1. Record Nr. UNINA9910143410503321

Titolo	Trace chemical sensing of explosives [[electronic resource] /] / edited by Ronald L. Woodfin
Pubbl/distr/stampa	Hoboken, N.J., : Wiley, c2007
ISBN	1-280-82194-9 9786610821945 0-470-08520-7 0-470-08519-3
Descrizione fisica	1 online resource (396 p.)
Altri autori (Persone)	WoodfinRonald L
Disciplina	662.2 662.20287 662/.20287
Soggetti	Chemical detectors Explosives - Detection Terrorism - Prevention Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references (p. 333-349) and index.
Nota di contenuto	TRACE CHEMICAL SENSING OF EXPLOSIVES; CONTENTS; FOREWORD; PREFACE; ACKNOWLEDGMENTS; LIST OF CONTRIBUTORS; PART I FUNDAMENTAL CONSIDERATIONS; 1 CHEMICAL SENSING; 1.1 What Is Chemical Sensing?; 1.2 Types of Sensing Systems; 1.3 Sensing Possibilities; 1.3.1 Bulk Sensors; 1.3.2 Trace Sensors; 1.4 Aromas; 1.4.1 Biosensors; 1.4.2 Electronic Sensors; 1.4.3 Other Indirect Methods (Switch of Molecules); 1.4.4 Target Possibilities; 1.4.5 Sensitivity and the Problem of False Positives; 1.5 Configuring an Electronic Trace Sensor; 1.5.1 Required Elements; 1.5.2 Integration and Packaging 1.6 Issue of Concentration1.6.1 Nomenclature; 1.6.2 Source to Sample; 1.6.3 Catch, Count, and Release Cycle; 1.6.4 Sensor Sensitivity Versus Sampling Time; 1.6.5 The Concentration Gap; 1.6.6 Sensitivity Comparison; References; 2 WHAT TO DETECT?; References; 3 DANGEROUS INNOVATIONS; 3.1 Introduction; 3.2 Theory of Improvised Explosives; 3.3 History and the Anarchist Literature; 3.4 Fertilizer-

Based IEs; 3.4.1 Ammonium Nitrate IEs; 3.4.2 Urea Nitrate; 3.5 Peroxide Explosives; 3.6 The Next Wave; 3.6.1 Improvised Detonators; 3.6.2 Peroxide Main Charges; 3.6.3 Fringe Mixtures; 3.6.4 On the Horizon References4 WHERE SHOULD WE LOOK FOR EXPLOSIVE MOLECULES?; 4.1 Introduction; 4.1.1 Where Did the Molecules Come from and How Did They Get Here?; 4.1.2 Objects Other Than Buried Landmines; 4.1.3 Questions That Beg for Answers; 4.2 Source of the Molecules; 4.2.1 How the Molecules Diffuse or Leak from a Munition; 4.2.2 Example of Landmines; 4.2.3 Other Munitions; 4.3 Transport of the Molecules; 4.3.1 Buried Sources; 4.3.2 Concentration Estimates from Buried Sources; 4.3.3 Other Environments; 4.3.4 Odor Plumes; 4.4 EF&T Implications for Search and Sampling Strategies; 4.4.1 Sources Buried on Land
4.4.2 Sources Producing Plumes4.5 Open Questions and Fruitful Areas for Future Research; 4.5.1 Objects Buried in the Sea Bottom; 4.5.2 Sampling Plant Material; 4.6 Role of Computer Modeling; 4.6.1 Soil Transport Models; 4.6.2 Plume Transport Models; 4.6.3 Plume Search Models; 4.7 Conclusions; References; 5 STRUCTURE OF TURBULENT CHEMICAL PLUMES; 5.1 Turbulent Mixing; 5.2 Instantaneous Structure; 5.3 Time-Averaged Characteristics; 5.4 Information for Tracking Chemical Odor Plumes; 5.5 Variation of the Plume Structure; Acknowledgments; References; PART II FIELD EXPERIENCE
6 DETECTION OF TRACE EXPLOSIVE SIGNATURES IN THE MARINE ENVIRONMENT6.1 Introduction; 6.2 Overview of Fate and Transport of Explosives Released from UUXO; 6.3 Sampling and Sensing Methodology; 6.4 SeaDog Sensor Configurations; 6.4.1 Prototype Integrated with a Robotic Crawler Platform; 6.4.2 Diver-Deployed SeaDog and Initial Integration with the REMUS; 6.4.3 SeaDog Miniaturization: The SeaPup; 6.5 Results of Sensor Tests Conducted in the Marine Environment; 6.5.1 Tests of the Sensor Prototype on a Crawler Vehicle
6.5.2 Tests of the Diver-Deployed SeaDog Sensor and Initial Integration to the REMUS

Sommario/riassunto

This timely book covers the most recent developments in the chemical detection of explosives in a variety of environments. Beginning with a broad view of the need for and the potential applications of chemical sensing, the book considers the issue of how to effectively include chemical sensing into systems designed to find hidden explosives devices. Offering a firsthand look at the latest technologies direct from those who are actively developing them, the book features:A look at the history of the field, including the contributions of recent programsA brief explanation of the chem

2. Record Nr. UNISALENTO991001990589707536

Autore	Salerno, Luigi
Titolo	Giulio Mancini e "Le cose di Siena" / Luigi Salerno
Pubbl/distr/stampa	Roma : De Luca, 1956
Descrizione fisica	P. 9-17 ; 26 cm
Disciplina	759.5
Soggetti	Mancini, Giulio Mancini, Giulio
Lingua di pubblicazione	Italiano
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Estr. da: Scritti di storia dell'arte in onore di Lionello Venturi