## PROPERTIES AND INTERACTIONS OF INTERPLANETARY DUST

edited by

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This volume, the proceedings of the 8th Colloquium of the International Astronomical Union held in Marseille, France, July 9-12, 1984, provides a well-founded, up to date synopsis of interplanetary dust, its interaction with larger bodies, magnetic fields, radiation and gas and both loss and generation of dust particles. The book begins with observations of zodiacal light and F-corona (I) followed by space and ground studies of interplanetary dust (II). Investigations of interplanetary dust particles by laboratory studies (III) has become an important tool of research on dust. In a similar way optical observations provide further progress only if they are followed by laboratory investigations, theoretical work and modelling. This type of work was taken care for in the section "Optical studies of dust (IV)". Comets and meteroids (V) were treated as far as they are related to interplanetary dust. An important aspect of dust particles in the heliospheric medium are dust-plasma interactions (VI). Finally, if all topics referred to above are involved, one arrives at a realistic treatment of the dynamics of interplanetary dust (VII), which will lead to an understanding of the complicated interactions between sources, sinks, development of interplanetary dust particles and to an insight as to why the interplanetary dust cloud is as we find it today. An outlook to future problems and recommended investigations in the panel discussion (VIII) and a summary of the present status as it results from the meeting is presented in the conclusions (IX).

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