

Information Derived from the CSD Collection[1]

This supplement contains literature references for all 245 crystal structures surveyed for this report whether the species stated to be present is correct or not. The nature of the errors in the claimed moieties are of a variety of types, all of which were detailed in our previous publication [2]. **If CSD gave additional annotations of importance, they are quoted herein. Entries whose hydrogens were not reported have been omitted from this survey.**

[1] CSD = Cambridge Crystallographic Structural Database CCSD, Cambridge Crystallographic Data Centre, 12 Union Road, Cambridge CB2 1EZ, UK, Version 1.15 and subsequent updates till January 15th, 2014.

[2] Bernal, I. & Watkins, S.F. (2013). *Acta Cryst.*, **C39**, 808-810.

Hydroxonium Cations in Order of Size

**1. (H₃O⁺) Note: Mixed: 3+ 5 = APANIP, CERPUL, VIKDOI. 3+ 9 = IVAYIN
Total = 58**

AFOPEQ

L.-Q. Tang, M. S. Dadachov, X.-D. Zou,
Z. Kristallogr.-New Cryst. Struct. (2001), **216**, 385.

APOGIW

L. B. Serezhkina, E. V. Peresypkina, A. V. Virovets, N. A. Neklyudova,
Zh. Neorg. Khim. (Russ.)(Russ. J. Inorg. Chem.) (2010), **55**, 1088.

AWORIO

S. Yousuf, A. S. Johnson, S. A. Kazmi, M. Hemamalini, H.-K. Fun,
Acta Crystallogr., Sect. E: Struct. Rep. Online (2011), **67**, m1105.

AZAHUE

J. C. Barnes. Private communication to CSD. Hydroxonium tris(1,8-cineol) tetrachloro-ferrate(iii)

BEXFEQ

Weiqing Zhong, J. A. Parkinson, S. Parsons, I. D. H. Oswald, R. A. Coxall, P. J. Sadler, Inorg. Chem., **43** (2004) 3561. **Our Notes: It really is (H₁₁O₅⁺). Linear, listed correctly below.**

BOBZAT

J.-P. Behr, P. Dumas, D. Moras, J. Am. Chem. Soc., **104** (1982) 4540.

BOQYAI

Kui-Rong Ma, Jia-Ning Xu, De-Kuan Ning, Jing Shi, Dao-Jun Zhang, Yong Fan, Tian-Yong Song, Inorg. Chem. Commun., **12** (2009) 119.

BOTHEY01

Y. V. Nelyubina, P. Y. Barzilovich, M. Y. Antipin, S. M. Aldoshin, K. A. Lyssenko, Chem. Phys. Chem (2011), **12**, 2895.

BOVJIG

Kong Mun Lo, Seik Weng Ng,
Acta Crystallogr., Sect.E: Struct. Rep. Online (2009), **65**, m720.

DISORDER: The halogen atoms are mixed bromine:chlorine with a total Br:Cl ratio set at 0.75:0.25. The three independent bromine atoms have been modelled with occupancies 0.6434(11), 0.7468(11) and 0.8598(11). The sum formula is C108 H96 Br4.50 Cd2 Cl1.50 O8 P6.

CIKLUE

S. V. Krivovichev, V. V. Gurzhii, I. G. Tananaev, B. F. Myasoedov, Dokl.Akad.Nauk SSSR(Russ.) (Proc. Nat. Acad. Sci. USSR), **409** (2006) 625.

DAPVAT

E. Stephen, A. J. Blake, E. Carter, D. Collison, E. S. Davies, R. Edge, W. Lewis, D. M. Murphy, C. Wilson, R. O. Gould, A. J. Holder, J. McMaster, M. Schroder, Inorg. Chem. (2012), **51**, 1450.

DAYBEL

M. R. Silva, A. M. Beja, J. A. Paixao, J. Martin-Gil,
Acta Crystallogr., Sect.C: Cryst. Struct. Commun. (2005), **61**, m507.

DAYJUJ

L. Tessler, I. Goldberg,
Acta Crystallogr., Sect.C: Cryst. Struct. Commun. (2005), **61**, o738.

DEKCAX

I. Goldberg.
J. Inclusion Phenom. Mol. Recog. Chem. (1984), **1**, 349.
CCDC Notes: H32 has been deleted because of suspected error. Three hydrogen atoms were found for one of the water molecules; it was suggested that this is due to oxonium ion formation via proton transfer from the imide nitrogen.

DEVMUM

D. R. Bond, T. A. Modro, M. L. Niven, L. R. Nassimbeni,
S. Afr. J. Chem. (1985), **38**, 78.
CCDC Notes: H46 has been deleted because of suspected error. Y for C43 should be -0.1328.

DEWLOG01

S. J. Borwick, D. J. Watkin, Private Communication to CSD.

DULYEP

A. Dudko, V. Bon, A. Kozachkova, N. Tsaryk, V. Pekhnyo,
Acta Crystallogr., Sect.E: Struct. Rep. Online (2010), **66**, m170.

DUMKIF

M. R. Edwards, H. D. Holden, A. J. Kirby, P. R. Raithby, Acta Crystallogr., Sect.C: Cryst. Struct. Commun., **42** (1986) 1225.

Disorder: The oxygen atoms of the sulfonate ion are disordered over two sets of sites; those of minor occupancy are not retained.

DUPJUT01

C. B. Shoemaker, L. V. McAfee, D. P. Shoemaker, C. W. DeKock,
Acta Crystallogr., Sect.C: Cryst. Struct. Commun. (1986), **42**, 1310.

ECOZUS

E. S. Stoyanov, Kee-Chan Kim, C. A. Reed,
J. Am. Chem. Soc. (2006), **128**, 1948.

EGOHOT

Yi-Ming Xie, Qi-Sheng Zhang, Zhen-Guo Zhao, Xiao-Yuan Wu, Shan-Ci Chen, Can-Zhong Lu,
Inorg. Chem. (2008), **47**, 8086.

ESUDAX02

A. Katrusiak, M. Szafranski, Chem. Phys. Lett., **340** (2001) 302.

ETHDPH05

I. V. Ananyev, P. Yu. Barzilovich, K. A. Lyssenko,
Mendeleev Commun. (2012), **22**, 242.

FITTOS

A. Hammerschmidt, I. Beckmann, M. Lage, B. Krebs,
Z. Anorg. Allg. Chem. (2005), **631**, 393.

GEPGUE

De-Wu Sun, Qi Zhang, Hong-Ju Zhai, Acta Crystallogr., Sect.E: Struct. Rep. Online, **62** (2006) m2770.

GIQXEJ

G. R. Willey, T. J. Woodman, U. Somasundaram, D. R. Aris, W. Errington, J. Chem. Soc., Dalton Trans. (1998) 2573.

GOCJIR

P. Comba, W. Goll, B. Nuber, K. Varnagy, Eur. J. Inorg. Chem. (1998) 2041.

HACWIR

F. Nepveu, M. Berkaoui, L. Walz,
Acta Crystallogr., Sect.C: Cryst. Struct. Commun. (1993), **49**, 1465.

HAGSUE

Wenjun Dong, Guanghua Li, Zhan Shi, Wensheng Fu, Dong Zhang, Xiaobo Chen,
Zhimin Dai, Lei Wang, Shouhua Feng,
Inorg. Chem. Commun. (2003), **6**, 776.

