Modeling IR spectra of OH127.8+0.0 and OH26.5+0.6 at different pulsation phases

Kyung-Won Suh and Hak-Youn Kim

Department of Astronomy and Space Science, Chungbuk National University

We investigate the spectral energy distributions (SEDs) of OH127.8+0.0 and OH26.5+0.6 with thick dust envelopes at different pulsation phases including. Using new data including the ISO observations, we have determined the new pulsation parameters. The deep silicate absorption features show significant variations depending on the pulsation phase. The variation is mainly due to changes in the properties of dust envelopes around the OH/IR stars. Comparing the results of detailed radiative model calculations, we explore the changes of the relevant parameters of the envelopes and central stars depending on pulsation phase. We find that a significant amount of dust grains is evaporated when the luminosity of a central star increases.