

# Contents

## Introduction

|          |                                                                                                                               |             |
|----------|-------------------------------------------------------------------------------------------------------------------------------|-------------|
| <b>1</b> | <b>Aim and General Description of the Anthology</b>                                                                           | <b>xv</b>   |
| 1.1      | Purpose of the Introduction . . . . .                                                                                         | xvi         |
| 1.2      | Organization of the Anthology . . . . .                                                                                       | xvii        |
| <b>2</b> | <b>Notes on the Historiography of National Socialism</b>                                                                      | <b>xix</b>  |
| <b>3</b> | <b>The Impact of Nazi Science Policy on Physics Instruction and Research</b>                                                  | <b>xxvi</b> |
| 3.1      | The Changing Attitude of Scientists within Germany . . . . .                                                                  | xxviii      |
| 3.2      | Science Policy Measures after 1934 . . . . .                                                                                  | xxix        |
| 3.3      | Faculty Membership in Nazi Organizations . . . . .                                                                            | xxxix       |
| 3.4      | Student Enrollment in the Sciences . . . . .                                                                                  | xlvi        |
| <b>4</b> | <b>Emigration Research</b>                                                                                                    | <b>liii</b> |
| 4.1      | General Emigration Statistics . . . . .                                                                                       | liii        |
| 4.2      | The Emigration of Scholars, Scientists and Engineers . . . . .                                                                | liv         |
| 4.3      | Emigration Statistics by Region and Discipline . . . . .                                                                      | lvi         |
| 4.4      | Reaction to the Dismissals and to the First Wave of Emigrations                                                               | lviii       |
| 4.5      | Host and Transit Countries . . . . .                                                                                          | lix         |
| 4.6      | Emigr  Relief Organizations . . . . .                                                                                         | lxi         |
| <b>5</b> | <b>Physics in Nazi Germany</b>                                                                                                | <b>lxv</b>  |
| 5.1      | Institutions Connected to Physical Research . . . . .                                                                         | lxv         |
| 5.2      | German Physical Associations . . . . .                                                                                        | lxx         |
| 5.3      | The Protracted Conflict between Experimental and Theoretical<br>Physics and the Emergence of the ‘Aryan Physics’ Movement . . | lxx         |
| 5.4      | Physical Research in Germany 1933–1945 . . . . .                                                                              | lxxviii     |
| 5.5      | The Legacy of National Socialism . . . . .                                                                                    | lxxxix      |
| <b>6</b> | <b>Style and Rhetoric</b>                                                                                                     | <b>xciv</b> |
| <b>7</b> | <b>The Text</b>                                                                                                               | <b>xcix</b> |
| 7.1      | Tips for the User . . . . .                                                                                                   | xcix        |
| 7.2      | A Note on the Translation . . . . .                                                                                           | c           |
| 7.3      | Acknowledgments . . . . .                                                                                                     | c           |

## I Controversies Prior to 1933

|   |                                                                                                             |    |
|---|-------------------------------------------------------------------------------------------------------------|----|
| 1 | <b>A. Einstein:</b> My Reply. On the Anti-Relativity Theoretical Co., Ltd., <b>Aug. 27, 1920</b>            | 1  |
| 2 | <b>M. von Laue:</b> Review of J. Stark's <i>The Current Crisis in German Physics</i> , <b>Jan. 12, 1923</b> | 6  |
| 3 | <b>P. Lenard &amp; J. Stark:</b> The Hitler Spirit and Science, <b>May 8, 1924</b>                          | 7  |
| 4 | <b>A. von Brunn:</b> Review of <i>100 Authors against Einstein</i> , <b>Mar. 13, 1931</b>                   | 10 |