HAJZAV

Xiang-Jiang Wu, Xiao-Ming Shen, Peng Zhang, Qian Deng, Shu-Zi Lu, Tie-Jun Cai,
Z. Kristallogr.-New Cryst. Struct. (2011), **226**, 387.

HAYZEN

Zhao-Peng Deng, Shan Gao, Li-Hua Huo, Hui Zhao, Acta Crystallogr., Sect. E: Struct.
Rep. Online. **61**, (2005) o4175.

HOEDSO01

P. Sartori, R. Juschke, R. Boese, D. Blaser,
Z. Naturforsch.,B: Chem. Sci. (1994), **49**, 1467.

CCDC Notes: The space group is P2₁/c, not P2₁/n.

HUQDEC

C. Pettinari, F. Marchetti, A. Cingolani, A. Drozdov, S. Troyanov, I. Timokhin, V.
Vertlib, Inorg. Chem. Commun. (2003), **6**, 48.

Crystal Notes: isotopic with the Eu analogue.

IQAJIU

Zhenhua Zhang, Yunyin Niu, S.W.Ng, Benlai Wu, Hongwei Hou, J. Coord. Chem., **64**
(2011) 1683.

IVAYIN

D. J. Stasko, K. J. Perzynski, M. A. Wasil, Chem. Commun., (2004) 708.

IZAFEV

Lei Zheng, Xinmin Qiu, Zhibin Zhang, Dunru Zhu, Yan Xu,
Inorg. Chem. Commun. (2011), **14**, 906.

IZIQIR

A. Tuel, V. Gramlich, Ch. Baerlocher, J. Solid State Chem., **177** (2004) 2484.

JAGLOS

J. van Eerden, M. Skowronska-Ptasinska, P. D. J. Grootenhuis, S. Harkema, D. N.
Reinhoudt, J. Am. Chem. Soc. (1989), **111**, 700.

JEDUUI

P. Teulon, J. Roziere, Z. Anorg. Allg. Chem., **483** (1981) 219.

JEDYAT

E. Matczak-Jon, K. Slepokura, P. Kafarski, J. Mol. Struct., **782** (2006) 81.

JEHPAN

T. Taga, T. Kobayashi, Acta Crystallogr., Sect.C: Cryst. Struct. Commun., **46** (1990) 1343.

JEJLOY

N. V. Novozhilova, N. S. Magomedova, A. N. Sobolev, V. K. Bel'skii, Zh. Strukt. Khim. (Russ.) (J. Struct. Chem.) (1989), **30**, 174.

JOTQOY03

M. Calleja, S. A. Mason, P. D. Prince, J. W. Steed, C. Wilkinson, New J. Chem., **25** (2001) 1475.

KAPKOC

Deyuan Kong, J. L. McBee, A. Clearfield, Cryst. Growth Des., **5** (2005) 643.

KARTII

Deng Zhang, Lei Zheng, Xinmin Qiu, Yan Xu, Jie Fu, Dunru Zhu, RSC Advances (2012), **2**, 217.

MAFZUQ

Yun Ling, Tengbiao Liao, Zhenxia Chen, Yaming Zhou, Linhong Weng, Dalton Trans., (2010) 10712.

MUKNOV

W. Schmitt, C. E. Anson, R. Sessoli, M. van Veen, A. K. Powell, J. Inorg. Biochem., **91** (2002) 173. **The hydroxone formulation is incorrect.**

MUYHEU

D. Sisak, L. B. McCusker, A. Buckl, G. Wuitschik, Yi-Lin Wu, W. B. Schweizer, J. D. Dunitz, Chem.-Eur J., **16** (2010) 7224.

NAYKEE

M. Zabel, A. L. Poznyak, V. I. Pavlovskii, Zh. Strukt. Khim. (Russ.) (J. Struct. Chem.), **46** (2005) 569.

NEYBOI

V. G. Young Junior, A. G. Sykes, Inorg. Chem., **37** (1998) 376.

NITRAN01

E. K. Andersen, I. G. K. Andersen, Acta Crystallogr., Sect.B: Struct.Crystallogr. Cryst. Chem., **31** (1975) 379.

NUWMUN

K. W. Oliver, S. J. Rettig, R. C. Thompson, J. Trotter, Shihua Xia, J. Fluorine Chem. (1997), **83**, 47.

OXACDH38

N. Casati, P. Macchi, A. Sironi, Chem. Commun., (2009) 2679.

PAHHAJ

N. R. Khasiyatullina, V. F. Mironov, A. V. Bogdanov, D. B. Krivolapov, I. A. Litvinov, Mendeleev Commun. (2011), **21**, 346.

PUGGOO

Zhi-Biao Zhu, Shan Gao, S. W. Ng, Acta Crystallogr., Sect. E: Struct. Rep.Online, **65** (2009) o2687.

PUSXIL01

Teng-Biao Liao, Yun Ling, Zhen-Xia Chen, Ya-Ming Zhou, Lin-Hong Weng, Chem.Commun., **46** (2010) 1100.

QEDBUW

M. A. Sridhar, M. Ramegowda, N. K. Lokanath, J. S. Prasad, G. B. E. Gowda, K. N. Thimmai, Mol. Cryst. Liq. Cryst. Sci. Technol., Sect.A, **326** (1999) 189.

QEGLAP

K. Gorlitzer, G. Badia, P. G. Jones, A. K. Fischer, Pharmazie (2000), **55**, 17.

QEQNOP

V. F. Mironov, A. T. Gubaiddullin, L. M. Burnaeva, I. A. Litvinov, S. V. Romanov, I. V. Konovalova, N. M. Azancheev, A. N. Pudovik, Zh. Obshch. Khim. (Russ.)(Russ. J. Gen.Chem.) (2000), **70**, 1284.

QONNAJ

P. Barczynski, A. Katrusiak, J. Koput, Z. Dega-Szafran, M. Szafran, J. Mol. Struct., **918** (2009) 918.

QOZHUJ

Kuirong Ma, Jianing Xu, Lirong Zhang, Jing Shi, Daojun Zhang, Yulan Zhu, Yong Fan, Tianyong Song, New J. Chem., **33** (2009) 886.

QOZJAR

Kuirong Ma, Jianing Xu, Lirong Zhang, Jing Shi, Daojun Zhang, Yulan Zhu, Yong Fan, Tianyong Song, New J. Chem., **33** (2009) 886.

RAHNEV

D. V. Pushkin, E. V. Peresypkina, L. B. Serezhkina, A. V. Marukhnov, A. V. Virovets, Kristallografiya(Russ.)(Crystallogr. Rep.) (2011), **56**, 486.

RASYOZ

Seik Weng Ng, Acta Crystallogr., Sect. C: Cryst. Struct. Commun., **53** (1997) 633.

