Appendices

Appendix A: About the images of particulate matter in backscattered electron (SEM) with corresponding EDS spectra of selected metal bearing particles.

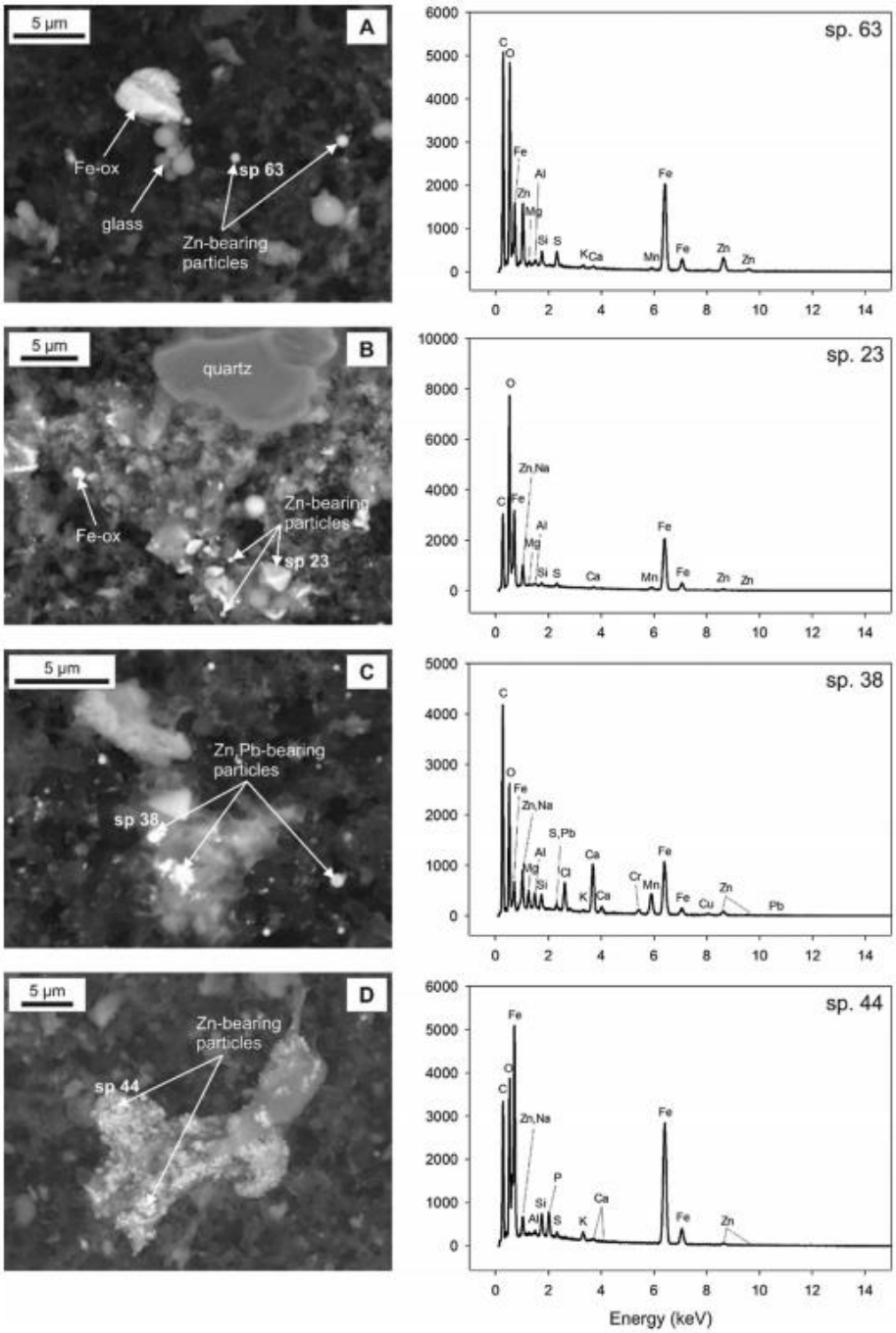
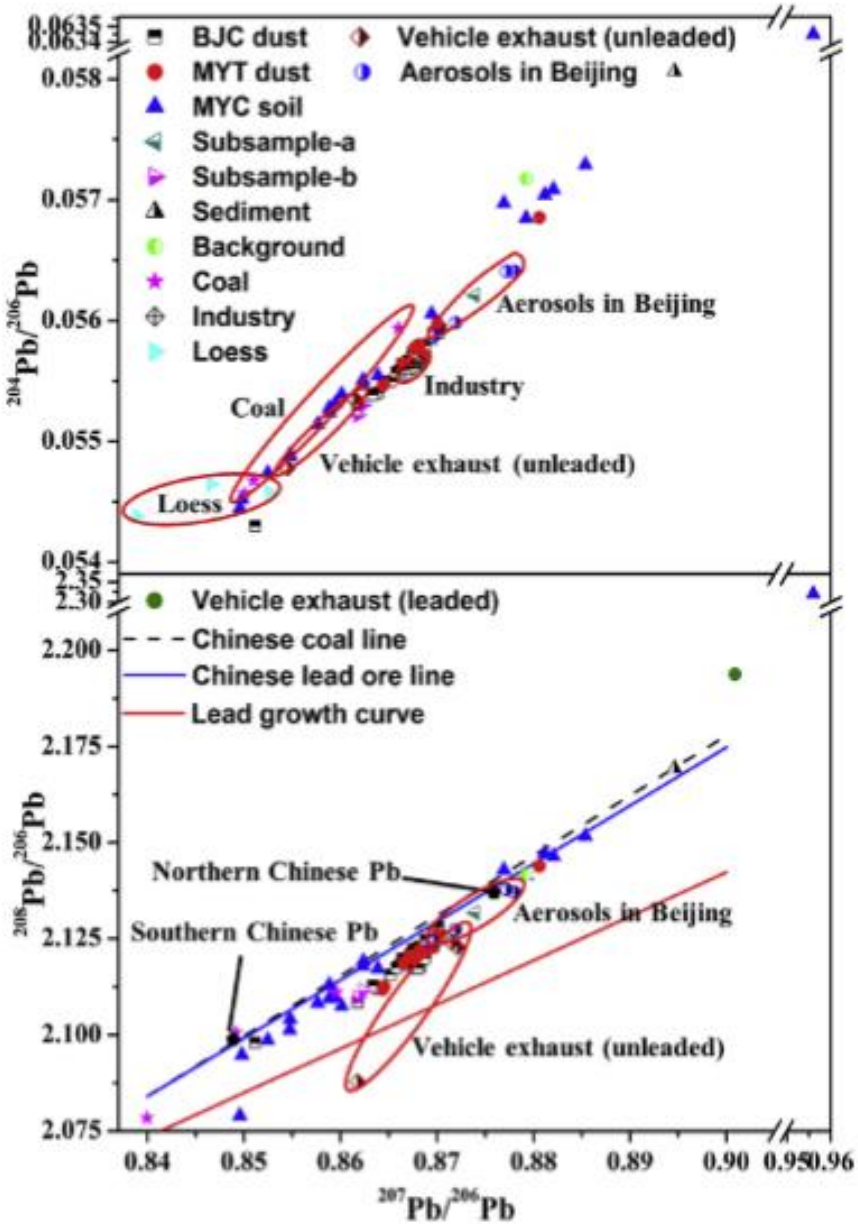