## II After the Nazi Seizure of Power

|    |                                                                                                                              |    |
|----|------------------------------------------------------------------------------------------------------------------------------|----|
| 5  | <b>L. Meitner:</b> Letter to Otto Hahn, <b>Mar. 21, 1933</b>                                                                 | 17 |
| 6  | <b>A. Einstein:</b> Letters to the Prussian Academy of Sciences and the Academy's Response, <b>Mar. 28–Apr. 5, 1933</b>      | 18 |
| 7  | Law for the Restoration of the Professional Civil Service, <b>Apr. 7, 1933</b>                                               | 21 |
| 8  | First Ordinance on the Implementation of the Law for the Restoration of the Professional Civil Service, <b>Apr. 11, 1933</b> | 25 |
| 9  | <i>Göttinger Zeitung:</i> Voluntary Resignation of Prof. James Franck, <b>Apr. 17, 1933</b>                                  | 26 |
| 10 | <b>Edith Hahn:</b> Letter to James and Ingrid Franck, <b>Apr. 22, 1933</b>                                                   | 31 |
| 11 | <b>Göttingen University Lecturers:</b> Professor Franck's Resignation, <b>Apr. 24, 1933</b>                                  | 32 |
| 12 | Law against the Overcrowding of German Schools and Universities, <b>Apr. 25, 1933.</b>                                       | 34 |
| 13 | <b>W. Köhler:</b> Conversations in Germany, <b>Apr. 28, 1933</b>                                                             | 36 |
| 14 | <i>Vossische Zeitung:</i> The Spirit at Universities, <b>Apr. 28, 1933</b>                                                   | 40 |
| 15 | <b>F. Haber:</b> Letter of Resignation to Minister Rust, <b>Apr. 30, 1933</b>                                                | 44 |
| 16 | <b>J. Franck:</b> Letter to Walther Gerlach, <b>May 3, 1933</b>                                                              | 45 |

---

|    |                                                                                                                                    |    |
|----|------------------------------------------------------------------------------------------------------------------------------------|----|
| 17 | Third Ordinance on the Implementation of the Law for the Restoration of the Professional Civil Service, <b>May 6, 1933</b>         | 46 |
| 18 | <b>P. Lenard:</b> A Big Day for Science. Johannes Stark appointed President of the <i>PTR</i> . <b>May 13, 1933</b>                | 49 |
| 19 | <b>M. von Laue:</b> The Change in the Reich Physical and Technical Institute Presidency in the Spring of 1933                      | 53 |
| 20 | <b>H. Kopfermann:</b> Letter to Niels Bohr, <b>May 23, 1933</b>                                                                    | 54 |
| 21 | <i>Science:</i> The Scientific Situation in Germany, <b>June 2, 1933</b>                                                           | 59 |
| 22 | <b>W. Heisenberg:</b> Letter to Max Born, <b>June 2, 1933</b>                                                                      | 61 |
| 23 | <b>C. Bosch:</b> Letter to Fritz Haber, <b>June 16, 1933</b>                                                                       | 63 |
| 24 | <b>F. Haber:</b> Letter to Carl Bosch, <b>June 22, 1933</b>                                                                        | 63 |
| 25 | <b>Governor of Hessen:</b> Dismissal of George Jaffé, <b>June 26, 1933</b>                                                         | 66 |
| 26 | <b>J. J. Thomson:</b> Letter to George Jaffé, <b>July 18, 1933</b>                                                                 | 67 |
| 27 | <b>M. von Laue:</b> Opening Address at the Physics Conference in Würzburg, <b>Sep. 18, 1933</b>                                    | 67 |
| 28 | <b>J. Stark:</b> Organization of Physical Research, <b>Sep. 18, 1933</b>                                                           | 71 |
| 29 | <b>M. von Laue:</b> Fritz Haber †, <b>Feb. 16, 1934</b>                                                                            | 76 |
| 30 | <b>Kaiser Wilhelm Society:</b> Record of a Conference Regarding the Kaiser Wilhelm Institute of Physics, <b>June 22, 1934</b>      | 79 |
| 31 | <b>M. von Laue:</b> On Heisenberg's Uncertainty Relations and their Epistemological Significance, <b>June 29, 1934</b>             | 82 |
| 32 | <b>J. Stark:</b> Personal Evaluations of G. Hertz and R. Gans for the German University Lecturers Association, <b>Nov. 8, 1934</b> | 86 |
| 33 | <b>G. Mie:</b> Letter to Max von Laue, <b>Nov. 20, 1934</b>                                                                        | 87 |
| 34 | <b>M. von Laue:</b> Letter to Gustav Mie, <b>Nov. 22, 1934</b>                                                                     | 89 |
| 35 | <b>M. Wien:</b> Physics at German Universities, <b>late Nov. 1934</b>                                                              | 91 |

