## **Opening Address**

F. L. WHIPPLE

Director, Smithsonian Astrophysical Observatory, Cambridge, Massachusetts

T is certainly a great honor for the Smithsonian Astrophysical Observatory to have so many distinguished visitors here to discuss cosmical gas dynamics, the area of joint investigations for astrophysicists and aerodynamicists. We consider it particularly appropriate that we have been permitted to play host to this first meeting of your group in the United States, for let me remind you that the Smithsonian Astrophysical Observatory itself represents in its founding a meeting ground for aerodynamics and astrophysics. Its first director, Samuel P. Langley, was a man whose contributions to both these sciences are outstanding. I believe that he would regard our sponsorship of this present Symposium as a natural step in the progress of the research program of the Smithsonian Astrophysical Observatory along the lines that he envisaged with its founding. The program of the Smithsonian Astrophysical Observatory lays heavy stress on the study of meteors and meteorites, together with their interaction with the earth's upper atmosphere, certainly a relevant program in the scope of modern ultraspeed aerodynamics. At the moment, a very considerable part of our efforts are going into the tracking of artificial

earth satellites, as the first step toward outer space. It is particularly timely that this conference should be sponsored by us this year, the first in our newly expanded effort in astrophysics, culminated and strengthened by our having brought the Smithsonian Astrophysical Observatory into close geographical and scientific relationship with the Harvard College Observatory. We trust that the two observatories, occupying common space and utilizing common facilities, will enhance the efforts of both in this common area of astrophysics and aerodynamics. We appreciate the impetus which your meeting here will give to our programs.

On behalf of Dr. Leonard Carmichael, the Secretary of the Smithsonian Institution, and of Dr. Donald H. Menzel, Director of the Harvard College Observatory, who is not able to be here, I bring you regards and welcome. The credit for this meeting goes to the Organizational Committee, Dr. Burgers, Dr. Thomas, and the many others who have carried the heavy load, while I have merely signed a few letters. We are delighted and honored that you are here, and I expect the meeting to be a great success.