

Dr. Yasin Elshorbany, born October 17, 1970 in Egypt and obtained his B.Sc-Chemistry (Honor) in 1993 and then the M.Sc.-Physical Organic Chemistry, Cairo University in 2002, M.Sc thesis title: “A regiochemical study of reactions of some 1,3-dipole precursors with Heterocyclic thiones”. He obtained his PhD in atmospheric chemistry under the supervision of Prof. Peter Wiesen at the University of Wuppertal, Germany in January 2010 with Excellent grade (*Summa Cum Laude*), PhD thesis title: Investigation of the Tropospheric Oxidation Capacity and Ozone Photochemical Formation in the city of Santiago de Chile, Field Measurements and Modeling Study. Dr Elshorbany has participated in a numerous laboratory and field campaigns all over the world and has currently more than 15 published peer reviewed articles and a book. Dr. Elshorbany is currently an associate researcher at the National Research Center, Egypt and also a Post-doctoral research associate at the University of Wuppertal, Germany

## Publications:

### I. peer reviewed articles:

1. **Elshorbany, Y. F.**, Barnes, I., Becker, K. H, Kleffmann, J., and Wiesen, P.: Sources and Cycling of Tropospheric Hydroxyl Radicals-An Overview, *Zeitschrift für Physikalische Chemie*, 224, 967-987, 2010. DOI:10.1524/zpch.2010.6136.
2. **Elshorbany, Y. F.**, Kurtenbach, R., Wiesen, P. Lissi, E., Rubio, M., Villena, G., Gramsch, E., Rickard, A. R., Pilling, M. J., Kleffmann. J.: Oxidation capacity of the city air of Santiago, Chile, *Atmospheric Chemistry and Physics*, **9**, 2257-2273, 2009.
3. **Elshorbany, Y. F.**, Kleffmann, J., Kurtenbach, R., Rubio, R., Lissi, E., Villena, G., Rickard, A.R. and Pilling, M. J., Wiesen, P.: Summertime Photochemical Ozone Formation in Santiago de Chile, *Atmospheric Environment*, **43**, 6398-6420, 2009.
4. **Elshorbany, Y. F.**, Kleffmann, J., Kurtenbach, R., Rubio, R., Lissi, E., Villena, G., Rickard, A.R. and Pilling, M. J., Wiesen, P.: Seasonal dependence of the oxidation capacity of the city of Santiago de Chile, *Atmospheric Environment*, **44**, 5383-5394, 2010, a special issue dedicated for the Atmospheric Chemical Mechanism conference, ACM-2009, Davis, US.

5. Bartels-Rausch, T., Brigante, M., **Elshorbany, Y. F.**, Ammann, M., D'Anna, B., George, C., and Kleffmann, J.: Humic acid in ice: Photo-enhanced conversion of nitrogen dioxide into nitrous acid, *Atmospheric Environment*, 40, 5443-5450, 2010.
6. Rubio, M., Lissi, E., Villena, G., **Elshorbany, Y. F.**, Kleffmann, J., Kurtenbach, R., Wiesen, P.: Simultaneous measurements of formaldehyde and nitrous acid in dews and gas phase in the atmosphere of Santiago, Chile, *Atmospheric Environment*, 43, 6106 - 6109, 2009.
7. Metzger, A., Dommen, J., Gaeggeler, K., Duplissy, J., Prevot, A. S. H., Kleffmann, J., **Elshorbany, Y.**, Wisthaler, A. and Baltensperger, U.: Evaluation of 1,3,5 trimethylbenzene degradation in the detailed tropospheric chemistry mechanism, MCMv3.1, using environmental chamber data. *Atmospheric Chemistry and Physics*, 8, 6453-6468, 2008.
8. Stemmler, K., Ndour, M., **Elshorbany, Y.**, Kleffmann, J., Ammann, M., D'Anna, B., George, C., and Bohn, B.: Induced conversion of nitrogen dioxide into nitrous acid on submicron humic acid aerosol, *Atmospheric Chemistry and Physics*, 7, 4237- 4248, 2007.
9. Kleffmann J., Gavriloaiei T., **Elshorbany Y.**, Ródenas M., Wiesen P.: Detection of nitric acid ( $\text{HNO}_3$ ) in the atmosphere using the LOPAP technique, *Journal of Atmospheric Chemistry*, 58 (2), 131-149, 2007.
10. Bejan, I., **Abd El Aal, Y.(Elshorbany Y)**, Barnes, I., Benter, T., Bohn, B., Wiesen, P. and Kleffmann, J.: The Photolysis of ortho-nitrophenols: a new phase source of HONO, *Physical Chemistry physics*, 8 (17): 2028-2035, 2006.
11. Niedojadlo, A., Becker, K. H., **Elshorbany, Y. F.**, Kurtenbach, R., Wiesen, P., Schady, Zwozdziak, A., and Zwozdziak, J.: Non-Methane Volatile Organic Compound Measurements in the city centre of Wroclaw, Poland. 2007, NATO science series. Volume 79, 181-196. DOI: 10.1007/978-1-4020-6429-6\_13. In review, 2010.

- 12.** Shawali, A. S., Abdallah, M. A., Mosselhi, M. A. N., **Mohamed Y. F.**: Synthesis and tautomeric structure of 1,2-bis(7-arylhydrazono-7H-[1,2,4]triazolo[3,4-b][1,3,4]thiadiazin-3-yl)ethanes; *Zeitschrift für Naturforschung Section B-A J. of Chemical Sciences*, **57** (5), 552-556, 2002.
- 13.** Mosselhi, M. A. N., Abdallah, M. A., **Mohamed, Y. F.**, Shawali, A. S.: Synthesis and tautomeric structure of 7-arylhydrazono-7H-[1,2,4]triazolo[3,4-b][1,3,4]thiadiazines, *Phosphorus Sulfur and Silicon and the Related Elements*, **177** (2), 487-496, 2002.
- 14.** Rubio, M., Lissi, E., Villena, G., **Elshorbany, Y. F.**, Kleffmann, J., Kurtenbach, R., Wiesen, P.: Rate of nocturnal ozone depletion in downtown Santiago, Chile, submitted, 2010.

## **II. Books:**

- 15.** Yasin Elshorbany: Tropospheric Oxidation Capacity and Ozone Photochemical Formation, Südwestdeutscher Verlag für Hochschulschriften AG Co. KG, ISBN 978-3-8381-1638-9, 2010.

## **III. Publications in preparation:**

- 16.** **Elshorbany, Y. F.**, Kleffmann, J., Kurtenbach, Wiesen, P., A. Hofzumanhaus, Y. Kanaya, ...: HO<sub>x</sub> budgets at the international HO<sub>x</sub>COMP, a Case Study of HO<sub>x</sub> Chemistry under Low NO<sub>x</sub> Conditions, to be submitted, 2010.
- 17.** **Elshorbany, Y. F.**, Kleffmann, J., Wiesen, P., Hufzumanhaus, A., et al.: Source Apportionment Analysis of OVOCs and their Role in the Oxidation Capacity under low NO<sub>x</sub> conditions, 2010c, in preparation.