

## Special Issue

# Physico-Chemistry of Dinitrosyl Iron Complexes as a Determinant of Their Biological Activity

### Message from the Guest Editor

Dinitrosyl iron complexes (DNIC) with thiol-containing ligands are found in almost all living organisms when nitric oxide (NO), being a universal regulator of biological processes, and its various endogenous derivatives appear in them. The following factors allow us to consider DNIC as the “working form” of NO: DNIC’s ability to donate neutral NO molecules and nitrosonium cations NO<sup>+</sup>, these complexes fully imitate NO biological activity, and this agent is mainly included in cells and tissues in DNIC. The purpose of the proposed issue is to overview the latest analytical evidence on physical and chemical properties DNIC with thiol-containing ligands determining the biological activity of these complexes as NO and NO<sup>+</sup> donors. This analysis can be useful for better understanding the mechanisms of regulatory and cytotoxic action of endogenous NO in living organisms, and for developing novel drugs with a similar effect on a human and animal organisms.

### Guest Editor

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