

Retraction of articles

This article reports the retraction of 39 articles published in *Acta Crystallographica Section E* between 2004 and 2009.

After thorough investigation (see Harrison *et al.*, 2010), 39 additional articles are retracted as a result of problems with the data sets or incorrect atom assignments. Full details of all the articles are given in Table 1.

Table 1

Details of articles to be retracted, in order of publication.

Title	Reference	Retracted by	DOI	Refcode
<i>trans</i> -Bis[1-[3-(cyclohexylamino)propyliminomethyl]-2-naphtholato]copper(II) dichloride dihydrate	Zhang (2004)	Journal	10.1107/S1600536804028296	BIPDUA
Bis(4-bromo-2-formylphenolato- $\kappa^2 O, O'$)copper(II)	Sun & Gao (2005)	Author	10.1107/S160053680500187X	FEYSUY
Bis(salicylaldehyde)zinc(II)	Xiong & Liu (2005)	Journal	10.1107/S1600536805010913	GAMDUU
Bis(4-bromo-2-formylphenolato- $\kappa^2 O, O'$)zinc(II)	Chen (2006)	Journal	10.1107/S1600536805040432	SAZCUS
Bis(2-formylphenolato- $\kappa^2 O, O'$)nickel(II)	Li & Chen (2006)	Journal	10.1107/S1600536806012931	IDAZAP
Bis(2-formylphenolato)cobalt(II)	Qiu (2006)	Journal	10.1107/S1600536806015704	GEJDUV
Bis(2-formylphenolato- $\kappa^2 O, O'$)manganese(II)	Wang & Fang (2006)	Journal	10.1107/S1600536806021039	IDOVED
Tetraaqua(1,10-phenanthroline- $\kappa^2 N, N'$)copper(II) naphthalene-1,5-disulfonate dihydrate	Liu <i>et al.</i> (2006)	Author	10.1107/S1600536806030637	GENYOO
Tetraaqua(1,10-phenanthroline- $\kappa^2 N, N'$)nickel(II) naphthalene-1,5-disulfonate dihydrate	Liu & Fan (2006)	Author	10.1107/S1600536806035410	KERBEP
{6,6'-Diethoxy-2,2'-[ethane-1,2-diylbis(nitrilomethylidyne)]diphenolato}-trinitratolutetium(III)copper(II)	Sui <i>et al.</i> (2006)	Journal	10.1107/S160053680604565X	HESPEP
Bis(2-formylphenolato- $\kappa^2 O, O'$)iron(II)	Yang <i>et al.</i> (2007)	Author	10.1107/S1600536807021721	PIFCAJ
2,6-Dimethoxybenzohydrazide	Qadeer <i>et al.</i> (2007a)	Journal	10.1107/S1600536807022593	PIFHES
2-(2,4-Dichlorophenylsulfanyl)acetohydrazide	Qadeer <i>et al.</i> (2007b)	Journal	10.1107/S1600536807022891	YIFSOW
{6,6'-Diethoxy-2,2'-[ethane-1,2-diylbis(nitrilomethylidyne)]diphenolato}-trinitratoeuropium(III)zinc(II)	Hu <i>et al.</i> (2007)	Author	10.1107/S1600536807031121	WIHKEE
{ μ -6,6'-Diethoxy-2,2'-[ethane-1,2-diylbis(nitrilomethylidyne)]diphenolato}-trinitratocerium(III)zinc(II)	Sui, Zhang, Hu & Yin (2007)	Author	10.1107/S1600536807032564	WIHREL
{ μ -6,6'-Diethoxy-2,2'-[ethane-1,2-diylbis(nitrilomethylidyne)]diphenolato}-trinitratopraseodymium(III)zinc(II)	Chen <i>et al.</i> (2007)	Author	10.1107/S1600536807032540	WIHRIP
{ μ -6,6'-Diethoxy-2,2'-[ethane-1,2-diylbis(nitrilomethylidyne)]diphenolato}-trinitratopraseodymium(III)nickel(II)	Sui, Li <i>et al.</i> (2007)	Author	10.1107/S1600536807032618	UFACUA
