MATCH
Communications in Mathematical and in Computer Chemistry

MATCH Commun. Math. Comput. Chem. **57** (2007) 517-517

ISSN 0340 - 6253

Correction to the paper "The genetic reactions of ethane"

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Below is given the correct version of corollary 3.2 from [1].

Corollary 3.2. *Under the conditions of lemma 3.1, let H be the subgroup of $Aut_0''(U)$ consisting of all automorphisms β that satisfy the equality $\beta(C_>(\bar{V};a)) = C_>(\bar{V};a)$ for each $a \in V\backslash U$, and let $s: V\backslash U \to V\backslash U$ be a bijection that maps any chiral pair onto a chiral pair and any G''-orbit onto itself. One has:*
(i) $H \leq Aut_0''(V)$; in general, if $\beta \in Aut_0''(U)$ then $\beta s \in Aut_0''(V)$ iff $\beta(C_>(\bar{V};a)) = C_>(\bar{V};s(a))$ for all $a \in V\backslash U$; in particular, if
$V\backslash U = \{A, B, \ldots\} \cup \{A^1, B^1, \ldots\}$, if $C_>(\bar{V};A) = C_>(\bar{V};B) = \cdots$, $C_>(\bar{V};A^1) = C_>(\bar{V};B^1) = \cdots$, and if s leaves the sets $\{A, B, \ldots\}$ and $\{A^1, B^1, \ldots\}$ invariant, then $Hs \subset Aut_0''(V)$;
(ii) if $V\backslash U$ consists of several chiral pairs $\{A, A^1\}$, $\{B, B^1\}, \ldots$, and eventually, of dimers, if the automorphism $w \in Aut_0''(U)$ is such that $w^2 = id$, $w(C_>(\bar{V};A)) = C_>(\bar{V};A^1)$, $w(C_>(\bar{V};B)) = C_>(\bar{V};B^1), \ldots$, and if w leaves the cones of the dimers invariant, then $Hws \subset Aut_0''(V)$ for $s = (A, A^1)(B, B^1)\ldots$; if, in addition, $C_>(\bar{V};A) = C_>(\bar{V};B) = \cdots$ and $C_>(\bar{V};A^1) = C_>(\bar{V};B^1) = \cdots$, then $Hws \subset Aut_0''(V)$ for any s that maps the set $\{A, B, \ldots\}$ onto the set $\{A^1, B^1, \ldots\}$, and is such that $s^2 = id$;
(iii) if $V\backslash U$ consists of two chiral pairs $\{A, A^1\}$, $\{B, B^1\}$, and eventually, of several dimers, if the automorphism $w \in Aut_0''(U)$ is such that

$$w^2 = id,\ w(C_>(\bar{V};A)) = C_>(\bar{V};B),\ w(C_>(\bar{V};A^1)) = C_>(\bar{V};B^1),$$

and if w leaves the cones of the dimers invariant, then $Hws \subset Aut_0''(V)$ for $s = (A, B)(A^1, B^1)$.

Proof: Straightforward application of [1, lemma 3.1, (iv)].

References

[1] The genetic reactions of ethane, MATCH Commun. Math. Comput. Chem. 56 (2006), 21 -95.