
Vehicle Emissions and Urban Air Quality: Progress, Challenges, and Future

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Résumé

A chemical perspective on the formation and treatment of vehicle emissions and impact on urban air quality will be provided. Engine hardware and operating conditions, after-treatment catalysts, and fuel composition all affect the amount and composition of emissions. Vehicle emissions consist of volatile organic compounds (VOCs), CO, nitrogen oxides (NO_x), and particulate matter (PM). The past few decades have seen substantial reductions in the emissions of NO_x, volatile organic compounds (VOC), and particulate matter (PM) emissions from new vehicles. Current emission trends will be presented and discussed in the context of the future of vehicle emissions and urban air quality.

Mots-Clés: Vehicle Emissions, Urban Air Quality

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