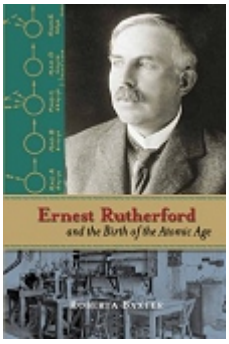
Profiles in Science

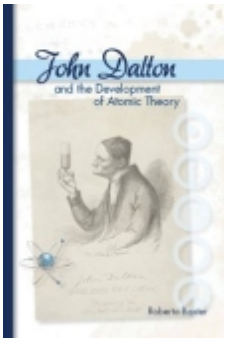
Booklist top ten Series 2007



School Library Journal
June 2013

BAXTER, Roberta. **Ernest Rutherford and the Birth of the Atomic Age.** 112p. (Profiles in Science Series). bibliog. chron. diags. index. notes. photos. reprods. websites. Morgan Reynolds. 2013. PLB $28.95. ISBN 978-1-59935-171-1. LC 2010049096.

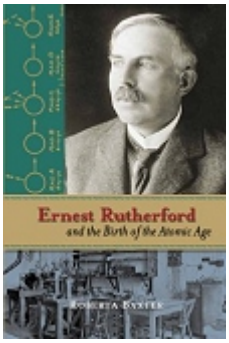
Gr 6-8–This is a well-rounded portrait of one of the 20th century's greatest experimental scientists. Baxter not only explains Rutherford's major accomplishments–discovering alpha and beta radiation, observing and naming the proton, introducing the concept of "half life" and proving that atoms can be split to create new elements, etc.–in lucid but not oversimplified terms, but she also paints a vivid picture of an ambitious but not egotistical man with a big personality and close family ties. Enlightening diagrams and plenty of photographs of Rutherford and his contemporaries add solid visual elements, and readers after further information will find extensive source notes and generous lists of print and Web resources. Tracing Rutherford's life from childhood in New Zealand to worldwide fame as both a researcher and an educator who trained a generation of nuclear physicists in Canada and Great Britain, the author makes a strong case for placing him high in the all-time pantheon of great scientists.–John Peters, Children's Literature Consultant, New York City

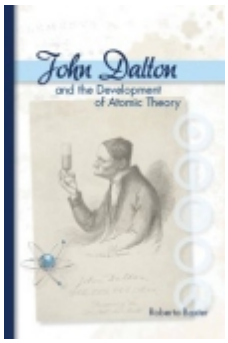


School Library Journal
June 2013

BAXTER, Roberta. **John Dalton and the Development of Atomic Theory.** 112p. (Profiles in Science Series). bibliog. charts. chron. diags. glossary. illus. index. notes. photos. reprods. websites. Morgan Reynolds. 2013. PLB $28.95. ISBN 978-1-59935-122-3. LC 2010038610.

Gr 9 Up–Dalton, an unassuming British teacher who devoted his life to his students and his experimental work in the late-18th- and early-19th centuries, is known as the father of atomic theory. Baxter begins with her subject's education at Quaker schools and his early inclination to observe and document the natural world and devise experiments to help him understand it more fully. The book focuses on his work as a teacher and his scientific efforts, in which he made significant contributions to meteorology and the understanding of colorblindness, an interest piqued by his own inability to see colors. The author describes how Dalton's meteorological observations led to experiments with atmospheric gases and the nature of the elements and his eventual publication of his theory of the atom as the smallest unit of each element. She is admiring of her subject's dedication and humility and his largely self-taught and -financed experimentation and work. Average-quality photos, reproductions, and explanatory illustrations supplement the text. Dalton and his work are worthy subjects, but the subject matter is difficult, and the text is often filled with scientific jargon. The reading level is high, some of the more advanced scientific concepts are not adequately illustrated, and the author assumes reader familiarity with British currency, history, and geography. Given those weaknesses, this title should be considered as a supplementary choice for secondary readers who possess a basic understanding of chemistry and need report material on Dalton or his revolutionary work.–Mary Mueller, Rolla Public Schools, MO

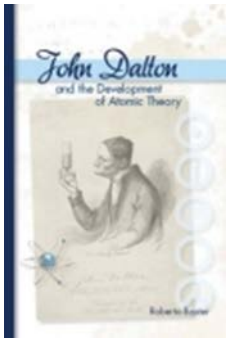




March 15, 2013, Booklist reviews

***Ernest Rutherford and the Birth of the Atomic Age*.** By Robert Baxter. Apr. 2013. 112p. illus. lib. ed., $28.95 (9781599351711). 530.092
***John Dalton and the Development of Atomic Theory*.** By Roberta Baxter. Apr. 2013. 112p. illus. lib. ed., $28.95 (9781599351223). 509.2

For budding chemists and physicists, the titles in the Profiles in Science series extend learning beyond the textbook and offer a detailed look at the men behind some of science's revolutionary theories. *John Dalton and the Development of Atomic Theory* begins with Dalton's Quaker background and young start (at age 12!) as an educator in the late 1700s. Highlighting Dalton's modest lifestyle and constant curiosity, the book explains the scientist's research on color blindness, meteorology, and the aurora borealis, often using instruments he constructed himself. The text shows how these early experiments led to his pioneering work in the development of the modern atomic theory. *Ernest Rutherford and the Birth of the Atomic Age* describes Rutherford's childhood in New Zealand and his work alongside other venerable scientists such as Marie Curie and Niels Bohr. It recounts his early research in chemical transmutations and the discovery of the concept of radioactive half-life., which earned him a Nobel Prize in 1908. Building on previous advances in atomic theory, Rutherford made more of a name for himself through model of the atom. Enhanced with reproductions, archival photos, charts, models, and appended back matter, both biographies complement one another as they conclude with each scientist's legacy. — *Angela Leeper*



Kidsbiographer.com

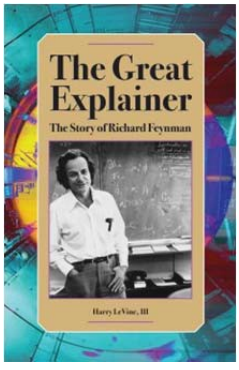
John Dalton and the Development of Atomic Theory
By Roberta Baxter
(Morgan Reynolds, 2013, Greensboro, North Carolina, $28.95)

Generations of chemists – and chemistry students – owe their efforts to John Dalton. His atomic theory changed the way scientists understood the nature of matter. Born to a humble Quaker family in the English Lakes District in the 1760's, unable to attend university, Dalton nonetheless taught secondary school and college-level science. He conducted chemical experiments and meteorological research. Intellectually omnivorous, Dalton also studied the causes of color blindness, a condition he himself had, and wrote a grammatical text.

