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## Structure Reports

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## 6-[4-(2-Chloroethyloxy)naphthyl]fulvene. Corrigendum

In the paper by Li, Ma, Huang \& Dong [Acta Cryst. (2005), E61, o3901-o3902], the correspondence author is incorrectly indicated. The correct correspondence author is given here, together with revised postal and e-mail addresses.

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## Key indicators

Single-crystal X-ray study
$T=298 \mathrm{~K}$
Mean $\sigma(\mathrm{C}-\mathrm{C})=0.004 \AA$
$R$ factor $=0.062$
$w R$ factor $=0.145$
Data-to-parameter ratio $=17.5$
For details of how these key indicators were automatically derived from the article, see http://journals.iucr.org/e.
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## 6-[4-(2-Chloroethyloxy)naphthyl]fulvene

The title compound, $\mathrm{C}_{18} \mathrm{H}_{15} \mathrm{ClO}$, has been synthesized by reacting cyclopentadiene with 4-(2-chloroethyloxy)naphthaldehyde. The naphthalene and cyclopentadienyl rings make a dihedral angle of $42.4(1)^{\circ}$.

## Comment

Fulvene is widely used in organic synthesis because of its special structure and characteristic reactivity (Stone \& Little, 1984). It is well known that fulvene is a good candidate for the synthesis of organometallic coordination polymers or supramolecular complexes (Wang et al., 2003).

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We prepared the title compound, (I), which is a new fulvene derivative (see scheme). Single-crystal analysis of (I) reveals that the asymmetric unit consists of one molecule (Fig. 1). The naphthalene and cyclopetadienyl rings make a dihedral angle of $42.4(1)^{\circ}$. The dihedral angle between the plane defined by atoms $\mathrm{O} 1 / \mathrm{C} 11 / \mathrm{C} 12$ and the naphthalene ring plane is $7.9(2)^{\circ}$. The largest dimension of the molecule, estimated as the $\mathrm{Cl} 1 \cdots \mathrm{H} 3$ separation, is $12.65 \AA$ (H3 is bonded to C3). Other dimensions (Table 1) are as expected.

## Experimental

All organic solvents were of reagent grade and were used without further purification. Cyclopentadiene and 4-(2-chloroethyloxy)naphthaldehyde were prepared according to the literature methods (Korach et al., 1973; Wang et al., 2003). A solution of tetrahydropyrrole $(0.5 \mathrm{ml})$ in methanol $(5 \mathrm{ml})$ was added to a solution of 4-(2chloroethyloxy)naphthaldehyde ( $0.75 \mathrm{~g}, 3.20 \mathrm{mmol}$ ) and cyclopentadiene ( $1.17 \mathrm{ml}, 14 \mathrm{mmol}$ ) in $\mathrm{CH}_{2} \mathrm{Cl}_{2}(10 \mathrm{ml})$. The mixture was stirred overnight at 298 K , and then acetic acid $(0.42 \mathrm{ml})$ and water $(5 \mathrm{ml})$ were added. The product was extracted with $\mathrm{CH}_{2} \mathrm{Cl}_{2}$ and purified by column chromatography on silica gel using $\mathrm{CH}_{2} \mathrm{Cl}_{2}$ as eluant to afford (I) as an orange solid ( $0.75 \mathrm{~g}, 83 \%$ ). Single crystals of (I) were obtained by layering $n$-hexane on to a $\mathrm{CH}_{2} \mathrm{Cl}_{2}$ solution of the crude reaction product. Single crystals were obtained after a period of one week at 298 K .

## organic papers

## Crystal data

$\mathrm{C}_{18} \mathrm{H}_{15} \mathrm{ClO}$
$M_{r}=282.75$
Orthorhombic, Pbca
$a=12.764(9) \AA$
$b=7.361(5) \AA$
$c=31.03(2) \AA$
$V=2915(4) \AA$
$Z=8$
$D_{x}=1.288 \mathrm{Mg} \mathrm{m}^{-3}$

Data collection
Bruker SMART CCD area-detector
$\quad$ diffractometer
$\varphi$ and $\omega$ scans
Absorption correction: multi-scan
$\quad(S A D A B S ;$ Bruker, 1999 $)$
$T_{\min }=0.905, T_{\max }=0.982$
16129 measured reflections

3175 independent reflections
1764 reflections with $I>2 \sigma(I)$
$R_{\text {int }}=0.071$
$\theta_{\text {max }}=27.0^{\circ}$
$h=-15 \rightarrow 16$
$k=-9 \rightarrow 8$
$l=-39 \rightarrow 39$

## Refinement

Refinement on $F^{2}$

$$
\begin{aligned}
& w=1 / {\left[\sigma^{2}\left(F_{\mathrm{o}}^{2}\right)+(0.0557 P)^{2}\right.} \\
&+0.0844 P] \\
& \text { where } P=\left(F_{\mathrm{o}}^{2}+2 F_{\mathrm{c}}^{2}\right) / 3 \\
&(\Delta / \sigma)_{\max }<0.00 \\
& \Delta \rho_{\max }=0.15 \mathrm{e} \AA^{-3} \\
& \Delta \rho_{\min }=-0.17 \mathrm{e}^{-3}
\end{aligned}
$$

Table 1
Selected geometric parameters $\left(\AA^{\circ},{ }^{\circ}\right)$.

| $\mathrm{C} 1-\mathrm{C} 2$ | $1.324(3)$ | $\mathrm{C} 10-\mathrm{O} 1$ | $1.362(3)$ |
| :--- | :--- | :--- | :--- |
| $\mathrm{C} 3-\mathrm{C} 4$ | $1.332(4)$ | $\mathrm{C} 11-\mathrm{O} 1$ | $1.428(3)$ |
| $\mathrm{C} 5-\mathrm{C} 6$ | $1.345(3)$ | $\mathrm{C} 11-\mathrm{C} 12$ | $1.489(3)$ |
| $\mathrm{C} 6-\mathrm{C} 7$ | $1.457(3)$ | $\mathrm{C} 12-\mathrm{Cl} 1$ | $1.770(3)$ |
|  |  |  |  |
| $\mathrm{C} 5-\mathrm{C} 6-\mathrm{C} 7$ | $127.5(2)$ | $\mathrm{C} 10-\mathrm{O} 1-\mathrm{C} 11$ | $118.32(19)$ |

All H atoms were included in calculated positions and refined as riding on their carrier C atoms, with $U_{\text {iso }}(\mathrm{H})=1.2 U_{\text {eq }}(\mathrm{C})$ and $\mathrm{C}-\mathrm{H}$


Figure 1
The structure of (I), with the atom-numbering scheme. Displacement ellipsoids are drawn at the $50 \%$ probability level and H atoms are shown as small spheres of arbitrary radii.
distances constrained to 0.93 (aromatic CH) or $0.97 \AA$ (methylene $\mathrm{CH}_{2}$ ).

Data collection: SMART (Bruker, 1999); cell refinement: SAINT (Bruker, 1999); data reduction: SAINT; program(s) used to solve structure: SHELXS97 (Sheldrick, 1997); program(s) used to refine structure: SHELXL97 (Sheldrick, 1997); molecular graphics: SHELXTL (Bruker, 1999); software used to prepare material for publication: SHELXTL.

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