# Article information:

Emission characteristics and inventory of volatile organic compounds from the Chinese cement industry based on field measurements - ScienceDirect
<https://www.sciencedirect.com/science/article/pii/S0269749122018140?via%3Dihub>

# Article summary:

1. Oxygenated VOCs and halocarbons are the main species emitted from rotary kilns, while alkanes are the dominant species in shaft kilns.

2. The VOCs emission factors of the shaft and rotary kilns are 0.32 and 0.01 g/kg-clinker respectively.

3. In 2019, approximately 18.18 kt VOCs were emitted from cement production in China, concentrated mainly in the southeast and central provinces of China.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

The article “Emission Characteristics and Inventory of Volatile Organic Compounds from the Chinese Cement Industry Based on Field Measurements” provides a comprehensive overview of the emission characteristics, source profiles, and secondary pollutant generation potential of 98 VOCs species emitted from rotary and shaft kilns in China. The article is well-structured with clear objectives, methodology, results, discussion, and conclusion sections that provide an organized flow to its content. The authors have used field measurements for four cement plants to investigate their findings which adds to the trustworthiness of their research as it is based on empirical evidence rather than theoretical assumptions or speculation.

The article does not appear to be biased or one-sided as it presents both sides of the argument equally by providing detailed information about both types of kilns (rotary and shaft). Furthermore, it also mentions possible risks associated with high OFP-contributing species in cement kilns which suggests that all aspects have been considered when conducting this research. However, there is no mention of any counterarguments or unexplored points which could have added more depth to the article’s content. Additionally, there is no evidence provided for some of the claims made which could weaken its reliability as a source of information on this topic.

In conclusion, this article provides a comprehensive overview of VOCs emissions from both rotary and shaft kilns in China but lacks evidence for some claims made which could weaken its reliability as a source of information on this topic.

# Topics for further research:

* VOCs emissions from cement kilns
* Secondary pollutant generation potential of VOCs
* Emission characteristics of rotary and shaft kilns
* Field measurements of VOCs emissions
* Mitigation strategies for VOCs emissions
* Health risks associated with VOCs emissions

# Report location:

<https://www.fullpicture.app/item/19d742f5bc19c4eaee7e9ee235d715c4>