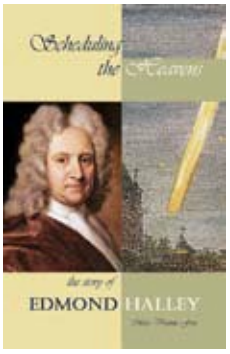
In *John Dalton and the Development of Atomic Theory*, Roberta Baxter examines Dalton's contributions to science for young adult readers. She clearly presents his theories and those of his contemporaries; in addition, she discusses how Dalton's ideas fit into the framework of today's scientific knowledge. Readers with a strong interest in chemistry will particularly relish this opportunity to explore scientific history. Baxter also explores Dalton's Quaker beliefs, the era's educational system, and the Industrial Revolution that swept the North of England during his lifetime. Because relatively little is known of Dalton's personal life, the narrative does not always seamlessly integrate scientific, historical and human information. However, Baxter includes enough anecdotes so that Dalton emerges as a dedicated, humble, and kind man, one more interested in advancing knowledge than his own status.

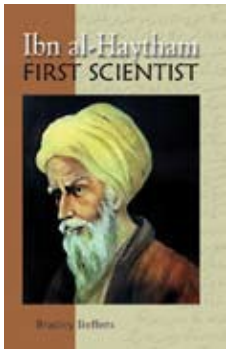
"Dalton showed that a person didn't have to attend the most prestigious college or have the best family connections to make contributions in the field of science," Baxter writes. *John Dalton and the Development of Atomic Theory* reminds young adults that science isn't merely an academic discipline, a class to be passed or even aced for college admission, but a way of asking questions about the world around them.

-Dorothy A. Dahm, kidsbiographer.com



School Library Journal
January, 2010
LEVINE, Harry, III. ***The Great Explainer: The Story of Richard Feynman***. 144p. (Profiles in Science Series). photos. reprods. bibliog. chron. index. notes. Web sites. CIP. Morgan Reynolds. 2009. PLB $28.95. ISBN 978-1-59935-113-1. LC 2009006677.
Gr 7-10–Feynman was instrumental in the development of the atomic bomb, but he may be best known for serving on the Presidential Commission that investigated the Challenger shuttle disaster. Information is presented on his life from his childhood in New York City to his death in California. LeVine balances details of Feynman's scientific work with the forces that hold nuclei together with his personal life. The layout is appealing, featuring photographs and illustrations on most spreads. This title would be a solid addition to most collections as there is little written about the physicist for this audience.–*Maren Ostergard, King County Library System, Issaquah, WA*

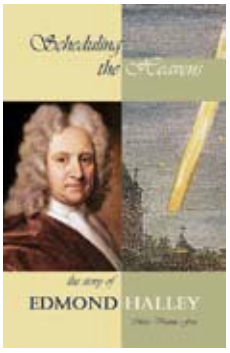




The Horn Book Guide
Fall 2007

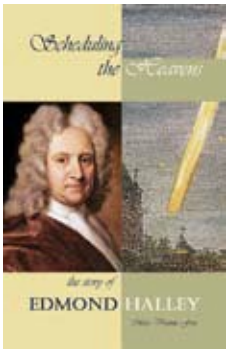
Fox, Mary Virginia **Scheduling the Heavens: The Story of Edmond Halley** 128 pp. Morgan LE ISBN 978-1-59935-021-9 $27.95
Steffens, Bradley **Ibn al-Haytham: First Scientist** 128 pp. Morgan LE ISBN 978-1-59935-024-0 $27.95
Venkatraman, Padma **Double Stars: The Story of Caroline Herschel**176 pp. Morgan LE ISBN 978-1-59935-042-4 $27.95

(3)YA Profiles in Science series. Thoroughly documented and handsomely illustrated, these biographies focus on their subjects' contributions to science, with historical and cultural contexts included for greater understanding. The Englishman Halley's study of comets' orbits, the medieval Arab scholar Ibn al-Haytham's devotion to a strict scientific method, and the transplanted German Herschel's astronomical observations are thoughtfully explored. Timeline, websites. Bib., ind. FFB



School Library Journal
April 2007
FOX, Mary Virginia. **Scheduling the Heavens: The Story of Edmond Halley**. 128p. diags. illus. maps. photos. reprods. bibliog. chron. index. notes. Web sites. CIP. Morgan Reynolds. Apr. 2007. PLB $27.95. ISBN 978-1-59935-021-9. LC 2006031269.

Gr 5-7–Though Halley (1656-1742) is best known for tracking the comet that bears his name, astronomy was only one of the fields in which he excelled. During his long career, he also studied tides, physics, mathematics, demographics, and more; designed and tested a diving bell; and even sailed over much of our planet to measure variations in its magnetic field. He was also a brilliant experimenter, and Fox describes many of his tools and techniques in enlightening detail. Even more admirable than all of these achievements, though, were Halley's uncommon selflessness when it came to encouraging other scientists and his gift for getting along with even his most difficult colleagues (with the notable exception being Royal Astronomer John Flamsteed). To judge from the endnotes, the author has drawn most of her information from a single modern study of Halley for adult readers. Yet with sturdy support from an array of mostly period maps, portraits, and title pages, plus a brief but wide-ranging bibliography, her lucid, thought-provoking profile makes a valuable alternative to Louis Baldwin's Edmond Halley and His Comet (Maverick, 1988; o.p.) or Linda Walvoord Girard's Earth, Sea and Sky: The Work of Edmond Halley (Albert Whitman, 1985).–John Peters, New York Public Library

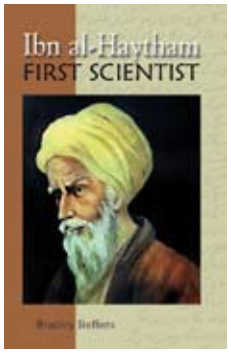


Booklist
June 1, 2007
Fox, Mary Virginia. **Scheduling the Heavens: The Story of Edmond Halley.** Apr 2007. 128 p. Morgan Reynolds, library edition, $27.95. (978-1-59935-021-9). 520.92.

