



The principal Component Analysis (PCA) compresses and denoises datasets, however it does not extract directly latent factors governing the spectral variations. Do not try to interpret the PCA loading - they are quite abstract. To cast your data in terms of few well-interpretable compounds, you need another technique - *Endmembering*. The basic version of **temDM MSA** allows to design endmembers manually. The advanced version offers the powerful algorithms for automatic and semi-automatic determination of endmembers.

The automatic endmembering combines the geometrical Vertex Component Analysis (VCA) and statistical Bayesian approaches. The user can control the key steps of the automatic procedure and interfere if necessary. The semi-automatic endmembering allows to move arbitrary selected endmembers in a given scatter plot and then optimize their position in the invisible dimensions.

As a bonus, this option allows the automatic clustering in the **Clustering** tool using the k-means algorithm.