SPECTRAFACTORY - A DATABASE OF MOLECULAR TEMPLATE SPECTRA

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We describe a database of calculated molecular absorption and emission spectra from the optical to the mm-range for a large range of temperatures and column densities. All spectra are calculated in the LTE limit and use as input a variety of linelists relevant for astrophysical purposes. The database is accessible through a web site, *www.spectrafactory.net*, where the spectra can be searched, viewed, manipulated and downloaded. In addition, model spectra can be requested for parameters specified by the user, and these requested spectra then become part of the database itself. Currently, spectrafactory contains over 290,000 spectra in 41 molecular species (95 different isotopologues), calculated over the wavelength range 0.35 - 3000 microns, or 3 - 30000 wavenumbers. We will describe the current state of this project, as well as our plans for its future development.