

Review of: "Flame Photometry: For the Determination of Alkali Metals in Commercially Sold Fireworks"

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Potential competing interests: No potential competing interests to declare.

Abstract:

- Na, K, Ba, and Sr are discussed. However, the authors only analyzed Na and K. These are common elements that do not have major impacts. What is the relevance of determining these elements?
- Na and K are elements that are easily determined by flame photometry. What is the relevance of this technique for analyzing fireworks?

Introduction:

- Very long and not very objective text.
- Do fireworks really impact air quality? Since they are set off at low frequency times and situations.
- Very informal and unreferenced excerpt from the text. "Although fireworks are famous, the higher emission post massive celebration is a serious issue and thus caught the attention of the judiciary and pollution board. The blanket ban is not feasible as the livelihood of lakhs of people, directly and indirectly, depends on this sector. It also has a history dating back to 600 AD, and, in several countries, it is closely attached to their faith and festive celebration. Therefore, it is crucial to reduce emissions scientifically."
- The discussion of the superiority of the flame photometry technique and Table 1 was vague, since it does not mention the disadvantages of the technique used in this research.
- The text as a whole lacks references and studies.
- If it were known that Na and K were present in the composition of these samples, why would they be quantified, since the impact on humans is low? Furthermore, how is their dispersion in the air, and what would their concentration in the atmosphere be?

Materials and methods:

- The instrumental parameters are not described.
- Instrumentation: Materials and methods are used to reproduce the experiment, so there is no discussion of how the technique works.

Results and discussion:

- The first paragraph is not necessary.
- There is no discussion of the concentrations of Na and K found in fireworks.

Conclusion:

- It is very broad and does not mention the actual results obtained in the work.

References:

- Search for more recent references and discussions.