1. Record Nr. UNINA9910822153403321 Autore Weiner Richard M Titolo Analogies in physics and life: a scientific autobiography / / Richard M. Weiner Pubbl/distr/stampa New Jersey, : World Scientific, c2008 **ISBN** 1-281-93844-0 9786611938444 981-279-082-9 Edizione [1st ed.] Descrizione fisica 1 online resource (454 p.) Disciplina 169 Physicists - Germany Soggetti Analogy **Physics** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Includes bibliographical references (p. 383-394) and index. Nota di bibliografia Nota di contenuto Contents; Preface; Part I: THE WANDERING YEARS (1930-1974); Section I: Czernowitz, a City of People and Books that No Longer Exists (1930-1945); Chapter 1. Childhood; My Countries; My Languages; My Family; My Schools: Chapter 2. Politics - Premonition of War: Making Ends Meet; Chapter 3. War - The Ghetto; Section II: Post-War Romania; The Isomeric Shift; Persona Non Grata (1945-1969); Chapter 4. High School and University; Foc sani 1945-1949; Bucharest; University; Theoretical Physics; Chapter 5. The Isomeric Shift on Spectral Lines; The Discovery of the Isomeric Shift Finite Size Effects in Subatomic PhysicsNatural Line Width and the Limits of Optical Spectroscopy; Atomic Versus Nuclear Shells, the Pauli Exclusion Principle and the Nuclear Shell Model; The Isomeric Shift and the Shell Structure of Nuclei; Some Confusion of Terminology; The Mossbauer Effect; Dubna - 1958; Chapter 6. Persona Non Grata; Applying for Emigration and Its Consequences; The Romanian Thaw;

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Sommario/riassunto

Analogies play a fundamental role in science. To understand how and why, at a given moment, a certain analogy was used, one has to know the specific, historical circumstances under which the new idea was developed. This historical background is never presented in scientific articles and quite rarely in books. For the general reader, the undergraduate or graduate student who learns the subject for the first time, but also for the practitioner who looks for inspiration or who wants to understand what his colleague working in another field does, these historical circumstances can be fascinating a