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DEPOSITION EQUATIONS; 5. GENERATION, TRANSPORT AND DEPOSITION ON CULTURAL OBJECTS EXPOSED TO THE EXTERNAL ENVIRONMENT; 6. GENERATION, TRANSPORT AND DEPOSITION ON CULTURAL OBJECTS INSIDE BUILDINGS; 7. SURFACE FORMS AND DEGRADATION; 8. IMPLICATIONS FOR DESIGN AND MAINTENANCE STRATEGIES; 9. CONCLUSIONS; REFERENCES

Chapter 4: Examples of Using Advanced Analytical Techniques to Investigate the Degradation of Photographic Materials1.

INTRODUCTION; 2. SILVER MIRRORING ON SILVER GELATIN GLASS PLATES; 3. IDENTIFICATION OF PHOTOGRAPHIC DYES IN COLOUR MOTION PICTURE FILMS; REFERENCES; Chapter 5: Hyperspectral Imaging: A New Technique for the Non-Invasive Study of Artworks; 1. INTRODUCTION; 2. THE PRINCIPLES OF REFLECTANCE AND HYPERSPECTRAL IMAGING; 3. BUILDING A HYPERSPECTRAL IMAGING SYSTEM; 4. SELECTED APPLICATIONS; ACKNOWLEDGEMENTS; REFERENCES; Author Index; Subject Index

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### Sommario/riassunto

In Chapter 1 Dudley Creagh writes on "synchrotron radiation and its use in art, archaeometry, and cultural heritage studies". Loic Bertrand has written in Chapter 2 on synchrotron imaging for archaeology and art history, conservation, and palaeontology. Dr. Bertrand is Archaeology and cultural heritage officer at the new French synchrotron, Synchrotron Soleil (Orme les Mesuriers, Gif-sur-Yvette, France). He is charged with the task of raising the awareness of cultural heritage scientists to the use of synchrotron radiation for their research. Chapter 3 has been written by Ivan Cole and his

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