

## PREFACE

This volume of the *Annals of Glaciology* is concerned with the Physics, Chemistry and Mechanics of Snow, encompassing alternative approaches to snow classification, avalanche dynamics and pollutant dispersion in snowy environments. The volume comes about through the energy of Nikolai Kazakov and his determination to bring together Russian and international snow science. The challenge has been huge. On the surface there is a language barrier that the IGS generously addressed by providing support for language editing in the shape of Ken Moxham. However, the challenge proved more deeply rooted.

Snow science was largely initiated through local need, with distinct communities taking different approaches. Throughout the Americas, Europe, Australasia and Japan, these approaches have become largely homogenized, with academic work visible and accessible. In contrast, the (substantial) Russian community has undergone its own evolution with sadly little interaction with scientists from elsewhere. This separation has been plain to see when reading the introduction to many of the submitted articles, where large bodies of work on either side of the divide were simply unknown. An important contribution to this issue is Sokratov and Kazakov's 'translation' between the international snow classification system and the Kolomytz classification that is still widely used across Russia. Although we can hope that Russians will start to employ the international standard in the future, this translation offers the international community an opportunity to systematically rediscover Russian knowledge and data from the last 30–40 years.

Editing this volume has required difficult decisions and considerable reflection on the nature of science and its communication. Several times I have had to ask myself whether my understanding of what constitutes scientific investigation is based on prejudice or expectation and this has been an important lesson. It has taken a long time, but we have brought together contributions from Russia, Japan, the USA and the UK, covering a wide range of snow science themes.

At the outset we ambitiously thought that the gap could be fully bridged in this one step. Now, I see this compilation and the network of people involved in creating it as a launch point for the bridge. It is important that we set about the next issue with equal motivation and vigour, because we have a way to go before we can truly say that the international community in snow science is really that.

I would like to offer huge thanks to the scientific editors (Ed Adams, Kouichi Nishimura, Sergey Sokratov, Jo Jacka, Perry Bartelt and Martin Schneebeli) who were presented with a difficult task, and to the reviewers. I also thank the IGS production staff and the General Secretary for their support and guidance. Finally, I thank the authors for their efforts and patience.

**Barbara Turnbull**