

BOOK REVIEW

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A Review of Scientific Trace Analysis in Traffic Accidents

REFERENCE: Pohl Klaus Dieter, *Naturwissen-Schaftlich-Kriminalistische Spuren Analyse Bei Verkehrsunfallen, Arbeitsmethoden Der Medizinischen Und Naturalwissenschaftlichen Kriminalistik*, Band 14, Prof. Emil Weinig und Prof. Steffen Berg, Herausgeber, Verlag Max Schmidt-Romhild, Lubeck, 1975.

The somewhat unique nature of the book and the rather complex German title suggest that listing the contents would be the best way to introduce the contents of the volume; also, the paging should indicate the extent of treatment given to various topics and subtopics.

CONTENTS

Preface	7
I. Introduction	9
II. Materials and Investigation	13
II.1 Impression Traces	14
II.2 Object Traces	26
II.2.1 Parts of Organisms	26
II.2.1.1 Blood	27
II.2.1.2 Tissue	28
II.2.1.2 Hair	28
II.2.1.3 Feathers	39
II.2.1.4 Plants	39
II.2.2 Natural Components of Clothing	44
II.2.2.1 Fabrics of Animal Origin	44
II.2.2.2 Fabrics of Plant Origin	51
II.2.3 Synthetic Components of Clothing	58
II.2.3.1 General Examination Techniques	60
II.2.3.1.1 Microscopic-Morphological Examination	60
II.2.3.1.2 Melting Points and Pyrolysis	63
II.2.3.1.3 Solubilities	74
II.2.3.1.4 "Type Reactions"	74

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II.2.3.1.5	Infra-Red Spectroscopy	76
II.2.3.1.6	Elemental Analysis	77
II.2.3.1.7	Thin-Layer Chromatography	77
II.2.3.1.8	Gas Chromatography	84
II.2.3.2	Characteristics of Individual Fabrics	87
II.2.3.2.1	Semi-Synthetic Fabrics	87
II.2.3.2.2	Synthetic Fabrics	91
II.2.3.2.2.1	Polymerisation Products	91
II.2.3.2.2.2	Polycondensation Products	96
II.2.3.2.2.3	Poly Addition Products	102
II.2.3.3	Examination of Coloring Agents	103
II.2.4	Investigation of Brake and Skid Marks	122
II.2.4.1	Morphological Examination	122
II.2.4.2	Analytical Examination	124
II.2.5	Investigation of Lubricants	141
II.2.5.1	Greases	141
II.2.5.2	Motor Oils	148
II.2.5.2.1	Components of Unused Oil	148
II.2.5.2.2	Components of Used Oil	149
II.2.5.2.3	Techniques to Examine Oil	150
II.2.5.2.3.1	Gas Chromatography	151
II.2.5.2.3.2	Analysis of Non-Volatile Components	152
II.2.6	Inorganic Components of Oil Sludge and Body Dirt	173
II.2.6.1	Apparatus, Sampling, Preparation of Samples	175
II.2.6.2	Evaluation of Emission Spectra	178
II.2.6.3	X-Ray Analysis of Under-Body Dirt	185
II.2.7	Investigation of Paint and Resin Traces	187
II.2.7.1	Morphological Examination	188
II.2.7.2	Microchemical Analysis of Resin	193
II.2.7.3	Analysis for Inorganic Compounds	195
II.2.7.4	Analysis for Organic Components	199
II.2.8	Investigation of Glass Traces	205
II.2.8.1	Morphological Examination	205
II.2.8.2	Determination of the Refractive Index	209
II.2.8.3	Examination of the Chemical Composition	211
III.	Determination of Illumination Conditions of Headlights	217
IV.	Securing Trace Material	223

Included in the 227 page volume are 149 references, 13 tables, 131 illustrations, 84 gas chromatograms, and 56 infrared spectra. The author of the book, Dr. Klaus Dieter Pohl, is the head of the Chemical-Toxicological and Criminalistics Lab of the Institute for Legal Medicine of the University of Freiburg.

Most of the information presented in this volume is based on work less than a dozen years old and as such, in the reviewer's opinion, represents a new generation of knowledge and a landmark in criminalistics-related publications.

The format of the book is somewhat unusual insofar that a great variety of techniques is applied to a very limited field, although this by no means excludes other applications. For example, the excellent section on fabrics and fibers has relevance to rape cases, that on gasoline and motor oil to arson investigations, and so on. The carefully categorized methods and procedures are in "recipe" form, which is certainly helpful to a busy criminalist who usually has no time or inclination to extract specifics from general information.

On reading the volume, one gets the impression that there is hardly a subsection in which the author either has contributed himself or has checked and critically evaluated the work of others. This often results in a description of referenced procedures listing pros and cons and a suggestion of an optimum method in terms of ease of application, sensitivity, and specificity.

There is an aspect which at a first glance may appear somewhat redundant—the application of the whole spectrum of morphological, chemical, physicochemical, and physical techniques on every possible item found on a scene. For example, gas chromatographic applications are described in some half a dozen subsections. However, if one considers that a lab worker is usually not an expert in gas chromatography, one can appreciate that a detailed description of experimental parameters for the different materials examined relieves the analyst of the need to optimize those parameters himself.

There are some potentially useful techniques, such as a rather complex chemical analysis of coloring compounds of synthetic textiles which may have limited value in routine applications. Another example is an impressive examination of motor oil including detergents, oxidation inhibitors, viscosity improvers, rust inhibitors, and other substances. However, this is in line with the author's penchant for a detailed completeness and the effort to condense material from a wide variety of sources into a conveniently accessible volume.

If there is anything to criticize, it is the quite complex language. Seven-line sentences are not uncommon. Incidentally, the reviewer, a non-German who received part of his education in Germany, found it very frustrating that complex sentences with beautiful syntactic construction had precedence over clarity. Because of this and, moreover, because of the wealth of detailed and well-organized information, this reviewer recommends that the volume should be translated into English. This would result in a wider circulation which the book richly deserves and the crime lab practitioners need.