{6,6'-Dimethoxy-2,2'-[ethane-1,2-diylbis(nitrilomethylidyne)]diphenolato-1 $\kappa^4 O^1, O^2, O^3, O^4, O^5, O^6, O^7, O^8, O^9, O^{10}, O^{11}, O^{12}, O^{13}, O^{14}, O^{15}, O^{16}, O^{17}, O^{18}, O^{19}, O^{20}, O^{21}, O^{22}, O^{23}, O^{24}, O^{25}, O^{26}, O^{27}, O^{28}, O^{29}, O^{30}, O^{31}, O^{32}, O^{33}, O^{34}, O^{35}, O^{36}, O^{37}, O^{38}, O^{39}, O^{40}, O^{41}, O^{42}, O^{43}, O^{44}, O^{45}, O^{46}, O^{47}, O^{48}, O^{49}, O^{50}, O^{51}, O^{52}, O^{53}, O^{54}, O^{55}, O^{56}, O^{57}, O^{58}, O^{59}, O^{60}, O^{61}, O^{62}, O^{63}, O^{64}, O^{65}, O^{66}, O^{67}, O^{68}, O^{69}, O^{70}, O^{71}, O^{72}, O^{73}, O^{74}, O^{75}, O^{76}, O^{77}, O^{78}, O^{79}, O^{80}, O^{81}, O^{82}, O^{83}, O^{84}, O^{85}, O^{86}, O^{87}, O^{88}, O^{89}, O^{90}, O^{91}, O^{92}, O^{93}, O^{94}, O^{95}, O^{96}, O^{97}, O^{98}, O^{99}, O^{100}, O^{101}, O^{102}, O^{103}, O^{104}, O^{105}, O^{106}, O^{107}, O^{108}, O^{109}, O^{110}, O^{111}, O^{112}, O^{113}, O^{114}, O^{115}, 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O^{227}, O^{228}, O^{229}, O^{230}, O^{231}, O^{232}, O^{233}, O^{234}, O^{235}, O^{236}, O^{237}, O^{238}, O^{239}, O^{240}, O^{241}, O^{242}, O^{243}, O^{244}, O^{245}, O^{246}, O^{247}, O^{248}, O^{249}, O^{250}, O^{251}, O^{252}, O^{253}, O^{254}, O^{255}, O^{256}, O^{257}, O^{258}, O^{259}, O^{260}, O^{261}, O^{262}, O^{263}, O^{264}, O^{265}, O^{266}, O^{267}, O^{268}, O^{269}, O^{270}, O^{271}, O^{272}, O^{273}, O^{274}, O^{275}, O^{276}, O^{277}, O^{278}, O^{279}, O^{280}, O^{281}, O^{282}, O^{283}, O^{284}, O^{285}, O^{286}, O^{287}, O^{288}, O^{289}, O^{290}, O^{291}, O^{292}, O^{293}, O^{294}, O^{295}, O^{296}, O^{297}, O^{298}, O^{299}, O^{300}, O^{301}, O^{302}, O^{303}, O^{304}, O^{305}, O^{306}, O^{307}, O^{308}, O^{309}, O^{310}, O^{311}, O^{312}, O^{313}, O^{314}, O^{315}, O^{316}, O^{317}, O^{318}, O^{319}, O^{320}, O^{321}, O^{322}, O^{323}, O^{324}, O^{325}, O^{326}, O^{327}, O^{328}, O^{329}, O^{330}, O^{331}, O^{332}, O^{333}, O^{334}, O^{335}, O^{336}, O^{337}, 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O^{893}, O^{894}, O^{895}, O^{896}, O^{897}, O^{898}, O^{899}, O^{900}, O^{901}, O^{902}, O^{903}, O^{904}, O^{905}, O^{906}, O^{907}, O^{908}, O^{909}, O^{910}, O^{911}, O^{912}, O^{913}, O^{914}, O^{915}, O^{916}, O^{917}, O^{918}, O^{919}, O^{920}, O^{921}, O^{922}, O^{923}, O^{924}, O^{925}, O^{926}, O^{927}, O^{928}, O^{929}, O^{930}, O^{931}, O^{932}, O^{933}, O^{934}, O^{935}, O^{936}, O^{937}, O^{938}, O^{939}, O^{940}, O^{941}, O^{942}, O^{943}, O^{944}, O^{945}, O^{946}, O^{947}, O^{948}, O^{949}, O^{950}, O^{951}, O^{952}, O^{953}, O^{954}, O^{955}, O^{956}, O^{957}, O^{958}, O^{959}, O^{960}, O^{961}, O^{962}, O^{963}, O^{964}, O^{965}, O^{966}, O^{967}, O^{968}, O^{969}, O^{970}, O^{971}, O^{972}, O^{973}, O^{974}, O^{975}, O^{976}, O^{977}, O^{978}, O^{979}, O^{980}, O^{981}, O^{982}, O^{983}, O^{984}, O^{985}, O^{986}, O^{987}, O^{988}, O^{989}, O^{990}, O^{991}, O^{992}, O^{993}, O^{994}, O^{995}, O^{996}, O^{997}, O^{998}, O^{999}, O^{1000}$	Liu & Wen (2007)	Author	10.1107/S1600536807052464	HIQCAM
μ -Acetato-tri- μ -ferrocenecarboxylatobis[(<i>N,N</i> -dimethylformamide)-copper(II)]	Liu, Lin <i>et al.</i> (2007)	Journal	10.1107/S1600536807059041	HIQQEE

