Hidden Science: underground laboratories

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Résumé

Still today, laboratories remain the main " factory " of science-based knowledge. In the field of History of Sciences, laboratory studies have developed since the 1970s. They helped us to take into account the sociological context in which scientific knowledge is produced. In some cases, the very spatial structure of the laboratory was taken into account (Latour, 1979). In this symposium, we would like to address issues related to a specific type of laboratories, underground laboratories. While they may seem anedoctical, they are not. CERN owns what is said to be the " the largest underground construction in Europe " when the LEP, or Large Electron-Positron Collider, was built in 1988 (Fern, 2018).

Undergound laboratories could be located in tunnel (specially devised, like in the case of CERN, or not), former mines (like the seed collection which was stored in Longyearbyen in Svalbard), or even caves. They often include physics laboratory but some famous medical experiments on human circadian cycle have been conducted in caves. They could be devoted either to basic sciences like CERN, or to applied sciences, in order to solve practical problems or settle specific controversy like in the case of nuclear waste diposal laboratory in France (Patinaux, 2019).

This symposium will address the diversity of undergound laboratories by bringing together historian of sciences, engineer, and underground facility experts. One may assume also that more future laboratories will be located underground given the pressure for a more efficient space use in city planning (Bobylev, 2016).

References

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