the tin reagent $(C_5Me_5)SnBu_3$, which is required to obtain **1** in high yield,[17] does increase the expense and hazard of the overall procedure. However, it should be noted that $ClSnBu_3$, which is used to prepare $(C_5Me_5)SnBu_3$,[13] is regenerated in the synthesis of **1** and, thus, can be recovered and reused in subsequent preparations. Dioxygen, the source of the oxo ligand in **2**, can be used as a pure reagent or can come from ambient air. In comparison, previously reported routes to **2** (Figure 1) are nowhere near as facile. These reactions trace back to two pentamethylcyclopentadienyl-substituted vanadium starting materials that are more difficult and costly to prepare and use than **1**, $(\eta\text{-}C_5Me_5)V(CO)_4$[6,18] and $(\eta\text{-}C_5Me_5)_2V$.[19] Several oxidation and/or chlorination reactions produce **2** from these starting materials or their derivatives (Figure 1), with yields ranging from 20−85%, but none rivals the essentially quantitative conversion of **1** to **2** reported here.

In addition to being a facile route to **2**, reaction 1 is a interesting example of the clean use of O_2 to produce a terminal oxo compound.[20] Overall, a net 2-electron oxidation of vanadium(III) in the starting material occurs upon formal addition of one oxygen atom, producing the vanadium(V) oxo product. Several different mechanistic scenarios that might occur in reaction 1 can be envisioned. Interest in understanding the metal-mediated chemistry of dioxygen is widespread,[21] suggesting it will be worth examining this reaction in more detail.

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[17] We have not succeeded in preparing **1** in any useful yield using other C_5Me_5 reagents.

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[20] Thiyagarajan, B.; Kerr, M. E.; Bruno, J. W. *Inorg. Chem.* **1995**, *34*, 3444−3452 and references therein.

[21] See, for example: Studies in Surface Science and Catalysis, 66. *Dioxygen Activation and Homogeneous Catalytic Oxidation*; Simandi, L. I., Ed.; Elsevier: Amsterdam, 1991. *Oxygen Complexes and Oxygen Activation by Transition Metals*; Martell, A. E., Sawyer, D. T., Eds.; Plenum: New York, 1988. Sheldon, R. A.; Kochi, J. K. *Metal-Catalyzed Oxidations of Organic Compounds*; Academic Press: New York, 1981.

Additions and Corrections

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Jennifer C. Green* and Sergey Yu. Ketkov*: Electronic Structures of η^7-Cycloheptatrienyl η^5-Cyclopentadienyl Derivatives of Vanadium and Tantalum As Studied by Solution-Phase and Vapor-Phase Photoabsorption Spectroscopy in the Ultraviolet and Visible Regions.

Page 4747. The title of this paper should appear as given above.

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