Table 1 (continued)

Title	Reference	Retracted by	DOI	Refcode
{ μ -6,6'-Dimethoxy-2,2'-[ethane-1,2-diylbis(nitrilomethylidyne)]diphenolato}- μ -nitrate-dinitratoeuropium(III)zinc(II)	Hu <i>et al.</i> (2008)	Author	10.1107/S160053680706151X	MIRPAF
Bis(4-chloro-2-formylphenolato)nickel(II)	Li <i>et al.</i> (2008)	Author	10.1107/S1600536807056309	RISTET
{ μ -6,6'-Dimethoxy-2,2'-[ethane-1,2-diylbis(nitrilomethylidyne)]diphenolato}- μ -nitrate-dinitratoerbium(III)zinc(II)	Chen <i>et al.</i> (2008)	Author	10.1107/S1600536808006958	QIXHIP
Bis(2-ethoxy-6-formylphenolato- $\kappa^2 O^1, O^6$)nickel(II)	Han (2008)	Journal	10.1107/S160053680800809X	QIXLIT
{ μ -6,6'-Dimethoxy-2,2'-[ethane-1,2-diylbis(nitrilomethylidyne)]diphenolato}- μ -nitrate-dinitratoholmium(III)zinc(II)	Xiao, Sui <i>et al.</i> (2008)	Author	10.1107/S1600536808013743	BIZTUA
{ μ -6,6'-Diethoxy-2,2'-[ethane-1,2-diylbis(nitrilomethylidyne)]diphenolato}-trinitratoholmium(III)nickel(II)	Xiao, Fu <i>et al.</i> (2008)	Author	10.1107/S1600536808013755	BIZVAI
Hydrogen-bonding patterns in the cocrystal terephthalic acid-4,4'-bipyridine (2I)	Wang <i>et al.</i> (2009)	Journal	10.1107/S160053680903236X	DUCZEH
{6,6'-Dimethoxy-2,2'-[ethane-1,2-diylbis(nitrilomethylidyne)]diphenolato-1 $\kappa^4 O^1, O^1, O^6, O^6$:2 $\kappa^4 O^1, N, N, O^1$ } (ethanol-1 κO)- μ -nitrate-1:2 $\kappa^2 O$:O'-dinitrato-1 $\kappa^2 O, O'$ -samarium(III)zinc(II)	Huang <i>et al.</i> (2009)	Journal	10.1107/S1600536809033558	YUCWAV

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Key indicators

Single-crystal X-ray study
 $T = 298$ K
Mean $\sigma(\text{C}-\text{C}) = 0.005$ Å
 R factor = 0.051
 wR factor = 0.153
Data-to-parameter ratio = 14.9For details of how these key indicators were
automatically derived from the article, see
<http://journals.iucr.org/e>.

Bis(2-formylphenolato)cobalt(II)

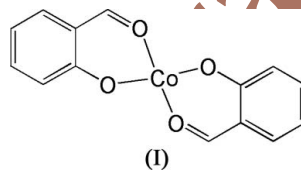
In the title compound, $[\text{Co}(\text{C}_7\text{H}_5\text{O}_2)_2]$, the Co atom is connected to four O atoms from two 2-formylphenolate ligands in a square-planar coordination. The molecule possesses a crystallographically imposed centre of symmetry.

Received 10 April 2006

Accepted 28 April 2006

Comment

The ability of some cobalt(II) complexes to bind dioxygen reversibly was discovered decades ago. Since then, many cobalt(II) dioxygen carriers have been discovered (Rybak-Akimova *et al.*, 1997), some of them having properties which make them good candidates for industrial and medicinal applications. Here, the structure of a new cobalt(II) complex, (I), derived from salicylaldehyde is reported.



In the title mononuclear cobalt(II) compound, the Co atom is four-coordinated by four O atoms from two 2-formylphenolate ligands, forming a square-planar coordination (Fig. 1). The Co atom lies on a centre of symmetry. The whole complex molecule is essentially planar, with a mean deviation of 0.047 (3) Å. The Co—O bond lengths (Table 1) are comparable with the corresponding values observed in other cobalt(II) complexes (De Angelis *et al.*, 1996; Ruiz-Molina *et al.*, 2000; Henson *et al.*, 1999). The molecular packing in (I) is stabilized only by van der Waals interactions (Fig. 2).

Experimental

A mixture of salicylaldehyde (1.0 mmol, 122.1 mg) and $\text{Co}(\text{CH}_3\text{COO})_2 \cdot 4\text{H}_2\text{O}$ (1.0 mmol, 249.1 mg) was dissolved in ethanol (50 ml).