RIDLUM

Z. S. Kozhomuratova, Yu. V. Mironov, M. A. Shestopalov, I. V. Drebushchak, N. K. Moroz, D. Yu. Naumov, A. I. Smolentsev, E. M. Uskov, V. E. Fedorov, Eur. J. Inorg. Chem. (2007) 2055.

SOPNIU01

A. I. Gubin, G. D. Khakimzhanova, N. N. Nurakhmetov, R. S. Erkasov, M. Zh. Buranbaev,

Kristallografiya(Russ.)(Crystallogr. Rep.) (1990), **35**, 1568.

CCDC Notes: **z(C2) is 0.0399 not 0.0299.**

SSALAD03

Z. G. Aliev, L. O. Atovmyan, T. A. Baranova, A. E. Ukshe, Zh. Strukt. Khim. (Russ.) (J. Struct. Chem.), **36** (1995) 947.

TAKGUJ

Jing-Hua Wang, Peng-Fei Yan, Guang-Ming Li, Ju-Wen Zhang, Peng Chen, M. Suda, Y. Einaga,

Inorg. Chim. Acta (2010), **363**, 3706.

TANKUQ

Lei Zhang, Xinmin Qiu, Yan Xu, Jie Fu, Yan Yuan, Dunru Zhu, Su Chen, Cryst. Eng. Comm (2011), **13**, 2714.

TAYPUE

O. Reich, S. Hasche, K. Buscher, I. Beckmann, B. Krebs,

Z. Anorg. Allg. Chem. (1996), **622**, 1011.

TFMSUL02

J.-O. Lundgren, R. Tellgren, I. Olovsson. Acta Crystallogr., Sect.B: Struct. Crystallogr. Cryst. Chem., **34** (1978) 2945.

TFSLAC

R. G. Delaplane, J.-O. Lundgren, I. Olovsson, Acta

Crystallogr.,Sect.B:Struct.Crystallogr.Cryst.Chem., **31** (1975)

TOLSAM01

D. D. Dexter, Z. Kristallogr., Kristallgeom., Kristallphys., Kristallchem., **134** (1971) 350.

TOLSAM12

J.-O. Lundgren, J. M. Williams, J. Chem. Phys., **58** (1973) 788. **Neutron radiation**

TPPOBR01

G. Reck, Private Communication to CSD (2006).

UKESOT

Xing Feng, Zhong-Fei Li, Sai-Feng Xue, Zhu Tao, Qian-Jiang Zhu, Yun-Qian Zhang, Jing-Xin Liu,
Inorg. Chem. (2010), **49**, 7638.

VARKOO

R. Chenevert, D. Chamberland, M. Simard, F. Brisse,
Can. J. Chem. (1989), **67**, 32.

VAZVIB

G. Lang, K. W. Klinkhammer, T. Schlecht, A. Schmidt, Z. Anorg. Allg. Chem., **624** (1998) 2007.

VIKHON

M. I. Saleh, E. Kusrini, Hoong-Kun Fun, J. Bee-Jan The,
Acta Crystallogr., Sect.E: Struct. Rep. Online (2007), **63**, o3790.

WIHGID

T. S. Dolgushina, V. V. Sokolov, V. K. Bel'skii, V. A. Galishev, A. A. Petrov, Zh. Obshch. Khim. (Russ.) (Russ. J. Gen. Chem.) **63** (1993) 810.

XANZUJ

R. M. Denton, Jie An, B. Adeniran, A. J. Blake, W. Lewis, A. M. Poulton, J. Org. Chem. (2011), **76**, 6749.

XIRSOH01

M. S. Fonari, N. G. Furmanova, Wen-Jwu Wang, E. V. Ganin, I. A. Verin, Yu. A. Simonov, V. O. Gel'mbol'dt, Kristallografiya(Russ.) (Crystallogr. Rep.), **51** (2006) 856.

XIRSUN

M. S. Fonari, N. G. Furmanova, Wen-Jwu Wang, E. V. Ganin, I. A. Verin, Yu. A. Simonov, V. O. Gel'mbol'dt,
Kristallografiya(Russ.)(Crystallogr. Rep.) (2006), **51**, 856.

Crystal Notes: isostructural with Ta analogue.

YEPVIY

P. Sartori, R. Juschke, R. Boese, D. Blaser, Z. Naturforsch., B: Chem. Sci., **43** (1994) 1467.

YELPAG

R. Frohlich, R. K. Arni, A. Bozopoulos, C. A. Kavounis,
Z. Kristallogr. (1994), **209**, 816.

YOZRIP

R. J. Warr, A. N. Westra, K. J. Bell, J. Chartres, R. Ellis, C. Tong, T. G. Simmance, A. Gadzhieva, A. J. Blake, P. A. Tasker, M. Schroder, Chem.-Eur.J. (2009), **15**, 4386.

2. ($H_5O_2^+$) Note: 3+ 5 = APANIP, CERPUL, VIKDOI. 5 + 7 = GIDZEZ . RAPCOI = ($H_5O_2^+$) linking water cycles.

ACAYIM

O. S. Filipenko, I. I. Chuev, L. S. Leonova, G. V. Shilov, S. M. Aldoshin, Dokl. Akad. Nauk SSSR(Russ.) (Proc.Nat.Acad.Sci.USSR) **376** (2001) 501.

APANIP

B. Lesniewska, O. Danylyuk, K. Suwinska, T. Wojciechowski, A. W. Coleman, CrystEngComm (2011), **13**, 3265.

BOVMOP

J. Attar Gharamaleki, H. Aghabozorg, Z. Derikvand, M. Yousefi, Acta Crystallogr., Sect.E: Struct. Rep. Online, **65** (2009) m824.

BOVMUV

H. Aghabozorg, Z. Derikvand, J. Attar Gharamaleki, M. Yousefi, Acta Crystallogr., Sect.E: Struct. Rep. Online, **65** (2009) m826.

CIKLOY

S. V. Krivovichev, V. V. Gurzhii, I. G. Tananaev, B. F. Myasoedov, Dokl. Akad. Nauk SSSR(Russ.) (Proc.Nat.Acad.Sci.USSR) **409** (2006) 625.

CIKYIF

S. V. Krivovichev, V. V. Gurzhii, I. G. Tananaev, B. F. Myasoedov, Dokl. Akad. Nauk SSSR(Russ.) (Proc.Nat.Acad.Sci.USSR) **409** (2006) 625.

COLNUM01

F. A. Cotton, C. K. Fair, G. E. Lewis, G. N. Mott, F. K. Ross, A. J. Schultz, J. M. Williams, J. Am. Chem. Soc., **106** (1984) 5319.

DASXAX

D. Braga, S. L. Giaffreda, M. Polito, F. Grepioni, Eur. J. Inorg. Chem. (2005) 2737.

GARGUC

H.-W. Lerner, S. Scholz, N. Wiberg, K. Polborn, M. Bolte, M. Wagner, Z. Anorg. Allg. Chem. **631** (2005) 1863. **Disorder: Fluorines of the trifluoromethanesulfonate are disordered over two sites with occupancies 0.55:0.45.**

GARHIRH-W. Lerner, S. Scholz, N. Wiberg, K. Polborn, M. Bolte, M. Wagner, Z. Anorg. Allg. Chem., **631** (2005) 1863.

