

Call for papers for the international workshop

Fire Management in the Early Modern Age: Knowledge, Technology, Economy

16-17 September 2021

Université de Neuchâtel

In the early modern age, the question of fire management was central to the evolution of scientific practices, including applied physics and chemistry, but also to the development of technology, especially in fields where the transformation of matter through heating played a central role, such as artisanal practices (brewing, glass-work, ferrous metallurgy) and cooking. In the technological sphere, the question of fire management was closely related to economic issues, since the technical organization of households, laboratories and manufactures had to comply with the management of material resources (materials, fuel) and the rationalization of time and labor (reducing the waste while enhancing productivity). The aim of the workshop *Fire Management in the Early Modern Age: Knowledge, Technology, Economy* is to reflect on the question of fire management in the period 1600-1800, along the lines of inquiry described below.

a. The knowledge of fire

Scientific and technological practices in the early modern period were characterized by a coexistence of a sensuous paradigm, namely a qualitative appraisal of phenomena based on bodily knowledge, and an interest in quantification. In several fields – from chemistry to cooking – the practical knowledge of how to deal with fire was as much important as the theoretical knowledge of the properties of heat, acquired through increasingly accurate measuring tools. With regard to this issue, the workshop aims to discuss how the sensuous paradigm and the quantifying paradigm articulated in the early modern knowledge of fire, in the context of various scientific and technical practices.

b. The technology of fire

The technology of fire management was an important issue for early modern practitioners and inventors. One might think of the centrality of the furnace in several artisanal and scientific practices, but also on the importance of having a functional fireplace at home, for cooking and heating purposes. The early modern literature on furnaces, fireplaces, cooking tools, and other technologies, gives an insight into the evolution of the technology of fire management, and to understand the mechanisms of technological transfer and the structure of artisanal networks. With regard to these aspects, the workshop is aimed at understanding how the technology of fire developed in the period 1600-1800, taking into account the history of material devices and inventions, but also biographical sketches of inventors and studies of artisanal networks.

c. The economy of fire management

The question of economy was central to a great number of early modern discussions around fire management. In a period of transition between wood to coal, and of great crises caused by the scarcity of fuel supplies (one might think of the '*disette de bois*' in eighteenth-century France), a reflection on the economy of resources became all the more urgent. Practices relying on the use of fire needed to include instructions to practitioners on how to use fire economically, and on how to limit fuel waste. Also, the economic interest impelled to find methods to make technical procedures as much effective and productive as possible, in order to meet the needs of the emerging industry (a straightforward example is that of steel industry). In this sense, the economy of labor and of time also became core issues in the early modern discourse on fire management. With regard to these aspects, the workshop aims to explore the question of the economy of fire management - including the economy of fuel, time and labor - in literature on manufacturing and industrial production, as well as on housekeeping (cooking, but also heating the home) and the organization of collective spaces such as hospitals and workhouses.

Abstracts (either in English or in French) of no more than **500 words** should be sent to marco.storni@unine.ch by **28 February 2021**. Submissions from early career researchers - graduate students and postdoctoral researchers - are warmly welcome. Funding will be available to cover accommodation expenses and meals (travel expenses will not be covered). The papers presented in the workshop will be considered for publication in an edited volume.

Keynote speakers:

Liliane Hilaire-Pérez (Université Paris-Diderot)
Simon Werrett (University College London)

Organizers:

Gianenrico Bernasconi (Université de Neuchâtel)
Marco Storni (Université de Neuchâtel)

The workshop is sponsored by the SNF-funded project *Mesure du temps, chimie et cuisine: formalisation des pratiques au XVII^e et au XVIII^e siècle* (grant no. 100011_184856/1). Please consult the web page www.unine.ch/mtcc for further information.

Please address any further inquiry to marco.storni@unine.ch