

CARBON 14 DATING OF THE SHROUD

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Following the dating of the Turin Shroud last year, it has been suggested that the procedures were flawed, and that contamination of the Shroud by foreign material, particularly during the 1532 fire, could well have made a 1st century cloth appear to date from the 13th. century.

Science can never show that the Shroud was the cloth which wrapped the body of Jesus on Good Friday; not even a 1st. century carbon date would prove it to be authentic. The final decision, as always, must be made by the individual based on the available evidence. Equally, science can never prove it to be false, though if analysis showed it to be made of nylon with acrylic paint, most people would accept that it is unlikely to be genuine. (Although even here an individual might argue to his own satisfaction that God had altered the fabric to test the faith of his people!) What science does do, and very successfully for the most part, is offer help in reaching a decision. Sometimes very complex and technical evidence, such as genetic fingerprinting, is used to secure a conviction in a court of law, where the well-known criterion of 'beyond reasonable doubt' applies.

Faced with technical evidence, generally the layman has to accept the word of the expert. For the most part our experts do a very good job. Our protection against fraud, and to some extent error, is the reputation of the expert, and the organization he represents. To conceal something about the dating of the Shroud would require the active cooperation of many people, any one of whom could later expose the fraud and earn a considerable fee from the world's press. It is inconceivable that any of the three laboratories would put its reputation at risk in this way, least of all with such a prestigious project as the Turin Shroud. The twenty-one signatories of the *Nature* article have far too much to lose.

Carbon 14 is radioactive, which means that the amount present in any sample gradually decreases. The Shroud has the same proportion of carbon 14 as an object dating from about 1300 AD. This does not necessarily mean that the Shroud is this age. It could, for instance, be a mixture of 1st century cloth and 16th. century contamination, thinking in particular of the 1532 fire. How much contamination is there likely to be on the Shroud? Close-up photographs of the weave show it to be reasonably free from extra material. The result of mixing equal amounts of 1st century and 16th. century materials would (obviously) be a date of around the 8th. century, but to produce the measured age of the Shroud there would have to be about five times as much contamination as original material. Remembering that the samples were subjected to a very vigorous cleaning process before dating, it seems unlikely that such large amounts would remain, even were they present originally. Again, each individual must make up his or her own mind.

It is hard to find any evidence about the Shroud's age. Certainly it is a remarkable strip of cloth, and it has a way of ringing true whenever tests are carried out on it. Yet if one asks the question, "What positive evidence is there about its age?" the answer has to be "None, except for carbon dating, which says it is about 1300 AD."