

**SPECTROSCOPY AND RADIATIVE TRANSFER:
SELECTED RESEARCH AND APPLICATIONS***

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ABSTRACT. This article is an overview of the author's 50 years of research on radiant heat transfer and the associated studies in quantitative spectroscopy that were performed in response to perceived public needs and because the scientific underpinnings appeared to be of sufficient interest in their own right to merit investigation. Many highly competent former students and colleagues participated in this adventure and made important contributions without which the author would have accomplished little. The topical coverage has remained important to this day and critical national and global decisions remain unresolved while frontier research on radiative energy transfer continues at many locations.