

**SUPPLEMENTARY MATERIALS:
SPACE GROUPS P1 AND Cc: HOW ARE THEY DOING?**

Richard E. Marsh
The Beckman Institute
California Institute of Technology
Pasadena, Cal. 91125, USA

TABLE 1S. Space group revisions; original space group, Cc (No. 9)

Refcode	S. G.	Formula Unit	Reference
AXIYUB	C2/c	$C_{32}H_{36}O_6Sn$	Ma <i>et al.</i> (2004a)
AZERUS	C2/c	$C_{16}H_{14}Cr_2O_4Se$	Song <i>et al.</i> (2004)
BENWIB	Fdd2	$C_{54}H_{68}N_8Ni_3O_8 \cdot 2(PF_6)$	Adams <i>et al.</i> (2004)
BIJKIP	P31c	$C_{24}H_{30}N_3P$	Beddie <i>et al.</i> (2004)
BIJMIR	C2/c	$C_{44}H_{70}O_2Si_4Zr$	Bradley <i>et al.</i> (2004)
DADMEB	C2/c	$C_4H_{10}N_2O_{10}Zn$	Yang <i>et al.</i> (2004)
DALNOU	C2/c	$C_{33}H_{52}ClN_7ORu \cdot CF_3SO_3$	Jitsukawa <i>et al.</i> (2004)
EBUXUV	C2/c	$C_{42}H_{40}N_2O_2$	Shen <i>et al.</i> (2004)
EVUQUH	C2/c	$C_{34}H_{55}N_6Rh \cdot 2(PF_6)$	Mas-Marza <i>et al.</i> (2004)
EXATUS	Fdd2	$C_{68}H_{54}Co_4O_8P_4$	Golovko <i>et al.</i> (2004)
FAYQUS	C2/c	$C_{14}H_{14}N_2O_4S_2Zn$	Ng <i>et al.</i> (2004)
FEJGAD	C2/c	$C_{24}H_{22}Cl_2N_2Sn$	Ma <i>et al.</i> (2004b)
IBUSUU	Ama2	$C_{26}H_{26}GaNO_2P_2$	Montiel-Palma <i>et al.</i> (2004)
IREFEQ	C2/c	$C_{54}H_{18}F_{20}N_6Ru \cdot 3(CH_2Cl_2)$	Li <i>et al.</i> (2004)
IXUVOM	C2/c	$C_{18}H_{15}NO_4$	Costa <i>et al.</i> (2004)
SAGJIU	C2/c	$C_{23}H_{27}BF_2O_4$	Mayoral <i>et al.</i> (2004)
SALTUV	C2/c	$C_{10}H_{16}N_{10}S_2Zn$	Du (2004)
WAGRAY	C2/c	$C_{41}H_{45}ClN_4O_4 \cdot C_{10}H_9N_3O_7$	Oliva <i>et al.</i> (2004)
WAJDIV	C2/c	$C_{35}H_{30}FeN_{12}O_3Sr$	RoyChowdhury <i>et al.</i> (2004)
XACMOE	C2/c	$C_{22}H_{28}N_4O_4Zn$	Chantarasiri <i>et al.</i> (2004)
YACPAU	C2/c	$C_{38}H_{36}FeN_6 \cdot 2(PF_6)$	Brady <i>et al.</i> (2004)
YAPZAR	C2/c	$C_{90}H_{172}Li_4NO_{24}Si_{16}Yb$	Lorenz <i>et al.</i> (2004)
CEBLUR	C2/c	$C_{12}H_8N_4S_4Zn$	Suen <i>et al.</i> (2005)
CEFDOH	C2/c	$C_{104}H_{28}F_{40}N_{10} \cdot 3(C_7H_{16}) \cdot 1.5(H_2O) \cdot 2(CH_2Cl_2)$	Anand <i>et al.</i> (2005)
ECATIM	C2/c	$C_{12}H_{12}O_{15}Tb \cdot Na_3 \cdot 8(H_2O)$	Kang <i>et al.</i> (2005)
FENWUR	C2/c	$C_{52}H_{52}ZnN_{16}O_2 \cdot 2(NO_3) \cdot 5(H_2O)$	Zhu <i>et al.</i> (2005)
FIPGOB	C2/c	$C_{38}H_{24}CdN_4O_4 \cdot 2(H_2O)$	Shi <i>et al.</i> (2005)
JARNOG	C2/c	$C_{26}H_{28}CdN_{10}O_6 \cdot CH_2Cl_2$	Yeh <i>et al.</i> (2005)
LAMDIN	Fdd2	$C_{12}H_{36}CaO_6S_6 \cdot 2(ClO_4)$	Ullstrom <i>et al.</i> (2005)
LARTII	C2/c	$C_{19}H_{30}N_3O_2P$	Gholivand <i>et al.</i> (2005)
LEBWAR	Fdd2	$C_{11}H_{16}NS \cdot C_2HO_4$	Ananikov <i>et al.</i> (2005)
NATLAW	C2/c	$C_{27}H_{36}AuClN_2 \cdot C_7H_8$	Fructos <i>et al.</i> (2005)
NAVTUA	C2/c	$C_{20}H_{28}AuN_8O_8 \cdot Na_3 \cdot 2(C_5H_7N_2O_2) \cdot 8(H_2O)$	Oyaizu <i>et al.</i> (2005)
NICJEP	C2/c	$C_{13}H_{12}O_3$	Wang <i>et al.</i> (2005)
TASDUN	Fdd2	$C_{21}H_{18}O_3$	Muthusamy <i>et al.</i> (2005)
TAVDAW	C2/c	$C_{25}H_{45}N_3O_5$	Hanessian <i>et al.</i> (2005)
TAWFIH	C2/c	$C_{24}H_{18}FeN_{12}$	Gaspar <i>et al.</i> (2005)
WARTEP	C2/c	$C_{36}H_{24}N_6Ni \cdot 2(C_9H_{12}NO_5S_2) \cdot H_2O$	Lan <i>et al.</i> (2005)
YAJXIR	C2/c	$C_{21}H_{24}N_3O_2 \cdot C_6H_2N_3O_7$	Voskressensky <i>et al.</i> (2005)
DEJCOL	C2/c	$C_{43}H_{49}N_5 \cdot CH_2Cl_2$	Champouret <i>et al.</i> (2006)
DELJAG	C2/c	$C_{26}H_{24}FeN_6Se_2$	Morita <i>et al.</i> (2006)
DIFBUQ	C2/c	$C_{32}H_{40}F_{12}HfO_8$	Zherikova <i>et al.</i> (2006)
GEFYEW	C2/c	$C_{42}H_{46}Co_2N_{14}O_{12} \cdot 2(H_2O)$	Fernandez-Fernandez <i>et al.</i> (2006a)
HEBZUK	C2/c	$C_{24}H_{32}B_2BiN_{12}S_6 \cdot NO_2(?) \cdot 2.5(C_3H_7NO)$	Dodds <i>et al.</i> (2006)
KIBFUX	C2/c	$C_6H_{24}MnN_6 \cdot C_{10}H_6S_2 \cdot H_2O$	Yu <i>et al.</i> (2006)
KIBGAE	C2/c	$C_6H_{24}CoN_6 \cdot C_{10}H_6S_2 \cdot H_2O$	Yu <i>et al.</i> (2006)
KIBGEI	C2/c	$C_6H_{24}NiN_6 \cdot C_{10}H_6S_2 \cdot H_2O$	Yu <i>et al.</i> (2006)
NEJTOM	C2/c	$C_{58}H_{58}CuN_{10}O_4 \cdot 2(ClO_4) \cdot 0.5(C_6H_6) \cdot 2.5(C_2H_3N)$	Plante & Glass (2006)
NEKFEP	Fdd2	$C_{42}H_{48}$	Muller <i>et al.</i> (2006)
NIMPIJ	C2/c	$C_{34}H_{28}Cu_2N_4O_8$	Tao <i>et al.</i> (2006)
SERXOD	C2/c	$C_{86}H_{110}N_4O_{22} \cdot 2(CH_4O)$	Zhang <i>et al.</i> (2006)
XEFCUH	C2/c	$C_{30}H_{38}Ag_2N_{10} \cdot 2(ClO_4) \cdot 2(C_2H_3N)$	Fernandez-Fernandez <i>et al.</i> (2006b)

