**DESCRIPTION**

*The practical and comprehensive guide to the creation and application of holograms*

Written by Martin Richardson (an acclaimed leader and pioneer in the field) and John Wiltshire, *The Hologram: Principles and Techniques* is an important book that explores the various types of hologram in their multiple forms and explains how to create and apply the technology. The authors offer an insightful overview of the currently available recording materials, chemical formulas, and laser technology that includes the history of phase imaging and laser science. Accessible and comprehensive, the text contains a step-by-step guide to the production of holograms. In addition, *The Hologram* outlines the most common problems encountered in producing satisfactory images in the laboratory, as well as dealing with the wide range of optical and chemical techniques used in commercial holography.

*The Hologram* is a well-designed instructive tool, involving three distinct disciplines: physics, chemistry, and graphic arts. This vital resource offers a guide to the development and understanding of the recording of materials, optics and processing chemistry in holography and:

- Discusses the pros and cons of the currently available recording materials
- Provides tutorials on the types of lasers required and optical systems, as well as diffraction theory and wave front reconstruction
- Details the chemical formulations for processing techniques
Researchers and technicians working in academia and those employed in commercial laboratories on the production of holograms as well as students of the sciences will find *The Hologram* to be a comprehensive and effective resource.

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**ABOUT THE AUTHOR**

**MARTIN J. RICHARDSON** is Professor of Modern Holography in the Imaging & Displays Research Group at De Montfort University, Leicester Media School, UK. After graduating from The Royal College of Art with a PhD in Holographic Imaging, he was later awarded the Saxby Medal by The Royal Photographic Society in recognition of his sustained pioneering contributions to the science and technology of holographic imaging and to the physical understanding of its materials and applications.

**JOHN D. WILTSHIRE** is an independent consultant with over 35 years of experience in the field of optical technology.

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**SERIES**

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