

- ZEIDLER P. 2002: *Chemia i filozofia. Czy istnieją specyficzne problemy filozoficzne chemii?*, [w:] E. PIOTROWSKA, J. WIŚNIEWSKI (red.), *Z filozofii przyrodoznawstwa i matematyki*, Wydawnictwo Fundacji Humaniora, Poznań, s. 153-168.
- ZEIDLER P. 2003: *Homo experimentator a spór o realizm laboratoryjny*, [w:] D. SOBCZYŃSKA, P. ZEIDLER (red.), „Homo experimentator”, WN IF UAM, Poznań, s. 105-137.
- ZEIDLER P. 2004: *The Semiotic Status of Structural Formulas and the Causal Theory of Reference*, [w:] D. SOBCZYŃSKA, P. ZEIDLER, E. ZIELONACKA-LIS (red.), *Chemistry in the Philosophical Melting Pot*, Peter Lang, Frankfurt am Mein, s.151-169.
- ZEIDLER P. 2005: *Spór o stabilność praktyki badawczej nauk empirycznych*, [w:] J. KMITA, B. KOTOWA, J. SÓJKA (red.), *Nauka, humanistyka, człowiek*, WN UAM, Poznań, s. 139-155.
- ZIELONACKA-LIS E. 2003: *Filozoficzne koncepcje wyjaśniania naukowego a współczesna chemia*, WN IF UAM, Poznań.

#### THE POSITION OF PHILOSOPHY OF CHEMISTRY IN THE PHILOSOPHY OF NATURAL SCIENCES

##### Summary

The paper is focused on the role of philosophy of chemistry in the philosophy of natural sciences. The author claims that chemistry is a paradigmatic example of laboratory science in Ian Hacking's sense. Therefore a philosophical and methodological analysis of chemistry can change or modify several theses of the philosophy of natural sciences. Some of them are as follows: the stability of laboratory science; the primacy of experimental practice over the theoretical one in chemistry; the problem of the reduction of chemistry to physics; the influence of scientific instruments on the growth of chemical knowledge; the problem of the empirical criteria of the existence of theoretical entities; the role of theoretical models and theoretical modelling in laboratory sciences; the problem of using the principle of inter-subjective testability in chemistry; the semiotic peculiarities of chemistry.

*Summarised by Author*

**Słowa kluczowe:** filozofia chemii, filozofia nauk przyrodniczych, nowy eksperymentalizm, nauka laboratoryjna, stabilność nauki laboratoryjnej, redukcja chemii do fizyki, realizm laboratoryjny, kryteria istnienia przedmiotów teoretycznych, model teoretyczny, inter-subiektywna sprawdzalność, semiotyka chemii.

**Key words:** philosophy of chemistry, philosophy of natural sciences, new experimentalism, laboratory science, stability of laboratory science, reduction of chemistry to physics, laboratory realism, criteria of existence of theoretical entities, theoretical model, inter-subjective testability, semiotics of chemistry.

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