

# ***Interactive comment on “Near-road sampling of PM<sub>2.5</sub>, BC, and fine particle chemical components in Kathmandu Valley, Nepal” by Kabindra M. Shakya et al.***

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Shakya et al. report analysis of bulk PM<sub>2.5</sub> and BC concentrations as well as chemical speciation from six sites in Kathmandu valley, Nepal in the manuscript "Near road sampling of PM<sub>2.5</sub>, BC and fine particle chemical components in Kathmandu valley, Nepal". Overall manuscript is well written and results reported are useful in more than one way. One of the best use of data I see is the assessing the occupational health hazard for traffic police personnel.

Limitation if any to be considered is relatively short period of observations. However, this does not reduce the importance of their finding given the fact that there are very few studies on air pollution from this part of the world that report such a comprehensive

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set of observations.

Few of the suggestion, authors may consider to improve the manuscript are

(1) bulk PM<sub>2.5</sub> concentration are measured using optical technology. Such instrument rely on aerosol density measurements/assumption to convert number concentrations into mass. Did author carried out gravimetric measurements to calibrate their instrument?

(2) There are large differences between elemental carbon and black carbon. Authors have not attempted on explaining this difference. They may do in revised manuscript.

(3) To calculate enrichment factors, authors have to use data for crustal ratios. Authors have not mentioned source and data used in their study.

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