

Title	Kinetic studies of zinc (II) ion incorporation into polyvalent porphyrin, tetrakis (3, 5-di-tert-butyl-4-hydroxyphenyl) porphyrin in dimethylformamide
Sub Title	
Author	小沢, 俊彦(Ozawa, Toshihiko) 高井, 豊子(Takai, Toyoko) 花木, 昭(Hanaki, Akira)
Publisher	共立薬科大学
Publication year	1989
Jtitle	共立薬科大学研究年報 (The annual report of the Kyoritsu College of Pharmacy). No.34 (1989.) ,p.72- 72
JaLC DOI	
Abstract	
Notes	抄録
Genre	Technical Report
URL	https://koara.lib.keio.ac.jp/xoonips/modules/xoonips/detail.php?koara_id=AN00062898-00000034-0072

慶應義塾大学学術情報リポジトリ(KOARA)に掲載されているコンテンツの著作権は、それぞれの著作者、学会または出版社/発行者に帰属し、その権利は著作権法によって保護されています。引用にあたっては、著作権法を遵守してご利用ください。

The copyrights of content available on the KeiO Associated Repository of Academic resources (KOARA) belong to the respective authors, academic societies, or publishers/issuers, and these rights are protected by the Japanese Copyright Act. When quoting the content, please follow the Japanese copyright act.

**Kinetic Studies of Zinc (II) Ion Incorporation into Polyvalent Porphyrin,
Tetrakis(3,5-di-tert-butyl-4-hydroxyphenyl)porphyrin
in Dimethylformamide***

Toshihiko OZAWA**, Toyoko TAKAI and Akira HANAKI**

小沢俊彦**, 高井豊子, 花木 昭**

The incorporation of zinc (II) ion into porphyrins in dimethylformamide was studied kinetically. The porphyrins studied were tetrakis(3,5-di-tert-butyl-4-hydroxyphenyl)porphyrin and tetraphenylporphyrin. The rate of the reaction was measured spectrophotometrically. The rates under pseudo-first-order conditions were almost the same for the both porphyrins. The results showed that the bulky substituents in the meso-phenyl groups have little effect on the zinc (II) ion incorporation into the porphyrin ring. It has also been shown that the counteranions of the zinc (II) used have a substantial effect on the kinetics of the porphyrin metallation, and the compensation effects have been observed in the seven zinc (II) salts examined. On the basis of zinc concentration dependence and temperature dependence of the rate constants, metallation mechanism was discussed.

* 本報告は *Inorg. Chim. Acta*, **159**, 225—230 (1989) に発表.

** 放射線医学総合研究所