

# Table of Contents

<b>Chapter 1</b>	<b>Asteroids and The Origin of Life—Two Steps of Chemical Evolution on The Surface of These Objects</b>	<b>1</b>
<b>Chapter 2</b>	<b>Origin of High Orbital Eccentricity and Inclination of Asteroids</b>	<b>21</b>
<b>Chapter 3</b>	<b>Incidental Catch and New Distributional Records of Asteroids by Bottom Trawling Activities from Southeast Coast of India</b>	<b>35</b>
<b>Chapter 4</b>	<b>Towards Understanding The Dynamical Evolution of Asteroid 25143 Itokawa: Constraints from Sample Analysis</b>	<b>49</b>
<b>Chapter 5</b>	<b>The Key Role of Meteorites in The Formation of Relevant Prebiotic Molecules in a Formamide/Water Environment</b>	<b>63</b>
<b>Chapter 6</b>	<b>Possible Duplicities of Five Asteroids</b>	<b>77</b>
<b>Chapter 7</b>	<b>A New Family of Extraterrestrial Amino Acids in The Murchison Meteorite</b>	<b>97</b>
<b>Chapter 8</b>	<b>A Presumptive Fossilized Bacterial Biofilm Occurring in a Commercially Sourced Mars Meteorite</b>	<b>113</b>

<b>Chapter 9</b>	<b>Stable Chromium Isotopic Composition of Meteorites and Metal-Silicate Experiments: Implications for Fractionation During Core Formation</b>	<b>123</b>
<b>Chapter 10</b>	<b>Concentration of Platinum Group Elements during the Early Earth Evolution: A Review*</b>	<b>145</b>
<b>Chapter 11</b>	<b>Microchemical and Structural Evidence for Space Weathering in Soils from Asteroid Itokawa</b>	<b>211</b>
<b>Chapter 12</b>	<b>Titan as the Abode of Life</b>	<b>229</b>
<b>Chapter 13</b>	<b>Quantum Meteorites: An Extemporaneous Description of the System of the World</b>	<b>253</b>
<b>Chapter 14</b>	<b>Arab Metallurgy owes much to Meteorites iron — A Special Regard to Damask Saber</b>	<b>275</b>
<b>Chapter 15</b>	<b>The Role of Ultrahigh Resolution Fourier Transform Mass Spectrometry (FT-MS) in Astrobiology-Related Research: Analysis of Meteorites and Tholins</b>	<b>289</b>
<b>Chapter 16</b>	<b>The Formation of Jupiter, the Jovian Early Bombardment and the Delivery of Water to the Asteroid Belt: The Case of (4) Vesta</b>	<b>313</b>
	<b>Index</b>	<b>353</b>