GOKVUX

G. G. Aleksandrov, V. S. Sergienko, E. G. Afonin, Zh. Neorg. Khim.(Russ.)(Russ. J. Inorg. Chem.), **43** (1998) 1811.

HAHFOM

D. Braga, M. Curzi, L. Maini, M. Polito, F. Grepioni, Dalton Trans., (2004) 2432.

HUHVIP

C. George, J. R. Deschamps, A. P. Purdy,
Acta Crystallogr., Sect.E: Struct. Rep. Online, **58** (2002) o1128.

KEZHIG

A. E. Prozorovskii, A. B. Yaroslavtsev, Z. N. Prozorovskaya,
Zh. Neorg. Khim.(Russ.)(Russ. J. Inorg. Chem.) **34** (1989) 2622.

KEZHOM

A. E. Prozorovskii, A. B. Yaroslavtsev, Z. N. Prozorovskaya,
Zh. Neorg. Khim.(Russ.) (Russ.J.Inorg.Chem.) **34** (1989) 2622.

KIGJUG

M. Wenger, J. Bernstein, Mol. Pharmaceutics, **4** (2007) 355.

LAPVIH

I. Bernal, Jiwen Cai, J. Myrczek, Polyhedron **12** (1993) 1157.

LOHQOP

V. V. Bon, A. V. Dudko, A. N. Kozachkova, V. I. Pekhnyo, Acta Crystallogr., Sect.E: Struct. Rep. Online, **64** (2008) o2344.

LUYWUX

I. Takasu, T. Mochida, A. Izuoka, T. Sugawara, A. Asamitsu, Y. Moritomo, Y. Tokura, Mol. Cryst. Liq. Cryst. Technol., Sect. A, **285** (1996) 275.

MIRLAB

I. A. Charushnikova, A. M. Fedoseev, N. A. Budantseva, I. N. Polyakova, F. Muazi, Koord. Khim. (Russ.)(Coord. Chem.), **33** (2007) 63.

NANNOF

I. Bernal, Jiwen Cai, W. T. Jordan, J. Coord. Chem, **37** (1996) 283.

NASFIX

E. S. Stoyanov, S. P. Hoffmann, Kee-Chan Kim, F. S. Tham, C. A. Reed, J. Amer. Chem. Soc., **127** (2005) 7664.

NAWWUCA. S. Antsyshkina, G. G. Sadikov, V. S .Sergienko, A. L. Poznyak, Zh. Neorg. Khim.(Russ.)(Russ. J. Inorg. Chem.) **42** (1997) 1137.

NINDOD01

C.-O. Selenius, J.-O. Lundgren, Acta Crystallogr., Sect.B: Struct. Crystallogr. Cryst. Chem. **36** (1980) 3172.

NIZWAU

O. Reich, S. Hasche, S. Bonmann, B. Krebs, Z. Anorg. Allg. Chem. (1998), **624**, 411.

OZEDIH

E. Stephen, Deguang Huang, J. L.Shaw, A. J. Blake, D. Collison, E. S. Davies, R. Edge, J. A. K. Howard, E. J. L. McInnes, C. Wilson, J. Wolowska, J. McMaster, M. Schroder, Chem.-Eur.J. (2011), **17**, 10246.

QAFMUF

M. Haukka, P. Hirva, S. Luukkanen, M. Kallinen, M. Ahlgren, T. A. Pakkanen, Inorg. Chem., **38** (1999) 3182.

QUQNUL

Calleja, K. Johnson, W. J. Belcher, J. W. Steed, Inorg. Chem., **40** (2001) 4978.

RABCOI

T. Dahlems, D. Mootz, M. Schilling, Z. Naturforsch.,B: Chem. Sci., **51** (1996) 536.

Our Note: (H_5O^{2+}) linking water multi-cycle rings.

RAFZEF

E. Mateczk-Jon, B. Kurzak, W. Sawka-Dobrowolska, Polyhedron (2012), **31**, 176.

RAGWAZ

I. A. Baidina, S. N. Vorob'eva, A. I. Smolentsev, A. V. Belyaev, Zh. Strukt. Khim.(Russ.)(J. Struct. Chem.) (2011), **52**, 137.

REVCEB02

A. A. Hoser, L. Dobrzycki, M. J. Gutmann, K. Wozniak, Cryst. Growth Des., **10** (2010) 5092. **REVCEB03** is its polymorph.

REVCEB03

A. A. Hoser, L. Dobrzycki, M. J. Gutmann, K. Wozniak, Cryst. Growth Des., **10** (2010) 5092.

SAJJET

P. Holly, P. Sehnal, M. Tichy, J. Zavada, I. Cisarova, Tetrahedron Asymm., **15** (2004) 3805.

Our Note: Bifurcated hydrogen bonds. Authors described it as containing H_3O^+

SIHBIV01

G. J. Perpetuo, J. Janczak, Acta Crystallogr., Sect.C: Cryst. Struct. Commun., **64** (2008) o21. **Our Note:** SIHBIV05 id polymorph.

SIHBIV05

A. Lemmerer, S. A. Bourne, M. A. Fernandes, Cryst. Growth Des., **9** (2009) 2265.

SODFOG.

R. D. Rogers, A. H. Bond, W. G. Hipple, A. N. Rollins, R. F. Henry, Inorg. Chem., **30** (1991) 2671.

Disorder: Both nitro group of one crown ether are disordered over two orientations with O27-O30 :O27'-O30' having occupancies of 0.55:0.45.

CCDC Notes: Fw reported as 2383.4; we calculate 1674.5. Dx reported as 1.81; we calculate 1.27. Intramolecular hydrogen bonding is present in the oxonium monohydrate species.

Our Notes: It did not affect the hydronium cation. Also: Unreported bifurcated hydrogen bonds.

SOGWIV

Rui-Qin Zhong, Ru-Qiang Zou, D. S. Pandey, T. Kiyobayashi, Qiang Xu, Inorg. Chem. Commun., **11** (2008) 951.

SOGZEU

N. G. Furmanova, M. Kh. Rabadanov, T. S. Chernaya, M. S. Fonar', Yu. A. Simonov, E. V. Ganin, V. O. Gel'mbol'dt, P. Ya. Grigorash, S. A. Kotlyar, G. L. Kamalov, Kristallografiya(Russ.)(Crystallogr.Rep.), **53** (2008) 273.

Disorder: The fluorine atoms of the hexafluoroniobate(v) anion are equally disordered over two sites. **Note:** It did not affect the hydronium cation.

CCDC Notes: The proton associated with the water is equally distributed between two water molecules.

SOJZOH

E. S. Stoyanova, I. V. Stoyanova, F. S. Tham, C. A. Reed, J. Am. Chem. Soc., **130** (2008) 12128.

SUGKAG

V. S. Sergienko, A. B. Ilyukhin, A. V. Luzikova, M. A. Porai-Koshits, Koord. Khim. (Russ.)(Coord. Chem.), **17** (1991) 1489.

