



Maja Kuzmanoski

Assistant Research Professor
Environmental Physics Laboratory
Institute of Physics Belgrade, Serbia
Pregrevica 118, 11080 Belgrade, Serbia

Telephone: +381 11 3713145

Email: maja.kuzmanoski@ipb.ac.rs

www.envpl.ipb.ac.rs

QUALIFICATIONS

- **Ph.D. in Atmospheric Physics** (October 2005)
University of New South Wales, Australia
Thesis: Physical and Optical Properties of Aerosols from Field Campaigns
Advisors: Assoc. Prof. Michael Box, Dr. Gail Box
- **B.Sc. in Physics** (December 1998)
University of Belgrade, Serbia

SCHOLARSHIPS

International Postgraduate Research Scholarship, funded by Australian Department of Education, Science and Training (February 2001 - June 2004)

RESEARCH INTERESTS

- Characterization of aerosol optical properties through modeling and remote sensing
- Lidar remote sensing
- Aerosol radiative effects
- Mineral dust optical properties
- Dust model validation using remote sensing and in-situ measurements

PROFESSIONAL EXPERIENCE

- **Assistant Research Professor** (January 2011 - present)
Institute of Physics Belgrade, Serbia
- **Consultant, part-time** (May 2005 - May 2007)
Bay Area Environmental Research Institute, Sonoma, CA

PARTICIPATION IN RESEARCH PROJECTS

- GEO-CRADLE (Coordinating and integrating state-of-the-art Earth Observation Activities in the regions of North Africa, Middle East, and Balkans and Developing Links with GEO related initiatives towards GEOSS), funded within European Union's Horizon 2020 research and innovation programme, under grant agreement No 690133 (2016 - 2018)

- ACTRIS-2 Integrated Activities (IA), funded within European Union's Horizon 2020 research and innovation programme under grant agreement No 654109 (2015 - 2019)
- In-Dust (International Network to Encourage the Use of Monitoring and Forecasting Dust Products), COST Action CA16202, European Cooperation in Science and Technology (2017 – 2021)
- Investigation of Climate Change and Its Influences on Environment: Monitoring the Influences, Adaptations, and Offsets, funded by Serbian Ministry of Education and Science, research project III43007 (2011 – 2017)
- ACTRIS (Aerosols, Clouds, and Trace gases Research InfraStructure Network), funded within the EC 7th Framework Programme (2011 - 2015)

PUBLICATIONS

Book chapters:

Tomašević, M., Z. Mijić, M. Aničić, A. Stojić, M. Perišić, **M. Kuzmanoski**, M. Todorović, and S. Rajšić, Air Quality Study in Belgrade: Particulate Matter and Volatile Organic Compounds as Threats to Human Health, In: Air Pollution: Sources, Prevention and Health Effects, Editor: Rajat Sethi, Nova Science Publishers, NY, USA, ISBN: 978-1-62417-735-4, p. 315-346, 2013.

M. Aničić, Z. Mijić, **M. Kuzmanoski**, A. Stojić, M. Tomašević, S. Rajšić, and M. Tasić, A Study of Airborne Trace Elements in Belgrade Urban Area: Instrumental and Active Biomonitoring Approach, In: Trace Elements: Environmental Sources, Geochemistry and Human Health, Editors: Diego Alejandro De Leon and Paloma Raquel Aragon, Nova Science Publishers, NY, USA, ISBN: 978-1-62081-401-7, p.1-30, 2012.

Peer-reviewed journals:

Ilić, L., **M. Kuzmanoski**, P. Kolarž, A. Nina, V. Srećković, Z. Mijić, J. Bajčetić, and M. Andrić, Changes of atmospheric properties over Belgrade, observed using remote sensing and in situ methods during the partial solar eclipse of 20 March 2015, *Journal of Atmospheric and Solar-Terrestrial Physics*, doi: 10.1016/j.jastp.2017.10.001, in print, 2017.

Todorović, M., M. Perišić, **M. Kuzmanoski**, A. Stojić, A. Šoštarić, Z. Mijić, and S. Rajšić, Assessment of PM10 pollution level and required source emission reduction in Belgrade area, *Journal of Environmental Science and Health, Part A*, 50, 1351-1359, 2015.

Vuković, G., M. Aničić Urošević, I. Razumenić, **M. Kuzmanoski**, M. Pergal, S. Škrivanj, and A. Popović, Air quality in urban parking garages (PM10, major and trace elements, PAHs): Instrumental measurements vs. Active moss biomonitoring, *Atmospheric Environment*, 85, 31-40, 2014.