TABLE 1S. Space group revisions; original space group, Cc (No. 9) – Continued

Refcode	S. G.	Formula Unit	Reference
CIBJED	C2/c	C ₂₂ H ₃₄ N ₂ O ₄ Ti	Boyle <i>et al.</i> (2007)
HIWMAC	C2/c	2(C ₁₂ H ₂₈ N)·C ₃₅ H ₆₅ Co ₂ N ₁₃ O ₅ ·C ₄ H ₉ NO	Zinn <i>et al.</i> (2007)
KIJCOW	C2/c	C ₃₀ H ₂₀ MoN ₂ O ₄	Sakakura <i>et al.</i> (2007)
SICNAU	C2/c	2(C ₄₀ H ₃₈ N ₄ O ₈)·3(CHCl ₃)·6(H ₂ O)	Chawla <i>et al.</i> (2007)
TICZAH	C2/c	C ₂₄ H ₅₂ O ₂ Si ₂	Yamada <i>et al.</i> (2007)
TIZZIM	C2/c	C ₇ H ₁₄ N ₂	Morozova <i>et al.</i> (2007)
YIDGAU	C2/c	C ₄₄ H ₃₄ IrN ₆ ·3(PF ₆)·2(C ₂ H ₃ N)	Yoshikawa <i>et al.</i> (2007)
BOJWUT	C2/c	C ₁₀ H ₁₈ CdN ₄ O ₄ S ₂	Zhu <i>et al.</i> (2008)
CIRZUZ	C2/c	C ₅₄ H ₇₆ CuN ₄ ·PF ₆	Diez-Gonzales <i>et al.</i> (2008)
DELWEX01	C2/c	C ₂₃ H ₂₄ CuN ₂ O ₂	Sarkar <i>et al.</i> (2008)
JIYGAA	C2/c	C ₂₂ H ₂₂ N ₄ S	Zheng <i>et al.</i> (2008)
NIYXID	C2/c	Na·C ₁₆ H ₂₄ GaN ₄ O ₈ ·5(H ₂ O)	Heppeler <i>et al.</i> (2008)
QOBJAT	C2/c	C ₄₄ H ₃₂ N ₈ Ni ₂ O ₁₂ ·2(H ₂ O)	Wang <i>et al.</i> (2008)
RIWNER	C2/c	C ₃₁ H ₅₇ FeN ₂ O ₂ ScSi ₂	Carver <i>et al.</i> (2008)
VIZHIW01	C2/c	C ₁₆ H ₂₂ O ₄	Liskin & Valente (2008)

