

## NEW CHALLENGE TO DR. WALTER McCRONE

In *Newsletter* no. 13 we quoted a report from *Time* magazine calling into question Dr. Walter McCrone's findings on Yale University's purportedly fifteenth century Vinland Map. Although if genuine this map would be the first to show the mainland of America, deriving apparently from the Viking explorations, McCrone's analyses showed the ink to contain up to 50% anatase, a form of titanium dioxide not developed until the 1920s, leading him to dismiss it as a twentieth century forgery. According to *Time*, researchers at the University of California's Davis campus had re-examined the Vinland Map and found cause for doubt on McCrone's findings.

Now, in "The Vinland Map, Revisited: New Compositional Evidence on Its Inks and Parchment", published in *Analytical Chemistry*, [(1987), vol 59, pp.829-33], the University of California researchers have published their findings in proper scholarly detail. Using a PIXE (particle induced X-ray emission) proton milliprobe they have made a series of non-destructive analyses of the Vinland Map actually confirming the presence of titanium in several locations. But as their report goes on:

We have detected titanium in several other early parchments in similar amounts. These include a 12th. Century Italian manuscript, a 13th. Century Oxford Bible, a 1457 Mainz Psalter, a 1470 Donatus (*Speculum*) and a 1470 Donatus (*Saliceto*).

As the researchers show, the titanium is present merely in trace amounts both on the Vinland Map, and on the genuinely early documents above-mentioned. Accordingly the very basis of McCrone's argument for the Vinland Map's fraudulence has been invalidated.

Although these findings offer no proof that the Vinland Map is genuine, they inevitably yet further weaken the force of Dr. McCrone's arguments for the inauthenticity of the Shroud. As commented by Dr. Harbottle of Brookhaven "They have demonstrated to my satisfaction that ... McCrone was off by a factor of 10,000."