



Low-Cost Nanostructured Catalysts Promise Cleaner Indoor Air

Poor air quality has serious public health consequences. The World Health Organization estimates that 7 million people die each year from air pollution-related diseases.

air pollution is close to eight million premature deaths and 80 million.

Heterogeneous catalysts have been widely used for air pollution abatement for decades, most commonly as catalytic converters in internal combustion engines. Nevertheless, applications of catalysis in air treatment beyond related pollution abatement have become increasingly limited due to the significant use of scarce platinum group metals (PGMs) and the high energy cost associated with maintaining elevated temperatures required for catalysis. Yet, catalysts hold great promise for broader air purification applications, including indoor air purification, if they could overcome issues related to their price, stability, and operating costs.

Boston-based start-up, Metalmark Innovations, Inc., is developing and commercializing a new approach for producing heterogeneous catalysts from the nanoscale up, with funding from the National Science Foundation

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