

Preface to the Present Volume

Recently much progress has been made in the field of differential and analytic geometry. This progress indicates the merit of studying further the family of geometric objects and of employing essentially the method of partial differential equations.

With this in mind, we organized several seminars in the academic year of 1987 in which audience were graduate students and mature mathematicians who were not experts on the topics considered in the sessions.

The present volume and subsequent volume 18-II are the outcome of the activities during and after these seminars.

Part I of this volume is devoted to the survey notes from the expository lectures given during these seminars and expanded by their authors' own original contributions. In addition, we asked Fukaya to contribute his survey note in this volume because of its strong relevance to the study of the family of Kähler metrics of the type considered. Part II of this volume is devoted to original papers.

The editor wishes to take this opportunity to thank all the speakers and the authors of the articles in this volume for their cooperation.

This volume is edited using the $\mathcal{A}\mathcal{M}\mathcal{S}$ - $\mathcal{T}\mathcal{E}\mathcal{X}$. We owe much to Dr. Chiaki Tsukamoto who wrote the style files for printing this volume, for having overcome many problems in the editing process. We also owe much to Mrs. Kozaki for her help in preparing our manuscripts in the $\mathcal{A}\mathcal{M}\mathcal{S}$ - $\mathcal{T}\mathcal{E}\mathcal{X}$ style. To all of the above we express our hearty thanks.

T. OCHIAI, editor

*All papers in this volume have been refereed and are in final form.
No version of any of them will be submitted for publication elsewhere.*