Revisions to space groups other than P1 or Cc

Refcode	Old	New	Formula Unit	Reference
BENWOH	P2 ₁	C222 ₁	C ₆₂ H ₈₀ N ₈ NaNi ₄ O ₁₆ ·ClO ₄	Adams <i>et al.</i> (2004)
BENWUN	C2	C222 ₁	C ₆₂ H ₈₀ N ₈ NaNi ₄ O ₁₆ ·PF ₆	Adams <i>et al.</i> (2004)
DALNAG	P2 ₁	P2 ₁ /m	C ₂₈ H ₄₀ Cl ₂ N ₆ Ru·PF ₆ ·2(H ₂ O)	Jitsukawa <i>et al.</i> (2004)
FENXOM	C2	C2/c	C ₂₆ H ₂₄ CuN ₈ O ₄ S·8.5(H ₂ O)	Zhu <i>et al.</i> (2005)
FENXUS	P $\bar{1}$	C2/c	C ₂₆ H ₂₄ CoN ₈ O ₄ S·8.25(H ₂ O)	Zhu <i>et al.</i> (2005)
LARTOO	P $\bar{1}$	C2/c	C ₁₇ H ₂₆ N ₃ O ₂ P	Gholivand <i>et al.</i> (2005)
DELJEK	P2 ₁ /a	Pbam	C ₂₆ H ₂₄ FeN ₆ Se ₂ ·2(C ₂ H ₆ O)	Morita <i>et al.</i> (2006)
DIFGIJ	P $\bar{1}$	P2 ₁ /c	C ₁₀ H ₈ F ₆ O ₄ Pt	Zharkova <i>et al.</i> (2006).
NIMPOP	Pc	P2 ₁ /c	C ₃₅ H ₃₂ Cu ₂ MgN ₄ O ₁₀ ·CH ₄ O	Tao <i>et al.</i> (2006)
CIBKAA	P $\bar{1}$	C2/c	C ₄₄ H ₅₀ N ₂ O ₄ Ti	Boyle <i>et al.</i> (2007)
TIZZAE	Pnc2	Pbcn	C ₁₄ H ₂₆ N ₄ Cu	Morozova <i>et al.</i> (2007)

TABLE 2S. Space group revisions; original space group, P1 (No. 1)

