

Biomonitoring of atmospheric particles using roadside trees leaves: micro-PIXE and SEM-EDX analysis of leaves

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In order to shed light on the problem of atmospheric particles pollution of roadside atmosphere in megacities area, we carried out two-dimensional elemental analysis of roadside trees leaves by using micro-PIXE, while morphological and elemental characterizations of the atmospheric particles retained on the leaves surface were analyzed by using SEM-EDX. The roadside trees leaves were collected at the Imazato crossing in Osaka City and the Kamiyama crossing in Tokyo metropolitan area, Japan.

The research results are important for the physicochemical characterization of particles in atmospheric roadside, enabling detailed analysis of the various roadside emission sources and atmospheric processes.

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