Natalie Pigeard-Micault, Charles-Adolphe Wurtz: Un savant dans la tourmente: entre bouleversements politiques et revendications féministes. Paris: Éditions Hermann, 2011. 170 pp. ISBN 978 2 7056 8076 3.

## By Bernardo Herold\*

After the publication of the comprehensive biography by Alan Rocke "Nationalizing Science, Adolphe Wurtz and the Battle for French Chemistry", MIT Press 2001, and the presentation in 1992 of the unfortunately never published PhD thesis at the University of Kent by Ana Carneiro "The Research School of Chemistry of Adolphe Wurtz, Paris 1853-1884", it looked as if there was nothing else to add to the existing literature on this outstanding French chemist. It is thus a pleasant surprise to be faced now with a captivating narrative, Charles-Adolphe Wurtz, Un savant dans la tourmente, authored by Natalie Pigeard-Micault, who adopts an entirely new point of view. Much of what has been covered by earlier biographies is well summarized in the introduction, which describes Wurtz's origins, his evolution as a disciple of Liebig and Dumas and his early support of atomism. The main subject of the book is, however, Wurtz's activity as dean of the Faculty of Medicine of Paris. He began his career in this institution, in 1853, as professor of organic and medical chemistry, and was appointed dean, in 1866, a position he held until 1875, when he resigned, keeping nevertheless the title of honorary dean, and becoming professor of organic chemistry at the Faculty of Sciences.

At the Faculty of Medicine, he established a research school, which hosted students from different nationalities and beliefs in an atmosphere of great tolerance. Pigeard-Micault shows how popular Wurtz was among his students. He took care of them both professionally and personally in different ways, including humanitarian support when one of them was imprisoned for political motives. The author also focuses on Wurtz's role in giving women access to medical studies. She interprets Wurtz's responsible care for the well-being of his students and his position towards women as a reflection of his upbringing.

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As dean Wurtz had to face the political turbulence caused by the opposition of republican and left wing students to the imperial regime. The author successfully provides readers with a view of the ideological and political intricacies of those days, and shows how Wurtz was able to rule the Faculty in a fair and benign way, without losing entirely the trust of the imperial government. At the same time he managed to keep freedom of teaching and learning inside the Faculty. Among the medicine students were some of the most radical socialist activists, including those of a Marxist orientation. This meant also that he found himself amidst enraged battles of doctrinal and ideological nature, which went on in Paris under Napoleon III. On the one hand, there were the conservatives influenced by the clergy, who opposed any ideas they thought of as being contrary to the most restrictive interpretations of the Catholic doctrine; on the other, were those rebellious students and teachers who preached atheism and materialism.

As the author shows, this conflict naturally penetrated scientific debates. The clergy and some of Wurtz's medical colleagues saw atomism as materialism, therefore denying the existence of a human soul in a body constituted by atoms and molecules obeying the laws of Physics and Chemistry. In turn, those who preached positivism as the exclusive pathway to truth saw in atoms something, which could not be observed or measured and thus as objectionable as the belief in the presence of Christ's body in the communion wafer. The political turmoil reached its climax during the siege of Paris in the Franco-Prussian war (1870/71) with the Paris Commune.

Pigeard-Micault's narrative concludes with Wurtz's return to Chemistry after his resignation as dean, in 1875. Atomism, however, was then losing ground. His main opponent in Paris was Marcelin Berthelot, but even some of his own students began to treat atomism as a mere unproven hypothesis.

The author deals very sensitively with the human aspects of Wurtz's role, by emphasizing the relevance of his origins as a son of a Lutheran minister in Strasbourg and how this helped him to stay independent from both extreme religious and secularist views. Theology, as taught then in countries and regions of protestant majority, began to incorporate certain aspects of historical critical interpretations of the Bible. In France, on the contrary, there was no possible conciliation between the Catholic Clergy and the ideas of thinkers such as Ernest Renan, the author of the famous *Life of Jesus*. Wurtz's cultural and religious roots certainly helped him to keep an independent posture in relation to these conflicts, and advocate freedom of thought and teaching.

Pigeard-Micault's account of Wurtz's activity as an academic leader gives a wealth of information not only on the Alsatian chemist and his school but also on the intellectual, social and political atmosphere, in France, under Napoleon III, notably the young leaders of the republican opposition who were to shape the III Republic. The book is written in clear classical French, but accessible to a reader, who learned French as a foreign language.