Though best known for calculating the orbit and accurately predicting the return on a regular schedule of the eponymous comet, the ambitious, brilliant scientist Halley excelled in many other fields besides astronomy. During his long career, Halley studied demographics, mathematics, navigation, physics, and more. Among his many achievements, he published the first meteorological chart, catalogued the unmapped stars of the Southern Hemisphere, designed and tested a diving bell, and sailed over much of the planet to measure variations in its magnetic field. Fox conveys Halley's life and times, and his lasting contributions to science, in rich, vivid detail. The informative text is supported with maps and portraits from the period as well as sidebars that elaborate upon the concepts and instruments related to Halley's work. A time line, source notes, and a bibliography are appended. Books on Halley for this audience are scarce; this solid biography, part of the excellent Profiles in Science series, is a welcome contribution.—Ed Sullivan

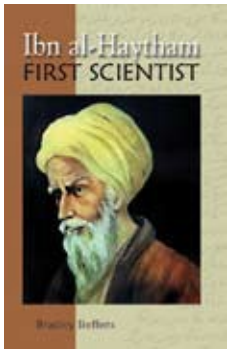
School Library Journal
August 2007
VENKATRAMAN, Padma. ***Double Stars: The Story of Caroline Herschel***. 176p. (Profiles in Science Series). photos. reprods. bibliog. chron. index. notes. Web sites. CIP. Morgan Reynolds. 2007. PLB $27.95. ISBN 978-1-59935-042-4. LC 2006035171.

Gr 8 Up–A pioneer in the field of astronomy, Herschel (1750-1848) was born into a working-class family in Hanover, Germany (Prussia). Though her father thought she should receive an education, her mother was determined to keep her a virtual slave to the household. After her father's death, Herschel's brother, William, who would become one of astronomy's great scientists, sought to take her to England with him. At first, she was the housekeeper and manager of his estate. She also took music lessons and eventually rose to prominence on the stage as a soprano. But when offered a lucrative contract to sing at a prestigious festival, she turned it down in order to stay in her brother's household, and she became his assistant. Soon Caroline Herschel began to make discoveries of her own. Herschel is frequently mentioned in texts about female scientists, but this is one of the few stand-alone biographies. Black-and-white and color photos are included. Although the book is full of excellent information, the writing is somewhat dry and ponderous. It's a good resource for reports, but it's not a biography that will easily lend itself to pleasure reading.–*Elaine Baran Black, Georgia Public Library Service, Atlanta*



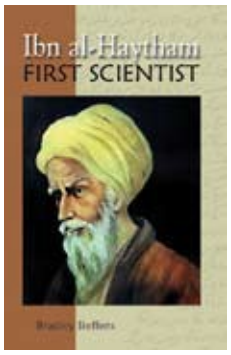
Booklist
December 1, 2006
Steffens, Bradley. *Ibn Al-Haytham: First Scientis*t. Jan. 2007. 128p. Morgan Reynolds, lib. ed., $27.95 (978-1-59935-024-0). 509.2. Gr. 8–11.

Ibn al-Haytham ("Alhazen" in Library of Congress cataloging) was born in Basra in 965. A Muslim who studied the works of Aristotle, Euclid, Archimedes, and Ptolemy, he developed an approach to science using experimentation and deduction and made significant observations and discoveries, particularly in the field of optics. Translations of his books influenced medieval European scientists and mathematicians from Bacon to Fermat to Kepler. Steffens notes that al-Haytham's discovery of the camera *obscura* may have changed western art as well. The book concludes with a timeline, source notes, bibliography and list of Web sites. Steffens has organized what is known of his subject's life and work into a coherent narrative. He is quick to acknowledge gaps but backs up inferences logically. Like the history of mathematics, the history of science is incomplete without an acknowledgment of early scholars in the Middle East. This clearly written introduction to Ibn al-Haytham, his society, and his contributions does that. —*Carolyn Phelan*



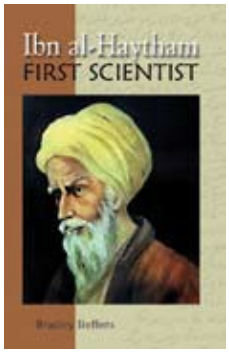
School Library Journal
July 2007
STEFFENS, *Bradley.* ***Ibn al-Haytham: First Scientist***. 128p. (Profiles in Science Series). diags. maps. photos. reprods. bibliog. chron. index. notes. Web sites. CIP. Morgan Reynolds. 2007. PLB $27.95. ISBN 978-1-59935-024-0. LC 2006023970.

Gr 7 Up–A profile of a mathematician, physicist, and astronomer born in Basra, in what is now Iraq, in 965 C.E. The text vacillates between relating the life of this multifaceted scientist and digressing into lengthy accounts about the time in which he lived. The opening chapter describes the Arab Muslims and their mass migration with a sprinkling of references to Ibn al-Haytham's boyhood. While the historical background is informative, it may lose readers expecting a more biographical account. Steffens credits the man as a pioneer of the scientific method, citing his emphasis on testing hypotheses through experimentation. The most engaging chapter introduces The Book of Optics, a groundbreaking treatise on vision and light. Most of the scientist's other works are mentioned only briefly. Intriguingly, the author speculates that Ibn al-Haytham may have faked madness so he could be released from a government post to pursue his research. Steffens informs readers of the sparseness of information available about his subject and indicates when he is making assumptions. He also incorporates how religion played a part in the man's life. Boxed entries about related topics appear throughout. All quotations are documented in the source notes. The well-placed reproductions and detailed captions add interest and additional facts. This book will circulate best where students seek short biographies on people of varied cultures for reports.–*Linda L. Plevak, Bulverde/Spring Branch Library, Spring Branch, TX*



Kirkus
December 1, 2006
Steffens, Bradley
IBN AL-HAYTHAM: First Scientist
Morgan Reynolds (128 pp.)
PLB $27.95
Jan. 7, 2007
PLB: 978-1-59935-024-0

