Preface

Following the International Symposium on Solid-State Reactions and Mechanical Alloying held February 1990 in Grenoble, and the International Symposium on Mechanical Alloying (ISMA) organized in Kyoto May 1991, such meetings are now being organized as a comprehensive series entitled ISMANAM. This year's International Symposium on *Metastable, Mechanically Alloyed and Nanocrystalline Materials ISMANAM-1994* was held in Grenoble from June 27th to July 1st.

Major topics included soft-magnetic materials produced by the nanocrystallization of rapidly-quenched amorphous alloys, nanocrystalline alloys and ceramics obtained by mechanical/reactive milling, their catalytic, magnetic and mechanical properties and new bulk amorphous alloys obtained by slow cooling.

A *European meeting on Disordering and Amorphization* was also planned in Grenoble in 1994 following the European workshop-type meetings held in Grenoble (France) July 1991, in Irsee (Germany) July 1992, and in Cambridge (U.K.) July 1993. We took advantage of this opportunity to hold the two meetings together in order to bring together scientists from various disciplines interested in these interrelated areas of exciting research.

We were delighted by the enthusiastic response to this year's meeting. About 150 papers were presented. After the usual review process, most of these papers appear in this special volume of *Materials Science Forum*.

A quasi-permanent Steering Committee has been formed by scientists committed to promote ISMANAM as the main international conference series on *Nanocrystalline and Mechanically Alloyed Materials*.The names of these scientists who are members of our various committees are indicated by © on our various lists. As the current Chairman, I am pleased to announce that the Steering Committee has accepted the invitation of Dr. Robert Schulz and his colleagues to hold ISMANAM-95 in Quebec City in Canada. The Committee has also tentatively accepted an invitation to Rome, Italy for ISMANAM-96 and a definite announcement will be made in Quebec City.

In order to honor the best contributions at the conference, the Steering Committee awarded two gold medals which were prepared in my laboratory for the occasion. They are made of "mechanically alloyed" hot-pressed gold plates hardened by a micro-dispersion of TiN particles.

The ISMANAM-94 gold medal for best scientist was awarded to Professor Akihisa Inoue of Tohoku University in Sendai. Akihisa Inoue was born on September 13th, 1947 in Himeji-City in Japan. He obtained his Ph.D. in Materials Science and Engineering at Tohoku University in 1975 and married Mariko with whom he had a daughter, Akiko who is now 14 years old. He has been a visiting scientist at the ATT Bell Laboratories, the Swedish Metal Research Institute and the Royal Institute of Technology in Stockholm and is the recipient of several previous scientific awards.

Akihisa Inoue received the ISMANAM-94 Best Scientist Gold Medal for the pioneering contributions of he and his team to the development of Fe-based soft-magnetic and other nanocrystalline alloys as well as bulk amorphous alloys such as the Zr-Ti-based family.

Many of his numerous remarkable results are reviewed in two keynote papers in this Proceedings.

The ISMANAM-94 gold medal for best young scientist to Dr Guofu Zhou of the Van der Waals-Zeeman Lab in Amsterdam, the Netherlands. Guofu Zhou who was born on October 1st, 1964 in Sichuan, China obtained his first Ph.D. degree at the Institute of Metal research, Academia Sinica in Shenyang in 1992 but is now following a new doctoral program in Amsterdam under the supervision of Professor Hans Bakker. He is married and has a four year old daughter.

Guofu Zhou received the ISMANAM-94 Best Young Scientist Gold Medal for his excellent Ph.D. work on the disordering of several classes of intermetallics under heavy deformation conditions and the resulting changes in structure and magnetic properties which led to the discovery of spin-glass behavior in $GdAl_2$ amorphous Co_2Ge. Most of these results, which have recently appeared in several papers in the Physical Review Letters and Physical Review B, are reviewed the paper presented by Guofu Zhou and the Keynote paper of Hans Bakker in this volume.

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