## **Preface**

This book is essentially the proceedings of the meeting devoted to the mechanisms of the relationship between Soil-Plant-Microorganisms in the Rhizosphere, held in Montpellier on September 28-29, 1989.

In this meeting we used the procedure introduced in 1986 by Y. Bertheau for the meeting entitled "Present and Potential Industrial Uses of Parasitic and Symbiotic Plant Microorganisms". The submitted communications were reviewed for publication by two independent referees from two different countries (the mention "reviewed" is printed on such papers).

Although the rhizosphere is a complex and difficult environment to define, the purpose of this meeting was to put together people working in the different fields of the plant root environment. Each session was organized with one or two exhaustive syntheses (invited speaker), free communications and posters.

The first session was devoted to the plant root structure and its environment with two exhaustive syntheses, Transports in Roots (Dr. C. Grignon) and The Soil-Root Interface in Relation to Mineral Nutrition (Dr. V. Römheld).

Host-microbe interactions was addressed in the second session The introductory paper focused on "The Symbiotic Signals in the Morphogenesis of *Rhizobium* Induced Root Nodules" (Dr. A.A.N. van Brussel) but communications (on mycorrhizal fungi/free bacteria) were also presented.

The third session, with the theme concerning Plant Growth Promotor Microorganism introduced by Pr. Y. Okon attracted workers from various fundamental and applied domains such as state organizations and private companies interested in the development of the inoculation procedures.

The last session, Antagonisms in the Rhizosphere (more conventional for a Plant Pathology Society), introduced by Dr. G. Défago regrouped free communications on various microorganisms with an inclination of understanding the mechanisms involved in the antagonism phenomenon.

I know the participants in this meeting appreciated finding an occasion to have discussions with scientists working in various fields. And finally, I cannot end this short introduction without thanking all the people who encouraged and helped me in the organization of the meeting and during the meeting.

The organizer J.C. CLEYET-MAREL