Refcode	S. G.	Formula Unit	Reference
CEGJUJ	Cc	$C_{14}H_{23}NO_7Sn_2 \cdot C_{12}H_8N_2$	Ma <i>et al.</i> (2006)
CEPKOY	Cc	$C_{22}H_{14}O_3$	Zhu <i>et al.</i> (2006)
DELHUY	$P\bar{1}$	$C_{26}H_{24}FeN_6S_2 \cdot C_2H_6O$	Morita <i>et al.</i> (2006)
DERMET	$P\bar{1}$	$C_{38}H_{46}N_2NiS$	Malyshev <i>et al.</i> (2006)
DESNUL	$P\bar{1}$	$C_{24}H_{44}O_2$	Wang <i>et al.</i> (2006)
DIDTIU	$P\bar{1}$	$C_{10}H_8F_6O_4Pt$	Zharkova <i>et al.</i> (2006)
ECEHAW	$P2_1$	$C_{26}H_{16}N_4OS$	Ogura <i>et al.</i> (2006)
HEQZAF	$P\bar{1}$	$2(C_{10}H_{21}N_2) \cdot C_6NiS_{10}$	Onozaki & Miyamura (2006)
JECROZ	$P2_1$	$C_{36}H_{48}Cl_4Cu_2N_4O_4$	Hatano <i>et al.</i> (2006)
KEVKIG	$P\bar{1}$	$C_{14}H_{16}Fe_2O_9S_2$	Song <i>et al.</i> (2006)
PEDSUN	$P\bar{1}$	$C_{16}H_{14}N_6Ni_2O_2S_4$	Shi <i>et al.</i> (2006)
SEWXUO	$P\bar{4}_n2$	$C_{32}H_{30}Co_2CrLaN_8O_{12}$	Shiga <i>et al.</i> (2006)
SEWYAV	$P\bar{4}_n2$	$C_{32}H_{30}Co_2CrGdN_8O_{12}$	Shiga <i>et al.</i> (2006)
TEJCAN	$P2_1$	$C_{40}H_{40}FeN_2PPd \cdot SbF_6 \cdot CH_2Cl_2$	Hintermann <i>et al.</i> (2006)
UCUNOW	$P\bar{1}$	$C_{24}H_{20}As \cdot C_6H_{12}Cl_8N_3O_3Pt_2 \cdot 0.5(C_5H_{12})$	Pellicani <i>et al.</i> (2006)
VENPOU	$P2_12_12_1$	$C_{23}H_{14}F_6O_5S_2$	Hasegawa <i>et al.</i> (2006)
VIMBID	$P\bar{1}$	$C_{28}H_{48}N_2O_4$	Uncuta <i>et al.</i> (2006)
ZENVAP01	$P\bar{1}$	$C_{13}H_{12}O$	Babkov <i>et al.</i> (2006)
CIBLOP	$P\bar{1}$	$C_{24}H_{22}N_2O_4S_2Ti$	Boyle <i>et al.</i> (2007)
CIWFEU	$P\bar{1}$	$C_{32}H_{18}F_4$	Ie <i>et al.</i> (2007)
CIWGAR	$P\bar{1}$	$C_{36}H_{16}F_{10}O_2$	Ie <i>et al.</i> (2007)
DICREN	$P\bar{1}$	$C_{21}H_{31}N_5O_6$	Comelles <i>et al.</i> (2007)
DIHXUO	$P\bar{1}$	$2(C_{12}H_{16}N_8Zn) \cdot C_6H_8Mo_8N_4O_{26} \cdot 6(H_2O)$	Tian <i>et al.</i> (2007a)
GIJQUM	$P\bar{1}$	$C_{34}H_{52}CoP \cdot 2PF_6$	Yu <i>et al.</i> (2007)
HEYHEZ	$P\bar{1}$	$C_{28}H_{34}Cl_2Cu_2N_6 \cdot 2(ClO_4)$	Liang <i>et al.</i> (2007)
HEZJIG	$P\bar{1}$	$2(C_{19}H_{14}Cl_2N_2O_2) \cdot CH_2Cl_2$	Cheng & Cheng (2007)
HIDJUA	$P\bar{1}$	$C_{11}H_{14}N_2O_2S$	Lin <i>et al.</i> (2007)
HIGHAH	$P\bar{1}$	$C_{19}H_{14}O_2$	Kavala <i>et al.</i> (2007)
KEYSAJ	$P\bar{1}$	$2(C_3H_{10}N) \cdot C_{12}H_8O_6S_2 \cdot C_4H_8O_2$	Mizobe <i>et al.</i> (2007)
KEYSIR	$P\bar{1}$	$2(C_3H_{10}N) \cdot C_{12}H_8O_6S_2 \cdot C_4H_8O_2$	Mizobe <i>et al.</i> (2007)
KICDEG	$P\bar{1}$	$C_{18}H_{24}CoN_{12} \cdot 2(C_7H_4NO_4) \cdot 2(H_2O)$	Shi <i>et al.</i> (2007)
KIDYOM	$P\bar{1}$	$C_{32}H_{36}Ag_2N_8O_4 \cdot 2(ClO_4) \cdot 2(C_2H_3N)$	Chen <i>et al.</i> (2007)
KIDZIH	$P\bar{1}$	$C_{32}H_{36}Ag_2N_8O_4 \cdot 2(BF_4) \cdot C_2H_3N \cdot H_2O$	Chen <i>et al.</i> (2007)
LEZLEI	$P2_1$	$C_{35}H_{32}O_5$	Shimasaki <i>et al.</i> (2007)
MILDUH	$P2_1$	$C_{18}H_{28}Cl_2Cl_2N_2P_2Pd \cdot CH_2Cl_2$	Imamoto <i>et al.</i> (2007)
ODUWEQ	$P\bar{1}$	$C_6H_8N \cdot C_6H_7N \cdot H_4B_5O_{10}$	Beckett <i>et al.</i> (2007)
RIFSEF	Fdd2	$C_{12}H_{24}Br_3FeN_4O_2$	Lundberg <i>et al.</i> (2007)
TIDXAG	$P\bar{1}$	$C_{62}H_{40}Br_6N_4O_{12}Tb_2 \cdot 2(C_7H_5BrO_2) \cdot 2(H_2O)$	Li <i>et al.</i> (2007a)
TIDXEK	$P\bar{1}$	$C_{52}H_{38}Br_4N_4O_{12}Tb_2$	Li <i>et al.</i> (2007a)
TILDUO	$P\bar{1}$	$C_{56}H_{34}Eu_2N_4O_{20}$	Tian <i>et al.</i> (2007b)
TILROW	$P\bar{1}$	$C_{62}H_{40}Cl_6Dy_2N_4O_{12}$	Li <i>et al.</i> (2007b)
VICVUZ	$P\bar{1}$	$C_{16}H_{21}ClCuN_3O \cdot ClO_4$	Mikata <i>et al.</i> (2007)
WEWZII	$P\bar{1}$	$C_{34}H_{28}O_{14} \cdot C_3H_6O \cdot CHCl_3$	Tatsuta <i>et al.</i> (2007)
WEZBAF	C2	$C_{14}H_{21}NO_7$	Metta-Magana <i>et al.</i> (2007)
XIJPUC	$P\bar{1}$	$C_{45}H_{31}F_8N_2NiO_2 \cdot C_{24}BF_{20} \cdot CH_2Cl_2$	Meinhard <i>et al.</i> (2007)
XIKCOK	$P\bar{1}$	$C_{17}H_{23}Cl_4IrN_2 \cdot PF_6 \cdot 0.5(CH_4O)$	Corberan <i>et al.</i> (2007)

TABLE 2S. Space group revisions; original space group, P1 (No. 1) - Continued

Refcode	S. G.	Formula Unit	Reference
BOHCOR	$P\bar{1}$	$C_{21}H_{26}N_2$	Iglesias <i>et al.</i> (2008)
CIZBOD	$P\bar{1}$	$C_{19}H_{18}N_2O_2S$	Cho & Chang (2008)
CONKAS	$P\bar{1}$	$C_{74}H_{94}N_6O_{12} \cdot 2(CHCl_3)$	Lin <i>et al.</i> (2008)
DISHIX	$P\bar{1}$	$C_{18}H_{20}O_4$	Cacciapaglia <i>et al.</i> (2008)
DISHOD	$P\bar{1}$	$C_{18}H_{20}O_4$	Cacciapaglia <i>et al.</i> (2008)
DOCFOR	$P\bar{1}$	$C_{30}H_{30}N_{10}Ni_2O_6$	Xing <i>et al.</i> (2008)
DOCFUX	$P\bar{1}$	$C_{15}H_{15}N_5O_3Zn$	Xing <i>et al.</i> (2008)
DOCXID	$P\bar{1}$	$C_{62}H_{40}Cl_6N_4O_{12}Tb_2$	Li <i>et al.</i> (2008)
KIYRAM	$C2/c$	$C_{22}H_{20}N_8O_4$	Shawali <i>et al.</i> (2008)
KOMYAN	$P\bar{1}$	$C_{24}H_{16}Cu_2N_4O_8 \cdot 4(H_2O)$	Csonka <i>et al.</i> (2008)
NOMXUJ	$P\bar{1}$	$C_{36}H_{48}N_6Zn$	Zheng <i>et al.</i> (2008)
PIXMOZ	$P\bar{1}$	$C_6H_{10}N_2 \cdot 2(ClO_4)$	Kapoor <i>et al.</i> (2008)
POCMUQ	$P\bar{1}$	$C_{76}H_{48}F_{12}N_4O_8Pb_2$	Marandi <i>et al.</i> (2008)
POKLEH	Cc	$C_{21}H_{25}MnN_5O \cdot 2(C_{24}H_{20}B)$	Hureau <i>et al.</i> (2008)
QOFTAH	$P\bar{1}$	$C_{26}H_{46}F_2N_2O_2Sn_2 \cdot 2(CF_3O_3S)$	Svec <i>et al.</i> (2008)
QQQWPO02	$P\bar{1}$	$C_{10}H_8CuF_6O_4$	Baidina <i>et al.</i> (2008)
ROJTIA	$P\bar{1}$	$C_{54}H_{50}Eu_2)_{22}$	Yan <i>et al.</i> (2008)
YOKPUK	$P\bar{1}$	$C_{24}H_{36}Ag_2Cl_2N_{12}O_8$	Luo <i>et al.</i> (2008)
YOMKER	$P2_1$	$C_{12}H_{13}NO_2$	Chmielewski <i>et al.</i> (2008)
XIXCOX	$P\bar{1}$	$C_{128}H_{146}N_{14}Zn_2 \cdot 4(C_6H_6) \cdot 8(C_2H_3N)$	Maeda <i>et al.</i> (2008)

