

Contents

Air quality community action network <i>Michael R. Ogletree & Gregg W. Thomas</i>	1
Air Quality Index as a tool for monitoring environmental degradation and health implications <i>M. Sanmi Awopetu & J. Olugbenga Aribisala</i>	9
Long-term trends of tropospheric ozone in the Czech Republic, 1993–2018 <i>Milan Vana & Jaroslav Pekarek</i>	21
Air pollution, citizen data collectives and communication agenda setting in Colombia <i>Juan-Carlos Valencia & Oscar Fonseca</i>	33
An IoT platform for indoor air quality monitoring using the Web of Things <i>Daniel Ibaseta, Julio Molleda, Fidel Díez & Juan C. Granda</i>	45
Investigating ozone ambient levels: Case study of the Fahaheel urban area, state of Kuwait <i>Masumah Al-Qassimi & Sultan Majed Al-Salem</i>	57
Influence of spatial resolution in modeling the dispersion of volcanic ash in Ecuador <i>René Parra</i>	67
Real-time atmospheric monitoring of urban air pollution using unmanned aerial vehicles <i>Qingyue Wang</i>	79
Assessment of source contributions to the urban air quality for the Bristol ClairCity pilot case <i>Kevin Oliveira, Vera Rodrigues, Silvia Coelho, Ana Patrícia Fernandes, Sandra Rafael, Carlos Faria, Joana Ferreira, Carlos Borrego, Trond Husby, Iason Diafas, Per Sieverts Nielsen, Xiufeng Liu, Angreine Kewo, Carlo Trozzi, Enzo Piscitello, Kris Vanherle, Svein Knudsen, Evert Bouman, Jo Barnes, Stephan Slingerland, Enda Hayes, Hans Bolscher & Myriam Lopes</i>	89

Assessment of primary air pollutants in a tropical metropolitan region by combining local and global emissions inventories <i>Yasmín Kaore Lago Kitagawa, Erick Giovani Sperandio Nascimento, Lilian Lefol Nani Guarieiro, Taciana Toledo de Almeida Albuquerque & Davidson Martins Moreira</i>	99
Comparison of two PM _{2.5} forecasting models in Osorno, Chile <i>Patricio Perez & Byron Nuñez</i>	111
Estimating concentrations of suspended particulate matter over the metropolitan area of Mexico City using satellite and geospatial imagery: Preliminary results <i>Rodrigo T. Sepúlveda-Hirose, Ana B. Carrera-Aguilar, Magnolia G. Martínez-Rivera, Pablo de J. Angeles-Salto & Carlos Herrera-Ventosa</i>	119
Hourly tropospheric ozone concentration forecasting using deep learning <i>Lucas Alves, Erick Giovani Sperandio Nascimento & Davidson Martins Moreira</i>	129
Unpaved road influence areas in hydrocarbon exploration projects <i>Miguel Antonio de Luque Villa & Alexander Valencia Cruz</i>	139
Regression modelling for predicting visibility in a tropical urban environment <i>Savitha Ulavi & Saragur Madanayak Shiva Nagendra</i>	149
Characterization of odorous emissions from a civil wastewater treatment plant in Italy <i>Marco Ravina, Deborah Panepinto, Jheyson Mejia Estrada, Luca de Giorgio, Pietro Salizzoni, Maria Chiara Zanetti & Lorenza Meucci</i>	159
Nanotechnology-based control of hazardous air pollutants emission: Pilot scale trials for simultaneous capture of H ₂ S, NH ₃ , and odours from livestock facilities <i>Guadalupe Valdes Labrada, Suraj Kumar, Bernardo Predicala & Mehdi Nemati</i>	171
Integrated environmental health risk assessment framework for firewood-induced indoor air pollution <i>Khomotso Semanya & Fannie Machete</i>	179
Prospects for the use of alternative fuels and energy by road transport in Russia <i>Alla Golubeva & Elena Magaril</i>	193
Children's exposure to indoor air in schools: Impact on wheezing <i>Juliana P. Sá, Pedro T. B. S. Branco, Maria C. M. Alvim-Ferraz, Fernando G. Martins & Sofia I. V. Sousa</i>	205

Health and economic impacts of ozone ship-related air pollution
in Portugal
*Rafael A. O. Nunes, Maria C. M. Alvim-Ferraz, Fernando G. Martins,
Jukka-Pekka Jalkanen, Hanna Hannuniemi & Sofia I. V. Sousa*..... 213

Real-life emission factor assessment for biomass heating appliances
at a field measurement campaign in Styria, Austria
*Rita Sturmlechner, Christoph Schmidl, Elisa Carlon, Gabriel Reichert,
Harald Stressler, Franziska Klauser, Joachim Kelz, Manuel Schwabl,
Bernadette Kirchsteiger, Anne Kasper-Giebl, Ernst Höftberger
& Walter Haslinger* 221

Estimation of fuel loss and spatial-temporal dispersion of vehicular
pollutants at a signalized intersection in Delhi city, India
Rajni Dhyani, Niraj Sharma & Mukti Advani 233

**Special session: Transport and air quality in Portugal
(Joint session with Urban Transport 2019)**

Using air quality modelling and emission projections as a support to the
first Air Pollution Control Program under NEC Directive targets for 2030
*Joana Ferreira, Diogo Lopes, Sílvia Coelho, Alexandra Monteiro,
Myriam Lopes, Dília Jardim, Filipa Marques, Filomena Boavida
& Ana I. Miranda* 247

Urban mobility strategies to improve local air quality:
Case study of Lisbon, Portugal
*Diogo Lopes, Joana Ferreira, Sandra Rafael, Patricia Baptista,
Marta Faria, Nuno Canha, Susan Marta Almeida & Marina Almeida-Silva*..... 257

**Special session: Strategies for human exposure reduction
(Organised by E. C. Rada)**

Perspectives of stack and environmental monitoring in the surroundings
of a waste-to-energy plant
*Luca Adami, Marco Schiavon, Martina Ferrai, Loris Dallago,
Elena Cristina Rada, Marco Tubino & Marco Ragazzi* 267

CO₂ measurements for unconventional management of indoor air quality
*Marco Ragazzi, Rossano Albatichi, Marco Schiavon, Navarro Ferronato
& Vincenzo Torretta* 277

Integrated methodology for the management of human exposure to
air pollutants
*Marco Schiavon, Elena Cristina Rada, Luca Adami, Federica Fox
& Marco Ragazzi*..... 287

Influence of key parameters on the removal efficiency of air pollutants by a biotrickling filter <i>Vincenzo Torretta, Marco Schiavon, Paolo Caruson & Marco Ragazzi</i>	297
--	-----

**Special session: Naturally occurring ionizing pollutants
(Organised by R. Ippolito)**

Radon entry models into buildings versus environmental parameters, building shape and types of foundation <i>Rosaria Ippolito & Romolo Remetti</i>	309
--	-----

Indoor radon survey in university buildings: A case study of Sapienza – University of Rome <i>Christian di Carlo, Romolo Remetti, Federica Leonardi, Rosabianca Trevisi, Luigi Lepore & Rosaria Ippolito</i>	317
--	-----

An inexpensive and continuous radon progeny detector for indoor air-quality monitoring <i>Christian di Carlo, Luigi Lepore, Luca Gugliermetti & Romolo Remetti</i>	325
--	-----

Author index	335
---------------------------	-----