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## FORMAL - LOGICAL APPROACH TO MULTICENTERED PROCESSES WITH CYCLIC ELECTRON TRANSFER

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# Construction of the Complete Sets of Symbolic Equations for Multicentered Processes with Cyclic Electron Transfer

Definition of "usual" and "specific" reaction centres (1,2). The number of specific centres in even- and odd-centered reaction systems (2). The simplest symbolic equations for 3, 4, 5 and 6-centered systems (2,4). A procedure for deriving complete sets of symbolic equations for the title processes (2,4).

## 2) Classification of Multicentered Processes with Cyclic Electron Transfer

Classification of the title processes corresponding to the types of interconversion of reaction systems (3,4). Definition of A- and I- reaction fragments (3). Systematization of cyclodismutation processes (3). General classification of the title reactions on topological types, reaction types and structural kinds (5).

#### Applications of Symbolic Equations

A simple unambiguous designation system for the topological types of multicentered processes (3,4). Some examples for devising new organic reactions (2,5). Systematic treatment of tautomeric interconversions (5). General principles for the construction of multipurposed computer programs on the basis of the proposed approach (2 papers, in preparation).

#### Bibliography

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- (3) N.S.ZEFIROV and S.S.TRATCH, Rearrangements and Cyclizations, XI.Formal-logical Approach to Concerted Reactions, The Classification of Multicentered Processes with Cyclic Electron Transfer, <u>Zh.Org.Khim.</u>, <u>11</u>,1785-1800(1975).
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- (5) N.S.ZEFIROV and S.S.TRATCH, Rearrangements and Cyclizations, XV.Tautomerism. General Problems, Classification, Search of Novel Topological and Reaction Types, <u>Zh.Org. Khim.</u>, <u>12</u>, 697-718 (1976).

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