



an Open Access Journal by MDPI

# Selected Papers from the 17th V.A. Fock Meeting on Theoretical, Quantum and Computational Chemistry

Guest Editors:

### Message from the Guest Editors

Prof. Dr. Richard Dronskowski

Prof. Dr. Elena Besley

Dr. Andrei L. Tchougréeff

Deadline for manuscript submissions: closed (31 March 2022) This Special Issue will publish selected papers from 17 th V.A. Fock Meeting on Theoretical, Quantum and Computational Chemistry, which will be held on 23-27 August 2021 in the Yaroslav-the-Wise Novgorod State University, Novgorod The Great, Northwestern Federal District, Russia.

Fock Theoretical. Meetings on Ouantum and Computational chemistry is a series of events launched yet in the year 1998 to celebrate 100-th anniversary of Prof. Vladimir A. Fock of St. Petersburg (Leningrad) State University - the creator of the Hartree-Fock approximation for many-fermion wave functions underlying entire areas of molecular and solid state quantum chemistry, materials science and nuclear physics. Since then, these Meetings are held either on annual or biannual basis in different Russian cities and gather largely theoretical chemists, but also theoretically thinking experimentalists from Russia, other states of former Soviet Union and other countries.

The scope of the Meetings includes all aspects of theoretical, quantum and computational chemistry either fundamental or applied to specific problems of materials science, drug design, chemical technology etc.

**Special**sue



mdpi.com/si/71940





an Open Access Journal by MDPI

## **Editor-in-Chief**

#### Prof. Dr. Lev Vaidman

Raymond and Beverly Sackler School of Physics and Astronomy, Tel Aviv University, Tel Aviv 69978, Israel

### Message from the Editor-in-Chief

We get more and more evidence that quantum theory is the correct description of nature. It was born a century ago by explaining a few paradoxical results that could not be understood in the framework of classical physics. Today, quantum physics leads technological revolution in metrology, communication, computation, and the design of novel materials. Still it needs more solid foundations, and we need to develop a deeper understanding of how it can be used for new applications.

*Quantum Reports* is an online, open-access journal providing an advanced forum for clarifying foundations of quantum theory and developing its applications in all fields of physics and technology. *Quantum Reports* is inviting innovative and insightful contributions from the growing community of researchers of quantum science.

## **Author Benefits**

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions. **High Visibility:** indexed within Scopus and other databases. **Journal Rank:** CiteScore - Q2 (*Physics and Astronomy (miscellaneous)*)

## **Contact Us**

*Quantum Reports* Editorial Office MDPI, St. Alban-Anlage 66 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/quantumrep quantr@mdpi.com