



## Giant Glass Sphere for OSC Lobby

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We describe the problems and successes in fabricating a large polished glass sphere to decorate the lobby of the College of Optical Sciences at the University of Arizona. The idea originated long ago when the West Wing for OSC was in the planning stages. It took over ten years to complete the project. Much of that was bad luck, and it was never quite clear what the delay was.



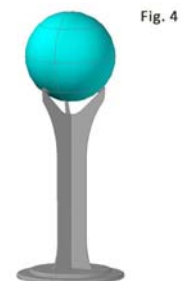
Inspiration for the project came at the Arizona-Sonora Desert Museum when I was searching for a home for a glass sphere sun clock. The tourists were drawn to the 7" polished sphere like a magnet. "It turns the world upside down," they gasped. The sun clock eventually was placed on Kitt Peak, but OSC seemed beautifully appropriate for a large sphere, as well as an introduction to the Joy of Optics.



The good luck was the Ohara Co. donating a 500-lb. chunk of borosilicate glass [Fig.1], which they shipped to an Oregon company for fabrication, along with some funds to help. They were able to make a fine ground sphere [Fig.2], but were never able to polish it.



Eventually the polishing was accomplished at OSC, under the direction of Prof. José Sasián. We learned that small spheres (up to ~5" diameter) are polished inexpensively by machine, but large ones like our 52cm size would not justify the expense of building a large machine for just a single fabrication, and so the work was performed by hand by Geoffrey Bret Harte. [Fig. 3.] Prof. Peyghambarian covered most of the expenses.



The stand [Fig. 4] was designed by Roland Shack, myself and Scott Benjamin.