena, Tiziana Magri, Giovanni Agnesod

H16-28	Analysis of dispersion and higher order statistical moments above rural and urban areas Evgeni Syrakov, Kostadin Ganev
	<b>Poster session 2</b>
	<b>Topic 5: Urban scale and street canyon modelling: Meteorology and air quality</b>
H16-21	Preparation of Input Data Set for Dispersion Model AUSTAL2000 using Observations at Synoptic Weather Station Dimitar Atanasov, Petio Simeonov, Lilia Bocheva
H16-47	Numerical study of the air quality in the city of Sofia – some preliminary results Ivelina Georgieva, Georgi Gadzhev, Kostadin Ganev, Maria Prodanova, Dimitar Syrakov, Nikolay Miloshev
H16-76	Numerical study of ventilation performance over hypothetical urban areas in idealized stably stratified flows Chi-To Ng and Chun-Ho Liu
H16-82	Urban micro-scale investigation of NO <sub>x</sub> and CO Ghermandi G., Fabbi S., Zaccanti M., Bigi A., Teggi S
H16-86	Atmospheric Stability and Its Effect on The Polluted Columns of Concentrations in North West of Baghdad City Ahmed F. Hassoon
H16-88	Annual average impact of trees on air quality in street canyons Stijn Vranckx and Peter Vos
H16-89	LES simulation of the residence of air pollutants in the wake of a cubical building for different atmospheric stability Goulart V. Elisa, Mavroidis Ilias, Cezana C. Fernanda, Santos M. Jane, Reis Jr. C. Neyval
H16-90	Influence of ground source location on dispersion over array of buildings with different height Goulart V. Elisa, Cezana C. Fernanda, Santos M. Jane, Reis Jr. C. Neyval
H16-115	Experimental study of short stack emissions on a building under changes thermal stability Mohamed F. Yassin
H16-118	Modelling of Traffic Pollutant Dispersion released from single line source in local urban areas Jiri Pospisil, Miroslav Jicha
H16-128	Wavelet analyses of turbulent flow above surface with 5 different classes of roughness Radka Kellnerová, Klára Jurčáková, Václav Uruba, Libor Kukačka, Štěpán Nosek, Zbyněk Jaňour
H16-140	A laboratory investigation of flow and turbulence over a two-dimensional urban canopy A. Di Bernardino, P. Monti, G. Leuzzi1, G. Querzoli
H16-187	Vertical circulation of air pollutants and ozone distribution over Los Angeles Hiroaki Minoura, Darko Koracin, Joshua Fu, Xinyi Dong, Cheng-En Yang
	<b>Topic 6: Use of modelling in health and exposure assessments</b>
H16-34	Empirical Background TCO model over Bulgaria Petya Kaleyna, Plamen Mukhtarov, Nikolay Miloshev
H16-58	Analysis of toxic load computations and fluctuation concentrations modeling for the assessment of atmospheric accidental release Jean-Marc Lacome, Jean-Martin Vincent, Florence Zeman
H16-78	Mean annual population exposure to atmospheric particulate matter in Poland Maciej Kryza, Małgorzata Werner, Anthony J. Dore
H16-141	Using Calpuff to assess the population exposure to primary and secondary particulate matter originating by a thermal power plants Cristina Mangia, Marco Cervino, Emilio Gianicolo
H16-151	Modelling the impact of a coal-fire power plant, located in southern Italy, for risk assessment purposes Roberto Giua, Angela Morabito, Alessandra Nocioni, Tiziano Pastore, Ilenia Schipa, Annalisa Tanzarella
H16-174	PAHs Urban Concentrations Maps using Support Vector Machine

	Armando Pelliccioni, Andrea Cristofari, Mafalda Lamberti, Claudio Gariazzo
H16-190	Impact of air pollution and social background on respiratory functions and incidence of respiratory diseases Kvetoslava Rimarova
<b>Topic 7: Inverse dispersion modelling and source identification</b>	
H16-9	A Source Term Estimation Method for a Nuclear Accident, using Atmospheric Dispersion Models Minsik Kim, Ryohji Ohba, Masamichi Oura, Shinsuke Kato, Masayuki Takigawa, Paul Bieringer, Bent Lauritzen, Martin Drews
H16-31	Bayesian model combination for inverse modelling problems Paul B Westoby, Andrew R Webb
H16-32	Model selection and calibration for Bayesian inverse problems Paul B Westoby, Andrew R Webb
H16-120	Statistical evaluation of XRF elemental composition data - a step to source identification of PM10 pollution in Sofia Blagorodka Veleva, Elena Hristova, Emilia Nikolova, Maria Kolarova, Raliza Valcheva
<b>Topic 8: Modelling air dispersion and exposure to accidental releases</b>	
H16-14	Urban dispersion model evaluation of the QUIC and HPAC models using the DAPPLE dataset Belinda Tull, Paul Suden
H16-41	Turbulent Lagrange Particle Trajectory Model for Changing Atmospheric Conditions Sebastian Haug, Walter Scheuermann, and Eckart Laurien
H16-62	Modelling the Regional Deposition of Radionuclides from the Fukushima Dai-ichi Nuclear Power Plant with NAME Susan Leadbetter, Matthew Hort, Andrew Jones, Helen Webster, Claire Witham
H16-85	DIPLOS: Dispersion of Localised Releases in a Street Network Omduth Coceal, Zheng-Tong Xie, Alan Robins, Sylvia Bohnenstengel, Bharathi Boppana, Paul Hayden, Glyn Thomas, Ian Castro, Stephen Belcher, and DIPLOS partners
H16-101	The role of atmospheric dispersion modelling systems and expertise in crisis situations: A methodology to assess their support to crisis command center Yasmine Benamrane, Patrick Armand, and Jean-Luc Wybo
H16-125	Air pollution analysis from the plant of Hot Asphalt "Abel Santamaria" in Coliseo, provincia de Matanzas, Cuba" Manuel Adrián Perera Sánchez, Edna Elina Arencibia Gutiérrez
H16-130	Modelling of 137Cs accidental release after Chernobyl over Ukrainian territory by means of CALPUFF Oleg Skrynyk
H16-144	Relation of puff and continuous dispersion within urban canopy Hana Chaloupecká, Klára Jurčáková, Zbyněk Jaňour
<b>COSTES1006 Special Session</b>	
H16-153	Large Eddy Simulation of Accidental Releases of Hazardous Substances in Idealized Urban Geometry Vladimír Fuka, Josef Brechler
H16-177	Application of the SIRANERISK operational dispersion model for accidental or deliberate releases in urban area: new developments and sensitivity study Guillevic Lamaison, Lionel Soulhac, Patrick Armand, Luc Patryl
H16-185	Applicability of Gaussian dispersion models for accidental releases in urban environment – results of the "Michelstadt" test case in COST Action ES1006 Petrov A., Valente J., Bauman-Stantzer K., Batchvarova E.