

The quality assurance library store and lookup application consists of two methods (QA\_Search and QA\_Library) that will store up to 5 unique spectra into a library and then compare an unknown sample against the library entries. The method then reports the library entry with the closest match to the unknown sample and displays how close the match is in percentage. The methods can be downloaded via the i-LAB<sup>®</sup> Spectrum Software from the [www.microptixtech.com](http://www.microptixtech.com) website. This document provides the basic instructions for downloading and running the quality assurance library lookup methods.

**The Minimum firmware revision required to run this application is 1.73.11.**

#### Downloading the Methods:

1. Create a New Methods Folder in Spectrum called QAQC\_LIB.
2. Click on the QAQC\_LIB folder and click on the "Add Method (from Web)" tab.
3. Enter License Key **fe00e926-dabc-4b68-8f9e-75f24abbac96** to download the QA\_Search Method.
4. Click on the "Add Method (from Web)" tab again and enter License Key **40fc6227-4903-44a2-8454-161546f633e9** to download the QA\_Library Method.
5. Turn on your i-LAB<sup>®</sup> and connect to the computer with the included USB cable.
6. Click on each method individually and click on the "Send to i-LAB" tab to download the methods to your i-LAB<sup>®</sup> hand-held spectrometer.

#### Running the QA Library Lookup Methods:

There are 2 steps required to run the QA library store and lookup application:

1. Scan and save your library spectra entries with the QA\_Library method.
2. Match your unknown sample(s) to the closest library entry with the QA\_Search method.

#### Scanning and Storing the Library Spectra:

1. Turn on the i-LAB<sup>®</sup>, Press the Menu Button and Select QA\_Library under Methods.
2. Following the prompts, you will be asked to Scan your blank and then Scan your first library sample. You will then be prompted to hit the "Menu" key to exit, or Scan your second library sample. This will continue for up to 5 library samples.

#### Matching your Sample to the Closest Library Entry:

1. Turn on the i-LAB<sup>®</sup>, Press the Menu Button and Select QA\_Search under Methods.
2. Following the prompts, you will be asked to Scan your sample. The i-LAB<sup>®</sup> will compare the sample spectrum against each entry in the library of stored samples and report which entry had the closest match to the sample. It will also display the percentage match. The results will be automatically saved to the log.

**The QA\_Search method can be run repeatedly for as many samples as are necessary.**