Kuzmanoski, M., M. Todorović, M. Aničić Urošević, and S. Rajšić, Heavy metal content of soil in urban parks of Belgrade, *Chemical Industry* 68, 643-651, 2014.

Kuzmanoski, M., M. A. Box, B. Schmid, P. B. Russell, and J. Redemann, Case study of modeled aerosol optical properties during the SAFARI 2000 campaign, *Applied Optics*, 46, 5263-5275, 2007.

Kuzmanoski, M., M. A. Box, G. P. Box, B. Schmid, J. Wang, P. B. Russell, H. H. Jonsson, and J. H. Seinfeld, Aerosol properties computed from aircraft-based observations during the ACE-Asia campaign: 1. Aerosol size distributions retrieved from optical thickness measurements, *Aerosol Science and Technology*, 41, 202-216, 2007.

Kuzmanoski, M., M. A. Box, B. Schmid, G. P. Box, J. Wang, P. B. Russell, D. Bates, H. H. Jonsson, E. J. Welton, and J. H. Seinfeld, Aerosol properties computed from aircraft-based observations during the ACE-Asia campaign: 2. A case study of lidar ratio closure, *Aerosol Science and Technology*, 41, 231-243, 2007.

Box, M. A., G. P. Box, M. J. Kay, **M. Kuzmanoski**, G. Taha, and D. Cohen, Physical, chemical and radiative properties of aerosols in Sydney, Australia, *Australian Meteorological Magazine*, 51, 223-228, 2002.

Conference proceedings:

Ilić L., **M. Kuzmanoski**, and Z. Mijić, Planetary boundary layer and elevated aerosol layer height retrieval from lidar signal in Belgrade, Proceedings of the 5th WeBIOPATR Workshop and Conference, 14-16 October 2015, Belgrade, Serbia, p. 79-84.

Kuzmanoski M., L. Ilić, and Z. Mijić, Aerosol remote sensing study of a Saharan dust intrusion episode in Belgrade, Serbia, Proceedings of the XIX International Eco-Conference 2015, September 23-25, 2015, Novi Sad, Serbia, p. 73-80.

Mijić Z., M. Perišić, A. Stojić, **M. Kuzmanoski**, and L. Ilić, Estimation of atmospheric aerosol transport by ground-based remote sensing and modeling, Proceedings of the XIX International Eco-Conference 2015, September 23-25, 2015, Novi Sad, Serbia, p. 375-382.

Todorović, M., **M. Kuzmanoski**, and T. Ljubenović, Horizontal distribution of heavy metal concentrations in urban park soil, *Physical Chemistry 2014: Proceedings of the 12th International Conference on Fundamental and Applied Aspects of Physical Chemistry*, September 22-26, 2014, Belgrade, Serbia, p. 921-924.

Mijić, Z., **M. Kuzmanoski**, D. Nicolae, and L. Belegante, The use of hybrid receptor models and ground-based remote sensing of particulate matter for identification of potential source regions, Proceedings of the 4th WeBIOPATR Workshop and Conference, October 2-4, 2013, Belgrade, Serbia, p. 52-59.

Todorović, M., M. Perišić, **M. Kuzmanoski**, and A. Šoštarić: Health risk assessment of trace metals associated with PM10 in Belgrade district, Proceedings of the 4th WeBIOPATR Workshop and Conference, October 2-4, 2013, Belgrade, Serbia, p. 205-208.

Vuković, G., M. Aničić Urošević, **M. Kuzmanoski**, M. Tomašević, M. Pergal, S. Škrivanj, and A. Popović: Health risk assessment of pollutants (PAHs and heavy metals) associated with PM10 in urban parking garages, Proceedings of the 4th WeBIOPATR Workshop and Conference, October 2-4, 2013, Belgrade, Serbia, p. 171-175.

Perišić, M., M. Todorović, A. Stojić, **M. Kuzmanoski**, and S. Rajšić: Health risk assessment of VOCs in Belgrade semi-urban area, Book of Abstracts, 6th Symposium Chemistry and Environmental Protection, May 21-24, 2013, Vršac, Serbia, p. 378-379.

Todorović, M., **M. Kuzmanoski**, M. Aničić Urošević, T. Ljubenović, S. Rajšić, and M. Tasić: Heavy metal content in Belgrade urban parks (poster presentation), Book of Abstracts, 6th Symposium Chemistry and Environmental Protection, May 21-24, 2013, Vršac, Serbia, p. 322-323.

