trends; that is, the heavier transition-metal $M(NR_2)_4$ compounds are more difficult to reduce, leading to unusually nitrogen rich stoichiometries.

Interestingly, preliminary studies indicate that the reaction of $Mo(NMe_2)_4$ and ammonia is more complicated and leads to a nitrogen-rich film with a N to Mo ratio of ≈ 1.45, suggesting a stoichiometry close to Mo_2N_3 (Figure 1d). The films are gold-colored and conductive.

In conclusion, we have prepared very pure, high-quality early-transition-metal nitride thin films by low-temperature CVD from $M(NR_2)_4$ and ammonia precursors. This system provides access to metal nitride coatings with stoichiometries not available by other chemical routes. In general, periodic trends explain the stoichiometries. Finally, by successfully employing the $M(NR_2)_4/NH_3$ system, we have shown that solution chemistry can be used as a guide for the design of low-temperature CVD reactions.

Acknowledgment. We are grateful to the National Science Foundation (DMR-88-02306) for support of this work. We thank Yuan Z. Lu for his help in obtaining the TEM data. The RBS spectra were acquired by using the Cambridge Accelerator for Materials Sciences housed in the Harvard Materials Research Laboratory, an NSF-funded facility (DMR-86-14003).

Supplementary Material Available: Transmission electron micrographs and electron diffraction patterns for Zr_3N_4 and Nb_3N_4 thin films and a listing of X-ray photoelectron binding energies (5 pages). Ordering information is given on any current masthead page.

Additions and Corrections

Intermediates and Transition States in Chloride Ion/Acyl Chloride Displacement Reactions [*J. Am. Chem. Soc.* **1987**, *109*, 589–590]. CHAU-CHUNG HAN and JOHN I. BRAUMAN*

I (J.I.B.) have become aware that the data in Figure 1e of this paper were changed so as to enhance some of the peaks and diminish others, in order to reflect the observations in a spectrum that was acquired but not saved. Extensive subsequent studies,[1] however, have failed to reproduce the result reported. Consequently, I believe that the conclusion reported in this paper does not follow from these experiments, although it is consistent with other experiments[2] and with quantum calculations.[3,4]

---

(1) Wilbur, J. L.; Brauman, J. I. Manuscript in preparation.
(2) Asubiojo, O. I.; Brauman, J. I. *J. Am. Chem. Soc.* **1979**, *101*, 3715.
(3) Yamabe, S.; Minato, T. *J. Org. Chem.*, **1983**, *48*, 2972.
(4) Blake, J. F.; Jorgensen, W. L. *J. Am. Chem. Soc.*, **1987**, *109*, 3856.

Photochemical Dehydrogenation of Alkanes Catalyzed by *trans*-Carbonylchlorobis(trimethylphosphine)rhodium: Aspects of Selectivity and Mechanism [*J. Am. Chem. Soc.* **1989**, *111*, 7088–7093]. JOHN A. MAGUIRE, WILLIAM T. BOESE, and ALAN S. GOLDMAN*

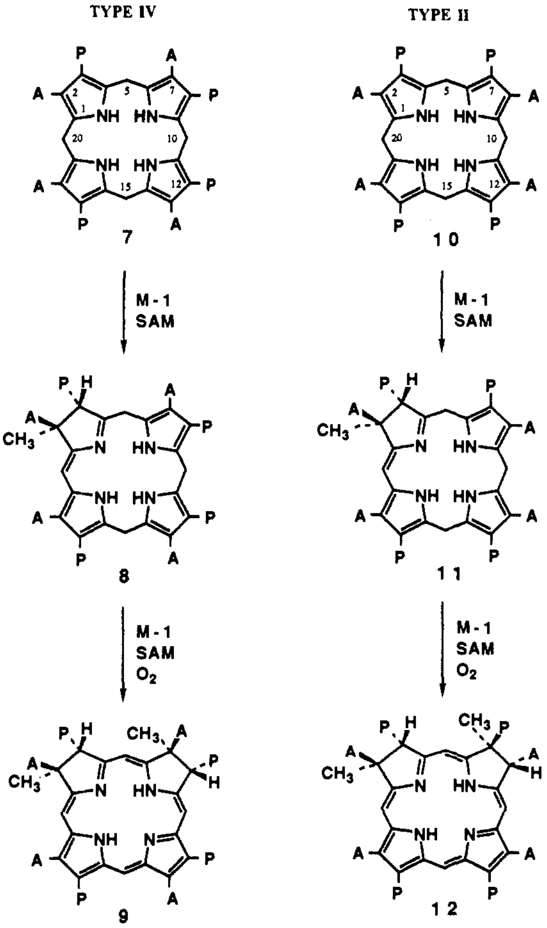
Page 7093: In the second paragraph before the Conclusion, the first sentence should read "... k_3 and k_4 are of course expected to be strongly dependent on the alkane substrate." In the same paragraph, the quantum yield for cyclohexane and cyclooctane dehydrogenation in the absence of added CO is misstated as $\Phi_{obs} = 0.97$. The correct value is 0.097, as indicated in Figure 4 and ref 29.

Reaction-Surface Topography for Hydride Transfer: Ab Initio MO Studies of Isoelectronic Systems CH_3O^- + CH_2O and CH_3NH_2 + $CH_2NH_2^+$ [*J. Am. Chem. Soc.* **1990**, *112*, 530–537]. IAN H. WILLIAMS,* ANDREA B. MILLER, and GERALD M. MAGGIORA*

Page 531: Figure 3, showing the important molecular orbitals discussed in the text, is incorrectly labeled. The HOMOs should be orbitals $7a_1$ and $7a_g$ (*not* $6b_1$ and $6b_u$), and the LUMOs should be $7b_1$ and $7b_u$ (*not* $7a_1$ and $7a_g$). The sentence in the last two lines of the left-hand column of page 531 should read as follows: Cartesian force constants computed analytically within CADPAC were employed in normal-mode analyses, using the CAMVIB program,[14] to characterize each critical point.

Uroporphyrinogen III Methylase Catalyzes the Enzymatic Synthesis of Sirohydrochlorins II and IV by a Clockwise Mechanism [*J. Am. Chem. Soc.* **1990**, *112*, 5343–5345]. MARTIN J. WARREN, MARIO D. GONZALEZ, HOWARD J. WILLIAMS, NEAL J. STOLOWICH, and A. IAN SCOTT*

Page 5344: In Scheme II structures **8** and **11** are incorrect and should contain only one methyl group as shown in the revised version given below, which also shows the conversion of **8** and **11** to **9** and **12** by further C-methylation. This graphical error in no way alters the conclusions of the work as discussed in the text.



A = CH_2COOH P = CH_2CH_2COOH