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Front Cover Story (see: Noshan Bhattarai, Shuxiao Wang, Yuepeng Pan, Qingcheng Xu, Yanlin Zhang, Yunhua Chang, Yunting Fang, 2021, 15(6): 126)

Atmospheric ammonia (NH_3) is the most abundant alkaline substances in the atmosphere while aerosol ammonium (NH_4^+) constitutes a majority of the inorganic cation concentration in total $PM_{2.5}$ mass (particulate matter with an aerodynamic equivalent diameter below 2.5 μm). Despite the role of NH_3 in contributing to secondary aerosol formation, it is largely unregulated pollutant in many regions of the world including China and the USA. In light of this, number of studies suggested that fossil fuel related sources may be an important source of NH_4^+ and NH_3 in urban atmosphere in China based on source apportionment of nitrogen isotopic composition ($\delta^{15}N$) in NH_4^+ and NH_3, respectively. However, there is no consensus on whether non-agricultural sources (including fossil-fuel sources) or agricultural sources (livestock waste and fertilizer use) are main contributor to ambient NH_4^+ and NH_3 in urban atmosphere based on previous findings. In view of this, our study highlights the uncertainties in the current approach of isotope-based source apportionment of NH_4^+ and NH_3, and hence the suggestions to reduce the uncertainties are provided.

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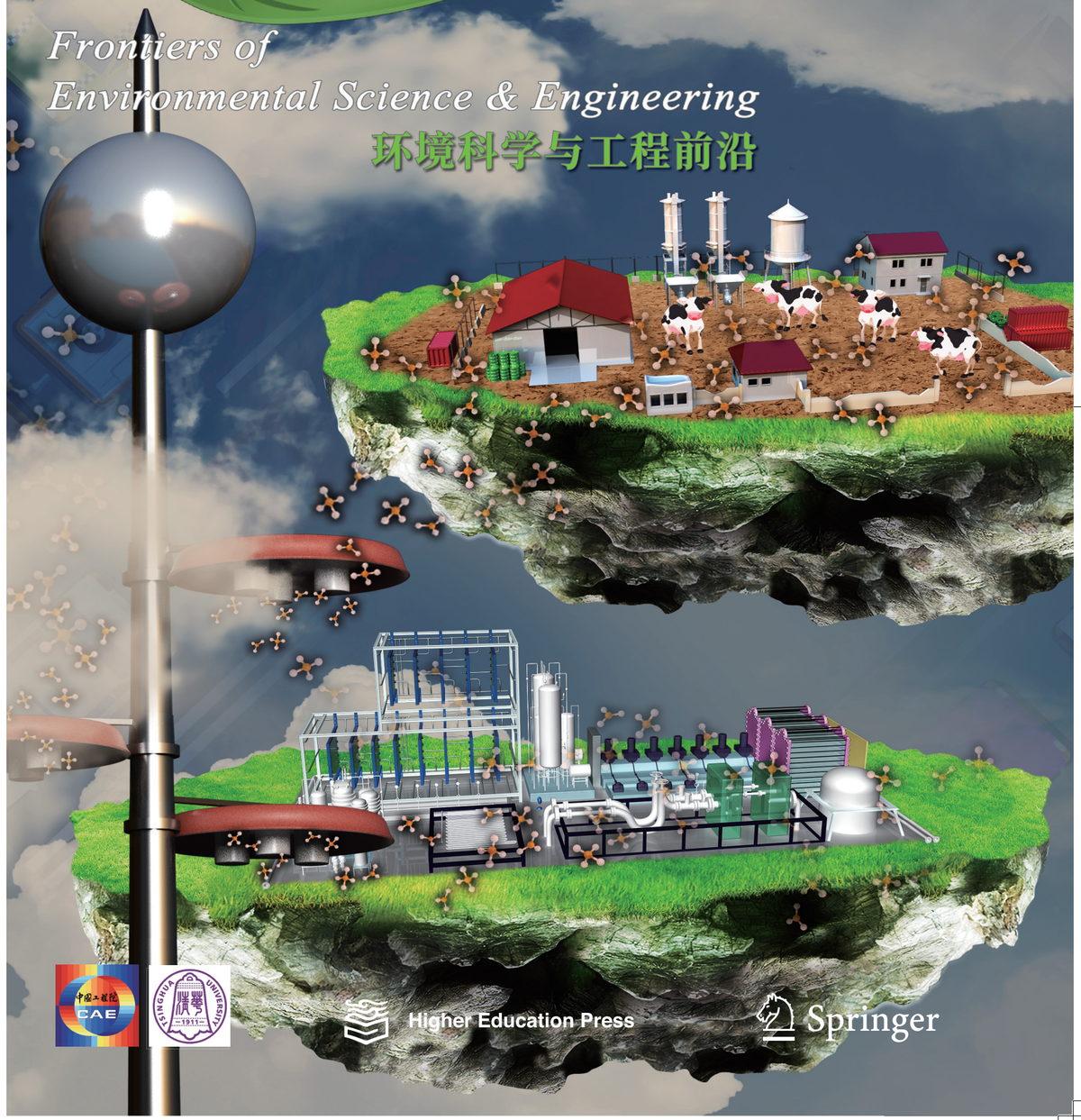

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