

## Obituary

# Joachim (Jo) Urban



Joachim Urban, known to many of us as Jo, passed away on Thursday, August 14, 2014, at the age of 49. Sadly he suffered a heart attack while jogging during his summer vacation in Bordeaux.

As a leading expert in microwave and sub-mm atmospheric observations, he was very well known and connected in the atmospheric chemistry and remote sensing community. Jo participated in many international activities. He made important contributions to three SPARC (Stratosphere-Troposphere Processes and their Role in Climate) activities: Data Initiative (trace gas climatologies), WAVAS II (water vapour assessment) and the SPARC/IO3C/IGACO-O3/NDACC (SI2N) "Activity on Past changes in the Vertical Distribution of Ozone". He collaborated in the still ongoing ESA (European Space Agency) Climate Change Initiative (CCI) on ozone and was co-author of Chapter 2 "Global Ozone" of the current WMO/UNEP Scientific Assessment of Stratospheric Ozone Depletion 2014, which will be published in coming weeks.

Born in Bremen, he obtained his MSc (*Diplom Physik*) and PhD (*Dr. rer. nat.*, "summa cum laude") from the University of Bremen in Germany, where he was part of the microwave group of Prof. Klaus Künzi within the Institutes of Environmental Physics and Remote Sensing. His research focus was on flight born sub-mm observations using the ASUR (Airborne Submm SIS Radiometer) aboard the DLR research aircraft Falcon collaborating with Drs. Hebert Nett and Harry Küllmann within the German Ozone Research Programme. Jo participated in several flight campaigns with ASUR studying among others Arctic stratospheric chemistry (ClO, HCl, N<sub>2</sub>O, O<sub>3</sub>). He also established the sub-mm retrieval of the hydroxyl (OH) radical for another flight-borne THz-radiometer (THOMAS) developed by the DLR.

From 1998 to 2004 he joined as a postdoc the group of Dr. Jérôme de la Noë at l'Observatoire de Bordeaux, France, where he continued research using ground-based microwave remote sensing. During his time in Bordeaux he started working on various space projects: radiation transfer (RT) calculations to investigate the possibility of sub-mm atmospheric

observations in a potential French Mars mission (MAMBO) and in collaboration with Drs. Philippe Baron and Nicola Lautié on the French RT code Molière in preparation for the upcoming SMR (Sub-Millimetre Radiometer) observations aboard the Odin satellite.

Since 2004 he has worked at Chalmers University, Gothenburg, Sweden, where he was an essential part of the Odin team headed by Prof. Donal Murtagh being responsible for microwave trace gas retrieval and science analysis using data from SMR, which was successfully launched in 2001. He was also involved in the STEAM concept, a follow-up on SMR, to be flown as part of the PREMIER limb sounder proposed to the European Space Agency. After being an associate professor for several years, he just became Biträdande professor (full professor) in July this year.

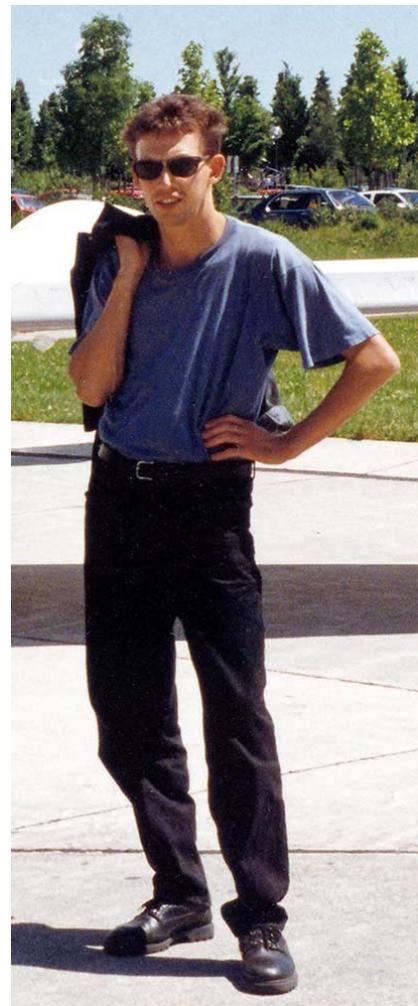
His main research interests were the development of microwave and sub mm remote sensing techniques, numerical algorithms for trace constituent retrieval, the establishment and analysis of long-term trends in stratospheric and mesospheric constituents, and studies of atmospheric processes with emphasis on polar chemistry.

He was an outstanding scientist, leader in his field, well known and well liked.

We have lost a good friend and colleague.

*"Our dead are never dead to us, until we have forgotten them." George Elliot*

Mark Weber, John P. Burrows, Harry Küllmann,  
and Donal Murtagh



20 years ago after the successful test flight of THOMAS aboard the Falcon aircraft