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Nota di contenuto	List of Contributors -- About the Guest Editor -- Preface to "Atmospheric Mercury" -- Matthew T. Parsons, Daniel McLennan, Monique Lapalme, Curtis Mooney, Corinna Watt and Rachel Mintz Total Gaseous Mercury Concentration Measurements at Fort McMurray, Alberta, Canada, Reprinted from: Atmosphere 2013, 4(4), 472-493, http://www.mdpi.com/2073-4433/4/4/472 -- Xin Lan, Robert Talbot, Patrick Laine, Barry Lefer, James Flynn and Azucena Torres Seasonal and Diurnal Variations of Total Gaseous Mercury in Urban Houston, TX, USA Reprinted from: Atmosphere 2014, 5(2), 399-419, http://www.mdpi.com/2073-4433/5/2/399 -- Xiaohong Xu, Umme Akhtar, Kyle Clark and Xiaobin Wang Temporal Variability of Atmospheric Total Gaseous Mercury in Windsor, ON, Canada, Reprinted from: Atmosphere 2014, 5(3), 536-556, http://www.mdpi.com/2073-4433/5/3/536 -- Amanda S. Cole, Alexandra Steffen, Chris S. Eckley, Julie Narayan, Martin Pilote, Rob Tordon, Jennifer A. Graydon, Vincent L. St. Louis, Xiaohong Xu and Brian A. Branfireun A Survey of Mercury in Air and Precipitation across Canada: Patterns and Trends Reprinted from: Atmosphere 2014, 5(3), 635-668 http://www.mdpi.com/2073-4433/5/3/635 -- Gang S. Lee, Pyung R. Kim, Young J. Han, Thomas M. Holsen and Seung H. Lee Tracing Sources of Total Gaseous Mercury to Yongheung Island off the Coast of Korea, Reprinted from: Atmosphere 2014, 5(2), 273-291, http://www.mdpi.com/2073-4433/5/2/273 -- Xinrong Ren, Winston T. Luke, Paul Kelley, Mark Cohen, Fong Ngan, Richard Artz, Jake Walker, Steve Brooks, Christopher Moore, Phil

Swartzendruber, Dieter Bauer, James Remeika, Anthony Hynes, Jack Dibb, John Rolison, Nishanth Krishnamurthy, William M. Landing, Arsineh Hecobian, Jeffery Shook and L. Greg Huey Mercury Speciation at a Coastal Site in the Northern Gulf of Mexico: Results from the Grand Bay Intensive Studies in Summer 2010 and Spring 2011 Reprinted from: Atmosphere 2014, 5(2), 230-251, <http://www.mdpi.com/2073-4433/5/2/230> -- Cheryl Tatum Ernest, Deanna Donohoue, Dieter Bauer, Arnout Ter Schure and Anthony J. Hynes Programmable Thermal Dissociation of Reactive Gaseous Mercury, a Potential Approach to Chemical Speciation: Results from a Field Study Reprinted from: Atmosphere 2014, 5(3), 575-596, <http://www.mdpi.com/2073-4433/5/3/575> -- Jesse O. Bash, Annmarie G. Carlton, William T. Hutzell and O. Russell Bullock Jr. Regional Air Quality Model Application of the Aqueous-Phase Photo Reduction of Atmospheric Oxidized Mercury by Dicarboxylic Acids Reprinted from: Atmosphere 2014, 5(1), 1-15 <http://www.mdpi.com/2073-4433/5/1/1> -- Yanxu Zhang and Lyatt Jaegle Decreases in Mercury Wet Deposition over the United States during 2004-2010: Roles of Domestic and Global Background Emission Reductions Reprinted from: Atmosphere 2013, 4(2), 113-131 <http://www.mdpi.com/2073-4433/4/2/113> -- Steve Brooks, Xinrong Ren, Mark Cohen, Winston T. Luke, Paul Kelley, Richard Artz, Anthony Hynes, William Landing and Borja Martos Airborne Vertical Profiling of Mercury Speciation near Tullahoma, TN, USA Reprinted from: Atmosphere 2014, 5(3), 557-574 <http://www.mdpi.com/2073-4433/5/3/557> -- Franz Slemr, Andreas Weigelt, Ralf Ebinghaus, Carl Brenninkmeijer, Angela Baker, Tanja Schuck, Armin Rauthe-Schoch, Hella Riede, Emma Leedham, Markus Hermann, Peter van Velthoven, David Oram, Debbie O'Sullivan, Christoph Dyroff, Andreas Zahn and Helmut Ziereis Mercury Plumes in the Global Upper Troposphere Observed during Flights with the CARIBIC Observatory from May 2005 until June 2013 Reprinted from: Atmosphere 2014, 5(2), 342-369 <http://www.mdpi.com/2073-4433/5/2/342> -- Peter Rafaj, Janusz Cofala, Jeroen Kuenen, Artur Wyrwa and Janusz Zysk Benefits of European Climate Policies for Mercury Air Pollution Reprinted from: Atmosphere 2014, 5(1), 45-59 <http://www.mdpi.com/2073-4433/5/1/45>.

Sommario/riassunto

Mercury is a serious environmental toxin that is distributed globally by large-scale atmospheric circulations. The chapters in this book cover measurements of speciated atmospheric mercury, regional modeling, continental-scale distributions across the U.S. and Canada, large-scale distributions in the free troposphere, and changes in wet deposition across the U.S. The diverse topics give snap-shots of current research areas in atmospheric mercury and some insight into policy issues in Europe. Together, the work demonstrates the complexity of atmospheric mercury and provides aspects on measuring and modeling it. Much work is needed in the future to unravel the chemical forms of oxidized atmospheric mercury and how it is intertwined in global cycling of mercury. The complexities of this work are extremely challenging for emerging atmospheric chemists.
