

Chemistry Before Lavoisier

Course on the History of Chemistry by Prof. Lawrence Principe

This course in the period Mav-July 2010 is an opportunity not to miss for every student with an interest in the history of chemistry, or with a broader interest in the history of science and history of ideas from the early modern period. Lecturer of this course is Prof. Lawrence M. Principe, chemist and historian of science and technology from Johns University. Hopkins Prof. Principe has conducted groundbreaking research in the history of early chemistry, and provided new unexplored views important early chemists such as Robert Boyle (1627-1691), see f.e. L. Principe, The Aspiring Adept: Robert Boyle and His Alchemical Quest (Princeton University Press, Principe 1998). Prof. occupy the F.C. Donders Chair of the Utrecht University in the period May-August 2010.

Course content

It is sometimes thought that serious chemistry began with the "Chemical Revolution" of Lavoisier in the 1780s. This idea is far from true. This

course is devoted to the developments in chemistry before that time, and their cultural and experimental context. We will cover these from developments earliest union of practical experience and philosophical ideas about the nature of matter (ca. 300 AD) to the professionalization 18th chemistry (early century). Topics include alchemy in the Greek, Arabic, and Latin West, alchemical secrecy and codes (and how to decipher them), the search for and basis of the Philosophers' and transmutation, atomistic and other matter theories, the rise of chemical medicine, the decline alchemy, the intersection of chemistry and religion, the teaching of chemistry, and the place of chemistry in early modern society (including in art, music, and literature). Some early claims and results will be explained in terms of modern chemistry replication of the modern processes. Notable figures to be covered include Geber, Paracelsus, van Helmont, Boyle, and Newton and others.

Assessment

7.5 ECTS credit points. Essay plus examination; literature and further details to be announced.

Audience

Second an third year chemistry bachelor students and chemistry master students. Other students from the Faculty of Natural Science and the Faculty of Humanities (Descartes Institute). Faculty members, or participants from outside Utrecht may also register if places are available (see registration)

Registration before February 21st 2010. Students via Osiris; course code SK-BHEMC. Others can register via <a href="mailto:students-numerus-

Course schedule

Mondays and Fridays from 9:00-10:45, starting April 26th, Went-building room N017, until Monday June 28th 2009. Schedule will be made available on the website www.science.uu.nl

Cost

For participants from outside Utrecht University the cost for this course is €525,-. All attendants will receive a student number and thereby will have access to Utrecht University resources (student mail, blackboard etc.).

Inaugural Lecture

Prof Principe will deliver an inaugural lecture on June 1, 2010, in the Academy Hall near the Utrecht Dom. Participants are invited to attend this public lecture and the reception afterwards.

Contact person for any further information: Prof Albert Philipse, Physical & Colloid Chemistry. Chemistry Department Utrecht University. (a.p.philipse@uu.nl) or Dr. Egbert Mulder, Education Institute, Chemistry Department Utrecht University (e.mulder@uu.nl).

Pictures:

Boyle (January 25, 1627 - December 30, 1691)
Boyle's air pump

