1. Record Nr. UNISA996508667703316

Autore	Alberts G (Gerard), <1954->
Titolo	Tales of electrologica : computers, software and people / / Gerard Alberts and Jan Friso Groote
Pubbl/distr/stampa	Cham, Switzerland : , : Springer International Publishing, , [2023] ©2023
ISBN	3-031-13033-2
Edizione	[1st ed. 2022.]
Descrizione fisica	1 online resource (205 pages)
Collana	History of Computing, , 2190-684X
Disciplina	338.470040973
Soggetti	Computer industry - Netherlands Computer scientists
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Chapter 1. Electrologica, A Gem (Gerard Alberts) -- Chapter 2. Philips and the Fate of Electrologica (Gerard Alberts) -- Chapter 3. From the X1 to the X8 (Huub de Beer) -- Chapter 4. Software Without Memory (Paul Klint) -- Chapter 5. The Mathematical Center, ALGOL 60 and the Electrologica X8 (Frans Kruseman Aretz) -- Chapter 6. History of Dekker’s Algorithm for Mutual Exclusion (Dirk Dekker) -- Chapter 7. The Electrologica X8 and the BOL Detector (René van Dantzig) -- Chapter 8. An Early Experiment in Algorithmic Composition (Lambert Meertens).
Sommario/riassunto	Manufacturing computers in series was quite a feat in the 1950s. As mathematical as it gets, the machines discussed here were called X1 and X8. The industrial achievement combined with the background in a mathematical research center made the company Electrologica a legend in Dutch computing. The tales in this book are told by those who have a right to tell. Highly engaged professionals take readers back to their pioneering work with the machines and in retrospect unveil some of the values, which went without saying in the 1960s. To disagree, Paul Klint relates the contrasting views on software in Dutch research traditions. ALGOL culture: Frans Kruseman Aretz takes the reader along to the detailed decisions on constructing compilers and shows the values of an ALGOL culture transpiring. Signposts: Dirk Dekker for the first time

‘owns’ his algorithm for mutual exclusion. In particle physics: René van Dantzig’s use case was an Electrologica X8 computer controlling two other computers in three-dimensional detection of colliding particles. Early steps in AI: Lambert Meertens’ tale of the X8 machine composing a violin quartet comes with his original presentation, as well as the code in ALGOL 60. The reflections of first hand experiences combine well with the second thoughts of historical research into archival sources. Historians Huub de Beer and Gerard Alberts offer a view into the boardrooms of the local enterprise Electrologica, and of the electronics multinational Philips. Where pioneers and historians meet in an inspiring dialogue, the reader gains a view on the often implicit decisions constituting the field. Fortuitously, a copy of the X8 was retrieved from Kiel, Germany, and put on display at Rijksmuseum Boerhaave, Leiden. Sparked by the very material presence of an X8, the present book takes stock of the state of historiography of Electrologica. Gerard Alberts is an associate professor in History of Digital Cultures, retired from the University of Amsterdam. Jan Friso Groote is a full professor of Formal Methods at the Eindhoven University of Technology. .

2. Record Nr. UNINA9910965081803321

Autore	Krementsov N. L
Titolo	Stalinist science / / Nikolai Krementsov
Pubbl/distr/stampa	Princeton, NJ, : Princeton Univesity Press, c1997
ISBN	9786612753152 9781400816880 1400816882 9781282753150 1282753150 9781400822140 1400822149 9781400812431 1400812437
Edizione	[Course Book]
Descrizione fisica	1 online resource (390 p.)
Disciplina	306.4/5/090470904
Soggetti	Science - Soviet Union - History - 20th century Communism - Soviet Union - History - 20th century Soviet Union Politics and government 1936-1953
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. [307]-358) and indexes.
Nota di contenuto	Front matter -- CONTENTS -- LIST OF FIGURES AND TABLES -- PREFACE -- LIST OF ABBREVIATIONS -- INTRODUCTION -- PART I: THE MAKING OF STALINIST SCIENCE -- Introduction -- CHAPTER 1. Russian Science in Transition, 1890-1929 -- CHAPTER 2. The Stalinization of Russian Science, 1929-1939 -- CHAPTER 3. Stalinist Science in Action: The Case of Genetics -- KEY EVENTS, 1917-1939 -- PART II: STALINIST SCIENCE IN THE 1940's -- Introduction -- CHAPTER 4. World War II and the Sweet Fruits of Victory -- CHAPTER 5. On the Threshold of the Cold War, 1946-1947 -- CHAPTER 6. The Fateful Year: 1948 -- KEY EVENTS, 1941-1953 -- PART III: THE CONSOLIDATION OF STALINIST SCIENCE -- Introduction -- CHAPTER 7. Talking the Talk: Ritual and Rhetoric -- CHAPTER 8. Walking the Walk: Education versus Research -- CHAPTER 9. The Realities of Stalinist Science: Careerism and Institutional Rivalry

-- CONCLUSION -- APPENDIX A: Stalinist Scientific "Newspeak": A Glossary -- APPENDIX B: Key Figures -- NOTES -- NAME INDEX -- SUBJECT INDEX

Sommario/riassunto

Some scholars have viewed the Soviet state and science as two monolithic entities--with bureaucrats as oppressors, and scientists as defenders of intellectual autonomy. Based on previously unknown documents from the archives of state and Communist Party agencies and of numerous scientific institutions, Stalinist Science shows that this picture is oversimplified. Even the reinstated Science Department within the Central Committee was staffed by a leading geneticist and others sympathetic to conventional science. In fact, a symbiosis of state bureaucrats and scientists established a much more terrifying system of control over the scientific community than any critic of Soviet totalitarianism had feared. Some scientists, on the other hand, developed more elaborate devices to avoid and exploit this control system than any advocate of academic freedom could have reasonably hoped. Nikolai Krementsov argues that the model of Stalinist science, already taking hold during the thirties, was reversed by the need for inter-Allied cooperation during World War II. Science, as a tool for winning the war and as a diplomatic and propaganda instrument, began to enjoy higher status, better funding, and relative autonomy. Even the reinstated Science Department within the Central Committee was staffed by a leading geneticist and others sympathetic to conventional science. However, the onset of the Cold War led to a campaign for eliminating such servility to the West. Then the Western links that had benefited genetics and other sciences during the war and through 1946 became a liability, and were used by Lysenko and others to turn back to the repressive past and to delegitimate whole research directions.