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The History and Scientific Development of Green Chemistry

Through the support of the New Scholars Award 2009 (The Society for the History of Alchemy and Chemistry), in conjunction with The Pieter Langerhuizen Stipendium (The Royal Dutch Society of the Sciences), I have been able to investigate the archives of the Chemical Heritage Foundation (Philadelphia, PA), the American Chemical Society (Washington, DC) and the Royal Society of Chemistry (London, UK). In my PhD project, I investigate the (scientific) development of the chemical community in relation to environmental problems and the public image. According to the chemical community in modern society, the public understanding of chemistry is bad and is mostly associated with the (supposed) polluting activities of the chemical community, which results in a negative image of chemistry. Consequently, the chemical community changed significantly, e.g. new journals, terminology and networks. I attempt to gain a better fundamental insight in these responsive changes.

Therefore, I carry out a comparative analysis of the development of ‘green chemistry’ in the USA and Europe. Both continents have shown to be the most significant contributors to the scientific output of green chemistry. Since the 1990s the term green chemistry has been growing in scientific articles extremely in comparison with other environmentally related terms of the chemical community.¹ Consequently, I assume that the analysis of green chemistry provides a better understanding of the chemical community, from which the chemical community might benefit with regards to policy issues like the environment and the public image. With the visits to the archives, as mentioned before, I obtained new valuable research results that improve my PhD project. For example, within the Royal Society of Chemistry (RCS) the Green Chemistry Network was founded in conjunction with an RSC journal. This journal, *Green Chemistry*, now belongs to the most important chemistry journals, but no such ACS journal was launched within ACS. This might imply a difference in scientific recognition of green chemistry within chemical societies.

Overall, I am grateful to The Society for the History of Alchemy and Chemistry, because this award was very helpful to my PhD project.

References:

1. J.A. Linthorst, “An Overview: Origins and Development of Green Chemistry”, *Foundations of Chemistry*, Vol. 12 (1), pp. 55-68, **2010**.