

**Amadeo Avogadro. Relazioni Accademiche.** Edited by MARCO CIARDI and MARIACHIARA DI MATTEO. Pp. 151, index. Leo S. Olschki Editore: Florence. 2015. €25. ISBN: 978-8-8222-6437-4.

Prior to the publication of this book focusing on Avogadro's activity in the context of the Turin Academy of Sciences, Marco Ciardi, a contributor to this journal, has published and edited three volumes devoted to the famous Italian physicist and chemist. In 1995, Ciardi authored a book with the suggestive title *L'atomo fantasma. Genesi storica dell'ipotesi di Avogadro* ("The Phantom Atom. Historical Origins of Avogadro's Hypothesis"), focusing on how Avogadro developed his hypothesis while teaching physics in Vercelli, a town in Piedmont, then under Napoleon's rule. In 2006 Ciardi edited a volume containing three previously unknown manuscripts written by Avogadro, prior to the publication of his famous paper of 1811, which are most relevant in showing the pathways of Avogadro's original thought. A third volume, reviewed in this journal, was released in 2011, marking the bicentenary of Avogadro's seminal article "Essai d'une manière de déterminer les masses relatives des molécules élémentaires des corps." It was in this essay that Avogadro formulated the hypothesis that immortalised his name: "equal volumes of gas, at the same temperature and pressure, contain the same number of molecules." This hypothesis, in addition, became of the utmost importance in the debates over atomic weights that took place at the 1860 Karlsruhe meeting, when Stanislao Cannizzaro, a major figure of the *Risorgimento*, circulated his equally famous booklet championing Avogadro's views among leading European chemists.

For this work, the Avogadro authority Ciardi is joined by Mariachiara Di Matteo. They offer an interesting volume devoted to the academic functions of a scientist whose career developed in an especially rich and eventful period of Italian history, one that spanned the Enlightenment, the Napoleonic period, the Restoration and the *Risorgimento*, and finally the unification of the country. Avogadro actively participated in these events, notably by taking part in the revolutionary movement of 1821. The *Relazioni Accademiche* gathers together about seventy documents produced in the context of Avogadro's activity in the Turin Academy of Sciences, where he became member in 1819. They are mainly composed of (a) opinion reports written by Avogadro, sometimes jointly with fellow academicians, (b) assessing memoirs submitted for publication to the Turin Academy, (c) and requests for privilege and patents on particular inventions and technical devices, including subjects such as the textile industry, transportation, the press, city lighting, electromagnetism, weather reporting, and others. Ciardi and Matteo provide readers with a most enlightening introduction organised thematically, which is invaluable for contextualising Avogadro's involvement with the Turin Academy, in various technical-scientific realms.

With this volume, the image of Avogadro as a predominantly speculative scientist is definitively debunked, as his manuscripts unveil less known aspects of his life, notably as an academician. As with Ciardi's above-mentioned books, this new dimension of Avogadro's career is accessible only to those who read Italian. The documents presented in this volume are kept at the Historical Archive of the Turin Academy of Sciences, and are undoubtedly of the highest importance in understanding Avogadro's place in the sciences and culture of the early nineteenth century; at the same time, they shed light on the history of the economy, technology, and science of the same period. Usually associated with the history of chemistry and with his famous hypothesis, Avogadro emerges from this book as a much richer, livelier, and more multifaceted character, certainly worth revisiting.