References

- Adams, H., Fenton, D. E., & McHugh, P. E. (2004). *Inorg. Chem. Commun.* **7**, 147.
- Anand, V. G., Saito, S., Shimizu, S. & Osuka, A. (2005). *Angew. Chem. Int. Ed.* **44**, 7244.
- Ananikov, V. P., Malyshev, D. A., Beletskaya, I. P., Aleksandrov, G. G., & Eremenko, I. L. (2005). *Adv. Synth. Catal.* **347**, 1993.
- Babkov, L. M., Baran, Ya., Davydova, N. A., Petrashko, A., & Unspenskiy, K. E. (2006). *Zh. Strukt. Khim. (Russ.)* **47**, 759.
- Baidina. I. A., Stabnikov, P. A., Gromilov, S. A. & Smolentsev, A. I. (2008). *Zh. Strukt. Khim.* **49**, 989.
- Beckett, M. A., Bland, C. C., Horton, P. N., Hursthouse, M. B., & Varma, K. S. (2007). *J. Organomet. Chem.* **692**, 2832.
- Beddie, C., Hollink, E., Wei, P., Gault, J. & Stephan, D. W. (2004). *Organometallics* **23**, 5240.
- Boyle, T. J., Sewell, R. M., Ottley, L. A. M., Pratt III, H. D., Quintana, C. J., & Bunge, S. D. (2007). *Inorg. Chem.* **46**, 1825.
- Bradley, C. A., Flores-Torres, S., Lobkovsky, E., Abruna, H. D. & Chirik, P. J. (2004). *Organometallics* **23**, 5332.
- Brady, C., Callaghan, P. L., Ciunik, Z., Coates, C. G., Dossing, A., Hazell, A., McGarvey, J. J., Schenker, S., Toftlund, H., Trautwein, A. X., Winkler, H., & Wolny, J. A. (2004). *Inorg. Chem.* **43**, 4289
- Cacciapaglia, R., Di Stefano, S., Mandolini, L., Mencarelli, P., & Ugozzoli, F. (2008). *Eur. J. Org. Chem.* 186.
- Carver, C. T., Monreal, M. J., & Diaconescu, P. L. (2008). *Organometallics* **27**, 363.
- Champouret, Y. D. M., Marechal, J.-D., Dadhiwala, I., Fawcett, J., Palmer, D., Singh, K. & Solan, G. A. (2006). *Dalton Trans.* 2350.
- Chantarasiri, N., Ruangpornvisuti, V., Muangsin, N., Detsen, H., Mananunsap, T., Batiya, C., & Chaichit, N. (2004). *J. Mol. Struct.* **701**, 93.
- Chawla, H. M., Singh, S. P., & Upreti, S. (2007). *Tetrahedron* **63**, 5636.

Chen, H.-C., Hu, H.-L., Chan, Z.-K., Yeh, C.-W., Jia, H.-W., Wu, C.-P., Chen, J.-D., & Wang, J.-C. (2007). *Cryst. Growth Des.* **7**, 698.

Cheng, Y. & Cheng, L.-Q. (2007). *J. Org. Chem.* **72**, 2625.

Chmielewski, M., Cierpucha, M., Kowalska, P., Kwit, M. & Frelet, J. (2008). *Chirality* **20**, 621.

Cho, S. H. & Chang, S. (2008). *Angew. Chem. Int. Ed.* **47**, 2836.

Comelles, J., Pericas, A., Moreno-Maas, M., Vallribera, A., Drudis-Sol, G., Lledos, A., Parella, T., Roglans, A., Garcia-Granda, S., & Roces-Fernandez, L. (2007). *J. Org. Chem.* **72**, 2077.

Corberan, R., Sanau, M., & Peris, E. (2007). *Organometallics* **26**, 3492.

Costa, M., Ca, N. D., Gabriele, B., Massera, C., Salerno, G. & Soliani, M. (2004). *J. Org. Chem.* **69**, 2469.

Csonka, R., Kaizer, J., Giorgi, M., Reglier, M., Hajba, L., Mink, J., & Speier, S. (2008). *Inorg. Chem.* **47**, 6121.

Diez-Gonzales, S., Stevens, E. D., Scott, N. M., Petersen, J. L., & Nolan, S. P. (2008). *Chem.-Eur. J.* **14**, 158.

