

## CHRONICLE

### In memoriam Leszek Starkel (1931–2021)

Leszek STARKEL, an outstanding figure of Polish and international geomorphology, paleohydrology and Quaternary paleogeography passed away on 6 November 2021. He was born in Wierzbnik, in a mining settlement which now belongs to Starachowice in the Świętokrzyskie (Holy Cross) Voivodeship.

After completing his studies at the Jagellonian University in Cracow in 1954, he began working with the Institute of Geography and Regional Organization of the Polish Academy of Sciences, where he defended his doctoral dissertation in 1959 and obtained habilitation in 1964. In the long period 1968–2001 he was director of the Institute of Geomorphology and Mountain Hydrology, later Institute of Geography and Spatial Organization of the Polish Academy of Sciences in Cracow. The principal goal of research in the Institute was the design of rational land use based on the detailed survey and evaluation of the Carpathian landscapes. The Institute established wide-scale international contacts within the frame of the Carpatho-Balkan Geomorphological Commission and organized expeditions to Mongolia (1974–1980) and India (since 1983), where Professor STARKEL was always present and an active participant.

He enjoyed high international reputation as one of the most respected geomorphologist in the eastern half of Europe. In 2004, he was the second Pole after Paweł Edmund STRZELECKI, to receive the Gold Founder's Medal, the highest distinction of the British Royal Geographical Society. In 2017, he was awarded the Medal of Wincenty Pol, by the President of the Polish Academy of Sciences at the request of the Committee of Geographical Sciences. He received the Knight's Cross and the Officer's Cross of the Order of Polonia Restituta. His international honours include the honorary fellowship of the International Association of Geomorphologists, the honorary fellowship of INQUA. He was also a member of the Polish Academy of Sciences and the Polish Academy of Arts and Sciences, as well as the honorary fellow of the Association of Polish Geomorphologists.

His rich contributions to geomorphology reflected his manifold interests and an extraordinary ability to see causal relationships in nature and between nature and humans. Some of his most often cited works in Polish are the paleogeography textbooks *Paleogeografia holocenu* (Paleogeography of the Holocene) (1977) and *Geografia Polski – Środowisko przyrodnicze* (Geography of Poland – The natural en-

vironment) (1991), edited by him, and the monograph *Ewolucja doliny Wisły od ostatniego zlodowacenia do dziś* (Evolution of the Vistula river valley from the last glaciation until the present-day) (2001). In English language he published on The role of catastrophic rainfall in the shaping of the relief of the lower Himalaya (Darjeeling Hills) (1972), The role of extreme (catastrophic) meteorological events in the contemporary evolution of slopes (1976), and The reflection of hydrologic changes in the fluvial environment of the temperate zone during the last 15,000 years (1983). To commemorate his 90<sup>th</sup> birthday a collection of papers was issued in *Studia Geomorphologica Carpatho-Balkanica*, where the most distinguished Polish and foreign geographers presented their research findings.

Two geographical regions were of outstanding importance in his research career. One was the Polish Carpathians and their foreland, including the Vistula river. There detailed research led by him revealed a variety of geomorphic processes, from weathering through hillslope to fluvial. He also loved travelling, particularly to India. Since 1968 he was a regular visitor to the Darjeeling Himalayas and the Meghalaya Plateau. Several generations of Indian geomorphologists followed his guidelines in the study of hillslope and channel processes. It was an unforgettable experience to listen to his field explanations of landslides, tectonics and braided rivers in north-east India. The impact of human activities has never avoided his attention and raised his concern on environmental problems on the subcontinent.

Professor STARKEL initiated bilateral cooperation between Polish and Hungarian geographers and was an active participant of several Polish-Hungarian seminars. In 1993 he became honorary member of the Hungarian Geographical Society and in 1995 he received our Society's highest distinction, the Łóczy Medal.

He was a basically optimistic person with a never disappearing smile on the face, who met all problems with good humour. His optimism was grounded on deep trust in the generations of young Polish and foreign geographers who followed in his footsteps. Recently he published an autobiography in Polish under the title *Drogi mojego życia* (The roads of my life) (2019), with valuable pieces of advice for his successors. We will equally keep him in remembrance as a scientist and as a human being.