Preface

The June issue of NCR covers six very different topics, three towards materials and three towards structures. The material papers deal with frost, chloride diffusion and moisture, i.e., three important aspects that are of specific interest in the Nordic countries. The papers devoted to structures treat influence of Alkali Silica Reactions (ASR) on load effects, fatigue, and the interaction between the concrete bridge deck and its edge beam. I think this is typical for both Nordic concrete research in general and Nordic Concrete Research (NCR) specifically. The Nordic concrete research may look fragmented but a common denominator is that all papers deal with practical problems that need to be solved in order to make concrete structures more durable, more efficient and more environmentally friendly. The diversity also reflects our research funding systems. In the 1990s, both Sweden and Norway had large research programmes devoted to high performance concrete with both governmental and private financing. In more recent years, there have been national research programmes on, e.g., self-compacting concrete and “green” concrete but none of these programmes has had the same size and the same life-time as the ones on high performance or high strength concrete. Today, the most frequent area of concrete research is sustainability and especially replacement of part of the Portland cement with other binders, but there are hardly any national programmes in this area. As long as there is a lack of large national research programmes, the Nordic concrete research will cover a lot of different topics as this issue of NCR is a good example of.

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