Words from the editors

On behalf of the editors of the journal, it is our great pleasure and honor to dedicate this special issue of the Nihonkai Mathematical Journal to Professor Kouei Sekigawa in celebration of his retirement from Niigata University in March 2009.

Professor Sekigawa has been a member of the editors of this journal ever since the birth of the journal and he has made significant contributions to the fields of Differential Geometry, Riemannian Geometry and Almost Hermitian Geometry; especially, curvature homogeneous Riemannian manifolds and geometry of almost Hermitian manifolds. He has published over 90 papers in academic journals. In 1979, he wrote his doctoral thesis and received his Doctorate of Science degree under the direction of his adviser Professor S.Ishihara at Tokyo Institute of Technology. The topic of his thesis was concerned with homogeneity of some almost Hermitian manifolds.

Professor Sekigawa was born in Niigata in 1944, and he entered the Department of Mathematics of Niigata University in April 1962, and he learned from Professor S.Sawaki, H.Mizusawa, K.Aoki, T.Watabe and other professors. After graduated the Department of Mathematics, he enrolled in the graduate school (master's course) of Niigata University and studied several topics in Differential Geometry under Professor Sawaki. In 1969, he got a position as an Assistant Professor in the Department of Mathematics, Niigata University. In 1973, he was promoted to Associate Professor, and afterward to Professor in the Department in November 1981.

His research topics consist of two main parts:

(i) the Nomizu conjecture and several topics related to curvature homogeneous spaces,

(ii) almost Hermitian geometry concerning submanifolds in a 6-sphere S^6, which can be considered as a nearly Kähler manifold, and the following Goldberg conjecture.

"An almost complex structure of a compact almost Kähler Einstein manifold is integarable."

He was much interested in this conjecture because it is closely related to the generalization of Matsushima's result by his adviser Professor Sawaki. In 1983, he obtained a partial affirmative answer to the conjecture in dimension 4. Namely, he showed in 1985 that the conjecture is true if the scalar curvature is non-negative in dimension 4, and then in any dimension in 1987. He gave a talk on the results in an invited lecture of the Annual Conference of Mathematical Society of Japan held at Tokyo Metropolitan University in April 1985. The conjecture is, however, still open even now in the remainder cases.

Professor Sekigawa has played a leading part in international and domestic academic activities. He was an Editor (Geometry) of Journal of Ramanujan Mathematical Society during 1987–1996. He served as a Council member of Geometry Section of Mathematical Society of Japan during 1991–1993. Through the collaboration of Professor S.Dimiev of Bulgarian Academy of Sciences, he made a big contribution to the organization of several meetings of International Workshop on Complex Structures and Vector Fields in Bulgaria. In the fourth Workshop 1998, he was presented with COMMEMORATIVE DIPLOMA by the Bulgarian Academy of Sciences in recognition of his contribution to the series of the International Workshops.

He is also a successful educator, as manifested by activities of researchers obtaining their PhD degrees under his supervision from Niigata University as well as many high school teachers. Some of his most frequent collaborators include his former PhD students, H.Hashimoto, T.Koda, J.T.Cho, T.Oguro, A.Yamada, and R.S.Lemence. Moreover, he actively worked and published joint-papers with many co-authors including not only these researchers but also Professors T.Sato, L.Vanhecke, and J.H.Park.

Professor Sekigawa has retired from his position in March 2009, and then he became a Professor Emeritus of Niigata University. Now, he is a Fellow of the Institute of Science and Technology, Niigata University.