Kuzmanoski, M., M. Todorović, M. Aničić Urošević, S. Rajšić, and M. Tasić: XRF analysis of heavy metal content in soil samples using MINIPAL 4 spectrometer, Proceedings of the 11th International Conference on Fundamental and Applied Aspects of Physical Chemistry (Volume II), September 24-28, 2012, Belgrade, Serbia, p. 660-662.

Mijić, Z., **M. Kuzmanoski**, A. Stojić, A. Žekić, S. Rajšić, M. Tasić, Investigation of regional transport and health risk effects of metals in PM2.5 air particulate matter in Belgrade, Proceedings of the 3rd International WeBIOPATR Workshop & Conference, November 15-17, 2011, Belgrade, Serbia (CD).

Conference abstracts:

Kuzmanoski, M., L. Ilić, M. Todorović, Z. Mijić, A study of a dust intrusion event over Belgrade, Serbia, The 6th international WeBIOPATR Workshop and Conference, Book of Abstracts, 6-8 September 2017, Belgrade, Serbia, p. 36.

Kuzmanoski M., S. Ničković, and L. Ilić, Spatial distribution of mineral dust single scattering albedo based on DREAM model, Geophysical Research Abstracts, Vol. 18, EGU2016-4425, 2016, EGU General Assembly, Vienna, Austria, April 2016.

Schmid, B., H. Guan, **M. Kuzmanoski**, P. Pilewskie, A. Bucholtz, A. McComiskey, S. McFarlane, and B. Magi, The Sensitivity of Shortwave Radiative Forcing and Heating Rates to the Aerosol Vertical Profile, DOE ARM Science Team Meeting, Norfolk, USA, March 2008.

Schmid, B., H. Guan, A. McComiskey, S. McFarlane, **M. Kuzmanoski**, P. Pilewskie, B. Magi, The Sensitivity of Shortwave Radiative Forcing and Heating Rates to the Aerosol Vertical Profile, AGU Fall Meeting, San Francisco, USA, December 2007.

Kuzmanoski, M., M. A. Box, B. Schmid, P. B. Russell, B. Holben, and J. Redemann. Modeled aerosol optical properties during the SAFARI 2000 campaign, AGU Fall Meeting, San Francisco, USA, December 2006.

Kuzmanoski, M., M. A. Box, B. Schmid, J. Redemann, P. B. Russell, and B. Holben, Case studies of modeled properties of biomass burning aerosol during SAFARI 2000, EGU General Assembly 2006, Vienna, Austria, April 2006.

Kuzmanoski, M., M. A. Box, B. Schmid, G. P. Box, J. Wang, P. B. Russell, D. Bates, H. H. Jonsson, E. J. Welton, and J. H. Seinfeld, A case study of aerosol optical properties and radiative effects computed from airborne measurements during the ACE-Asia campaign, AGU Fall Meeting, San Francisco, USA, December 2005.

Kuzmanoski, M., M. A. Box, G. P. Box, B. Schmid, P. B. Russell, J. Redemann, J. M. Livingston, J. Wang, R. C. Flagan, J. H. Seinfeld, Aerosol size distributions retrieved from sunphotometer measurements during ACE-Asia: Intercomparison of two retrieval methods, 10th National Conference, Australian Meteorological and Oceanographic Society, Perth, Australia, February 2003.

Kuzmanoski, M., M. A. Box, G. P. Box, B. Schmid, P. B. Russell, J. Redemann, J. M. Livingston, J. Wang, R. C. Flagan, and J. H. Seinfeld, Aerosol size distributions during ACE-Asia: Retrievals from optical thickness and comparisons with in-situ measurements, AGU Fall Meeting, San Francisco, USA, December 2002.

Kuzmanoski, M., M. A. Box, G. P. Box, B. Schmid, P. B. Russell, J. Redemann, J. M. Livingston, J. Wang, R. C. Flagan, and J. H. Seinfeld, Size distributions of aerosols during ACE-Asia, Western Pacific Geophysics Meeting, Wellington, New Zealand, July 2002.

Kuzmanoski, M., G. Box, M. Box, P. Russell, and B. Schmid, Aerosol properties from international field campaigns, 9th National Conference, Australian Meteorological and Oceanographic Society, Melbourne, Australia, February 2002.

Box, G. P., G. Taha, and **M. Kuzmanoski**, Long-term atmospheric monitoring in Sydney using an MFRSR, Proc. IEEE International Geoscience and Remote Sensing Symposium (IGARSS'01), 1, 81-83, 2001.

Kuzmanoski, M., G. Taha, M. J. Kay, G. P. Box, and M. A. Box, Radiative effects of aerosols in Sydney, Australia, 8th National Conference, Australian Meteorological and Oceanographic Society, Hobart, Australia, February 2001.