

Addition/Correction

**Structural Studies on the Radical Cations of Benzene, Naphthalene, Biphenylene, and Anthracene Fully Annelated with Bicyclo[2.2.2]octene Frameworks [*J. Am. Chem. Soc.* 2000, 122, 10007–10016].**

Akira Matsuura, Tohru Nishinaga, and Koichi Komatsu

*J. Am. Chem. Soc.*, 2007, 129 (47), 14830-14830 • DOI: 10.1021/ja077519g

Downloaded from <http://pubs.acs.org> on February 9, 2009

**More About This Article**

Additional resources and features associated with this article are available within the HTML version:

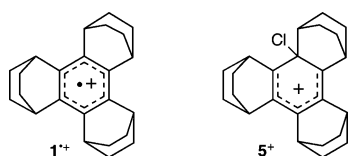
- Supporting Information
- Access to high resolution figures
- Links to articles and content related to this article
- Copyright permission to reproduce figures and/or text from this article

[View the Full Text HTML](#)

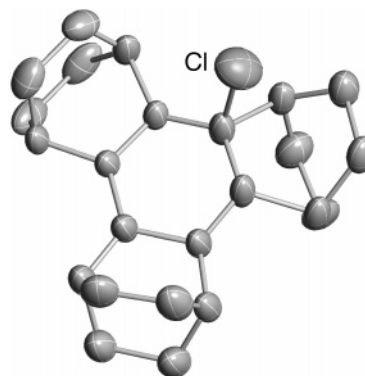


**Structural Studies on the Radical Cations of Benzene, Naphthalene, Biphenylene, and Anthracene Fully Annulated with Bicyclo[2.2.2]octene Frameworks** [*J. Am. Chem. Soc.* 2000, 122, 10007–10016]. Akira Matsuura, Tohru Nishinaga, and Koichi Komatsu\*

We deeply regret that we must correct a serious error in the structure of a key compound in this article. Recently, we found that the previously reported salt of the radical cation of benzene tris-annulated with bicyclo[2.2.2]octene,  $1^{+\bullet}$ SbCl<sub>6</sub><sup>-</sup>, was in fact a chloro-substituted arenium ion salt,  $5^+$ SbCl<sub>6</sub><sup>-</sup>.



Upon repeated X-ray crystallography,<sup>1</sup> the molecule was highly disordered but was shown to contain a covalently connected Cl atom. The thermal ellipsoid plot of one component of the disordered arenium ions is shown in Figure 1. A similar product was reported by Kochi et al. for the reaction of benzene tris-annulated with bicyclo[2.2.1]heptene with SbCl<sub>5</sub>.<sup>2</sup> The identity of arenium ion  $5^+$  is also clear from a close resemblance of the electronic absorption in CH<sub>2</sub>Cl<sub>2</sub> (501 nm,  $\epsilon$  5700) to that of Kochi's arenium ion (510 nm,  $\epsilon$  4700). We are grateful to Prof. Rajendra Rathore of Marquette University for pointing out this error.



**Figure 1.** Thermal ellipsoid plot of one component of disordered  $5^+$ SbCl<sub>6</sub><sup>-</sup>. Hydrogens, counteranion, and a solvent molecule (1,1,2,2-tetrachloroethane) are omitted for clarity.

**Supporting Information Available:** X-ray data for salt  $5^+$ SbCl<sub>6</sub><sup>-</sup>, in CIF format. This material is available free of charge via the Internet at <http://pubs.acs.org>.

**References**

- (1) Crystal data for  $5^+$ SbCl<sub>6</sub><sup>-</sup>: C<sub>24</sub>H<sub>30</sub>Cl<sup>+</sup>SbCl<sub>6</sub><sup>-</sup>·C<sub>2</sub>H<sub>2</sub>Cl<sub>4</sub>, MW = 856.22, orthorhombic, *Pnma*, *a* = 18.344(4), *b* = 12.128(2), and *c* = 15.010(3) Å, *V* = 3339.3(11) Å<sup>3</sup>, *Z* = 4, Mo K $\alpha$  radiation, crystal dimensions 0.30 × 0.30 × 0.20 mm. The 3992 unique reflections were collected at 100 K with *I* > 2 $\sigma$ (*I*) converging at R1 = 0.0360, wR2 = 0.0945.
- (2) Rathore, R.; Loyd, S. H.; Kochi, J. K. *J. Am. Chem. Soc.* **1994**, 116, 8414–8415.

JA077519G

10.1021/ja077519g

Published on Web 11/06/2007