**4.4.2 Search Activity – How could Boolean operators help with this search?**

Using the same example as in Search Activity 4.4.1, which of the following search strings do you think it would be best to use in the Patentscope simple search page

(1) "peracetic acid" AND waste

(2) sludge AND waste

(3) sludge OR waste

(4) mycelium AND bacteria

**Answer Search Activity 4.4.2**

Alternative (1) gives about 60 well targeted results. The use of quote marks keeps the words *peracetic* and *acid* together as a single phrase.

Alternative (2) gives over 16,000 results, almost all of which have nothing to do with the solution of using peracetic acid

Alternative (3) gives over 300,000 results, because the search engine is looking for documents that contain either the word sludge or the word waste.

Alternative (4) gives about 250 results. However, the keywords only address part of the problem, and do not address the solution.

The best answer is alternative (1) because it partly addresses the problem as well as the solution.