

Graphical Synopsis

Inorganic Crystal Structures

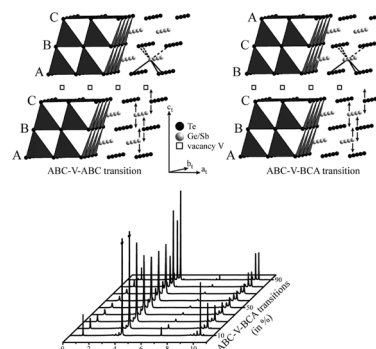
Philipp Urban, Matthias N. Schneider, Marten Seemann, Jonathan P. Wright and Oliver Oeckler

Information on real-structure phenomena in metastable GeTe-rich germanium antimony tellurides $(\text{GeTe})_n\text{Sb}_2\text{Te}_3$ ($n \geq 3$) by semi-quantitative analysis of diffuse X-ray scattering

DOI 10.1515/zkri-2014-1829

Z. Kristallogr. 2015; 230(6): 369–384

Synopsis: Simulations of diffuse scattering for crystals of $(\text{GeTe})_n\text{Sb}_2\text{Te}_3$ with $n = 2, 4, 5, 12$ reveal the degree of stacking disorder and associated relaxation as a function of composition and thermal treatment. It is dominated by inhibited diffusion.



Organic and Metalorganic Crystal Structures

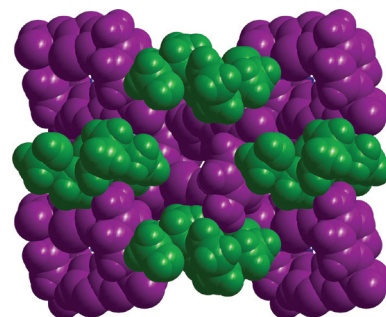
Aina Mardia Akhmad Aznan, Zanariah Abdullah, Chai-Hoon Khoo, Bao-Jing Chen, Tian-Hong See, Jiun-Horng Sim, Yoke-Kqueen Cheah, Hoi-Ling Seng and Edward R.T. Tiekink

Three ammonium salts of sulfathiazole: crystallography and anti-microbial assay

DOI 10.1515/zkri-2014-1830

Z. Kristallogr. 2015; 230(6): 385–396

Synopsis: The crystal structures of three ammonium salts of sulfathiazole display significant hydrogen bonding.

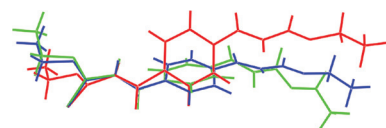


Nabihah Al Muna Mohd Nor, Jimmy Ahmad, Zanariah Abdullah, Siti Nadiah Abdul Halim, Alberto Otero-de-la-Roza and Edward R.T. Tiekink
Bipodal benzoylthiocarbamic acid esters: crystal and molecular structures of $R = \text{Et}$ (a polymorph), and of a binuclear Cu(I) complex, $R = \text{iPr}$

DOI 10.1515/zkri-2014-1820

Z. Kristallogr. 2015; 230(6): 397–405

Synopsis: Conformational differences in polymorphs and theoretical structures of $[1,4\text{-EtOC(=S)N(H)C(=O)C}_6\text{H}_4\text{C(=O)N(H)C(=S)OEt}]$ relate to the dictates of crystal packing.

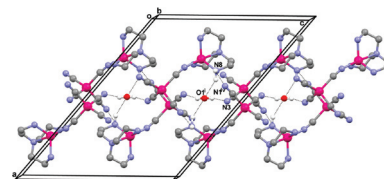


Güneş Süheyla Kürkçüoğlu, Okan Zafer Yeşilel, Onur Şahin, Elvan Sayın and Orhan Büyükgüngör
Dinuclear zinc(II) complex with tris(2-aminoethyl)amine ligand: synthesis, structure and properties

DOI 10.1515/zkri-2014-1814

Z. Kristallogr. 2015; 230(6): 407–412

Synopsis: The dinuclear complex tris(2-aminoethyl)aminezinc(II)- μ -cyanothreecyanozincate(II) hemihydrate, $[\text{Zn}(\text{tren})\text{Zn}(\mu\text{-CN})(\text{CN})_3] \cdot 0.5\text{H}_2\text{O}$ (**1**), was synthesized and characterized by spectral (FT-IR and Raman), elemental, thermal (TG, DTG and DTA) analysis as well as single crystal X-ray diffraction techniques. Zn(II) ions in the complex **1** exhibit two different coordination modes such as trigonal-bipyramidal and tetrahedral forms. Hydrogen bonds play very important role in the construction of supramolecular structures from the crystallographic data.