In this clearly written, carefully reasoned profile, Steffens not only traces the scantly documented life of one of early modern science's giants (better known in Europe as Alhazen), but also places him both within the broader contexts of early Muslim society, and of the whole history of science. A prolific writer who spent most of his life in Basra and Cairo, Ibn al-Haytham is chiefly remembered today for his work in optics, and as an exponent of enquiry through direct, repeatable experimentation rather than inductive reasoning alone. Along with easy-to-understand discussions of his achievements, readers will find a speculative but credible character study of a devout, brilliant polymath who was rather conveniently subject to mysterious bouts of mental illness that twice rescued him from onerous government jobs. Despite captions that are printed in red and therefore largely illegible, the many color pictures enhance this illuminating narrative with maps, diagrams, prints (including an old portrait of Muhammad) and images of illustrated manuscript pages. (index, multimedia resource lists) (Biography. 11-13)



Tri State Young Adult Book Review Committee
Jan 2007
***Ibn al-Haytham: First Scientist* by Bradley Steffens**
Book rating: G (Good)

Steffens provides an overview of Muslin and Arab influence including the use of zero, the advent of algebra and the vast library called the House of Wisdom containing the translations of Roman and Greek works in Arabic. The life of Ibn al-Haytham, now known as Alhazen to the Western world, shows his schooling and the reason he changed from a theology to a science career. Steffens presents background knowledge such as an understanding of the role of religion in science as well as the rift between various Muslim sects and the rift between Muslims and Christians and how those disagreements impacted science and mathematics. Alhazen is credited for translation of many Greek and Roman mathematic and science texts as well as the use of camera obscura to investigate properties of light. Using a scientific method based on observation, hypothesis and testing of the hypothesis, he wrote one of the standards about refraction and reflection of light waves. Once out of jail, he returned to the region now known as Iraq and continued his studies and writings. Steffens focuses on the transmission of science and math concepts and the rocky road of discovery as a theory was developed, then banned or manuscripts destroyed by religious leaders of all religions in following centuries. Once the Renaissance occurred, many of Alhazen's beliefs were again read, tested, and put into use by artists and other scientists. Because of the topics covered, the high school student with a background knowledge of higher mathematics and physics will fair better. However the interested student will persist as the story of Alhazen is fascinating with his travels, great insights, and his longevity. Maps help to locate the places mentioned. Illustrations expand the text. An index, bibliography, chapter notes and websites of relevant information help the student researcher.

Profiles in Science contains 7 titles about science figures. Each book provides a look at the times in which the scientists lived, their background, their discoveries. Illustrations, bibliography, timeline and index help the high school researcher.

Recommended where the history of mathematics and science is a priority. Steffens provides the background of the times and significant events in the life of Alhazen that led to the discovery of light properties. For high school students with a background in the science field. Requires strong knowledge of historic times and science concepts.—Lois McNicol, March 2007.

Booklist
December 1, 2006
Polcovar, Jane. *Rosalind Franklin and the Structure of Life*. 2006. 144p. Morgan Reynolds, lib. ed., $27.95 (1-59935-022-X). 572.8092. Gr. 8–11.
Born in 1920, English scientist Rosalind Franklin is best remembered for making the x-ray diffraction image that led to Crick and Watson's discovery of the structure of DNA. She died of cancer at 37, never knowing that they had seen that image or that it had been crucial to their breakthrough. Neither idealizing Franklin nor downplaying her importance, Polcovar writes a rattling good story of on two fronts: a woman becoming a scientist in an age when that was still unusual and the complex dynamics of personalities in a field sometimes thought of as impersonal. Polcovar very clearly explains the personality clashes in the lab, and the competitive environment in the scientific community that preceded that DNA announcement as well as the efforts, begun soon after her death and still continuing, to give Franklin full recognition for her part in that discovery. Illustrated mainly with photos, some in color, this absorbing biography concludes with a timeline, source notes, recommended Internet sites, and a bibliography. —*Carolyn Phelan*

School Library Journal
January 2007
YANNUZZI, Della. ***New Elements: The Story of Marie Curie***. 144p. maps. reprods. bibliog. chron. index. notes. Web sites. CIP. Morgan Reynolds. 2006. PLB $26.95. ISBN 1-59935-023-8. LC 2006018887.

Gr 4-8–This is an interesting and readable introduction to the scientist. Born in Warsaw, Poland, in 1867, Marya Salomee Sklodowska grew up with three sisters and one brother. Her mother and oldest sister died when she was 10. She valued learning and was determined from a young age to continue her education in spite of the challenges of poverty and gender. In her teens, she attended a "Floating University" that operated in defiance of Russian rule. She moved to Paris to continue her studies. There, she met Pierre Curie, and she devoted her life to research, first with him and then without, following his tragic, accidental death. Yannuzzi paints a picture of an amazing woman who overcame one obstacle after another to win the Nobel Prize twice. Black-and-white and color illustrations are included. This book pairs well with Carla Killough McClafferty's excellent Something Out of Nothing (Farrar, 2006), which has more detailed information on Curie's research and its repercussions.–Deanna Romriell, Salt Lake City Library, UT

Booklist
December 1, 2006
Yannuzzi, Della. *New Elements: The Story of Marie Curie*. 2006. 144p.illus. index. Morgan Reynolds, $26.95 (1-59935-023-8). 540.92. Gr. 7–10.

Like Carla Killough McClafferty's *Something Out of Nothing: Marie Curie and Radium* (2006), this title offers a straightforward, comprehensive view of the first woman to win a Nobel Prize in science. Excerpts from Curie's letters and journals personalize the telling, including many stories from Curie's Polish youth and impoverished student life in France before she moved on to the groundbreaking science. Only direct quotes are referenced in the appended source notes, and many of the fascinating anecdotes are undocumented. Still, readers will come away with a strong portrait of the heralded scientist's life and times (the historical context is nicely integrated), and serious researchers will turn to the bibliography's sturdy selection of titles. Well-chosen photos and prints, including an image of the simple laboratory in a shed where the Curies made their exciting discoveries, nicely enhance the text. A time line and Web resources round out the appended resources. —*Gillian Engberg*

Tri State Young Adult Book Review Committee
Jan 2007
New Elements: The Story of Marie Curie by Della Yannuzzi
Book rating: VG-BNS (Very Good [outstanding])

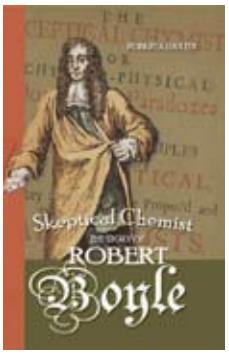
In this biography about a courageous woman who overame one obstacle after another in pursuit of education and science, Della Yannuzzi portrays Marie Curie in the most utmost manner, part of Morgan Reynolds Publishing Profiles in Science series.

