Message of the President

Dear Reader, let's start with research and with the following particular sentence: "Insufficient attention has been paid so far to the microscopic changes which accompany transitions in ice crystals, such as variations in the size and shape of these crystals." These words could well be expressed by researchers from the 16th CLACE campaign (cloud and aerosol characterization experiments) which started early 2017 at the Jungfraujoch station and which was initialized and set up during the year 2016. The study of tiny ice crystals, which take part in the cloud forming process, is part of the current research activities in this area. However and interestingly, the starting sentence dates back to a publication by Max Ferdinand Perutz from the Cavendish Laboratory, Cambridge, and Gerald Seligman, which appeared as "Publication No. 1 of the Jungfraujoch Research Party" in the Proceedings of the Royal Society of London, 1938. Probably most of you will know that Max Perutz, by following up his morphological and crystallographic studies of ice crystals done at the Jungfraujoch station, and extending them later to biological systems, was awarded the Nobel Prize for Chemistry in 1962 for solving the structure of haemoglobin. In this context, recently I enjoyed a chat with a young researcher from the actual CLACE campaign and during the conversation he addressed the role of tiny ice crystals in the cloud formation process. Well, he got really surprised by learning that already 80 years ago a later Nobel laureate worked on tiny ice crystals at the Jungfraujoch station; clearly, his motivation was really and understandably boosted by that. By the way, Max Perutz kindly acknowledged the use of the new scientific station at Jungfraujoch as their base of operations, saying: "being situated at the source of the Great Aletsch Glacier, the largest ice stream in the Alps, this station offers ideal facilities for our work." Just to mention, Perutz' research work at that time was partly funded by the Ski Club of Great Britain; well let's reflect on this fact for a moment. Having said this, I express now my great respect to all researchers being active at our stations, be it at the Jungfraujoch or the Gornergrat station, for their formidable work they accomplished over the year; the detailed report from our Director will show it at best.

Efforts on combining the research activities of the European Alpine High Altitude Research Observatories for an enhanced climate and environmental monitoring acquired fresh impetus during the year 2016. A joint meeting with participation of our Foundation in September 2016 at the "Bayerisches Staatsministerium für Umwelt" in Munich set a new agenda in the realm of the Virtual Alpine Observatory (VAO) network. As one of the issues, we were concerned with a discussion about the central elements of VAO. Besides establishing the alpine environmental data analysis center, these elements now also include, besides others, (*i*) defining and realizing joint basic research and application-oriented projects, (*ii*) flanking the VAO projects with national and European funded projects, and (*iii*) improving flood control and producing better estimates of water resources. Furthermore, the partner institutions in Germany and the seven associated research stations whose delegates represent the VAO board decided to hold the third VAO Symposium from 28 – 30 March 2017 at EURAC Research in Bolzano, Italy. This event will provide an ideal forum for networking with the international high altitude research community. Atmospheric variability and trends, alpine water supply, alpine environment: dangers and risks, environmental/high altitude medicine and infrastructure, and technology for environmental/high altitude research will be the topics. The fresh spirit, which was noticeable at the board meeting in Munich, gives hope for the future for a more active role of the VAO organisation in our international research community.

Did you already visit the website of the UNESCO World Heritage Swiss Alps Jungfrau-Aletsch? You will discover a whole collection of interesting facts about the first Natural World Heritage property listed from the Alps. And importantly, our Jungfraujoch research station is prominently settled within the perimeter of this unique World Heritage region. Furthermore, this UNESCO organization even showcases the alpine research on its website, and so, recently we set the goal to strengthen the links between this organization and our Foundation. For instance, a new visitor-, study- and congress center of the organization

opened doors in September 2016 in Naters (Canton Valais), and now we will evaluate options and synergies for an active participation with the research activities of our Foundation.

All over the year, I noticed with great pleasure the dedicated work of our Director, Prof. Markus Leuenberger and his team, to fulfil the mission assigned to our Foundation, be it for the Jungfraujoch or the Gornergrat station. My sincere thanks to them, and last but not least, Markus Leuenberger deserves all our congratulations for his promotion during 2016 to the rank of a "Professor Extraordinarius" at the University of Bern. Finally, on behalf of the Board of the Foundation HFSJG, I express my sincere thanks to all those who contributed to the progress and accomplishments during the year 2016; thereby, I am happy to join with our Director in giving acknowledgements to all our partners, team members and members of the Foundation, as nicely detailed at the end of his message.

Bern, February 2017 Silvio Decurtins