Dodds, C. A., Reglinski, J., & Spicer, M. D. (2006). *Chem.-Eur. J.* **12**, 931.

Du, J. -Y. (2004). *Transition Met. Chem.* **29**, 699.

Fernandez-Fernandez, M. del C., Bastida, R., Macias, A., Valencia, L., & Perez-Lourido, P. (2006a). *Polyhedron* **25**, 783.

Fernandez-Fernandez, M. del C., Bastida, R., Macias, A., Perez-Lourido, P. & Valencia, L. (2006b). *Inorg. Chem.* **45**, 2266.

Fructos, M. R., Belderrain, T. R., de Fremont, P., Scott, N. M., Nolan, S. P., Diaz-Requejo, M. M., & Perez, P. J. (2005). *Angew. Chem., Int. Ed.* **44**, 5284.

Gaspar, A. B., Agusti, G., Martinez, V., Munoz, M. C., Levchenko, G., & Real, J. A. (2005). *Inorg. Chem. Acta* **358**, 4089.

Gholivand, Kh., Vedova, C. O. D., Firooz, A. A., Alizadehgan, A. M., Michelini, M. C. & Diez, R. P. (2005). *J. Mol. Struct.* **750**, 64.

Golovko, V. B., Hope-Weeks, L. J., Mays, M. J., McPartlin, M., Sloan, A. M. & Woods, A. D. (2004). *New J. Chem. (Now. J. Chim.)* **28**, 527.

- Hanessian, S., Yun, H., Hou, Y. & Tintelnot-Blomley, M. (2005). *J. Org. Chem.* **70**, 6746.
- Hasegawa, A., Naganawa, Y., Fushimi, M., Ishihara, K., & Yamamoto, H. (2006). *Organic Letters* **8**, 3175.
- Hatano, M., Asai, T., & Ishihara, K. (2006). *Chem. Lett.* **35**, 172.
- Heppeler, A., Andre, J. P., Baschmann, I., Wang, X., Reubi, J.-C., Hennig, M., Kaden, T. A. & Maeke, H. R. (2008). *Chem.-Eur. J.* **14**, 3026.
- Hintermann, L., Lang, F., Maire, P., & Togni, A. (2006). *Eur. J. Inorg. Chem.* 1397.
- Hureau, C., Groni, S., Guillot, R., Blondin, C., Duboc, C. & Anxolabehere-Mallart, E. (2008). *Inorg. Chem.* **47**, 9238.
- Ie, Y., Nitani, M., & Aso, Y. (2007). *Chem. Lett.* **36**, 1326.
- Iglesias, M., Beetstra, D. J., Knight, J. C., Ooi, L.-L., Stasch, A., Coles, S., Male, L., Hursthouse, M. B., Cavell, K. J., Dervisi, A. & Fallis, I. A. (2008). *Organometallics* **27**, 3279.
- Imamoto, T., Nishimura, M., Koide, A., & Yoshida, K. (2007). *J. Org. Chem.* **72**, 7413.
- Jitzsukawa, K., Oka, Y., Yamaguchi, S. & Masuda, H. (2004). *Inorg. Chem.* **43**, 8119.
- Kang, J.-G., Kim, T.-J., Kang, H.-J., & Kang, S. K. (2005). *J. Photochem. Photobiol. A: Chem.* **174**, 28.
- Kapoor, I. P. S., Srivastava, P., Singh, G., Singh, U. P., & Frohlich, R. (2008). *J. Phys. Chem. A* **112**, 652.
- Kavala, V., Murru, S., Patel, B. K., & Das, G. (2007). *J. Chem. Cryst.* **37**, 527.
- Lan, C.-L., Zhang, S.-H., & Jiang, Y.-M. (2005). *Wuji Huaxue Xuebao (Chin. J. Inorg. Chem.)* **21**, 1122.
- Li, X., Zhang, T.-T., Ju, Y.-L., Wang, C.-Y., Li, Y.-Q., Zhang, L., & Zhang, Q. (2007b). *J. Coord. Chem.* **60**, 2121.
- Li, X., Ju, Y.-L., & Li, Y.-Q. (2008). *J. Coord. Chem.* **61**, 692.
- Li, Y., Chan, P. W. H., Zhu, N.-Y., Che, C.-M., & Kwong, H.-L. (2004). *Organometallics* **23**, 54.

