

Gauging the polluting effects of holy smoke

Hong Kong's pollution problems are well documented and pose a significant risk to the health of the population. Local road and marine traffic, as well as regional industry, are cited as primary culprits, but there are also noxious contributions from less frequently publicised sources.

Backed by a **HK\$500,000** grant from the **Environment and Conservation Fund**, **Prof Paulina Wong, Assistant Professor of Science Unit (SU)**, is studying **'Fine particulate matter pollution from incense burning at temples in Hong Kong'**.

The two-year project, which she began working on in 2019, will examine the areas affected by the PM2.5, or the fine particulate matter, emissions from this source, and the way in which the effects fluctuate over time.

Given that incense is routinely burned at the city's temples, Prof Wong then wondered how these emissions played into Hong Kong's overall pollution problem. One of the challenges she faces in her latest study is distinguishing between the pollutants that originate in the temples and those coming from passing vehicles, as the temples are often located, not only in tightly-packed residential areas, but also by busy roads. Another challenge has been gaining the access she needs, as some of the temple authorities have concerns that recommendations which may arise from Prof Wong's study may lead to calls for their temples to be relocated.

The goals of her project are to not only collect evidence of the ambient air pollution created by incense burning at temples, evidence which can then be used to estimate the health exposure of people living nearby, but also contribute to methodological advances in the field of environmental health and provide support for future policies.