|    |                                                                                                                                                          |     |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| 36 | Law on the Retirement and Transfer of Professors as a Result of the Reorganization of the German System of Higher Education, <b>Jan. 21, 1935</b>        | 96  |
| 37 | M. Nordmeyer: Letter to Lise Meitner, <b>May 21, 1935</b>                                                                                                | 97  |
| 38 | M. Planck: Progress Report by the Kaiser Wilhelm Society for the Advancement of the Sciences (April 1934 to the End of March 1935), <b>June 28, 1935</b> | 98  |
| 39 | P. Lenard: Foreword to <i>German Physics</i> , <b>August 1935</b>                                                                                        | 100 |
| 40 | J. Stark: Philipp Lenard: An Aryan Scientist, <b>Dec. 13, 1935</b>                                                                                       | 109 |
| 41 | <i>Nature</i> : Nazi-Socialism and International Science, <b>Dec. 14, 1935</b>                                                                           | 116 |

### III The Ideological Schism: 1936–1939

|    |                                                                                                       |     |
|----|-------------------------------------------------------------------------------------------------------|-----|
| 42 | W. Menzel: German Physics and Jewish Physics, <b>Jan. 29, 1936</b>                                    | 119 |
| 43 | W. Heisenberg: On the Article: ‘German and Jewish Physics’, <b>Feb. 28, 1936</b>                      | 121 |
| 44 | J. Stark: Comment on W. Heisenberg’s Reply, <b>Feb. 28, 1936</b>                                      | 124 |
| 45 | M. von Laue: Review of Philipp Lenard’s <i>German Physics</i> , <b>Feb. 29, 1936</b>                  | 127 |
| 46 | E. Gehrcke: How the Energy Distribution of Black-Body Radiation Was Really Found, <b>Apr. 3, 1936</b> | 130 |
| 47 | P. Debye: Comment on the Preceding Article by E. Gehrcke, <b>May 4, 1936</b>                          | 133 |
| 48 | P. Thiessen: Physical Chemistry in the National Socialist State, <b>May 9, 1936</b>                   | 134 |
| 49 | W. Heisenberg, H. Geiger & M. Wien: Petition, <b>Spring 1936</b>                                      | 137 |
| 50 | Reich Education Ministry: Memorandum to Reich Minister Bernhard Rust, <b>Oct. 2, 1936</b>             | 140 |
| 51 | <i>Science</i> : Germany and the Nobel Prizes, <b>Feb. 12, 1937</b>                                   | 141 |

