1a, lane 4 compared to lane 5) suggests that Tc recognizes a metal binding site and that the binding of the metal to the protein is considerably weaker than that of the chelated complex. Alternatively, the difference may relate to an induced and noninduced conformation of the repressor protein regulated by the allosteric effector Tc. Thus in the drug-bound conformation, the redox active Fe^{2+} may be more localized and in closer proximity to the peptide backbone of the binding pocket.

In conclusion, these experiments show for the first time that the redox-active Tc·Fe^{2+} complex binds to a specific site on the Tet repressor protein and can be used to define contact points between Tc and the repressor by site-specific proteolysis. It is noteworthy that the most prominent cleavage site between Arg-104 and Pro-105 is very near His-100, consistent with a pH-dependent binding study which suggested that a proton on an imidazole and Mg^{2+} compete for the same binding site on Tc.[4] The cleavage site between Glu-147 and Asp-148 points to possible binding between the carboxylate of either one of these amino acids and the Tc metal chelate. Most likely these contacts represent coordination sites to the chelated metal in which Tc serves as a template. Together with residues Ala-56 and Ile-57, they probably form the protein surface in contact with the Fe^{2+}. X-ray studies now in progress will obviously provide more insight into the binding of Tc with its repressor.

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(17) The Mg^{2+}/Fe^{2+} competition experiments are consistent with a k_{diss} of 1.2×10^{-2} min^{-1} or a $t_{1/2}$ of 1 h for the dissociation of Tet repressor Tc·Mg^{2+} complex measured by Tc fluorescence.[4]

Additions and Corrections

Amide Cuprate Reagents as a New Class of Nitrogen Nucleophiles. Application to Asymmetric Synthesis of β-Lactams [*J. Am. Chem. Soc.* **1992**, *114*, 5427–5429]. YOSHINORI YAMAMOTO,* NAOKI ASAO, and TADAO UYEHARA

Page 5428: The *R* configuration is produced in the R^3R^4NM reaction whereas the *S* configuration is obtained in the high pressure induced reaction of R^3R^4NH:[9] This sentence should read as follows: It is noteworthy that the sense of chiral induction in the R^3R^4NM addition to the 8-phenylmenthyl derivatives (**1f**) is opposite to that in the high pressure induced reaction of R^3R^4NH.[9] We thank Professor J. d'Angelo for calling this error to our attention.

Page 5428, ref 9: (*S*)-β-amino ester should read (*R*)-β-amino ester.

Carbon Dioxide Complexes via Aerobic Oxidation of Transition Metal Carbonyls [*J. Am. Chem. Soc.* **1992**, *114*, 6579–6580]. PENG-FEI FU, MASOOD A. KHAN, and KENNETH M. NICHOLAS*

Due to a simple calculational error the 2:1 stoichiometry reported for the reaction of $Cp'_2Nb(CO)CH_2Ph$ with O_2 (eq 1 and Figure 2, p 6580) is incorrect. The corrected concentration of **1a** is 0.18 mmol. From the corrected concentration of **1a** and several independent repetitions of the experiment a consistent stoichiometry of 1.0:1.0 ± 0.1 is obtained. We are currently seeking to identify the fate of the extra O atom.

Rapid Photopolymerization of Immunoprotective Gels in Contact with Cells and Tissue [*J. Am. Chem. Soc.* **1992**, *114*, 8311]. CHANDRASHEKHAR P. PATHAK, AMARPREET S. SAWHNEY, and JEFFREY A. HUBBELL*

In this recently published paper on the photopolymerization of water-soluble macromers for the encapsulation of tissues, we neglected to provide references on the eosin/triethanolamine photoinitiation system we used.[1-3] We regret this oversight.

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(1) Chesneau, E.; Fouassier, J. P. *Angew. Makromol. Chem.* **1985**, *135*, 41.

(2) Neckers, D. C.; Raghuveer, K. S.; Valdes-Aguilera, O. *Polym. Mater. Sci. Eng.* **1989**, *60*, 15.

(3) Valdes-Aguliera, O.; Pathak, C. P.; Shi, J.; Watson, D.; Neckers, D. C. *Macromolecules* **1992**, *25*, 541.

*Book Reviews**

Chemistry of Atmospheres. Second Edition. By Richard P. Wayne (University of Oxford). Clarendon Press: Oxford, England. 1991. xiii + 477 pp. $89.00 hardcover. $35.95 paperback. ISBN 0-19-655571-7.

This book provides an excellent introduction to atmospheric chemistry. The author presents a comprehensive overview of the major issues and provides the background in chemistry, physics, and biology needed to understand these issues. This second edition includes some of the important new developments of the last decade, such as the appearance of the Antarctic ozone hole and the subsequent realization that heterogeneous processes play a critical role in the chemical balance of the atmosphere. Flyby missions to the outer planets in the solar system and preliminary results are included in this book.

The first chapter discusses the composition of the atmospheres of Earth and the other planets, highlighting the special nature of Earth's atmosphere and its ability to support life. Chapters 2 and 3 provide an introduction to the topics in atmospheric physics, meteorology, and chemistry that are needed to understand atmospheric processes. Chapters 4–7 deal with different aspects of the Earth's atmosphere, starting with the ozone layer and the stratosphere in Chapter 4. Chapter 5 discusses tropospheric chemistry and air pollution, ion chemistry in the region above 60 km is covered in Chapter 6, and Chapter 7 discusses airglow due to electronically and vibrationally excited species in the atmosphere. The final two chapters of the book deal with the atmosphere of other planets and the evolution of atmospheres.

This book is highly recommended as either an introductory textbook or a general reference for the interested scientist. Anyone with an undergraduate level background in physical chemistry should find this book highly readable and a valuable resource.

Leah R. Williams, *SRI International*

Xenobiotics and Food-Producing Animals. Metabolism and Residues. Edited by D. H. Hutson (Shell Research Limited), D. R. Hawkins (Huntingdon Research Centre), G. D. Paulson (U.S. Department of Agriculture), and C. B. Struble (Hazleton Laboratories). American Chemical Society: Washington, DC. 1992. xii + 256 pp. $58.95. ISBN 0-8412-2472-2.

This book was developed from a symposium sponsored by the Division of Agrochemicals of the ACS and the International Society for the Study

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*Unsigned book reviews are by the Book Review Editor.