

# Alexandra Tsekeri

atsekeri@noa.gr

Place and date of birth: Ioannina, Greece, 15/1/1981  
Home address: Anaxarhou 57, 11631, Athens, Greece  
Tel.: +30-210-7015627 (*home*)

## Education:

*2005-2011:* PhD in Earth and Environmental Sciences  
Thesis title: “Development and assessment of a neural network approach for retrieving aerosol properties from multispectral, multiangle polarization measurements.”  
The Graduate School and University Center, The City University of New York, New York, USA

*1999-2004:* Five-year Diploma in Environmental Engineering  
Dissertation title: “Monitoring of the methane in the Black Sea.”  
Democritus University of Thrace, Polytechnic School, Xanthi, Greece

## Research Experience:

- Aerosol characterization using passive and active remote sensing techniques with focus on polarimetric data.
- Neural network and other inversion techniques applications on remote sensing data.
- Evaluation of lidar /sunphotometer synergetic algorithms for the retrieval of aerosol microphysical properties.
- Signal processing in open-path mid-infrared spectroscopy using FTIR and Quantum Cascade Laser.

## Selected publications in peer reviewed journals:

Tsekeri, A., Lopatin, A., Amiridis, V., Marinou, E., Igloffstein, J., Siomos, N., Solomos, S., Kokkalis, P., Engelmann, R., Baars, H., Gratsea, M., Raptis, P. I., Biniatoglou, I., Mihalopoulos, N., Kalivitis, N., Kouvarakis, G., Bartsotas, N., Kallos, G., Basart, S., Schuettemeyer, D., Wandinger, U., Ansmann, A., Chaikovsky, A. P., and Dubovik, O.: GARRLiC and LIRIC: strengths and limitations for the characterization of dust and marine particles along with their mixtures, *Atmos. Meas. Tech.*, 10, 4995-5016, <https://doi.org/10.5194/amt-10-4995-2017>, 2017.

Tsekeri, A., Amiridis, V., Marengo, F., Nenes, A., Marinou, E., Solomos, S., Rosenberg, P., Trembath, J., Nott, G. J., Allan, J., Le Breton, M., Bacak, A., Coe, H., Percival, C., and Mihalopoulos, N.: Profiling aerosol optical, microphysical and hygroscopic properties in ambient conditions by combining in situ and remote sensing, *Atmos. Meas. Tech.*, 10, 83-107, doi:10.5194/amt-10-83-2017, 2017.

Marinou, E., Amiridis, V., Biniatoglou, I., Tsikerdekis, A., Solomos, S., Proestakis, E., Konsta, D., Papagiannopoulos, N., Tsekeri, A., Vlastou, G., Zanis, P., Balis, D., Wandinger, U., and Ansmann, A.: Three-dimensional evolution of Saharan dust transport towards Europe based on a 9-year EARLINET-optimized CALIPSO dataset, *Atmos. Chem. Phys.*, 17, 5893-5919, doi:10.5194/acp-17-5893-2017, 2017.

Amiridis, V., Marinou, E., Tsekeri, A., Wandinger, U., Schwarz, A., Giannakaki, E., Mamouri, R., Kokkalis, P., Biniatoglou, I., Solomos, S., Herekakis, T., Kazadzis, S., Gerasopoulos, E., Proestakis, E., Kottas, M., Balis, D., Papayannis, A., Kontoes, C., Kourtidis, K., Papagiannopoulos, N., Mona, L., Pappalardo, G., Le Rille, O., and Ansmann, A.: LIVAS: a 3-D multi-wavelength aerosol/cloud database based on CALIPSO and EARLINET, *Atmos. Chem. Phys.*, 15, 7127-7153, doi:10.5194/acp-15-7127-2015, 2015.

Tsekeri, A., V. Amiridis, P. Kokkalis, S. Basart, A. Chaikovsky, O. Dubovik, R.E. Mamouri, A. Papayannis, and J. M. Baldasano, Application of a Synergetic Lidar and Sunphotometer Algorithm for the Characterization of a Dust Event Over Athens, Greece, *British Journal of Environment and Climate*, 3(4), 531-546, DOI:10.9734/BJECC/2013/2615, 2013.

Amiridis, V., Wandinger, U., Marinou, E., Giannakaki, E., Tsekeri, A., Basart, S., Kazadzis, S., Gkikas, A., Taylor, M., Baldasano, J., and Ansmann, A., Optimizing Saharan dust CALIPSO retrievals, *Atmos. Chem. Phys. Discuss.*, 13, 14749-14795, doi:10.5194/acpd-13-14749-2013, 2013.

Marengo, F., Amiridis, V., Marinou, E., Tsekeri, A., and Pelon, J.: Airborne verification of CALIPSO products over the Amazon: a case study of daytime observations in a complex atmospheric scene, *Atmos. Chem. Phys. Discuss.*, 14, 9203-9224, doi:10.5194/acpd-14-9203-2014, 2014.

Taylor, M., Kazadzis, S., Tsekeri, A., Gkikas, A., and Amiridis, V.: Satellite retrieval of aerosol microphysical and optical parameters using neural networks: a new methodology applied to the Sahara desert dust peak, *Atmos. Meas. Tech.*, 7, 3151-3175, doi:10.5194/amt-7-3151-2014, 2014.