|    |                                                                                                                                                  |     |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| 52 | <b>B. Rust:</b> Creation of a Research Council, <b>Mar. 16, 1937</b>                                                                             | 143 |
| 53 | <b>Reich Education Ministry:</b> The Taking of a Doctorate by Jews of German Nationality, <b>Apr. 15, 1937</b>                                   | 145 |
| 54 | <b>P. Debye:</b> Kaiser Wilhelm Institute of Physics, <b>Apr. 23, 1937</b>                                                                       | 146 |
| 55 | <i>Das Schwarze Korps:</i> 'White Jews' in Science, <b>July 15, 1937</b>                                                                         | 152 |
| 56 | <b>J. Stark:</b> 'Science' is Politically Bankrupt, <b>July 15, 1937</b>                                                                         | 157 |
| 57 | <b>F. Hund:</b> Letter to Reich Minister Rust, <b>July 20, 1937</b>                                                                              | 160 |
| 58 | <b>C. Krauch:</b> Youth to the Front Line. New Blood in Science and Technology, <b>August 1937</b>                                               | 161 |
| 59 | <b>F. Heyer:</b> Review of E. Günther's <i>Military Physics</i> , <b>Apr. 18, 1938</b>                                                           | 168 |
| 60 | <b>C. Bosch:</b> Letter to Reich Minister W. Frick, <b>May 20, 1938</b>                                                                          | 170 |
| 61 | <b>Reich Interior Ministry:</b> Letter to Carl Bosch, <b>June 16, 1938</b>                                                                       | 171 |
| 62 | <b>L. Prandtl:</b> Letter to Heinrich Himmler, <b>July 12, 1938</b>                                                                              | 172 |
| 63 | <b>H. Himmler:</b> Letter to Reinhard Heydrich, <b>July 21, 1938</b>                                                                             | 175 |
| 64 | <b>H. Himmler:</b> Letter to Werner Heisenberg, <b>July 21, 1938</b>                                                                             | 176 |
| 65 | <b>H. Himmler:</b> Letter to Ludwig Prandtl, <b>July 21, 1938</b>                                                                                | 177 |
| 66 | <b>Reich Education Ministry:</b> Memorandum to Secretary Otto Wacker, <b>Oct. 3, 1938</b>                                                        | 178 |
| 67 | <b>P. Debye:</b> Letter to the board of the German Physical Society and enclosed draft letter to the German members, <b>Dec. 2 &amp; 8, 1938</b> | 181 |
| 68 | <b>German Physical Society:</b> Minutes of Meeting, <b>Dec. 14, 1938</b>                                                                         | 182 |
| 69 | <b>P. W. Bridgman:</b> 'Manifesto' by a Physicist, <b>Feb. 24, 1939</b>                                                                          | 184 |
| 70 | <b>L. Prandtl:</b> Mechanics, <b>c. April 1939</b>                                                                                               | 186 |
| 71 | <b>H. Geiger:</b> Experimental Physics, <b>c. April 1939</b>                                                                                     | 189 |
| 72 | <b>A. Esau:</b> Technical Physics, <b>c. April 1939</b>                                                                                          | 193 |

