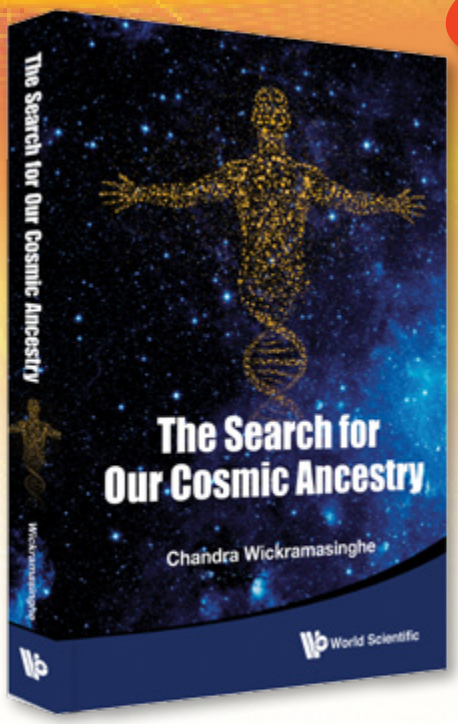

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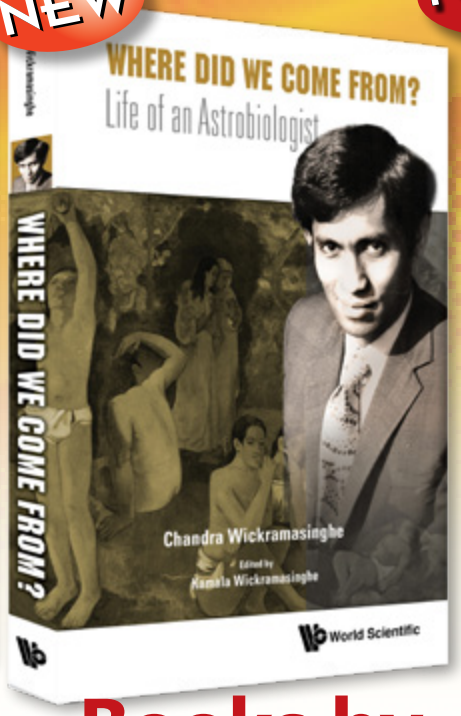

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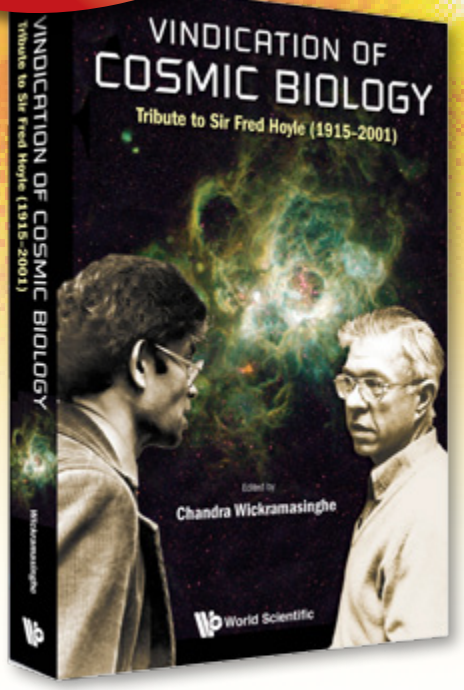

Books by CHANDRA WICKRAMASINGHE

The Search for Our Cosmic Ancestry

The idea that life is a cosmic, rather than a purely terrestrial phenomenon, has progressed from scientific heresy to mainstream science within the short timespan of a few decades. The theory of cometary panspermia developed by Fred Hoyle and the present author in the 1970's has been vindicated by a spate of new discoveries in astronomy and biology, and also with startling new evidence of microbial fossils in meteorites and micrometeorites. The recent Kepler Telescope searches for exoplanets have indicated the presence of over 100 billion habitable planets separated by only a few light years, thus making panspermia and the transfer of microbial life between such planets an inevitable fact. The book presents a comprehensive and up-to-date account of the Hoyle–Wickramasinghe theory of cometary panspermia in a manner accessible to a wide general readership.

Contents: The Genesis of Panspermia; The Primordial Soup and Evolution; Cosmological Context; From Dust to Life; Comets; Cosmic Viruses in Our Genes; Evidence from Epidemics; Microorganisms Entering the Earth; Planets of Life in the Solar System; Search for Exoplanets; Search for Extraterrestrial Intelligence; Meteorite Clues; Comet Impacts and Civilisation; The Mystery of the Red Rain.

216pp	**Dec 2014**
978-981-4616-96-6(hbk)	**US$64 / £42**
978-981-4616-97-3(pbk)	**US$38 / £25**

Chandra Wickramasinghe has published over 25 books and close to 300 scientific papers in peer-reviewed journals - over 60 of which were in the journal Nature.

Where Did We Come From? Life of an Astrobiologist

The life story of this book spans many stages of the life and scientific career of one of the foremost astrophysicists/astrobiologists of our times. Starting from his boyhood days, the book describes the author's scientific work over the past 50 years, the ground-breaking discoveries he had made, the controversies generated in the scientific community, and the gradual acceptance of his discoveries. Written in lucid non-technical language it captures the essence of the author's research at Cambridge, his lifelong collaborations with the legendary astronomer of the 20th century, Sir Fred Hoyle, the birth of the subject of astrobiology which they arguably "invented" in 1980, and his continuing ground-breaking research carried out while he was a Professor at Cardiff and later at Buckingham. The book traces the various influences that guided the author through his career, including that of his father who was a Cambridge Wrangler, and the profound influence of Buddhism in his early life.

