### Fundamental XPS Data to Assist Peak-fitting Elements, Binary Oxides and Chemical Compounds

<table>
<thead>
<tr>
<th>Chemical Compounds</th>
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<th>Abbreviation for Elemental Aluminum</th>
<th>Al₂₃ Be of Al₂³ under Native Oxide</th>
<th>Al₂³ FWHM of Al₂³ under Native Oxide</th>
<th>C₁₈ Be of Principal Peak 10 hours after ion Etch, Pure Al₂³</th>
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### Remarks:

- **Al₂³ FWHM of ion Etched, Pure Al₂³**: This column provides the full-width at half-maximum (FWHM) for the Al₂³ peak after ion etching, indicating the resolution attained through the technique.
- **C₁₈ Be of Principal Peak 10 hours after ion Etch, Pure Al₂³**: This column represents the time-dependent behavior of the Al₂³ peak 10 hours after ion etch, highlighting the stability or change in peak characteristics.
- **Al₂³ FWHM of ion Etched, Pure Al₂³**: This column offers insights into the quality of peak resolution achievable through ion etching, crucial for accurate analysis.

**Note:** Additional columns may provide detailed information such as peak positions, intensities, and ratios, which are essential for comprehensive material analysis.

**Changes and Improvements Include:**

- **A. Correction of several metal oxide metal signal BEs**
- **B. Correction of BEs of several O 1s peaks BEs**
- **C. Coloration of chart to enhance readability and reveal related elements.**
- **D. Highlighting of FWHM in blue lettering because these are the key to improved peak-fits.**
- **E. Addition of alkali oxides replacing alkali halides to match presence of other oxides.**
- **F. Marking of ionic oxides (red dot) that are expected to have C₁₈ BeS higher than 285.5 eV.**
- **G. Addition of various FWHMs and FWHMs for Sr, La, Ce, Ne Os, U, N, K, Rb, Cs and Th.**
- **H. Introduction of C₁₈ BeSs from Carbon recovered after ion etching and 10+ eV exposure to UHV.**
- **I. Addition of radioactive labels (bottom right corner of each box if radioactive).**
- **J. Calibration and Std Dev info shown in bottom image below signature.**

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**B. Vincent Crist**

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