

Development of ontological model on physical chemistry of radical reactions represented by relations in a relational database and its realization in the subject-oriented science intelligence system

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Abstract

In this paper a fragment of the domain ontology on thermochemistry of radical reactions is presented. The presented ontological model includes 165 subclasses of domain concepts and about 30 data and object properties. The ontology is developed with the use of ontology editing tool Protégé. The ontology will be used in the scientific intelligence system on thermochemistry of liquid-phase radical reactions. Integration of the developed model into the subject-oriented scientific intelligence system on physical chemistry of liquid phase radical reaction and its publication in the Internet in open access will allow the wide range of chemists to intensify their research on new material development.

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