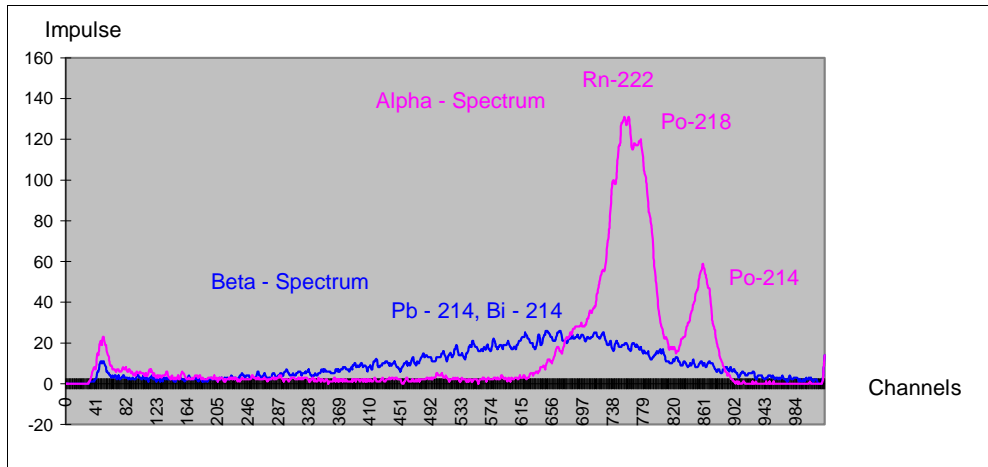# Alpha and Beta separation results with Triathler

The 2-dimensional plot of alpha- and beta-spectra of Rn 222

Alpha – Beta separation is performed by the method of pulse length index; long alpha pulses are measured in the alpha channel, the significant shorter beta – pulses in the beta channel. The above figure (above) shows a typical Rn-222 spectrum, performed by Triathler™. In the 2-D spectrum (down) x – axis is energy, y–axis is pulse length and z – axis is intensity. The horizontal line is the pulse length index PLI, which discriminates alpha and beta pules, the vertical lines correspond with the windows settings for alphas (top) and beta windows settings (down). PLI and windows can be set individually in order to perform best alpha - beta separation settings. The tool of the 2-D picture with Triathler™ Software is automatically created by the help of Excel –Macros. This tool enables optimal settings for Rn-222, U-234/U-234 or a - wipe test applications.