

Questions to Encourage Class Discussion on OPCW FIRES Film - [Fingerprints in the Mountains](#)

This film is a profile of a senior scientist involved in detecting chemical weapons agents. It follows Dr Pieter Siegenthaler - the head of Analytical Chemistry at the Swiss federal Institute for NBC protection (Spiez Laboratory) – as he demonstrates what his laboratory does to identify chemical agents and how rigorous the procedures are.

Questions

1. What analogies would you use to describe looking for chemical weapons in human or environmental samples?
2. Why is it so difficult to find chemical weapons agents?
3. How competent must laboratories be to identify chemical weapons and how might you ensure they are competent?
4. What is the value of proficiency testing?
5. Is the forensic work involved in detecting chemical agents interesting or just routine? Why so?
6. Should laboratories involved with detecting chemical weapons compete with one another?
7. What makes it challenging to search chemical components within a sample (originating from a CW attack field)?
8. How can one be passionate about their daily lab job? How could this relate to leisure activities?
9. What is a GC-MS? What are its operating principles? How does this relate to the Swiss environment?
10. How can an analytical chemist's findings have an influence on world affairs?