

Conference presentation

On Tuesday, June 9th a conference on the latest news related to the Shroud was held in the University of Padua. The main results obtained in collaboration with the Universities of Bologna, Modena, Parma and Udine and the Polytechnic of Bari, also funded by a Paduan Research Project (CPDA099244) titled "Multidisciplinary analysis applied to the Shroud Turin: study of body image, of possible environmental pollution and of micro-particle characterizing the linen fabric. " were presented.

As for the double body image impressed in the most important Relic of Christianity and most studied scientifically, it has been shown the technical and scientific impossibility to reproduce this image, but the most reliable hypothesis is connected to an electrical phenomenon called Corona Discharge. Shroud-like images using a dummy scale ½ subjected to tensions of 300,000 volts have been reproduced at Padua.

As for the dating of the Shroud, statistical studies using robust methods have shown that the carbon 14 dating performed in 1988 is not statistically reliable. The inaccuracy of the carbon 14 dating was also demonstrated by an analysis of the numismatic Byzantine coins.

Alternative chemical methods dated the Shroud to about 300 BC (FT-IR analysis) and 200 BC (FT-IR analysis). A new machine capable of measuring the mechanical properties of single flax fibers by means of cyclic loading tests has been built in Padua. A date of about 400 AD resulted for the Shroud using this machine. By averaging both the chemical and the mechanical results a date of the Relic of the 33 BC with uncertainty of plus/minus four centuries resulted.