TFMSAD

R. G. Delaplane, J.-O. Lundgren, I. Olovsson, Acta Crystallogr., Sect.B: Struct.Crystallogr. Cryst.Chem. (1975), **31**, 2202.

TFMSAD01

R. G. Delaplane, J.-O. Lundgren, I. Olovsson, Acta Crystallogr., Sect.B: Struct. Crystallogr. Cryst. Chem., **31** (1975) 2202.

UDADUY

P. D. Smith, J. J. A. Cooney, E. J. L. McInnes, R. L. Beddoes, D. Collison, S. M. Harben, M. Helliwell, F. E. Mabbs, A. Mandel, A. K. Powell, C. D. Garner, J. Chem. Soc., Dalton Trans., (2001) 3108.

VEXMIU

T. Taga, T. Kobayashi, Acta Crystallogr., Sect.C: Cryst. Struct. Commun., **46** (1990) 2243.

VIKDOI

E. L. Varetti, M. M. Vergara, G. Rigotti, A. Navaza, J. Phys. Chem. Solids, **51** (1990) 381.

VIVQUN

K. Slepokura, Carbohydr. Res. (2008), **343**, 113.

VOMFEJ

Deguang Huang, Xiaofeng Zhang, E. J. L. McInnes, J. McMaster, A. J. Blake, E. S. Davies, J. Wolowska, C. Wilson, M. Schroder, Inorg. Chem. (2008), **47**, 9919.

VOPNAP

J. F. Hseu, J. J. Chen, C. C. Chuang, H. H. Wei, M. C. Cheng, Yu Wang, Y. D. Yao, Inorg. Chim. Acta, **184** (1991) 1.

Corrected by Marsh, see next entry.

VOPNAP02

R. E. Marsh, Acta Crystallogr., Sect.C: Cryst. Struct. Commun., **49** (1993) 643.

WASJAD01

H. Nagata, H. Nishi, M. Kamigauchi, T. Ishida, Chirality (2008), **20**, 820.

WETQOC

Junhong Mao, S. Mukherjee, Yong Zhang, Rong Cao, J. M. Sanders, Yongcheng Song, Yonghui Zhang, G. A. Meints, Yi Gui Gao, D. Mukkamala, M. P. Hudock, E. Oldfield, J. Am. Chem. Soc. (2006), **128**, 14485.

XEHMED

J. M. S. Skakle, J. L. Wardell, Acta Crystallogr., Sect.E: Struct. Rep. Online, **62** (2006) o1402.

YEKLIJ

M. Flick, M. Huber, G. Heckmann, H.-J. Deiseroth, A. Schmidt, Z. Anorg. Allg. Chem. **620** (1994) 1799.

YOXALT04

G. D. Brunton, C. K. Johnson, J. Chem. Phys., **62** (1975) 3797. Neutron Radiation

ZACMEV

ZACMEV M. Haukka, T. Venalainen, M. Ahlgren, T. A. Pakkanen, Inorg. Chem., **34** (1995) 2931.

3. (H_3O_3^+) Mixed 5 + 7 = GIDZEZ**CBZSUL01**

J. Roziere, J. M. Williams, J. Chem. Phys., **68** (1978) 2896. **Neutron radiation**

DOXLOR

B. A. Borgias, G. G. Hardin, K. N. Raymond, Inorg. Chem., **25** (1986) 1057. Contains “odd” (H_3O^+) - (OH^-) - (H_3O^+) entities.

GIDZEZ

G. B. Deacon, R. Harika, P. C. Junk, B. W. Skelton, A. H. White, New J. Chem., **31** (2007) 634.

Our Note: Incorrectly formulated in the paper.

GUKFUO

Gong-Jun Chen, Feng-Xian Gao, Fu-Ping Huang, Jin-Lei Tian, Wen Gu, Xin Liu, Shi-Ping Yan, Dai-Sheng Liao, Cryst. Growth Des., **9** (2009) 2662.

Our Note: Incorrectly formulated in the paper. Bifurcated hydrogen bonds.

HAZCAN

Zhi-Min Jin, Li Li, Li-Zhao Chen, Ling-Su Li, Mao-Lin Hu, Acta Crystallogr., Sect.E: Struct. Rep. Online, **61** (2005) o4325. **Our Note: Incorrectly formulated in the paper.**

KIGJUG

KIGJUG M. Wenger, J. Bernstein, Mol. Pharmaceutics, **4** (2007) 355. **Our Note: Incorrectly formulated in the paper. Bifurcated hydrogen bonds.**

LOLDOG

M. Byrnes, P. J. Cox, G. Kay, E. Nixon, Cryst. Eng. Commun., **11** (2009) 135.

ODEBOO

A. Herzog, C. B. Knobler, M.F.Hawthorne, J. Am. Chem. Soc. (2001), **123**, 12791.

SALSUL

D. Mootz, J. Fayos, Acta Crystallogr., Sect.B: Struct. Crystallogr. Cryst.Chem., **26** (1970) 2046. **Our Note: Incorrectly formulated in the paper.**

SINNAF

E. V. Ganin, V. O. Gelboldt, L. V. Koroeva, M. S. Fonari, Yu. A. Simonov, J. Lipkowski, S. A. Kotlyar, G. L. Kamalov, J. Inclusion Phenom. Macroyclic Chem. (2006), **56**, 345.

SLBZAC10

R. Attig, D. Mootz, Acta Crystallogr., Sect.B: Struct. Crystallogr. Cryst. Chem., **32** (1976) 435. **Our Note: Incorrectly formulated in the paper.**

SOJZOH

E. S. Stoyanov, I. V. Stoyanova, F. S. Tham, C. A. Reed, J. Amer. Chem. Soc., **130** (2008) 12128.

XUMQIF

W. Czado, U. Muller, Z. Kristallogr.-New Cryst. Struct. **217** (2002) 339.

4. (H_2O_4^+) Mixed 3 + 9 = IVAYIN**ASUHIF**

M. Rafizadeh, M. Ranjbar, V. Amani, , Acta Crystallogr. Sect. E: Struct. Rep. Online , **60** (2004) m479. **Our Note: Incorrectly formulated in the paper. Bifurcated hydrogen bonds.**

CATCAC

M. Rafizadeh, M. Ranjbar, V. Amani, Anal. Sci.: X-Ray Struct. Anal. Online, **21** (2005) x113. Incorrectly formulated in the paper.

FEGTEQ01

A. W. Hanson, Acta Crystallogr., **C43**, 296 (1987).

Disorder: Water molecule O1 is disordered over two positions of occupancy 0.9 and 0.1. Later ignored.

GETLUN

A. N. Chekhlov, Zh. Neorg. Khim. (Russ.)(Russ. J. Inorg. Chem.) **51** (2006) 621. **Our Note: Incorrectly formulated.**

JEDYAT

E. Matczak-Jon, K. Slepokura, P. Kafarski, J. Mol. Struct., **81** (2006) 782.

JODJIV

E. Cole, D. Parker, G. Ferguson, J. F. Gallagher, B. Kaitner, Chem. Commun. (1991) 1473. **Our Note: Incorrectly formulated.**

NUDCEV

E. C. Constable, Guoqi Zhang, C. E. Housecroft, M. Neuburger, S. Schaffner, Cryst. Eng. Comm., **11** (2009) 1014.

Our Note: Incorrectly formulated.

