

# Contents

<b>Part I: The Basics for Understanding Imaging</b> .....	<b>1</b>
1 Epidemiology and Imaging of Dust Diseases DANIEL E. BANKS .....	3
2 Responses of the Respiratory System to Inhaled Agents (Airways, Lung, and Pleura) ANDREW CHURG, ANNA RASK-ANDERSEN, ØYVIND OMLAND, and BENOIT NEMERY .....	13
2.1 Pathological Reactions to Inhaled Particles and Fibers ANDREW CHURG .....	13
2.2 Bio-Aerosols and Organic Dusts ANNA RASK-ANDERSEN and ØYVIND OMLAND .....	31
2.3 Chemical-Induced Lung Injury and Its Long-Term Sequelae BENOIT NEMERY .....	67
3 Diagnostic Techniques ZELENA A. AZIZ, DAVID M. HANSELL, VINICIUS C. S. ANTAO, JOHN E. PARKER, SHERWOOD BURGE, PASCAL DUMORTIER, GABRIEL REBOUX, NADINE MAGY and JEAN-CHARLES DALPHIN .....	77
3.1 Occupational and Environmental Lung Disease: The Role of Imaging ZELENA A. AZIZ and DAVID M. HANSELL .....	77
3.2 ILO Classification VINICIUS C. S. ANTAO and JOHN E. PARKER .....	93
3.3 Lung Function for Radiology SHERWOOD BURGE .....	101
3.4 Mineralogical Analysis of Lung Samples PASCAL DUMORTIER .....	115
3.5 Immunological Methods GABRIEL REBOUX, NADINE MAGY, and JEAN-CHARLES DALPHIN .....	133
<b>Part II: Imaging</b> .....	<b>159</b>
4 Lung Effects of Cigarette Smoking SUJAL R. DESAI and DAVID M. HANSELL .....	161

5	Silicosis CLARA GAIK CHENG OOI and HIROAKI ARAKAWA.....	177
6	Coal Worker's Pneumoconiosis JOHNY A. VERSCHAKELEN and PIERRE ALAIN GEVENOIS.....	195
7	Asbestosis SUSAN J. COPLEY.....	207
8	Non-Malignant Asbestos-Related Pleural Disorders PIERRE ALAIN GEVENOIS and PAUL DE VUYST .....	223
9	Mesothelioma ALEXANDER BANKIER and TOMAS FRANQUET .....	239
10	Imaging of Beryllium-Related Diseases DAVID A. LYNCH.....	249
11	Hard Metal and Cobalt Disease JOHNY A. VERSCHAKELEN and BENOIT NEMERY .....	257
12	Other Uncommon Pneumoconioses MASANORI AKIRA .....	263
13	Hypersensitivity Pneumonitis MICHEL W. BRAUNER, PIERRE-YVES BRILLET, and FRANÇOIS GUILLON.....	281
	Subject Index .....	297
	List of Contributors.....	301