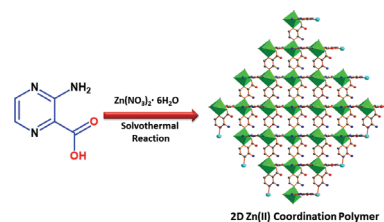


Anirban Karmakar and Susanta Hazra
Synthesis, structure and thermal study of a new 3-aminopyrazine-2-carboxylate based zinc(II) coordination polymer

DOI 10.1515/zkri-2014-1828

Z. Kristallogr. 2015; 230(6): 413–419

Synopsis: Solvothermal reactions of a zinc(II) salt with 3-aminopyrazine-2-carboxylic acid (HL) gave rise to a 2D (two dimensional) coordination polymer $[\text{Zn}(\text{L})_2]_n$ (**1**). Crystal structure analysis reveals that each hexacoordinated zinc(II) center adopts a distorted octahedral geometry occupied by three $\text{O}_{\text{carboxylate}}$ and three $\text{N}_{\text{pyrazine}}$ atoms. The FT-IR, TGA and topological analyses of this two-dimensional framework are also investigated in this work.

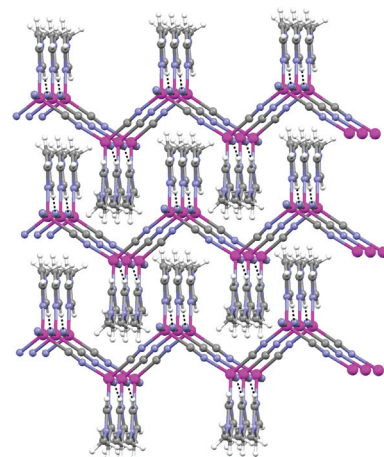


Elvan Sayın, Güneş Süheyla Kürkçüoğlu, Okan Zafer Yeşilel and Tuncer Hökelek
Synthesis, crystal structure and spectroscopic properties of one-dimensional zinc(II)-cyanide complex with 1-methylimidazole, $[\text{Zn}(\mu\text{-CN})(\text{CN})(1\text{-meim})]_n$

DOI 10.1515/zkri-2015-0001

Z. Kristallogr. 2015; 230(6): 421–426

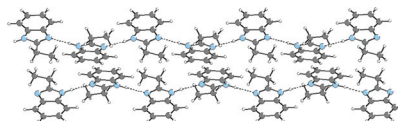
Synopsis: A new one-dimensional Zn(II)-cyanide complex with 1-methylimidazole ligand, $[\text{Zn}(\mu\text{-CN})(\text{CN})(1\text{-meim})]_n$ (1-meim: 1-methylimidazole) was synthesized and characterized by spectral (FT-IR and Raman) methods, elemental analysis, thermal (TG, DTG and DTA) analysis and single crystal X-ray diffraction techniques. In the crystal structure, the symmetry related zinc(II) atoms is bridged by the cyanide anions to form one-dimensional chains running along the b-axis.



Pilar Cabildo, Rosa M. Claramunt,
Fco. Javier Zuñiga, Ibon Alkorta and
Jose Elguero

**Crystal and molecular structures
of two 1*H*-2-substituted
benzimidazoles**

Synopsis: The X-ray molecular structures of seven 1*H*-benzimidazoles with different substituents at position 2 (H, Me, Et, Pr, Bu, Bn and Ph) have been compared using literature data and four new structures (Et, Pr).



DOI 10.1515/zkri-2015-0004

Z. Kristallogr. 2015; 230(6): 427–438

Formulae Index