SAZNEN

M. Rafizadeh, V. Amani, Acta Crystallogr., Sect.E: Struct. Rep. Online, **62** (2006) m90.

Our Note: Incorrectly formulated.

SOJZEX

E. S. Stoyanov, I. V. Stoyanova, F. S. Tham, C. A. Reed, J. Amer. Chem. Soc., **130** (2008) 12128.

WEWTOH

E. Cole, R. C. B. Copley, J. A. K. Howard, D. Parker, G. Ferguson, J. F. Gallagher, B. Kaitner, A. Harrison, L. Royle, J. Chem. Soc., Dalton Trans., (1994), 1619. Isostructural with the Cu(ii), Ni(ii) and Zn(ii) analogues. **Our Note: Incorrectly formulated, see the next two entries. The other metal derivatives cited must also be incorrect.**

WEWTUN

E. Cole, R. C. B. Copley, J. A. K. Howard, D. Parker, G. Ferguson, J. F. Gallagher, B. Kaitner, A. Harrison, L. Royle, J. Chem. Soc., Dalton Trans., (1994), 1619. **Isostructural with the Co(ii), Cu(ii) and Zn(ii) analogues. Our Note: Incorrectly formulated.**

WEWVEZ

E. Cole, R. C. B. Copley, J. A. K. Howard, D. Parker, G. Ferguson, J. F. Gallagher, B. Kaitner, A. Harrison, L. Royle, J. Chem. Soc., Dalton Trans., (1994), 1619. **Isostructural with the Co(ii), Cu(ii) and Ni(ii) analogues. Our Note: Incorrectly formulated.**

ZATLAJ01 K. M. Anderson, A. E. Goeta, J. E. Martin, S. A. Mason, G. J. McIntyre, B. C.R. Sansam, C. Wilkinson, J. W. Steed, Cryst.Growth Des. (2011), **11**, 4904. **Our Note: Contains (H₂O-(H₂O)-(H₃O⁺)-(H₂O).**

ZATLAJ03

K. M. Anderson, A. E. Goeta, J. E. Martin, S. A. Mason, G. J. McIntyre, B. C. R. Sansam, C. Wilkinson, J. W. Steed, Cryst. Growth Des. (2011), **11**, 4904.

5. Others of Higher Composition.

BEXFEQ

Weiying Zhong, J. A. Parkinson, S. Parsons, I. D. H. Oswald, R. A. Coxall, P. J. Sadler, Inorg. Chem., **43** (2004) 3561.

Our Notes: Incorrectly formulated

BIKVIA10

I. Goldberg, J. inclusion Phenom. Macroyclic Chem., **1** (1984) 349.

CCDC Notes: Only one hydrogen atom was located for one of the water molecules. Three hydrogens were found for another water molecule; it was suggested that this is due to oxonium ion formation via proton transfer from the imide nitrogen. Our comments: The oxygens were not reported at a common asymmetric unit thus, their relationship is not obvious from the cif coordinates. Also, the position of the hydrogens with respect to the oxygens of water and/or (H₃O⁺) are incorrect in their geometry. The same is true of UCANOB, below.

CERPUL

Bo Liu, Chuan-Bi Li, Zhou Shi, Yan-Wei Li, Acta Crystallogr., Sect.E: Struct. Rep. Online (2006), **62**, m2656.

CUNZIV

Yabing Liu, Wuping Liao, Yanfeng Bi, Xiaofei Wang, Hongjie Zhang, Cryst. Growth Des., **9** (2009) 5311.

DIJZEB10

A. Merschenz-Quack, D. Mootz, Acta Crystallogr., Sect.C: Cryst. Struct. Commun., **46** (1990) 1478.

Disorder: The cations are disordered over two sites with occupancies of 0.8:0.2. The 20% contribution was eliminated in order to see the main component.

DOTSUB

H. Kobayashi, K. Ikarashi, K. Uematsu, K. Toda, H. Okawa, Z. Taoyun, M. Sato. Inorg. Chim. Acta (2009), **362**, 238.

DUWXAV

Jin-Xin Liu, Ying-Feng Hu, Rui-Lian Lin, Wen-Qi Sun, Xin-Hua Liu, Wen-Rui Yao, J. Coord. Chem., **63** (2010) 1369.

FAGZOE

Shuo-ping Chen, Yu-qin Zhang, Le Hu, Hong-zhen He, Liang-jie Yuan, Cryst. Eng. Comm (2010), **12**, 3327.

GAPKUE

E. Eskelinen, P. Da Costa, M. Haukka, J. Electroanal. Chem. (2005), **579**, 257

HIXROV

E. Stadler, C. C. Stadler, C. R. de M. Peixoto, I. Vencato, Acta Crystallogr., Sect.C: Cryst. Struct. Commun. (1999), **55**, 9900051.

HUNQUC01

H. Akutsu, A. Akutsu-Sato, S. S. Turner, D. Le Pevelen, P. Day, V. Laukhin, A.-K. Klehe, J. Singleton, D. A. Tocher, M. R. Probert, J. A. K. Howard, J. Am. Chem. Soc. (2002), **124**, 12430.

IHEJOU

Jong-Ha Choi, T. Suzuki, S. Kaizaki, Acta Crystallogr., Sect.C: Cryst. Struct. Commun., **58** (2002) m539.

INIXOT

Yang Yang, Jian Wu, Yu Wang, Jiang Zhu, Ruibin Liu, Changgong Meng, Z. Anorg. Allg. Chem. (2011), **637**, 137.

IWEXEO

Zhen-Shan Peng, Chuan-Lei Zhang, Xiao-Ming Shen, Qian Deng, Tie-Jun Cai, J. Coord. Chem. (2011), **64**, 2848.

IYEPEH

M. Makha, C. L. Raston, A. N. Sobolev, A. H. White, Chem. Commun. (2004) 1066.

Disorder: One sulfonate is disordered over two sites with 0.75:0.25 occupancies and there is disorder of the water molecules. Seems not to affect the plotted cation, but formula given is wrong. Our Note: Cyclic species.

IZAMIG

P.A.Abramov, S.A.Aldoshin, E.V.Peresypkina, M.N.Sokolov, V.P.Fedin, Zh.Strukt.Khim.(Russ.)(J.Struct.Chem.), **51** (2010) 759. **CCDC Notes: The Ca atom is shown with 4 bonded water molecules in the paper but described at various points as having 5 bonded waters (and elsewhere with 4). As the closest non-bonded water molecule forms part of one of the cations, we have input the structure with 4 bonded waters. Our comments: No effect on the structure of the hydronium cation whose composition is given incorrectly. See above.**

IZAMUS

P. A. Abramov, S. A. Aldoshin, E. V. Peresypkina, M. N. Sokolov, V. P. Fedin, Zh. Strukt. Khim.(Russ.)(J. Struct. Chem.) (2010), **51**, 759.

