

This article was downloaded by:

On: 28 January 2011

Access details: *Access Details: Free Access*

Publisher *Taylor & Francis*

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



## Phosphorus, Sulfur, and Silicon and the Related Elements

Publication details, including instructions for authors and subscription information:

<http://www.informaworld.com/smpp/title~content=t713618290>

## Platinum Complexes of Phospholes with Reduced Pyramidal Character

László Kollár<sup>a</sup>; Zsolt Csók<sup>b</sup>; György Keglevich<sup>c</sup>

<sup>a</sup> Department of Inorganic Chemistry, Janus Pannonius University, Pécs, Hungary <sup>b</sup> Department of Silicate Technology, University of Veszprém, Veszprém, Hungary <sup>c</sup> Department of Organic Chemical Technology, Technical University of Budapest, Budapest, Hungary

**To cite this Article** Kollár, László, Csók, Zsolt and Keglevich, György (1999) 'Platinum Complexes of Phospholes with Reduced Pyramidal Character', *Phosphorus, Sulfur, and Silicon and the Related Elements*, 147: 1, 157

**To link to this Article:** DOI: 10.1080/10426509908053559

**URL:** <http://dx.doi.org/10.1080/10426509908053559>

PLEASE SCROLL DOWN FOR ARTICLE

Full terms and conditions of use: <http://www.informaworld.com/terms-and-conditions-of-access.pdf>

This article may be used for research, teaching and private study purposes. Any substantial or systematic reproduction, re-distribution, re-selling, loan or sub-licensing, systematic supply or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.

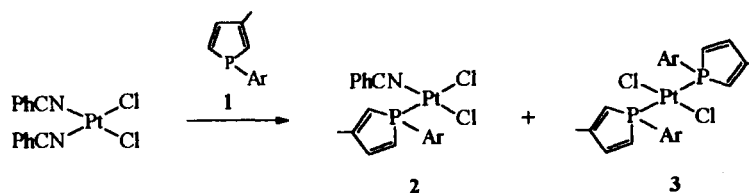
## Platinum Complexes of Phospholes with Reduced Pyramidal Character

LÁSZLÓ KOLLÁR<sup>a</sup>, ZSOLT CSÓK<sup>b</sup> and GYÖRGY KEGLEVICH<sup>c</sup>

<sup>a</sup>Department of Inorganic Chemistry, Janus Pannonius University, 7624 Pécs, Hungary, <sup>b</sup>Department of Silicate Technology, University of Veszprém, 8200 Veszprém, Hungary and <sup>c</sup>Department of Organic Chemical Technology, Technical University of Budapest, 1521 Budapest, Hungary

The synthesis of planarized phospholes showing considerable electron delocalization have been described.<sup>[1-3]</sup> We now report our findings on their complex forming ability with platinum.

The reaction of 1-(2,4,6-trialkylphenyl)phospholes **1** with PtCl<sub>2</sub>(PhCN)<sub>2</sub> resulted in the formation of complexes **2** and **3**. The P-ligands (**1a-c**) had an impact on the reactivity towards PtCl<sub>2</sub>(PhCN)<sub>2</sub> and on the ratio of products **2** and **3**. Structure of the complexes (**2** and **3**) was confirmed by stereospecific <sup>1</sup>J(<sup>31</sup>P, <sup>195</sup>Pt) couplings and on the basis of shielding effects in <sup>1</sup>H NMR.



Ar: 2,4,6-tri-*i*-propylphenyl (**a**)  
 2,4-di-*tert*-butyl-6-methylphenyl (**b**)  
 2,4,6-tri-*tert*-butylphenyl (**c**)

OTKA supports (no. T 23525, T 016260 and T 014917) are acknowledged.

### References

- [1] L.D. Quin, Gy. Keglevich, A.S. Ionkin, R. Kalgutkar and G. Szalontai, *J. Org. Chem.*, **61**, 7801 (1996).
- [2] Gy. Keglevich, L.D. Quin, Zs. Böcskei, Gy. M. Keserü, R. Kalgutkar and P. M. Lahti, *J. Organomet. Chem.*, **532**, 109 (1997).
- [3] Gy. Keglevich, Zs. Böcskei, Gy. M. Keserü, K. Újszászy and L.D. Quin, *J. Am. Chem. Soc.*, **119**, 5095 (1997).