

**ON-ROAD MOTOR VEHICLE EMISSIONS FROM AROUND THE WORLD****D.H. Stedman, G.A. Bishop***University of Denver Chemistry Department, Denver, USA*

In 1993, on-road emissions in Continental Europe showed a pronounced South/North declining gradient for CO, HC and NO fuel specific emissions (gm/kg). Emissions in Hamburg and Rotterdam were comparable to emissions measured in 1993 in the U.S.A. with the same on-road instrument. Contrasts between emissions in the USA, the UK and Sweden demonstrated the importance both of modern catalysts and of good maintenance. The same contrast in 1998 shows the same picture but lower emissions at all three locations. In the decade from 1993-2003, U.S. emissions have declined markedly, apparently mainly as a result of lower emitting, better maintained, new vehicles. Results from Asia and South America will also be presented together with an analysis which suggests a correlation between average on-road vehicle emissions and the inverse of reported per-capita income. This latter relationship holds only up to a point. Beyond that point of increasing poverty, measured on-road emissions reach a plateau. Results from Mexico City in 1991 and 1994 show a dramatic decline in emissions, mainly caused by the imposition of modern control measures to the taxi cabs which, while only a small fraction of the registered fleet, contribute a large fraction of the vehicle miles traveled. Further improvement in Mexico City on-road emissions was observed by a study in 2000 (Schifter et. al. 2003).