- Li, Y.-Q., Ju, Y.-L., Zhang, Y.-B., Wang, C.-Y., Zhang, T.-T., & Li, X. (2007a). *Wuji Huaxue Xuebao (Chin. J. Inorg. Chem.)* **23**, 969.
- Liang, H.-C., Zhang, Y., & Hetu, M. M. (2007). *Inorg. Chem. Comm.* **10**, 204.
- Lin, J.-B., Xu, X.-N., Jiang, X.-K., & Li, Z.-T. (2008). *J. Org. Chem.* **73**, 9403.
- Lin, Q., Wei, T.-B., & Zhang, Y.-M. (2007). *Phosphorus, Sulfur, Silicon, Related Elem.* **182**, 863.
- Liskin, D. V. & Valente, E. J. (2008). *J. Mol. Struct.* **878**, 149.
- Lorenz, V., Giessmann, S., Gun'ko, Y. K., Fischer, A. K., Gilje, J. W., & Edelmann, F. T. (2004). *Angew. Chem., Int. Ed.* **43**, 4603.
- Lundberg, D., Ullstrom, A.-S., D'Angelo, P., Warminska, D., & Persson, I. (2007). *Inorg. Chem. Acta* **360**, 2744.
- Luo, G.-G., Huang, R.-B., Chen, J.-H., Lin, L.-P. & Zheng, L.-S. (2008). *Polyhedron* **27**, 2791.
- Ma, C., Han, Y., & Zhang, R. (2004a). *J. Organomet. Chem.* **689**, 1675.
- Ma, C., Zhang, J. & Zhang, R. (2004b). *Heteroat. Chem.* **15**, 338.
- Ma, C., Li, J., Zhang, R., & Wang, D. (2006). *Inorg. Chim. Acta* **359**, 2407.
- Maeda, C., Yamaguchi, S., Ikeda, C., Shinokubo, H., & Osuka, A. (2008). *Organic Letters* **10**, 549.
- Malyshev, D. A., Scott, N. M., Marion, N., Stevens, E. D., Ananikov, V. P., Beletskaya, I. P., & Nolan, S. P. (2006). *Organometallics* **25**, 4462.
- Marandi, F., Asghari-Lalami, N., Ghorbanloo, M., & Mcardle, P. (2008). *J. Coord. Chem.* **61**, 1545.
- Mas-Marza, E., Poyatos, M., Sanau, M., & Peris, E. (2004). *Inorg. Chem.* **43**, 2213.
- Mayoral, M. J., Cano, M., Campo, J. A., Heras, J. V., Pinilla, E., & Torres, M. R. (2004). *Inorg. Chem. Commun.* **7**, 974.
- Meinhard, D., Wegner, M., Kipiani, G., Hearley, A., Reuter, P., Fischer, S., Marti, O., & Rieger, B. (2007). *J. Amer. Chem. Soc.* **129**, 9182.
- Metta-Magana, A. J., Reyes-Martinez, R., & Tlahuext, H. (2007). *Carbohydrate Research* **342**, 243.

- Mikata, Y., Fujimoto, T., Sugai, Y., & Yano, S. (2007). *Eur. J. Inorg. Chem.* 1143.
- Mizobe, Y., Miyata, M., Hisaki, I., & Tohnai, N. (2007). *Chem. Let.* **36**, 280.
- Montiel-Palma, V., Huitron-Rattinger, E., Cortes-Llamas, S., Munoz-Hernandez, M.-A., Garcia-Montalvo, V., Lopez-Honorato, E., & Silvestru, C. (2004). *Eur. J. Inorg. Chem.*, 3743.
- Morita, T., Asada, Y., Okuda, T., & Nakashima, S. (2006). *Bull. Chem. Soc. Jpn.* **79**, 738.
- Morozova, N. B., Stabnikov, P. A., Baidina, I. A., Semyannikov, P. P., Trubin, S. V., & Igumenov, I. K. (2007). *Zh. Strukt. Khim. (Russ.)* **48**, 947.
- Muller, T., Seichter, W., & Weber, E. (2006). *New J. Chem.* **30**, 751.
- Muthusamy, S., Krishnamurthi, J. & Nethaji, M. (2005). *Chem. Comm.* 3862.
- Ng, M. T., Deivaraj, T. C., Klooster, W. T., McIntyre, G. J., & Vittal, J. J. (2004). *Chem. - Eur. J.* **10**, 5853.
- Ogura, K., Ooshima, K., Akazome, M., & Matsumoto, S. (2006). *Tetrahedron* **62**, 2484.
- Oliva, A. I., Simon, L., Muniz, F. M., Sanz, F., Ruiz-Valero, C. & Moran, J. R. (2004). *J. Org. Chem.* **69**, 6883.
- Onozaki, K., & Miyamura, K. (2006). *Bull. Chem. Soc. Jpn.* **79**, 876.
- Oyaizu, K., Ohtani, Y., Shiozawa, A., Sugawara, K., Saito, T., & Yuasa, M. (2005). *Inorg. Chem.* **44**, 6915.
- Pellicani, R. Z., Intini, F. P., Maresca, L., Mesto, E., Pacifico, C., & Natile, G. (2006). *Eur. J. Inorg. Chem.* 1635.
- Plante, J. B. & Glass, T. E. (2006). *Organic Letters* **8**, 2163.
- RoyChowdhury, S., Komiyama, T., Yukawa, Y., & Bhattacharyya, R. (2004). *Inorg. Chem. Commun.* **7**, 1117.
- Sakakura, A., Kondo, R., Umemura, S., & Ishihara, K. (2007). *Adv. Synth. Catal.* **349**, 1641.
- Sarkar, B., Bocelli, G., Cantoni, A., & Ghosh, A. (2008). *Polyhedron* **27**, 693.

