SHORT SCIENTIFIC NOTES

Unit Cell Dimensions and Space Group of β—$IrHCl_2$ $[AsC_2H_5(C_6H_5)_2]_3$

Several mono hydrido, octahedral complexes of iridium of the type $IrHX_2L_3$, where X is a halogen and L is a tertiary arsine, have been isolated in two isomeric forms α and β[1,2]. Structures have been assigned to these on the basis of their infrared and nmr spectra[3]. It would be of interest to confirm these structural assignments by X-ray diffraction and locate the correct position of the hydridic hydrogen in these molecules. Further very few such compounds wherein a hydridic hydrogen is directly linked to the metal have been investigated by X-ray methods[4-7]. Hence the X-ray determination of the structure of the β-form of $IrHCl_2$ $[AsC_2H_5(C_6H_5)_2]_3$ has been taken up. The compound was prepared as reported earlier[2]. Single crystals were grown from methylene dichloride-methoxy ethanol solution of the compound.

The Unit cell dimension and space group of the crystal have been determined using Buerger X-ray Precession camera and CuK α radiation. The crystals are monoclinic with the following cell dimensions :

$a = 13{\cdot}18$ Å ρ mea $= 1{\cdot}67$ gm/cm³
$b = 18{\cdot}94$ Å ρ cal $= 1{\cdot}67$ gm/cm³
$c = 16{\cdot}55$ Å $Z = 4$
$\beta = 91°$

The systematic absences observed are :

OkO — k odd
hol — h + l odd

The absences correspond to the space group $P_{21/n}$.

Further work on the structure determination is in progress.

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A Record of Triassic Ostracodes from Kashmir, Himalayas

Poorly preserved ostracodes have been recovered for the first time by the acid etching of dark bluish-grey limestone samples collected from Lower Triassic thin bedded limestones and shales (*Meekoceras horizon*) from Mandakpal, Anantnag District, Kashmir. Ostracodes are represented by five genera : *Bairdia*, *Monoceratina*, *Microcheilinella*, *Judahella* and *Hungarella* which have already been reported from Salt Range, Pakistan (Sohn, 1970)[1]. The ostracode assemblage includes long ranging genera with the exception of *Judahella* which has not been reported from rocks other than the Triassic. The ostracode fauna suggests shallow water environment of deposition. Recently Triassic ostracodes have been reported from Alaska and Nevada[2], Israel[3], France, and Austria[4].

Ostracodes are associated with a number of well preserved conodonts and microgastropods and a few fish remains, mostly teeth and placoid scales. The age of the ostracode-bearing horizon has been determined as *Smithian* to *Spathian* on the basis of biostratigraphically significant conodont species *Neospathodus waageni* Sweet and *Neogondolella elongata* Sweet. Middle Triassic ostracodes have also been discovered from Niti Pass and Kalapani Limestone sequence exposed near Lapthal in Malla Johar, Kumaun Himalayas[5].

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