





Good morning. On behalf of the Organizing Committee, it is my great pleasure to welcome you to this International Conference on Fifth Generation Computer Systems 1988.

This is the third international conference on Fifth Generation Computer Systems, following the first conference in October of 1981 and the second conference in November of 1984. At the 1981 conference, we introduced our country's plans for research and development of Fifth Generation Computer Systems, and called for cooperation from other countries in this endeavor. That conference appears to have had a considerable impact, and became the impetus for the initiation of similar projects in several other countries. The 1984 conference was primarily devoted to explanations of the Fifth Generation Computer Systems project, and to presentations of research results for the initial stage of two and one-half years at the Institute for New Generation Computer Technology (ICOT), which is responsible for the actual research and development. At this conference, there were also reports of the latest research results, both from within Japan and from aborad. There is no doubt that this conference held great significance, both in confirming the

importance of research on fifth generation computers, and in indicating concrete directions for future research efforts.

Professor Tohru Moto-oka of the Department of Electrical Engineering at the University of Tokyo had supervised research at ICOT during the initial three-year stage, and had also overseen preparations for the last two international conferences; unfortunately, Professor Moto-oka passed away in November of 1985, with the work only half completed. Thereafter, I have strived in my humble way to fill the gap left by Professor Moto-oka, and have also done my best to keep alive at ICOT the same positive spirit in which research and development is carried out.

Reflecting on the experiences of '81 and '84, I have noticed that these FGCS conferences are quite unique in several ways. First, an extremely large numbers of outstanding papers have been submitted; second, highest-quality scientists and engineers from around the world cooperated to make the conferences successful, with many persons attending; third, participants from various fields were present, including government officials, journalists and managers involved in R&D projects; fourth, there were animated exchanges of opinion which transcended the perspectives

of individuals; and fifth, the conferences ranked as international events commanding worldwide attention. These facts attest to the crucially important role in store for research on Fifth Generation Computer Systems, both for the field of information science, and as a means of resolving the problems faced by information-oriented societies.

At this conference, we would hope that the participants would evaluate the accumulated results of basic research at ICOT over the past six and one-half years, and would also appreciate any comments or criticism of research plans for the final stage of the project. And, we hope for and expect that presentations of technical papers by researchers from Japan and abroad will lead to an understanding of advanced research on Fifth Generation Computer Systems, and will facilitate exchange of opinions. To this end, we have arranged for participants to view a demonstration indicating the major results of research at ICOT. Such a demonstration of advanced technology has not until now been attempted at an international conference; we are confident that it will aid understanding of the fruits of our work. Also, we have planned invited lectures and panel discussions by distinguished researchers active in the 'front lines' of the field, so that participants can better grasp the state of research on an international level, and to aid in estimations of themes for future research. Finally, we have scheduled a reception and banquet so that participants may mingle in an informal atmosphere.

As the late Professor Moto-oka once observed, this is the "age of competition and cooperation." Now is the time for us to pool our most important resource—human ingenuity—to prove what we can achieve, and to aim at a more plentiful society.

It is my fervent hope that this conference will serve as an occasion for vigorous debate and fruitful exchange of opinions and information.

Once more, in my capacity as Chairman of the Organizing Committee I wish to express my heartfelt gratitude to all participants. I would also like to extend warm thanks to those persons on the Program Committee who made great efforts to create such an attractive program of events for this conference, to the many persons from this country and others who agreed to review papers, to the Organizing Committee members for their selfless efforts to ensure that all conference events come off as planned, to the ICOT personnel who labored day and night to make a demonstration of their research results possible. and to the various individuals and institutions who lent their generous support to enable this conference.

Thank you.