Disorder: Dichloromethane molecules are disordered by symmetry. One anion halogen site has mixed occupancy Cl:Br in the ratio 0.75:0.25. The correct formula is C₃₇H₇₃Br_{0.25}Cl_{8.75}Mo₃N₂₄O₂₈S₄.

JAGLUY

J. van Eerden, M. Skowronska-Ptasinska, P. D. J. Grootenhuis, S. Harkema, D. N. Reinhoudt, J. Am. Chem. Soc. (1989), **111**, 700.

KEDGUV

S. Drueke, K. Wieghardt, B. Nuber, J. Weiss, H.-P. Fleischhauer, S. Gehring, W. Haase, J. Am. Chem. Soc. (1989), **111**, 8622.

LUXCIR

E. S. Stoyanov, I. V. Stoyanova, F. S. Tham, C. A. Reed, J. Am. Chem. Soc., **131** (2009) 17540.

MELZIM

K. Yamanari, I. Fukuda, S. Yamamoto, Y. Kushi, A. Fuyuhiro, N. Kubota, T. Fukuo, R. Arakawa, J. Chem. Soc., Dalton Trans. (2000) 2131.

NEBDII

L. Isaacs, Sang-Kyu Park, Simin Liu, Young Ho Ko, Narayanan Selvapalam, Youngkook Kim, Hyunuk Kim, P. Y. Zavalij, Ghyung-Hwa Kim, Heung-Soo Lee, Kimoon Kim, J. Am. Chem. Soc., **127** (2005) 18000. **Our Notes: Incorrectly formulated.**

OBATAM

F. Somoza, Jiwen Cai, I. Bernal, J. Coord. Chem. (1998), **43**, 187.

Note: This structure is currently under re-investigation, on the suspicion that the original may be a twin or have super-lattice problem that could not be addressed in 1997. Ivan Bernal.

PASYOY

Yong Fan, Guanghua Li, Wenping Jian, Miao Yu, Li Wang, Zhenfen Tian, Tianyou Song, Shouhua Feng, J. Solid State Chem. (2005), **178**, 2267.

PAZHOP

Fang Guo, Lei Li, Yi-Ning Zhang, Jian Tong, Chun-Liang Song, Fang Xia, Wen-Sheng Guo, Supramol. Chem. (2012), **24**, 415.

PICSUL

J.-O. Lundgren, Acta Crystallogr., Sect.B: Struct. Crystallogr. Cryst. Chem. (1972), **28**, 1684.

PIWBOM

F. A. Chavez, M. M. Olmstead, P. K. Mascharak, Inorg. Chem. (1997), **36**, 6323.

Disorder: Fluorines F2-F6 of the anion are disordered over two sites with occupancies 0.54:0.46. Anion F9-F12 are disordered over three sites with occupancies 0.37:0.314:0.311. Hydrogens of the hydroxonium ion are disordered over four sites with occupancies 0.81:0.75:0.73:0.71.

ROFRIO02

Shuo-ping Chen, Yu-qin Zhang, Le Hu, Hong-zhen He, Liang-jie Yuan, Cryst. Eng. Comm (2010), **12**, 3327.

ROLKEI

Wansheng You, Zaiming Zhu, Enbo Wang, Lin Xu, Changwen Hu, J. Chem. Cryst. (2000), **30**, 577.

RUCZUL

C. Marchal, Y. Filinchuk, Xiao-Yan Chen, D. Imbert, M. Mazzanti, Chem.-Eur. J. (2009), **15**, 5273.

Experimental Notes: Synchrotron Radiation.

RUVMEB

Xuemin Jing, He Meng, Guanghua Li, Yang Yu, Qisheng Huo, M.Eddaoudi, Yunling Liu, Cryst. Growth Des. (2010), **10**, 3489.

SAJBIP

Tzuoo-Tsair Luo, Yen-Hsiang Liu, Hui-Lien Tsai, Chan-Cheng Su, Chuen-HerUeng, Kuang-Lieh Lu, Eur. J. Inorg. Chem. (2004) 4253.

TIZVEE01

M. Pojarova, K. Fejfarova, E. Makrlik, Acta Crystallogr., Sect.E: Struct. Rep. Online (2010), **66**, o3341.

UCANOB

I. Bernal, U. Mukhopadhyay, A. V. Virovets, D. G. Samsonenko, D. N. Dybtsev, V. P. Fedin, W. Clegg, Chem. Commun., (2005) 3791.

Our Notes: This paper pointed out that the original report did not place the relevant oxygens in one asymmetric unit, with the consequence that their relationship was obscured. The Original : A.V.Virovets, D.G.Samsonenko, D.N.Dybtsev, V.P.Fedin, W.Clegg, Zh. Strukt. Khim. (Russ.)(J.Struct.Chem.), 42 (2001) 384, This examination shows there are problems even with the reported location of the hydrogens and the report is thus invalid. However, see the next entry that shows what this very unusual cation exists as described by UCANOB, and what this cations really like when the hydrogens are correctly found.

WIZPAX

W. T.A. Harrison, Acta Crystallogr., Sect.E: Struct. Rep. Online (2008), **64**, m681.

XELWUI

M. Yu. Shilova, A. V. Vologzhanina, L. B. Serezhkina, V. N. Serezhkin, Zh. Neorg. Khim. (Russ.)(Russ. J. Inorg. Chem.) (2009), **54**, 1842.

XEMMEI

Rui-Feng Wu, Tong-Lai Zhang, Xiao-Jing Qiao, Jian-Guo Zhang, Li Yang, Wei Yu, Rui-Feng Wu, Tong-Lai Zhang, Xiao-Jing Qiao, Jian-Guo Zhang, Li Yang, Wei Yu, Jiegou Huaxue(Chin. J. Struct. Chem.) **25** (2006) 849.

Our Notes: Contains a six membered ring of composition $[H_{14}O_6(2+)]$ just like the one in cucurbituril. oxonium 7-nitro-5-sulfonatonaphthalene-1,4-dicarboxylic acid.

XUGWAY

Ling Bai, Bi-Zhou Lin, Qin-Qin Wang,
Jiegou Huaxue(Chin. J. Struct. Chem.) (2009), **28**, 541.

ZAXNUJ

Ka-Ho Ng, Zhongyuan Zhou, Wing-Yiu Yu, Org. Lett. (2012), **14**, 272.

Containing $[H_{18}O_8(2+)]$

FEGTEQ

A. W. Hanson, Acta Crystallogr., C**43**, (1987) 296.

Disorder: Water molecule O2 is disordered over two positions of occupancy 0.82 and 0.18. **Comment:** For clarity, the 18% component was removed from plot we used to examine this entry.

WIDTEJ

T. Hubregtse, H. Kooijman, A. L. Spek, T. Maschmeyer, R. A. Sheldon, I. W. C. E. Arends, U. Hanefeld, J. Inorg. Biochem., **101**(2007) 900.

