## by Ph.D. Darius Ceburnis

It was a pleasure to attend the 12<sup>th</sup> International Global Atmospheric Chemistry (IGAC) scientific conference held in Beijing, China. IGAC is a great conference with no parallel sessions and carefully selected oral presentations covering all aspects of atmospheric chemistry in a balanced manner. It was well organized; in particular the questions sessions with "microphone" guys assisting incredibly rapidly. Young scientist programme looked impressive even from outside and even better received inside with many dedicated events for young scientists to help establishing vital links in their early carriers.

There were many great presentations, but some of them should be highlighted. A keynote presentation on ozone from historical perspective and future challenges delivered by David Parrish was a delight. It was intriguing to learn that every rapidly developing country is going through the depressing atmospheric pollution phase when environmental issues are being neglected. Similar story of severe ozone pollution has been recorded in Los Angeles (1950), Mexico city (1970) and more recently Beijing and Shanghai following in their footsteps. All participants had a chance to observe an infamous pollution haze advecting into Chinese capital during the conference.

An invited presentation given David Etheridge provided assured robust global warming evidence, emphasizing that the famous global warming hockey stick of temperature and greenhouse gases certainly survived scrutiny in ice core records. Franz Rohrer presented a new chemical coordinate system uncovering unknown self-cleansing capability of the atmosphere stabilised at it maximum efficiency.

Many presentations from local Chinese colleagues addressed the infamous Chinese regional haze. Despite decreasing or stabilized PM, SO<sub>4</sub> and NO<sub>x</sub> concentrations, however, not without the concern due to very high levels, ozone is one major pollutant which concentrations are sharply increasing. The haze is certainly a regional phenomenon and local policy measures, however, pleasing (with electrical motorcycles had completely replaced petrol ones in Beijing) are not a solution. More robust and sustainable policy is needed to address regional pollution.

Marine environment very often acknowledged for occupying 70% of the Earth's surface, but at same time is poorly represented by a number of presentations. Changes in marine atmosphere are more crucial for climatology of cloud effects then continental atmosphere as was presented by Richard Moore (who substituted A. Nenes). Emphasis on ship campaigns and infrastructures in marine environment (islands) should become a priority as aircraft, however, extremely important for process analysis, provide only a snapshot of the atmospheric composition.

Satellite science was represented by a large number of presentations. Satellites certainly provide valuable global and local data, but the robustness of data retrieval techniques should not be neglected. In this regard a very interesting last presentation of the conference presented by Mihalis Vrekoussis highlighted detection of the economic crisis in Greece. A combination of SCIAMACHY, GOME-2 and OMI data provided undeniable evidence of the rapidly decreasing pollution in Athens (up to 40%) and satellite data correlated very well with the ground measurements and, indeed, macro-economic indicators.

SOLAS summer school advertisement was well received with many printed hand-outs disappearing after each poster session.