Fig. 5. Images of PM_{10} in backscattered electrons (SEM) with corresponding EDS spectra of selected metal-bearing particles. (A) Site 12 summer sample, 5-µm iron oxide parti next to aluminium-silicate glassy globules and iron oxide-based droplets (<1 µm), containing up to 14 wt% Zn; (B) site 7 winter sample, Fe oxide droplets of various shapes and siz and Zn-bearing phases (up to 3 wt% Zn) that are associated with silicates; (C) site 13 winter sample, Fe oxide droplets and tiny metal-bearing spheres that are spread withi silicate/carbon-rich matrix; (D) site 13 summer sample, Zn-bearing Fe oxide-based clusters that are embedded in a silicate matrix.

Appendix B.

Isotopic composition in urban dust and rural surface soil sample and their possible sources in China.

$^{204}Pb/^{206}Pb$ vs $^{207}Pb/^{206}Pb$ and $^{208}Pb/^{206}Pb$ vs $^{207}Pb/^{206}Pb$.

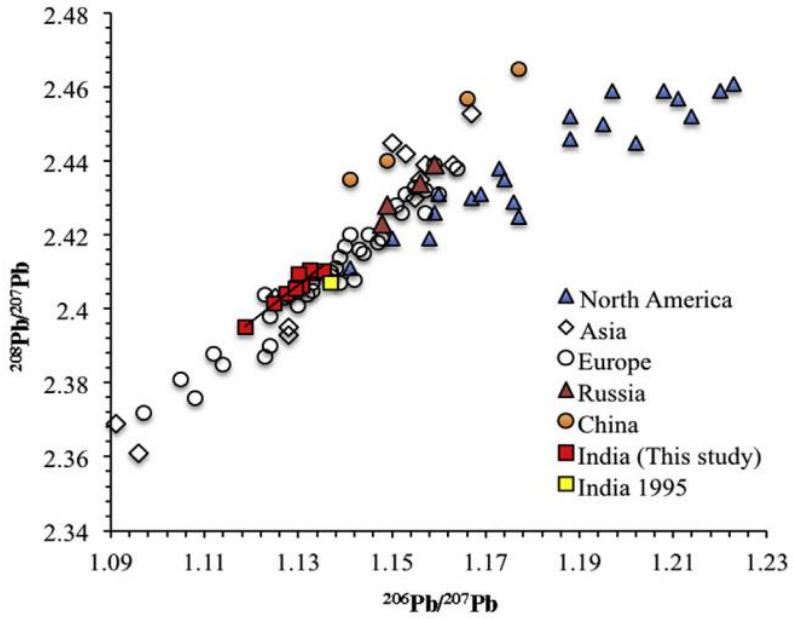


Appendix C

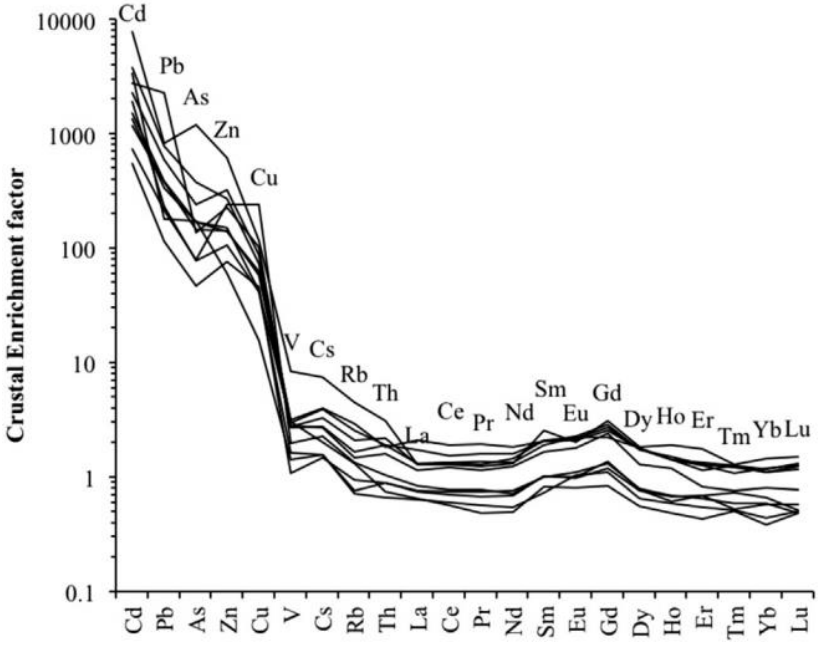
Picture of the key equipment employed in isotope analysis: TIMS and ICP-MS. (Courtesy: CZU Prague).

Appendix D

Pb isotope and enrichment plots



. Triple isotope plot for the Pb in Kanpur (India) and the aerosols collected from northern hemisphere (Bollhofer and Rosman, 2001)



Natural vs anthropogenic sources. The enrichment factors (EF) were calculated with respect to natural sources represented by the Al concentration of upper continental crust. Cd, Pb, As, Zn and Cu are dominated by anthropogenic sources (McLennan, 2001).