## FORWARD to VERTICAL ALIGNMENT PAPER

The Radiation Fall-through hypothesis is based upon an important characteristic of the Shroud that is discussed in a paper that I published in the Sept/Dec 1989 issue of *Shroud Spectrum International*. The title of that paper is, "*The Vertical Alignment of the Frontal Image*." In March of the following year, 1990, in the same journal, publication of the Radiation Fall-through hypothesis soon followed. Because this paper is probably unfamiliar to many readers of this website, I am including it on the TSC website as supporting documentation for the 1990 paper.

The vertical alignment paper represents my current thinking on the nature of the Shroud image as does its 1990 successor. The abstract of that paper reads, "If the Shroud is draped over a reclining body in the supine (horizontal) position, frontal image features, to first order, align vertically over the corresponding body part." The 1989 paper is a result of an over two year study into the problem of image directionality. It is also a follow-on companion to my previous paper (along with two colleagues) published in the July 15, 1984 Journal of Applied Optics under the title, "Correlation of image intensity on the Turin Shroud with the 3-D structure of a human body shape".

The 1984 and 1989 papers form a unified geometrical study of the Shroud of Turin image that can be used to develop and test image formation hypotheses. In particular, Image Characteristics B3.0 and B4.0 of the **Critical Summary** of this website use the 3-D and the vertical alignment characteristics of the Shroud image as tests of major image formation hypotheses.

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