Born in Warsaw, Poland in 1867, Maria Sklodowska grew up valuing learning and was determined to continue her education in spite of poverty and gender. She attended a floating university that operated in defiance of governing Russia's rule. After moving to Paris, she met Pierre Curie and together they devoted their lives to research, making exciting discoveries against a backdrop of political upheaval. Curie went on to win both the Nobel Prize for Physics and the Nobel Prize in Chemistry.

The book includes many illustrations as well as appended resources such as a time line, chapter notes, bibliographic and website information and an index.

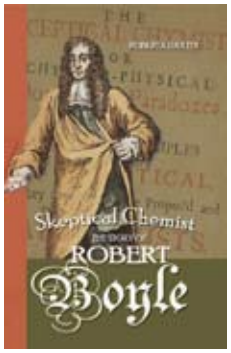
Titles in this series feature a particular scientist's life story. Each story will provide readers with information on the person's education, work and overall life experiences leading up to how they became so important.

Middle and high school collections will benefit from this title for research projects and/or casual reading. —Forba-Mayer, Charleen



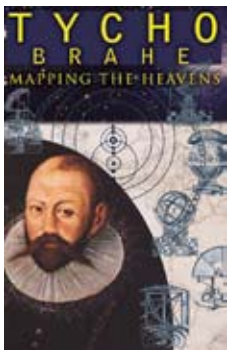
School Library Journal
January 2007
BAXTER, Roberta. ***Skeptical Chemist: The Story of Robert Boyle***. 128p. reprods. bibliog. chron. index. notes. Web sites. CIP. Morgan Reynolds. 2006. PLB $26.95. ISBN 1-59935-025-4. LC 2006023969.

Gr 6 Up–Baxter introduces a significant scientist about whom surprisingly little has been published. Boyle set standards for the scientific method that remain influential today, and he challenged accepting the authority of the ancients, such as Aristotle. Some of his findings seem obvious to us today, but his biggest contribution to science was the practice of conducting repeatable experiments. A comical poem about the chemist's methods, written by a contemporary, enriches the account. Each chapter opens with a garish mixture of a gothic typeface in purple on lime-green pages. This unusual design, along with color reproductions of period paintings and engravings, serves to break up the text. A chapter on Boyle's legacy, a time line, and source notes enhance this volume as does a list of authoritative Web sites.–Janet S. Thompson, Chicago Public Library



Booklist
December 1, 2006
Baxter, Roberta. *Skeptical Chemist: The Story of Robert Boyle*. 2006. 128p. illus. index. Morgan Reynolds, $26.95 (1-59935-025-4). 509.2. Gr. 8–11.

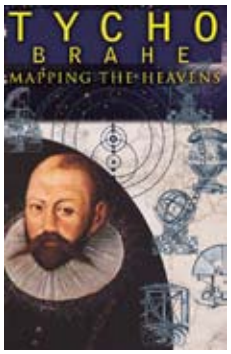
Born into a wealthy, privileged family and brought up in Ireland and England, Robert Boyle followed an unconventional path for a seventeenth-century gentleman. He devoted a good deal of his time and resources to what he called alchemy and natural philosophy and we call science. Baxter makes a convincing case for Boyle's significance as key figure in the field of scientific experimentation, as well as his contributions to modern chemistry and physics. Well organized and clearly written, her book offers a good view of changes in science and society at this pivotal time and presents a well-rounded view of Boyle, whose interests extended beyond scientific inquiry and discussion. The color illustrations include period portraits, paintings, and tinted engravings. For a somewhat older audience than Mary Gow's Robert Boyle: Pioneer of Experimental Chemistry (2005), this well-researched biography offers a fine depiction of Boyle's life and times. —Carolyn Phelan



School Library Journal
August 2003

BOERST, William J. ***Tycho Brake: Mapping the Heavens***. 144p. (Renaissance Scientists Series), diags. maps. photos, reprods. bibliog. chron. index, notes. Web sites. CIP. Morgan Reynolds. 2003. PLB $25.95. ISBN 1-883816-97-8. LC2002153640.

Gr 6-9-Scion of a noble Danish family, Brahe combined a passion for accurate observations of the position and motions of heavenly objects with the wealth to do the job right. He is portrayed as a demanding, secretive, temperamental genius—a colorful character who wore an artificial nose (having lost his original one in a duel), and whose interest in physical astronomy was sparked by irritation over the inaccuracies of the planetary tables of Ptolemy and Copernicus. Traveling from one royal patron to another, Brahe built state-of-the-art observatories, amassing the data that later allowed Johannes Kepler, his most brilliant protege, to develop a heliocentric model of the solar system, and to formulate the Laws of Planetary Motion. Boerst describes how quadrants, armillaries, and other scientific instruments of the day were actually used, as well as Brahe's private life and career, in some detail, then appends lists of books and Web sites for readers who want to know more about this quirky, seminal figure. A generous selection of prints and drawings, many contemporary and some in color, brings the man and his achievements to life even more successfully than Mary Gow's Tycho Brake: Astronomer (Enslow, 2002). This book will effectively raise the profile of a researcher whose significant contributions to the history of science are often lost in the glow surrounding those of Kepler and Galileo.— John Peters, New York Public Library



The Bridge
Volume 28 2005

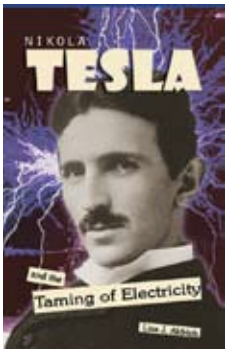
William J. Boerst. ***Tycho Brahe: Mapping the Heavens***. "Renaissance Scientists: Copernicus, Tycho, Kepler, Galileo, Newton." Greensboro, NC: Morgan Reynolds Publishing, Inc., 2003. Pp. 144. Maps, illustrations, sidebars, timeline, bibliography, index. Hardcover $23.95.

William J. Boerst is your man if you want a brief, solid summary of Tycho Brahe's life in English. The book is a good choice for school libraries, Danish-American bookstores, and homes. The author deals seriously with his subject, and the language is not oversimplified but accessible to the public at large from high school age through adults. The book has a solid binding and brims with excellent color illustrations from authentic sixteenth-century sources, as well as sidebars to explain technical matters in understandable terms.

Tyco Brahe was born ten years after the Reformation came to Denmark, and important changes were in the air: "it was an exciting time for a brilliant boy with an aptitude for mathematics." Tycho got a good education at the University of Copenhagen and several German universities. He came home to marry a woman from a lower social class, start a family, and accept the offer of King Frederik II to take over a Danish island, start an observatory, and serve the crown as a royal astronomer. Tycho soon attracted top assistants from many European lands, including several who later achieved some fame in their own right. Under Tycho's firm leadership, they made breakthrough discoveries in astronomy, map-making, and chemistry.

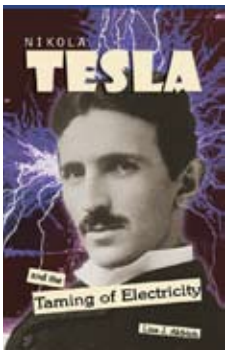
After King Christain IV came to the Danish throne in 1596, however, Tycho had a falling-out with the headstrong young monarch and chose to leave Denmark in search of a new patron. He soon joined the foremost court in Europe, that of Emperor Rudolf II in Prague, where the brilliant Kepler joined his scientific staff.

Their clashes were legendary. Tycho was a nobleman, "used to ruling others," but "despite his volcanic temper and suspicious nature, [he] was warmhearted and extroverted," while "Kepler was shy, occasionally petulant, and introverted." Eventually, however, the two of them established a working relationship that proved to be of tremendous importance to the future of the world: "for the first time, theoretical genius was married to astronomical measurements that could be trusted." The manner in which Tycho and Kepler tested hypothesis against data, and the assumptions about methods that they made, remain fundamental to the work of scientists to this day. The book has a good timeline and bibliography, but virtually all the endnote references are off by several pages. —J. R. Christianson



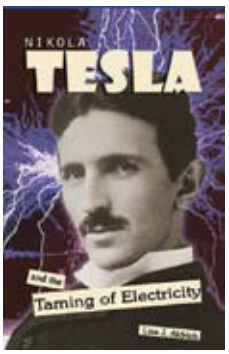
School Library Journal
October 2005
ALDRICH, Lisa J. ***Nikola Tesla and the Taming of Electricity***. 160p. diags. photos. reprods. bibliog. chron. index. notes. Web sites. CIP. Morgan Reynolds. 2005. PLB $24.95. ISBN 1-931798-46-X. LC 2004018786.

Gr 5-9–Beginning with her subject's boyhood in Croatia, Aldrich makes good use of the drama in the scientist's life to craft a very readable story. She covers his great inventions, such as early remote controls, radio, and alternating current equipment, technology that forms the basis for all electrical service in the world today. Although at one point Tesla was owed millions by Westinghouse, he voided the contract when the company was in financial trouble and died a pauper. Few know that after his death, the Supreme Court revoked the patent for radio given to Marconi and awarded it to Tesla instead. Readers learn about the genius's quirky personality and unusual obsessions, such as his fascination with pigeons and his abhorrence of germs. Some passages read like pulp science fiction, as Tesla works at creating a death ray, states that he has received communications from Mars, and describes beams of light coming from the eyes of a pigeon. The text includes numerous quotes and is supported by insets that explain some of the electrical-engineering concepts. Period photographs, diagrams from Tesla's notebooks, and similar illustrative materials appear throughout. A brief list of Web sites about the inventor, his longtime rival Thomas Edison, and the U.S. Patent Office is appended. A solidly researched and interesting biography.–Eric Norton, McMillan Memorial Library, Wisconsin Rapids, WI



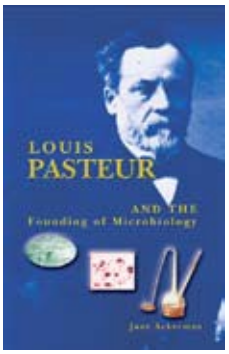
VOYA
October 2005
4Q 4P J S
Aldrich, Lisa J. ***Nikola Tesla and the Taming of Electricity***. Morgan Reynolds, 2005. 160p. PLB $24.95. 1-931798-46-X. Index. Illus. Photos. Biblio. Source Notes. Chronology.

People around the world are familiar with the name of Thomas Edison. He was the creator of such wonders as the incandescent light bulb, the phonograph, and many other inventions using direct-current electricity. There is another lesser-known inventor, however, who should be given his own due praise. Born in Croatia, Nikola Tesla always had a penchant for inventing. He was able to draft an invention in his mind's eye and then make the necessary revisions before creating a prototype. Tesla believed that electricity would revolutionize the world, and he helped to accomplish this revolution by using alternating-current electricity in many of his inventions. Most people are unaware that Tesla and not Marconi is the true father of the wireless radio and was granted its patent only eight months after his death. Aldrich creates a biography that shows the reader both the person and the inventor in Tesla. His mind was so complex and acute that he often neglected his heath, developing many mental disorders, including certain phobias and obsessive-compulsive disorders. Aldrich intersperses photographs of Tesla and his inventions throughout and places fact boxes that expand on the information contained in each chapter. The Web sites page is a great tool for those readers wishing to learn more about Tesla. School and public libraries will want to seriously consider adding this book to their collections. --Jonathan Masters.



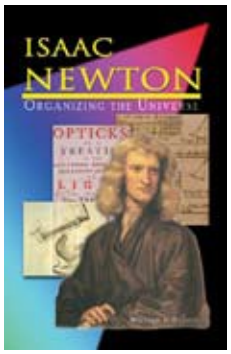
Booklist
May 1, 2005
Aldrich, Lisa J. ***Nikola Tesla and the Taming of Electricity***. 2005. 160p. illus. index. Morgan Reynolds, lib. ed., $24.95 (1-931798-46-X). 621.3.

Gr. 8-11. Born in rural Croatia in 1854 and educated as an engineer, Tesla moved to America as a young man and spent his life experimenting and inventing new ways to generate, transport, and use electricity. Often unlucky or unwise in trusting other inventors as well as businessmen in the electrical industry, Tesla enjoyed wealth based on his many patents, yet he died a poor and increasingly eccentric old man. He many not have the name recognition of Marconi, yet according to Aldrich's well-researched account, Marconi actually stole several of Tesla's patented ideas in designing his radio. Aldrich writes involvingly of Tesla's life, while using sidebars to carry information on related topics such as alternating and direct current, the patent system, and Tesla's dream of wireless power. The photos and diagrams are numerous, but oddly (and not particularly attractively) tinged with purple. Back matter includes a time line, source notes for quotes, and lists of books and Internet sites. –Carolyn Phelan



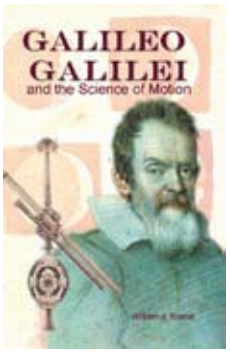
Booklist
December 15, 2003
Ackerman, Jane. ***Louis Pasteur and the Founding of Microbiology***. 2004. 144p. illus. index. Morgan Reynolds, $23.95 (1-931798-13-3).

Gr. 7-12. Pasteur failed his first college science entrance exam, but he went on to discover a world through his microscope that revolutionized the prevention and treatment of disease. He helped start the fields of immunology and microbiology; he invented the pasteurization of milk; he showed the importance of sanitation in preventing contagious disease. His breakthrough research into germs and how they are transmitted led to widespread vaccinations. Ackerman's style is dense, detailed, and sometimes dull, but the narrative is gripping, not only because of the excitement of Pasteur's research but also because of the candid discussion of his personal weaknesses, including his arrogance and his failure to acknowledge the essential contributions of the scientists he worked with. There are occasional scientific diagrams and period photos in color, and everything is well documented in detailed chapter notes for readers who want to find out more about the man and his amazing work. A useful time line, bibliography, and a list of web sites are appended. —Hazel Rochman



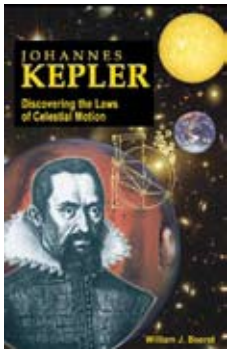
Booklist
December 15, 2003
Boerst, William J. ***Isaac Newton: Organizing the Universe***. 2004. 144p. illus. Morgan Reynolds, lib. ed., $23.95 (1-931798-01-X).

Gr. 6-10. Boerst, whose Renaissance Scientists series includes books on Brahe, Copernicus, Galileo, and Kepler, now adds a fine biography of Newton. Though Newton acknowledged his debt to his predecessors, his own intellectual achievements opened whole new vistas in the study of mathematics and science and marked a turning away from "natural philosophy" toward a more modern approach. In addition to an informative presentation of Newton's adult life, his university and government careers, and his intellectual accomplishments, Boerst offers a vivid portrayal of Newton's difficult childhood and adolescence. Sidebars carry information on topics such as Unitarianism, Newton's laws of motion, and centripetal force. Excellent color reproductions of period paintings, prints, drawings, and documents appear throughout the book, and a time line, source notes for quotations, and lists of books and Web sites are appended. —Carolyn Phelan



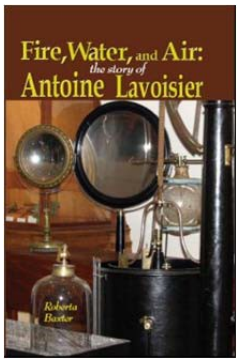
Booklist
November 1 2003
Boerst, William J. ***Galileo Galilei and the Science of Motion***. 2003. 128p. illus. Morgan Reynolds, lib. ed., $23.95 (1-931798-00-1).

Gr. 6-10. Boerst notes that Galileo is one of the few historical figures known by his first name, which is perhaps a measure of his profound importance in the history of science. His consistent application of mathematics to theories of motion, his insistence on verification by experimentation and measurement, and his willingness to take a public stance on controversial scientific questions set him apart from most of his contemporaries. Boerst clearly relates Galileo's personal story as well as his work in physics and astronomy. Unusually detailed and free from the taint of legend, this account of the scientist's troubles with the Church is more complex, more understandable, and probably more accurate than those found in most youth books. Attractive color illustrations include reproductions of period prints, paintings, and documents. Appendixes include a time line, source notes, a bibliography of sources, and a list of recommended Internet sites. From the Great Scientists series. --Carolyn Phelan

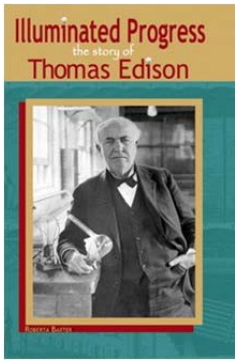


School Library Journal
August 2003
New York Public Library Book For the Teen Age selection
BOERST, William J. ***Johannes Kepler: Discovering the Laws of Celestial Motion***. 144p. (Renaissance Scientists Series), diags. maps. reprods. bibliog. chron. index. notes. Web sites. CIP. Morgan Reynolds. 2003. PLB $23.95. ISBN I-883846-98-6. LC 2003000708.

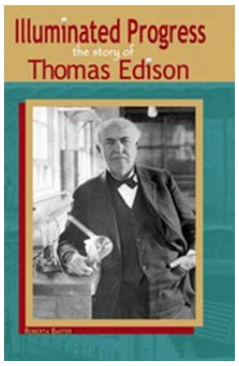
Gr 6-9-This 17th-century German mathematician and astronomer discovered three laws of planetary motion and was a key to further discoveries of natural law. Kepler, a Protestant, was persecuted during the counter-Reformation, lost a wife and several children to disease, saw his mother tried as a witch, and had constant financial difficulties, yet persevered in his quest for mathematical truths. In this detailed biography, both his academic work and his personal travails are carefully documented. Period portraits and images reproduced in full color and black and white as well as diagrams and maps enhance the presentation and help to hold readers' interest. Those not fully versed in the fundamentals of physics and mathematics will still be able to grasp the material presented. Boerst's theory that Kepler was looking for harmony in the universe as an antidote to the religious disharmony of his time is apocryphal but interesting. With a time line and bibliography consisting of both primary and secondary sources, this is a worthwhile source for information on both the life and works of this Renaissance genius.—Eva Elisabeth VonAncken, Trinity-Pawling School, Pawling, NY



