

# Ultraviolet and Visible Spectroscopic Database for Atoms and Molecules in Celestial Objects

Sang Joon Kim

Department of Astronomy & Space Science  
Kyunghee University, Yongin Kyunggido, 449-701

I have developed a UV and visible spectroscopic database (UVSD) for atoms and molecules, which are found in interstellar medium, stars, galaxies, and in the atmospheres of the earth, planets, satellites, and comets. This UV and visible database, which is machine-readable, consists of three different sub-databases depending upon the characteristics of the sub-databases: (A) atomic and molecular line listings from laboratory observations or theoretical studies; (B) absorption spectra measured in laboratories; and (C) solar UV, visible, and infrared spectral atlases. The UVSD is in a very initial stage of development compared with other well organized and established infrared and microwave databases. In order to make a good quality and complete database, substantial efforts should be made for the acquisition of scattered important data from laboratories or institutions, and then the acquired heterogeneous data should be peer-reviewed and standardized.