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Komplexe zouten van trans-1-2-diaminocyclohexaan met driewaardig rhodium en kobalt

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n-kobaltizout zou der-

Daarin een overzicht der
zoek gegeven wordt en
de resultaten, verkregen
ende methoden tot het
zulke complexe ionen,

n de complexe tri-diamino-ionen
en rhodium.

de	c) Schijnbaar absolute con- figuratie, in verband met de rotatorische dispersie en het circulair dichroïsme.	
he	Soort van rotato- rische Dispersie	Teeken v. h. Cotton-effekt
l	D-{Co(en) ₃ } ^{...}	+
	"	+
	"	+
aal	L-{Co(en) ₃ } ^{...}	-
	D-{Co(en) ₃ } ^{...}	+
	"	+
aal	D-{Co(en) ₃ } ^{...}	+
	"	+
	"	+

en L beteekenen hier dus weer resp.
oode deel van het spectrum; enz.

SUMMARY.

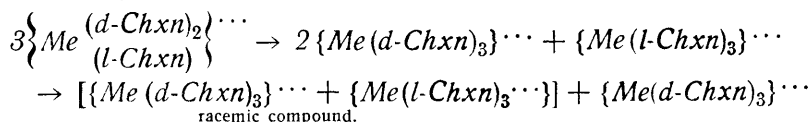
Some complex salts of *trans-1-2-diaminocyclohexane* with tri-
valent *cobaltum* and *rhodium* were prepared and their properties
described in detail.

Diaminocyclohexane was obtained by the following series of
reactions: *cyclohexanone* → *cyclohexanone-1-oxalylicester-2* →
cyclohexanone-1-carboxylicester-2 → *cyclohexanedione-1-2*
monoxime → *cyclohexanedione-1-2 dioxime* → *1-2-diaminocyclo-*
hexane.

The compound was resolved into its optically-active components
by means of *d-tartaric acid*. The complex salts of *racemic-*,
dextrogyratory- and *levogyratory diaminocyclohexane* with tri-
valent *cobaltum* and *rhodium* were studied. The complex salts of
racemic diaminocyclohexane with *cobaltum* and *rhodium* were
subsequently resolved into their optically active components by
means of the *halogeno-d-tartrates*. These components proved to be
identical with the complex salts directly obtained from the optically
active bases.

The crystallographic properties of all these complex salts were
determined and their rotatory dispersions in aqueous solutions were
measured.

Amongst all theoretically possible combinations only the ions
 $D-\{Me-(l-Chxn)_3\}^{\dots}$, $L-\{Me-(d-Chxn)_3\}^{\dots}$
and $\{Me(r-Chxn)_3\}^{\dots}$ proved to be stable. All other combinations
imaginable are unstable and in solution evidently decomposed
according to the formula:



Moreover, tentatives were made to prepare mixed complex salts
with different substitutes, as, for instance, $\left\{Co \begin{matrix} (r-Chxn)_2 \\ (en) \end{matrix} \right\}Cl_3$. These
complex salts also proved to be unstable and, in solution, to be
decomposed according to the formula:

