NEW!

ENCYCLOPEDIA OF THE
SOLAR SYSTEM
SECOND EDITION

Praise for the previous edition:

"I cannot imagine a trio of scientists better qualified to produce a volume about the solar system than Weissman, McFadden, and Johnson. This is more than a book—it is a fantastic voyage to neighbor worlds that combines the accuracy of science with the beauty and wonder that is our solar system."

— David H. Levy, Astronomer

Edited by:
Lucy-Ann McFadden
University of Maryland, College Park, U.S.A.

Paul R. Weissman and Torrence V. Johnson
Jet Propulsion Laboratory, California Institute of Technology, Pasadena, U.S.A.

books.elsevier.com/solar2

IMAGES courtesy of NASA
The Encyclopedia of the Solar System, Second Edition, is a completely revised, updated, and self-contained reference guide dedicated to our solar system. This beautifully illustrated work includes 47 thematic chapters providing a framework for understanding our exploration of space, our origins, and our quest for life elsewhere in the universe. Each entry is detailed and scientifically sound, yet accessible for students and non-scientists. In its second edition, this large-format reference is enhanced with hundreds of full-color photographs, illustrations and figures provided by NASA and many observatories. The Encyclopedia of the Solar System, Second Edition, is a must for the bookshelf of professional astronomers and amateur star-gazers alike.

Key Features:
- Over 50% new material, superbly illustrated with more than 700 full-color photos, drawings, and diagrams from current space missions
- Forty-seven thematically organized chapters by more than 75 eminent authors from around the world
- Information is easy to find with cross-references, suggestions for further reading, and a full glossary and index

Contents
The Solar System and Its Place in the Galaxy • The Origin of the Solar System • A History of Solar System Studies • The Sun • The Solar Wind • Mercury • Venus: Atmosphere • Venus: Surface and Interior • Earth as a Planet: Atmosphere and Oceans • Earth as a Planet: Surface and Interior • The Sun-Earth Connection • The Moon • Meteors • Near-Earth Objects • Mars Atmosphere: History and Surface Interaction • Mars: Surface and Interior • Mars: Landing Site Geology, Mineralogy, and Geochemistry • Main-Belt Asteroids • Planetary Satellites • Atmospheres of the Giant Planets • Interiors of the Giant Planets • Io: The Volcanic Moon • Europa • Ganymede and Callisto • Titan • Triton • Planetary Rings • Planetary Magnetospheres • Pluto and Charon • Physics and Chemistry of Comets • Cometary Dynamics • Kuiper Belt: Dynamics • Kuiper Belt Objects: Physical Studies • Solar System Dust • X-Rays in the Solar System • The Solar System at Ultraviolet Wavelengths • Infrared Views of the Solar System from Space • The Solar System at Radio Wavelengths • New Generation Optical/Infrared Telescopes • Planetary Radar • Remote Chemical Analysis • Solar System Dynamics: Regular and Chaotic Motion • Planetary Impacts • Planetary Volcanism • Planets and the Origin of Life • Planetary Exploration Missions • Extra-Solar Planets • Index

*Contents subject to change.

IMAGES courtesy of NASA