|                                         |                                                                                                                                 |            |
|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|------------|
| <b>73</b>                               | <b>SS Head of the Central Office of Public Safety:</b> Letter to R. Mentzel enclosing Report on Heisenberg, <b>May 26, 1939</b> | <b>195</b> |
| <b>74</b>                               | <b>S. Flügge:</b> Exploiting Atomic Energy, <b>Aug. 15, 1939</b>                                                                | <b>197</b> |
| <br><b>IV Physics at War: 1939–1945</b> |                                                                                                                                 |            |
| <b>75</b>                               | <b>E. Schumann:</b> Armed Forces and Research, <b>1939</b>                                                                      | <b>207</b> |
| <b>76</b>                               | <b>M. Planck:</b> Max von Laue, <b>Oct. 6, 1939</b>                                                                             | <b>220</b> |
| <b>77</b>                               | <b>L. Glaser:</b> Jews in Physics: Jewish Physics, <b>November 1939</b>                                                         | <b>223</b> |
| <b>78</b>                               | <b>P. Lenard:</b> Foreword to <i>Ideological Continental Blockade</i> , <b>Feb. 1, 1940</b>                                     | <b>234</b> |
| <b>79</b>                               | Contract between the Army Ordnance Office and the Kaiser Wilhelm Society, <b>Mar. 6, 1940</b>                                   | <b>235</b> |
| <b>80</b>                               | <b>B. Rust:</b> Letter to Army High Command, <b>Mar. 15, 1940</b>                                                               | <b>238</b> |
| <b>81</b>                               | <b>E. Telschow:</b> Foreword to <i>Yearbook of the Kaiser Wilhelm Society</i> , <b>August 1940</b>                              | <b>239</b> |
| <b>82</b>                               | <b>H.-J. Flechtner:</b> Where does German Physics Stand Today? A Wartime Conference in Berlin, <b>Sep. 8, 1940</b>              | <b>240</b> |
| <b>83</b>                               | <b>W. Müller:</b> Theoretical Physics at Universities, <b>Nov. 1940</b>                                                         | <b>246</b> |
| <b>84</b>                               | <b>L. Prandtl:</b> Letter to Hermann Göring, <b>Apr. 28, 1941</b>                                                               | <b>259</b> |
| <b>85</b>                               | <b>L. Prandtl:</b> Attachment to the Letter to Göring, <b>Apr. 28, 1941</b>                                                     | <b>261</b> |
| <b>86</b>                               | <b>C. Ramsauer:</b> Letter to Ludwig Prandtl, <b>June 4, 1941</b>                                                               | <b>267</b> |
| <b>87</b>                               | <b>P. Jordan:</b> Revolution in Science, <b>September 1941</b>                                                                  | <b>268</b> |
| <b>88</b>                               | <b>C. Ramsauer:</b> Letter to Ludwig Prandtl, <b>Oct. 31, 1941</b>                                                              | <b>275</b> |
| <b>89</b>                               | <b>W. Weizel:</b> Review of <i>Jewish and German Physics</i> , <b>Jan. 1942</b>                                                 | <b>276</b> |
| <b>90</b>                               | <b>C. Ramsauer:</b> Letter to Bernhard Rust, <b>Jan. 20, 1942</b>                                                               | <b>278</b> |
| <b>91</b>                               | <b>C. Ramsauer:</b> American Physics Outdoes German Physics, <b>Jan. 20, 1942</b>                                               | <b>281</b> |

|     |                                                                                                                                  |     |
|-----|----------------------------------------------------------------------------------------------------------------------------------|-----|
| 92  | <b>C. Ramsauer:</b> Refuting Allegations that Modern Theoretical Physics is a Product of the Jewish Spirit, <b>Jan. 20, 1942</b> | 285 |
| 93  | <b>C. Ramsauer:</b> The Munich Conciliation and Pacification Attempt, <b>Jan. 20, 1942</b>                                       | 290 |
| 94  | <b>L. Prandtl:</b> Letter to Carl Ramsauer, <b>Jan. 28, 1942</b>                                                                 | 292 |
| 95  | <b>W. Heisenberg:</b> The Theoretical Basis for the Generation of Energy from Uranium Fission, <b>Feb. 26, 1942</b>              | 294 |
| 96  | <b>G. Graue:</b> Letter to Albert Vögler, <b>Mar. 13, 1942</b>                                                                   | 301 |
| 97  | <b>A. Vögler:</b> Foreword to <i>Yearbook of the Kaiser Wilhelm Society</i> , after <b>Mar. 31, 1942</b>                         | 302 |
| 98  | Führer's Decree on the Reich Research Council, <b>June 9, 1942</b>                                                               | 303 |
| 99  | <b>H. Göring et al.:</b> Record of Conference Regarding the Reich Research Council, <b>July 6, 1942</b>                          | 304 |
| 100 | <b>H. Feitl:</b> War Physics. Specific Weight 'Zero', <b>May 30, 1943</b>                                                        | 309 |
| 101 | <b>P. Karlson:</b> War Physics. Dropping Bombs, <b>May 30, 1943</b>                                                              | 311 |
| 102 | <b>C. Ramsauer:</b> The Key Position of Physics in Science, Technology and Armament, <b>June 18, 1943</b>                        | 315 |
| 103 | <b>A. Esau:</b> Budget Memorandum to R. Mentzel, <b>Nov. 19, 1943</b>                                                            | 321 |
| 104 | <b>K. Diebner:</b> Nuclear Research Commissions, <b>Apr. 18, 1944</b>                                                            | 322 |
| 105 | <i>Das Reich:</i> A[braham]. Esau, <b>July 16, 1944</b>                                                                          | 324 |
| 106 | <b>H. Himmler:</b> Letter to Albert Speer, <b>Aug. 3, 1944</b>                                                                   | 327 |
| 107 | <b>W. Gerlach:</b> Letter to Martin Bormann, <b>Dec. 16, 1944</b>                                                                | 329 |

