

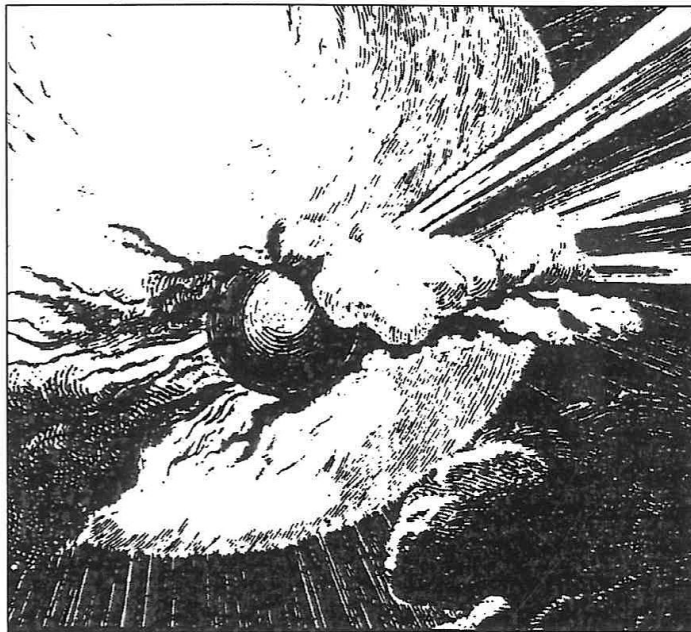
Alain CARION

# METEORITES



Alain CARION

# METEORITES



Translated from the French by  
Anne BLACK

*Special thanks to Roger Hewins*

— Second edition —

## — CONTENTS —

A few definitions: .....	5
Historical background: .....	5
Meteorite features: .....	7
Accretion and impacts: .....	9
Asteroids, « parents » of meteorites: .....	10
Classification: .....	11
— Undifferentiated meteorites: .....	11
— — Enstatite-chondrites (E): .....	11
— — Ordinary chondrites (OC): .....	12
— — Carbonaceous chondrites (C): .....	12
— — Rumuritiite: .....	12
— — Kakangari Type: .....	12
— Differentiated meteorites: .....	13
— — Achondrites (ACH): .....	13
— — — Asteroidal Achondrites: .....	13
— — — SNC: .....	13
— — — Lunar breccia and basalts (LUN): .....	13
— — — Brachinites (BRA): .....	13
— — — Lodranites (LOD): .....	13
— — — Acapulcoites (ACA) and Winonaites (WIN): .....	13
— — Iron (Metallic) meteorites (also called Siderites): .....	13
— — — Octahedrites (O): .....	14
— — — Hexahedrites (HEX): .....	14
— — — Ataxites (ATAX): .....	14
— — Stony-iron (formerly called siderolites): .....	17
— — — Pallasites (PAL): .....	17
— — — Mesosiderites (MES): .....	17
Fakes and pseudo-meteorites: .....	18
The age of meteorites: .....	19
Impacts: effects and consequences: .....	20
— Astroblemes: .....	20
— Impacts in space: .....	20
— Meteor Crater: .....	21
— Tektites: .....	22
— Other impact glass: .....	23
— Tunguska: .....	23
— Perseids and Leonids: .....	24
A few meteorites to dream about: .....	24
— Ensisheim: .....	24
— Peekskill-1992: .....	26
— The meteorite of Allende: .....	26
— The SNC: .....	28
— The lunar meteorites: .....	30
— ALH 84001: .....	31
The end of the dinosaurs: .....	33
The origin of life: .....	35
Conclusion: .....	36