

John D. Corbett (1926–2013)

John Corbett (John to all of his friends and students) passed away on 2 September 2013, after a stroke.

Corbett was born on 23 March 1926 in Yakima, Washington. After obtaining his Ph D in physical chemistry from the University of Washington, Seattle, Corbett and his wife Irene (whom he married in 1948) moved to Iowa State University (ISU) at Ames in 1952, where he joined the inorganic chemistry faculty, and rose to become a Distinguished Professor. In a six decade long career at ISU, he was mentor for several graduate (~45) and postdoctoral students (~80), many of whom continue to excel in academics around the world. Corbett has received every major award in his field, notably the Humboldt Prize (1985), Fellow of the National Academy of Sciences (1992) and the Distinguished Service Award from the American Chemical Society (2000). In 2007, he established an endowed professorship at Iowa State University in his name.

Corbett started his work as a scientist in Ames Laboratory in 1952 and also as a faculty member (1953) in the Inorganic Chemistry Department at ISU. His initial work was on molten salts and thermodynamics of phase transition. He then

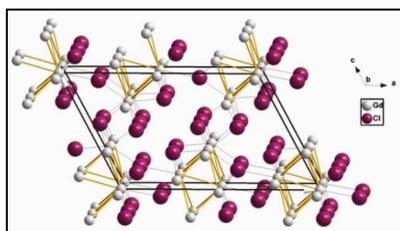
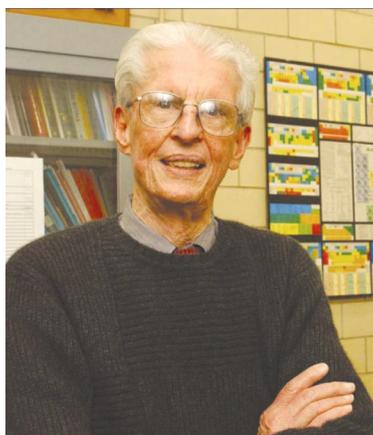


Figure 1. Gd_2Cl_3 (Corbett, J. D. *et al.*, *Inorg. Chem.*, 1973, **12**, 556). Gd chains running parallel to *b* axis.

moved to studying clusters (halide clusters were his forte) – Gd_2Cl_3 with an unusual structure of edge-shared octahedra (Figure 1), is textbook material today. He also popularized the subject of Zintl phases and intermetallic compounds (a subject popular in Germany) in USA and the rest of the world through his publications. His *Chemical Reviews* article (1985) on Zintl phases is a must read for anyone getting into polar intermetallics and Zintl phases. Other than the area of



halide clusters (especially condensed clusters), Corbett made immense contributions in the study of structure and bonding in alkali and alkaline metal triels and tetrels and then Au-based intermetallics. The discovery of carbon-free fullerenes $\text{K}_{10}[\text{NiIn}_{10}]$ in 1993 was indeed remarkable. Towards the later part of his career, Corbett dwelt on metal-rich tellurides and more recently (in the last 10 years), he was spearheading the difficult subject of quasi-crystal approximants. These structures are quite complex and to understand the bonding is even more difficult.

Corbett had probably the biggest group in the late eighties and early nineties with around 7–8 graduate and a similar number of postdoctoral students. His lab was buzzing with activity, with students from all round the world. He would allow a student to settle down and only give him a broad area to work and then wait for the group meetings to critically assess the work done. These group meetings used to be a ‘free for all’, everybody was encouraged to ask questions.

Corbett loved gardening, classical music and good food. He was witty, sometimes impatient (*God, give me patience, but hurry...* was his slogan at the bottom of his e-mail) and a man of details and commitment (he used to work six days a week till the last week).

As his student I learnt a lot from Corbett (especially how to look for metal-metal bonds in a complex extended solid) and made many everlasting friends from various parts of the world.

In praise of the synthetic solid state chemist, Corbett once wrote ‘The clever “cooking” of solid state synthesis often belies the experience, insight, imagination and hard work that go into a successful program. The remarkable often unprecedented results define that success’ (from the cover page of *Inorganic Chemistry*, 2010, 49).

John Corbett is survived by his son and daughter. He was indeed a colossus in the field of inorganic and solid state chemistry.

ASHOK KUMAR GANGULI

*Department of Chemistry,
Indian Institute of Technology Delhi,
New Delhi 110 016, India
e-mail: ashok@chemistry.iitd.ac.in*