## V The Legacy of National Socialism

|     |                                                                                                                           |     |
|-----|---------------------------------------------------------------------------------------------------------------------------|-----|
| 108 | <b>L. Meitner:</b> Letter to Otto Hahn, <b>June 27, 1945</b>                                                              | 332 |
| 109 | <b>A. Weinberg &amp; L. Nordheim:</b> Memorandum on the <i>Kernphysikalische Forschungsberichte</i> , <b>Nov. 8, 1945</b> | 334 |

|     |                                                                                                                  |     |
|-----|------------------------------------------------------------------------------------------------------------------|-----|
| 110 | <b>W. Finkelburg:</b> The Fight against Party Physics, c. 1946                                                   | 339 |
| 111 | <b>S. Goudsmit:</b> War Physics in Germany, <b>January 1946</b>                                                  | 345 |
| 112 | <b>S. Goudsmit:</b> German Scientists in<br>Army Employment I — The Case Analyzed, <b>February 1947</b>          | 352 |
| 113 | <b>H. Bethe &amp; H. Sack:</b> German Scientists in<br>Army Employment II — A Protest, <b>February 1947</b>      | 356 |
| 114 | <b>M. Planck:</b> My Audience with Adolf Hitler, <b>May 6, 1947</b>                                              | 359 |
| 115 | <b>W. Heisenberg:</b> Research in Germany on the Technical<br>Application of Atomic Energy, <b>Aug. 16, 1947</b> | 361 |
| 116 | <b>S. Goudsmit:</b> Nazis' Atomic Secrets, <b>Oct. 20, 1947</b>                                                  | 379 |
| 117 | <b>M. v. Laue:</b> Wartime Activities of German Scientists, <b>April 1948</b>                                    | 393 |
| 118 | <b>P. Morrison:</b> A Reply to Dr. von Laue, <b>April 1948</b>                                                   | 396 |
| 119 | <b>S. Goudsmit:</b> Our Task in Germany, <b>April 1948</b>                                                       | 397 |
| 120 | <b>L. Meitner:</b> Letter to Otto Hahn, <b>June 6, 1948</b>                                                      | 400 |
| 121 | <b>W. Gerlach:</b> Affidavit on Rudolf Mentzel, <b>Dec. 13, 1948</b>                                             | 403 |

## Appendix

|          |                                                   |              |
|----------|---------------------------------------------------|--------------|
| <b>A</b> | <b>Professional Institutions and Associations</b> | <b>I</b>     |
| <b>B</b> | <b>State and Military Institutions</b>            | <b>V</b>     |
| <b>C</b> | <b>National Socialist Organizations</b>           | <b>IX</b>    |
| <b>D</b> | <b>Some Major Industrial Firms</b>                | <b>XII</b>   |
| <b>E</b> | <b>Journals and Periodicals</b>                   | <b>XVI</b>   |
| <b>F</b> | <b>Biographical Profiles</b>                      | <b>XVIII</b> |
|          | <b>Bibliography</b>                               | <b>LIV</b>   |
|          | <b>Name Index</b>                                 | <b>XCv</b>   |

Physics and National Socialism  
An Anthology of Primary Sources  
Hentschel, K. (Ed.)  
1996, Cl, 511 p. 31 illus., Softcover  
ISBN: 978-3-0348-0202-4  
A product of Birkhäuser Basel