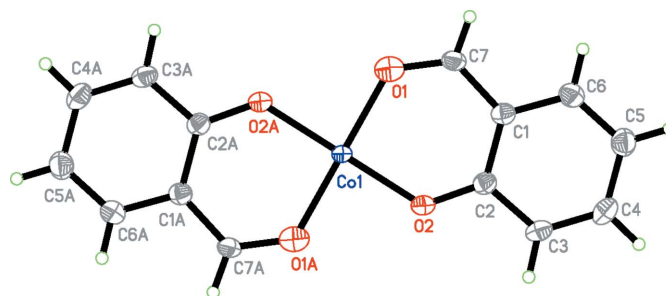


Figure 1

The molecular structure of (I), with displacement ellipsoids drawn at the 30% probability level. Atoms with the suffix A are generated by the symmetry code $(2 - x, 2 - y, 2 - z)$.

The mixture was stirred for about 1 h at room temperature to give a clear brown solution. After allowing the solution to evaporate slowly in air for a week, brown flake-like crystals were obtained.

Crystal data

$[\text{Co}(\text{C}_7\text{H}_5\text{O}_2)_2]$	$Z = 2$
$M_r = 301.15$	$D_x = 1.646 \text{ Mg m}^{-3}$
Monoclinic, $P2_1/c$	Mo $K\alpha$ radiation
$a = 12.955 (2) \text{ \AA}$	$\mu = 1.42 \text{ mm}^{-1}$
$b = 5.846 (1) \text{ \AA}$	$T = 298 (2) \text{ K}$
$c = 8.050 (2) \text{ \AA}$	Flake, brown
$\beta = 94.72 (2)^\circ$	$0.19 \times 0.17 \times 0.09 \text{ mm}$
$V = 607.6 (2) \text{ \AA}^3$	

Data collection

Bruker SMART CCD area-detector diffractometer	4072 measured reflections
ω scans	1312 independent reflections
Absorption correction: multi-scan (SADABS; Sheldrick, 1996)	1084 reflections with $I > 2\sigma(I)$
$T_{\min} = 0.774$, $T_{\max} = 0.883$	$R_{\text{int}} = 0.040$
	$\theta_{\text{max}} = 27.0^\circ$

Refinement

Refinement on F^2	$w = 1/[\sigma^2(F_o^2) + (0.0811P)^2 + 0.9211P]$
$R[F^2 > 2\sigma(F^2)] = 0.051$	where $P = (F_o^2 + 2F_c^2)/3$
$wR(F^2) = 0.153$	$(\Delta/\sigma)_{\text{max}} < 0.001$
$S = 1.07$	$\Delta\rho_{\text{max}} = 0.80 \text{ e \AA}^{-3}$
1312 reflections	$\Delta\rho_{\text{min}} = -0.70 \text{ e \AA}^{-3}$
88 parameters	
H-atom parameters constrained	

Table 1

Selected geometric parameters (\AA , $^\circ$).

Co1—O2	1.909 (3)	Co1—O1	1.921 (3)
O2 ⁱ —Co1—O2	180	O2—Co1—O1	92.73 (13)
O2 ⁱ —Co1—O1	87.27 (13)	O1—Co1—O1 ⁱ	180

Symmetry code: (i) $-x + 2, -y + 2, -z + 2$.

H atoms were placed in calculated positions and constrained to ride on their parent atoms, with C—H distances of 0.93 \AA and with $U_{\text{iso}}(\text{H}) = 1.2U_{\text{eq}}(\text{C})$.

Data collection: SMART (Bruker, 1998); cell refinement: SAINT (Bruker, 1998); 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, 1998); software used to prepare material for publication: SHELXTL.

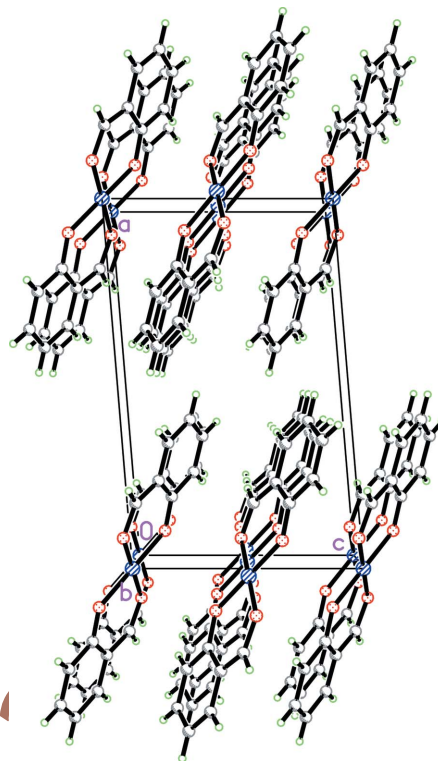


Figure 2
The molecular packing of (I), viewed along the b axis.

The author acknowledges Fuyang Normal College for research grants.

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