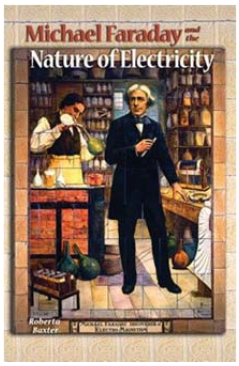
Midwest Book Review
Roberta Baxter's ***FIRE, WATER AND AIR: THE STORY OF ANTOINE LAVOISIER*** (1599350874) tells of a wealthy Frenchman who planned to become a lawyer, but who curiosity about science led him to pursue chemistry as his career. His choice would help change the face of chemistry, disproving old theories and finding new approaches to make chemistry more approachable even as politics in the form of the French Revolution was changing his life. A top pick for libraries seeking biographies of over 100 pages each.



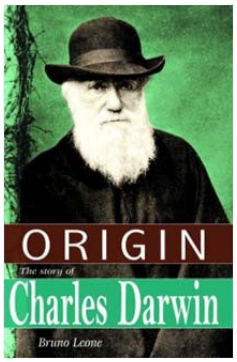
Booklist
Issue: December 1, 2008
Illuminated Progress: The Story of Thomas Edison.
Baxter, Roberta (Author)
Aug 2008. 144 p. Morgan Reynolds, library edition, $27.95. (9781599350851). 621.3092.
This title from the Profiles in Science series offers a concise, informative overview of the inventor who ushered into the world the Age of Electricity. In his lifetime Edison filed for and received 1,093 patents, a record that remains unsurpassed. A brief but insightful chapter on Edison's youth explains the influences his parents had upon his education and serendipitous scientific curiosity. After experimenting in telegraphy, Edison created some of his best-known inventions, including the phonograph, electric lighting equipment, and a system for making and showing motion pictures. Baxter highlights some lesser-known pursuits of Edison, including his experiments with an electric car, batteries for submarines, and the first vending machine. Baxter also discusses the many conflicts Edison had with collaborators and partners throughout his career, his often poor financial-management skills, and his shortcomings as a husband and father. This well-rounded biography is illustrated throughout with photographs. Appendixes include a time line, source notes, and bibliography. -*Ed Sullivan*



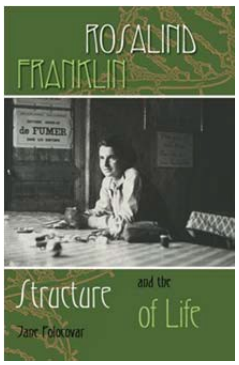
School Library Journal
December, 2008
BAXTER, Roberta. ***Illuminated Progress: The Story of Thomas Edison***. 144p. (Profiles in Science Series). photos. reprods. bibliog. chron. index. notes. Web sites. CIP. Morgan Reynolds. 2008. PLB $27.95. ISBN 978-1-59935-085-1. LC 2008007411.
Gr 5-8–Edison came of age in the latter half of the 1800s, when many important discoveries were being made, and he seized opportunities to collaborate with other leading innovators. These relationships, while often fruitful, sometimes led to disputes and/or lawsuits. The story of his life unfolds chronologically, with one experience building on the next and leading to discoveries both large and small. This most prolific inventor had an incredibly strong work ethic. He began experimenting when he was young, setting up small labs wherever he could, including on moving railroad cars. The book occasionally lapses into scientific jargon, which may be difficult for some readers to understand. Drawings, photographs, and diagrams are interspersed throughout. Denser and more detailed than Marfe Ferguson Delano's Inventing the Future (National Geographic, 2002), but not as appealing, this title would make a solid addition to biography collections.–*Jody Kopple, Shady Hill School, Cambridge, MA*



Midwest Book Review
Roberta Baxer's ***MICHAEL FARADAY AND THE NATURE OF ELECTRICITY*** (1599350866) offers some 140 pages of biographical facts about the discoverer of electro-magnetism. Michael Faraday was born the son of a blacksmith and was apprenticed to a bookbinder at an early age, but developed a passion for science that led him to a job as a scientist's assistant.



Booklist
Issue: March 15, 2009
Origin: The Story of Charles Darwin.
Leone, Bruno (Author)
Mar 2009. 160 p. Morgan Reynolds, hardcover, $28.95. (9781599351100). 576.8.
This informative overview in the Profiles in Science series focuses primarily on Darwin's scientific achievements. Tracing his life from childhood to the publication of The Origin of Species, Leone offers a vivid portrait of Darwin as an avid naturalist, keen and patient observer, cautious scientist, and master of synthesizing and articulating his theories and observations. Leone also discusses the mentors that influenced Darwin's thinking as a student at Cambridge, and on the works of philosophers and scientists who influenced his scientific work, such as Thomas Malthus. Much of the book is devoted to Darwin's voyage on the HMS Beagle and the observations that led him to the formulation of his evolutionary theories, but attention is also given to Darwin's important work in other subjects and the profound impact—and controversy—his theories had upon the scientific world. The book is illustrated throughout with photographs, diagrams, and drawings. Appendixes include a time line, source notes, and bibliography. Readers will find this book a solid overview of Darwin's life and work.
— *Ed Sullivan*



School Library Journal
March, 2007
POLCOVAR, Jane. ***Rosalind Franklin and the Structure of Life.*** 144p. photos. reprods. bibliog. chron. index. notes. Web sites. CIP. Morgan Reynolds. 2006. PLB $27.95. ISBN 978-1-59935-022-6. LC 2006016864.
Gr 8 Up–Although many people associate the names Watson and Crick with the discovery of DNA, few know that Franklin took the photograph that led the two men to their conclusions. Written in an easy-to-read manner, this book highlights her personal and professional struggles, and readers interested in the history of science will marvel at how such a huge player in the discovery of the double helix could have been overlooked. Black-and-white and color pictures complement the text, and some of them illustrate scientific concepts. The book is carefully annotated, has a detailed index, and includes helpful Web sites. A fine addition to large science collections.–*Delia Carruthers, Sunset Ridge Middle School, West Jordan, UT*