Same-age different material manuscripts reveal that the C-14 content of these manuscripts indicate a 215 year difference between them whereas there is no historical difference between them with respect to the present. Different material, different metabolism, and thus different inherit initial C-14 content; same material, same metabolism, same initial C-14 content.

The C-14 community puts vast metabolic macrocosm into historical reference.

This is done by using the same initial C-14 content (indicated by using a standard) for all types of material. When specifics are called for we must move deeper into metabolic considerations to find better consistency to render historical differences. This is achieved by comparing a sample's C-14 content with the initial C-14 content for that type of material. When this is done historical accuracy is achieved.

It may be interesting to compare different metabolisms. All living things have their own metabolism.

With Parchment our early 4<sup>th</sup> century manuscript (AA-10926 at 307 AD) contrasts well with the Tree-rings at 25% of one-sigma. Our early medieval manuscripts are at the rear-end of the two-sigma range with OxA-418 at 90%, OxA-419 at 93%, and OxA-420 at 96% of the two-sigma range. One speculates that these three medieval manuscripts are from similar animals but there is a profound difference between 25% of one-sigma and 90-96% of two-sigma. The material is animal skin but what accounts for this profound difference? Are we dealing with different species of cattle, goat, and sheep? Or perhaps different-age animals of the same species?

With Papyrus we are dealing with only one species and we see a similar variance yet with a consistent trend developing. A Papyrus of 308 AD widely misses the two-