Containing $[H_{22}O_{10}(2+)]$

LOHJOH

A. S. Antsyshkina, G. G. Sadikov, A. L. Poznyak, V. S. Sergienko, Zh. Neorg. Khim. (Russ.) (Russ. J. Inorg. Chem.) **45** (2000) 65.

RABCOI

T. Dahlems, D. Mootz, M. Schilling, Z. Naturforsch., B: Chem. Sci., **51** (1996) 536.

Our Notes: $(H_5O_2^+)$ linking water rings. See $(H_5O_2^+)$ entries.

Hydroxonates

ANAJOP

M. Lalia-Kantouri, C. D. Papadopoulos, A. G. Hatzidimitriou, T. Bakas, S. Pachini, Z. Anorg. Allg. Chem., **636** (2010) 531.

AYACEJ

V. A. Afanas'eva, L. A. Glinskaya, R. F. Klevtsova, I. V. Mironov, Koord. Khim. (Russ.) (Coord. Chem.), **36** (2010), 703.

AZEKOF

A. N. Chekhlov, Zh. Neorg. .(Russ.)(Russ. J. Inorg.Chem.) (2004), **49**, 248.

CANHEG

Wu Lei, Ming-Zhu Xia, Feng-Yun Wang, Li-Juan Heng, Ting-Hai Yang, Asian J. Chem., **23** (2011) 3755.

CEXHAO

U. Kuhl, A. Cambareri, C. Sauber, F. Sorgel, R. Hartmann, H. Euler, A. Kirfel, U. Holzgrabe, J. Chem. Soc., Perkin Trans.2 (1999) 2083.

DAPSCR10

G. J. Palenik, D. W. Wester, U. Rychlewska, R. C. Palenik, Inorg. Chem., **15** (1976) 1814.

DUYCOQ

M. A. Nadeem, M. Bhadhave, R. Bircher, J. A. Stride, Cryst. Eng. Comm (2010), **12**, 1391.

ESIXEK

C. D. Nicola, F. Garau, F. Marchetti, M. Monari, L. Pandolfo, C. Pettinari, A. Venzo, Dalton Trans., **40** (2011) 2011.

EXOQIR

D. J. Fox, R. G. Bergman, Organometallics **23** (2004) 1656.

EYIHEZ

S. D. Bergman, I. Goldberg, A. Barbieri, F. Barigelli, M. Kol, Inorg. Chem. (2004), **43**, 2355.

HIHFAF

P. Lemoine, M. Chiadmi, V. Bissery, A. Tomas, B. Viossat, Acta Crystallogr., Sect.C: Cryst. Struct. Commun., **52** (1996) 1430.

HOTYOF

A. Karmaker, J. B. Baruah, Supramol. Chem., **20** (2008) 667.

HPPHPN10

S. Mangani, E. F. Meyer Jr., D. L. Cullen, M. Tsutsui, C. J. Carrano, Inorg. Chem. (1983), **22**, 400.

HUDPOM

Ji-Bo Zhang, Xiao-Shu Qu, Acta Crystallogr., Sect. E: Struct. Rep. Online, **65** (2009) m1099.

IBAMAB

A. Duong, T. Maris, J. D. Wuest, Inorg. Chem. (2011), **50**, 5605.

KEKQAS

H. M. J. Wang, C. Y. L. Chen, I. J. B. Lin, Organometallics (1999), **18**, 1216.

LICQIX

B. Kersting, Eur. J. Inorg. Chem., **12** (1999) 2157.

MATLEY

M. Wiebcke, J. Felsche, Acta Crystallogr., Sect. C: Cryst. Struct. Commun., **56** (2000) 901

MUKNOV

W. Schmitt, C. E. Anson, R. Sessoli, M. van Veen, A. K. Powell, J. Inorg. Biochem., **91** (2002) 173. **The so-called H₃O(+) and OH(-) described in this report are incorrect, and more likely than not are waters, instead of acids and bases.**

NDPYCO01

A. Wojciechowska, M. Daszkiewicz, Acta Crystallogr., Sect.E: Struct. Rep. Online, **63** (2007) m2975.

PAZDOJ

D. Staben, T. Dahlems, D. Mootz, Z.Kristallogr.-New Cryst.Struct., **213** (213) 199.

PEYWEW

Zhi-min Chen, Wei Li, Ying-qun Yang, Dai-zhi Kuang, Yong-lan Feng, Jian-qiu Wang, Fu-xing Zhang, Hunan Shifan Daxue, Ziran Kexue Xuebao(Chin.)(J. Nat. Sci. Hunan Normal Univ.) **28** (2005) 54.

PYCXMN01

Yi-Zhi Li, Min Wang, Liu-Fang Wang, Chun-Gu Xia, Acta Crystallogr., Sect.C: Cryst. Struct. Commun. (2000), **56**, e445.

QIJDES

M. Wiebcke, J. Felsche, Acta Crystallogr., Sect.C: Cryst. Struct. Commun., **57** (2001) 306.

QIXPOD

Lin-Heng Wei, Acta Crystallogr., Sect.E: Struct. Rep. Online (2008), **64**, m578.

SEYLAJ

D. Mootz, R. Seidel, J. Inclusion Phenom. Mol. Recog. Chem., **8** (1990) 139.

SEYLEN01

D. Mootz, R. Seidel, J. Inclusion Phenom. Mol. Recog. Chem., **8** (1990) 139.

SUJHOV

Shu-Qiong Bai, Zhi-Yong Fu,
Jiegou Huaxue(Chin. J. Struct. Chem.) (2009), **28**, 1433.

TATGEC

Jun Zhai, Jun Zhai,
Jiegou Huaxue(Chin. J. Struct. Chem.) (2012), **31**, 255.

TEHFOD

Z. Derikvand, N. Dorost, F. Hassanzadeh, A. Shokrollahi, Z. Mohammadpour, A. Azadbakht, *Polyhedron*, **43** (2012) 140,

UBEJIU

P. Vianello, A. Albinati, G. A. Pinna, A. Lavecchia, L. Marinelli, P. A. Borea, S. Gessi, P. Fadda, S. Tronci, G. Cignarella, *J. Med. Chem.* (2000), **43**, 2115.

CCDC Notes : The structure given in the paper is the hydrochloride salt not the hydroxide salt as deposited.

VORYEG

I. F. Burshtein, N. V. Gerbeleu, O. A. Bologa, V. I. Lozan, T. I. Malinovskii, *Dokl. Akad. Nauk SSSR*(Russ.) (Proc.Nat.Acad.Sci.USSR), **316** (1991) 368.

WIKTIT

Ning-Hai Hu, *Acta Crystallogr.*, Sect.C: Cryst. Struct. Commun. (1994), **50**, 2082.

WOBSAH

WOBSAH M. Wiebcke, J. Felsche, *Acta Crystallogr.*, Sect.C:Cryst. Struct. Commun., **56** (2000) 1050.

XEHWEN

Wen-Yuan Hsieh, Shuang Liu, *Inorg. Chem.*, **45** (2006) 5034

XOTWAF

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YIVMEW

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