

1. Below the reflection spectra for two materials A and B are given.

- What type of material belongs to reflection spectrum A, what type to B? (Justify). Note the scale difference!
- For which colors are these (bulk) materials transparent?
- What is the approximate threshold energy for interband transitions for these materials?
- For which of the materials would you expect intraband transitions in the infrared region? (Justify.)
- Why do these intraband transitions occur in this region?

