# Obituary –

# Professor Harry Gove

Professor Harry E. Gove, emeritus Professor of Physics at the University of Rochester, New York State, and inventor of the accelerator mass spectrometry (AMS) method of radiocarbon dating used on the Shroud in 1988, died peacefully on February 18 this year. He was in his 86th year.

It was a letter to Professor Gove from then BSTS General Secretary the Revd David Sox, sent by Sox from London on 24 June 1977, which started the process by which in April 1988 three AMS laboratories received samples from the Shroud, and on 13 October of that same year delivered their now infamous '1260-1390' radiocarbon dating 'verdict'. Sox had seen an article in *Time* magazine describing Gove and his colleagues' development of the AMS method radiocarbon dating by which much smaller samples than previously could now be dated with much the same reliability. On Gove's own admission, before his receiving Sox's June 1977 letter, neither he, nor any other member of his team, had ever even heard of the Shroud. But he responded positively to Sox, whilst sagely remarking that it was 'probably a bit to soon to apply so recently a developed technique to such a renowned object'.

With typical astuteness Gove subsequently kept detailed notes of everything that transpired. And although he himself was not directly involved in the work on the Shroud samples, his role as architect of the AMS method caused the Arizona laboratory invited him to be present when they became the first of the three laboratories to produce a dating result for their Shroud sample, on 6 May 1988. As a result of this experience (which had to be kept secret at the time), and his close involvement with all the political manoeuvrings throughout the preceding eleven years, Gove was well-positioned to write an authoritative book concerning all that he knew. Entitled *Relic, Icon or Hoax? Carbon Dating and the Shroud*, this proved to be a most unstuffy chronicle of the events, full of pertinent observations on the personalities involved in them, and written with a verve, style and detail worthy of a Samuel Pepys.

Gove's enthusiasm for the method that he had developed undoubtedly led him to make some unwarranted claims for it with reference to the Shroud. His altogether serious declaration that the odds were 'about one in a thousand trillion' against the Shroud dating to the time of Jesus might in time be shown to have been more than a little misguided for someone for whom numbers in the zillion carried real meaning.

This said, Gove was a good, honest, well-balanced scientist - such that when in September 1994 he attended a Round Table at the University of Texas and was invited to view under a microscope some Shroud threads contaminated by a substantial build-up of microbiological coating, as from repeated handling over the

centuries, he readily acknowledged that there certainly seemed to be such a coating present. .

But as he can hardly have failed to realise, any further such admissions might damage the reputations, and thereby the livelihoods, of the very radiocarbon laboratories that it had been his life's work to bring into being. As was generally agreed, it needed 60% degree of contamination for a cloth genuinely of the first century to appear to be from the fourteenth. Specialist microbiologist Professor Stephen Mattingly of the University of Texas, confident that because of the transparency of the micro organisms, such a substantial degree of coating could be present yet all but invisible, decided to artificially prepare sample cloths with such a coating, particularly so that Gove could see for himself the scientific truth of this. As Mattingly takes up the story:

> I went back and forth with Harry Gove about this and finally sent him two linen samples. One was uncontaminated and the weight was determined and included with the sample. A second sample with near the identical uncontaminated weight was coated with enough bacteria (previously killed by heat) to represent 60% of the dry weight of the linen sample. The contaminated sample was more yellow in color and had a stiffness as previously noted in regard to the Shroud. Harry never corresponded with me again. What he did with the samples, I have no idea. Being a scientist I think he realized that I was correct and he saw no further need to argue with me. I was still a little surprised by his attitude...[1]

Despite the passing of several years Gove not only failed to respond to Mattingly, he also never returned the samples. As a result of this, in my view uncharacteristic behaviour on Gove's part, on 15 January of this year I wrote to Gove, who had always been courteous and forthcoming in his responses to me over the years, enquiring whether he still had Mattingly's samples, and whether he might now be willing to comment on the issue. Sadly, I had left the pursuit of the enquiry too late. For there was no reply from him, and less than five weeks later he was dead.

Did Harry Gove find himself between a rock and a hard place on the issue of microbiological contamination having skewed the Shroud carbon dating? We will probably never know.

Whatever, he is an individual whom I remember with affection, as always warm-hearted, hospitable, and with a twinkle in his eye. This enabled him easily to mix the very hard-nosed branch of science he worked in with his other altogether lighter interests - in opera, classical music, gardening and bee-keeping, all most commendably combined with a deep devotion to his family. The world of Shroud studies, as well as that of nuclear physics, is greatly diminished by his passing.

Ian Wilson

(Photo: University of Toronto)

[1] Email to the author, from Professor Mattingly, 14 January, 2009