236pp	**Mar 2015**
978-981-4641-39-5(hbk)	**US$68 / £45**
978-981-4641-40-1(pbk)	**US$34 / £22**

Vindication of Cosmic Biology
Tribute to Sir Fred Hoyle (1915–2001)

In the year 2015, 100 years after Fred Hoyle was born, the ideas relating to the cosmic origins of life are slowly gaining credence in scientific circles. Once regarded as outrageous heresy, evidence from a variety of disciplines — astronomy, geology, biology — is converging to support these once heretical ideas.

This volume opens with recent review articles pointing incontrovertibly towards our cosmic heritage, followed by a collection of published articles tracing the development of the theory throughout the years. The discovery that microorganisms — bacteria and viruses — are incredibly resistant to the harshest conditions of space, along with the detection of an estimated 144 billion habitable planets around other star systems in our galaxy alone, makes it virtually impossible to maintain that life on one planet will not interact with life elsewhere. The emerging position is that life arose exceedingly rarely, possibly only once, in the history of the cosmos, but its subsequent spread was unstoppable. "Panspermiology" can no longer be described as an eccentric doctrine, but rather is the only doctrine supported by an overwhelming body of evidence. Fred Hoyle's work in this area may in the fullness of time come to be regarded as his most important scientific contribution.

400pp	**Jul 2015**
978-981-4675-25-3(hbk)	**US$128 / £84**

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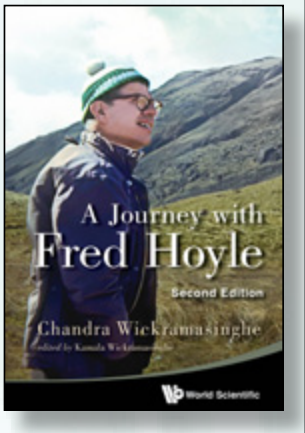
A Journey with Fred Hoyle Second Edition



By Chandra Wickramasinghe
(University of Buckingham, UK)

Edited by: Kamala Wickramasinghe

This is the story of the author's unique scientific journey with one of the most remarkable men of 20th century science. The journey begins in Sri Lanka, the author's native country, with his childhood acquaintance with Fred Hoyle's writings. The action then moves to Cambridge, where the famous Hoyle–Wickramasinghe collaborations begin. A research programme which was started in 1962 on the carbonaceous nature of interstellar dust leads, over the next two decades, to developments that are continued in both Cambridge and Cardiff. These developments prompt Hoyle and the author to postulate the organic theory of cosmic dust (which is now generally accepted), and then to challenge one of the most cherished paradigms of contemporary science — the theory that life originated on Earth in a warm primordial soup.

This new edition examines the many scientific developments that have transpired since the first edition was published. The discovery of bacteria in the upper reaches of the atmosphere, biological signatures in meteorites, spectroscopy of high-z galaxies and more all mesh with many of the ideas that had their origin in the first edition. Pushing into the future, the updated text examines the many experiments and probes currently operating or planned that will shed more light on the theory of planetary panspermia. A Journey with Fred Hoyle is an intriguing book that delineates the progress of a collaboration spanning 40 years, through a sequence of personal reflections, anecdotes and reminiscences.

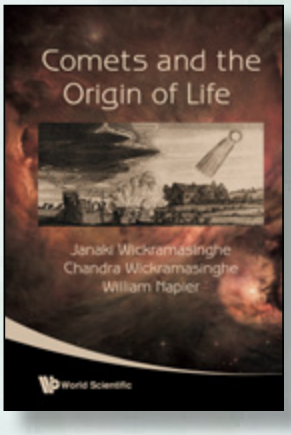
Contents: Origins: Prelude to the Journey; Cambridge and a First Meeting; A Hike in the Lake District; Betwixt the Stars; The Route to Carbon Dust; A Theory Takes Shape; The Institute of Astronomy: The Vintage Years; Winds of Change; The Cardiff Era; The Search for Cosmic Life; Life from Comets and Pathogens from Space; First Signs of Life; Bacterial Dust Predictions Verified; Life on the Planets; Evolution from Space; Theories of Trial; A Fossil Controversy; Comet Halley and Its Legacy; Alternative Cosmologies; The Last Decade; Epilogue;

Readership: General readers and students of the history of science.

268pp **May 2013**

978-981-4436-12-0(pbk) **US$42 / £28**

Comets and the Origin of Life



By Janaki Wickramasinghe *(Cardiff University, UK)*, Chandra Wickramasinghe *(Cardiff University, UK)*, William Napier *(Cardiff University, UK)*

The idea that comets may be connected with the origin of life on Earth was considered heresy a few decades ago, with scientists shying away from this possibility as if from a medieval superstition. However the case that comets may have contributed at least the complex organic building blocks of life has become very strong, and mechanisms have now been identified whereby comets may incubate and transfer microbial life from one cosmic habitat to another in the Galaxy. The latter process cometary panspermia was pioneered by the late Sir Fred Hoyle and one of the present authors in the early 1980's. A theory that was once controversial is slowly gaining scientific respectability and support.

The recent surge of interest in astrobiology has led to a spate of books in astrobiology — combining astronomy and biology — but in most of these, cometary panspermia is dealt with only cursorily. The present book sets out the case for cometary panspermia in a cogent way, combining evidence from space science, celestial mechanics, geology and microbiology. It should be an essential part of any university course on astrobiology, and also serve as a reference textbook for researchers in the field.

Contents: Cosmic Dust and Life; The Origin of Comets; Comets in the Galactic Environment; Dark Comets: A Link to Panspermia; Expulsion of Microbes from the Solar System; Liquid Water in Commets; Origin of Life; Expanding Horizons of Life

Readership: General scientific audience, astronomers, undergraduates in astrobiology.

232pp **Nov 2009**

978-981-256-635-5 **US$74 / £49**

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