

# **Modelling the Spatial Distribution of Benzene from NO<sub>2</sub> Data**

*Shenuka Kunanayagam, Tord Kjellstrom and Daniel Exeter*

NZ Environmental & Occupational Health Research Centre-(NEOH)  
Department of Community Health  
University of Auckland  
PO BOX 92019  
Auckland  
Email: mch\_shenuka@mednov1.auckland.ac.nz

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## **ABSTRACT**

The introduction of unleaded fuel to New Zealand increases the concentration aromatic hydrocarbons reaching the atmosphere. The increase in particular of benzene emissions to ambient air, is of interest due to its adverse effects on human health. The monitoring of benzene is an expensive process. Therefore, spatial NO<sub>x</sub> measurements may be used to estimate the spatial benzene distribution. Benzene is highly correlated with NO<sub>x</sub>. This study will present the spatial and temporal distribution of Benzene based on NO<sub>x</sub> data, and discuss problems in using such relationships.