A NEW NONENZYMATIC CHIRAL INDUCTION INTO CYCLIC *MESO* COMPOUNDS

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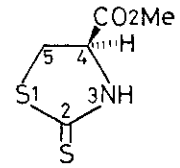
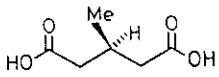
Recently we have developed a completely new procedure utilizing a functional heterocycle, 4(R)-MCTT (1), in which a highly regioselective differentiation between two identical groups in 3-methylglutaric acid (2) or in *meso*-2,4-dimethylglutaric acid (3) was performed.[1,2] So far, such a highly regioselective differentiation as ours was not successful by the chemical procedure; only a special enzyme or a few microorganisms could do this.

We will present recent results for the cyclic meso compounds, *meso*-cis-cyclohexene-1,2-diacetic acid (4) and *meso*-cis-5-norbornene-endo-2,3-diacetic acid (5).



4(R)-MCTT
1



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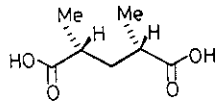

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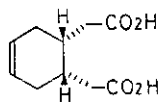

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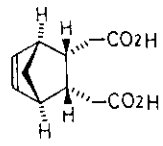

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1) Y. Nagao, T. Ikeda, M. Yagi, E. Fujita, and M. Shiro, J. Am. Chem. Soc., 104, 2079 (1982).

2) Y. Nagao, T. Inoue, E. Fujita, S. Terada, and M. Shiro, J. Org. Chem., 48, 132 (1983).