

## **Charged particles formation in the atmosphere and diethylamine**

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Diethylamine (DEA), chemical formula  $(C_2H_5)_2NH$  or  $C_4H_{11}N$ , is one of the VOC, emitted into the atmosphere from a variety of sources including meat cooking, biomass (especially burning), motor vehicle exhaust, industrial processes, marine organisms etc. We study air ions ageing (from about 1 second up to 20 second) concurrently by ion mobility spectrometry (AIS, Airel Ltd) and mass spectrometry (API300 TQ MS) to find out the characteristic differences in ions mobility and mass distribution induced by enhanced concentration of diethylamine compared to background, and to propose at least some of the ion species typical for the obtained spectra.