- Shawali, A. S., Mosselhi, M. A. N., Abdallah, M. A. & Elewa, M. S. (2008). *J. Chem. Res.*, **67**.
- Shen, Y.-M., Duan, W.-L., & Shi, M. (2004). *Eur. J. Org. Chem.* 3080.
- Shi, J.-M., Sun, Y.-M., Liu, Z., & Liu, L.-D. (2006). *Chem. Phys. Lett.* **418**, 84.
- Shi, J., Xu, J.-N., Song, T.-Y., He, X., Ye, J.-W., Wang, L., Fan, Y., & Zhang, P. (2007). *J. Coord. Chem.* **60**, 295.
- Shi, X., Zhu, G., Wang, X., Li, G., Fang, Q., Wu, G., Tian, G., Xue, M., Zhao, X., Wang, R. & Qiu, S. (2005). *Crystal Growth Des.* **5**, 207.
- Shiga, T., Okawa, H., Kitagawa, S., & Ohba, M. (2006). *J. Am. Chem. Soc.* **128**, 16426.
- Shimasaki, T., Kato, S., Ideta, K., Goto, K., & Shinmyozu, T. (2007). *J. Org. Chem.* **72**, 1073.
- Song, L.-C., Cheng, H.-W., & Hu, Q.-M. (2004). *J. Organomet. Chem.* **689**, 1849.
- Song, L.-C., Gao, J., Wang, H.-T., Hua, Y.-J., Fan, H.-T., Zhang, X.-G., & Hu, Q.-M. (2006). *Organometallics* **25**, 5724.
- Suen, M.-C., Wang, Y.-H., Hsu, Y.-F., Yeh, C.-W., Chen, J.-D., & Wang, J.-C. (2005). *Polyhedron* **24**, 2913
- Svec, P., Padelkova, Z., Cerbosek, Z., De Proft, F. & Ruziki, A. (2008). *J. Organomet. Chem.* **693**, 2937.
- Tao, R.-J., Mei, C.-Z., Liu, B.-T. & Niu, J.-Y. (2006). *Chin. J. Chem.* **24**, 1559.
- Tatsuta, K., Kasai, S., Amano, Y., Yamaguchi, T., Seki, M., & Hosokawa, S. (2007). *Chem. Lett.* **36**, 10.
- Tian, C.-H., Sun, Z.-G., Li, J., Zheng, X.-F., Liang, H.-D., Zhang, L.-C., You, W.-S., & Zhu, Z.-M. (2007a). *Inorg. Chem. Commun.* **10**, 757.
- Tian, L., Yu, L.-C., Chen, L., & Xia, W.-Q. (2007b). *J. Coord. Chem.* **60**, 1847.
- Ullstrom, A.-S., Warminska, D. & Persson, I. (2005). *J. Coord. Chem.* **58**, 611
- Uncuta, C., Bartha, E., Tanase, C. I., Tanase, A. E., Costan, O., Ciuca, M., Vanthuyne, N., & Roussel, C. (2006). *ARKIVOC* **7**, 42-10.

Voskressensky, L. G., Borisova, T. N., Kostenev, I. S., Vorobiev, I. V., & Varlamov, A. V. (2005). *Tetrahedron Letters* **46**, 1975.

Wang, M.-A., Tu, G.-Z., Ma, Z.-C., Zhang, N., & Wang, D.-Q. (2006). *Chin. J. Chem.* **24**, 205.

Wang, X.-L., Chen, B.-K., Lin, H.-Y., Bi, Y.-F. & Liu, G.-C. (2008). *J. Chem. Cryst.* **38**, 339.

Wang, Y., Huang, S., & Xia, P. (2005). *Synth. Commun.* **35**, 3141.

Xing, Y. H., Han, J., Zhou, G. H., Sun, Z., Zhang, X. J., Zhang, B. L., Zhang, Y. H., Yuan, H. Q. & Ge, M. F. (2008) *J. Coord. Chem.* **61**, 715.

Yamada, H., Okajima, K., Imagawa, H., Mukae, T., Kawamura, Y., & Nishizawa, M. (2007). *Bull. Chem. Soc. Jpn*, **80**, 583.

Yan, J., Guo, Y., Li, H., Sun, X. & Wang, Z. (2008). *J. Mol. Struct.* **891**, 298.

Yang, L., Su, Y., Xu, Y., Zhang, S., Wu, J. & Zhao, K. (2004). *J. Inorg. Biochem.* **98**, 1251.

Yeh, C.-W., Yen, Y.-S., Lin, W.-B., Su, C.-W., Chen, J.-D. & Wang, J.-C. (2005). *Struct. Chem.* **16**, 141.

Yoshikawa, N., Yamabe, S., Kanehisa, N., Kai, Y., Takashima, H., & Tsukahara, K. (2007). *Eur. J. Inorg. Chem.* 1911.

Yu, G.-A., Ren, Y., Guan, J.-T., Lin, Y., & Liu, S. H. (2007). *J. Organomet. Chem.* **692**, 3914.

Yu, J.-H., Wei, Y.-G., Ding, C.-J., Du, H.-G., Yan, S.-G., & Guo, H.-Y. (2006). *Chin. J. Chem.* **24**, 695.

Zhang, A., Ferguson, J. S., Yamato, K., Zheng, C. & Gong, B. (2006). *Organic Letters.* **8**, 5117.

Zharkova, G. I., Baidina, I. A., Stabnikov, P. A. & Igumenov, I. K. (2006). *Zh. Strukt. Khim. (Russ.)* **47**, 731.

Zheng, L., Yang, F., Dang, Q. & Bai, X. (2008). *Org. Let.* **10**, 889.

Zheng, Z., Elmkadden, M. K., Fischmeister, C., Roisnel, T., Thomas, C. M., Carpentier, J.-F., & Renuad, J.-L. (2008). *New J. Chem.*, 2150.

Zherikova, K. V., Morozova, N. B., Peresyphina, E. V., Baidina, I. A., & Igumenov, I. K. (2006). *Zh. Strukt, Khim. (Russ.)* **47**, 581.

Zhu, H.-F., Fan, J., Okamura, T., Sun, W.-Y. & Ueyama, N. (2005). *Cryst. Growth Des.* **5**, 289.

Zhu, N., Lightsey, D., Foroozesh, M., Alworth, W., Chaudhary, A., Willett, K. L. & Stevens, C. L. K. (2006). *J. Chem. Cryst.* **36**, 289.

Zhu, Q., Chu, W., Huang, R., Zhang, J., & Xu, Y. (2008). *J. Coord. Chem.* **61**, 3390.

Zinn, P. J., Sorrell, T. N., Powell, D. R., Day, V. W. & Borovik, A. S. (2007). *Inorg. Chem.* **46**, 10120.