## **Obituary**



Asbjørn Ivar Hordvik 1928–1995

Asbjørn Ivar Hordvik was born 14 May 1928, in Bergen, Norway, and died quite unexpectedly 21 December 1995, at his home in Hordvik, Norway, where he had gone to spend Christmas with his children and their families. Asbjørn became known to me personally in September 1984, after the Hamburg IUCr meeting. At that time, Asbjørn came to Seattle, to Lyle Jensen's lab, to spend a year's sabbatical; he later returned on two separate occasions to work with Larry Sieker on the structure of an iron–sulfur protein, desulforedoxin. Lyle Jensen's lab had a long history with crystallographers in Norway, much of it indirectly connected to Asbjørn, and finally, in 1984, directly.

Asbjørn was trained as a physical chemist at the University of Bergen, working with Professor Sven Furberg on nucleic acid components, thymine, uracil, D-ribose and arabinose, and graduated from there in 1955. He then worked on sulfur compounds with Dr Olav Foss. Professor Furberg was the first Norwegian crystallographer who came to Seattle to work with Lyle Jensen. As was the custom in Norway then, Asbjørn obtained his PhD at The University of Bergen in 1968 after working as a faculty member for some time. His thesis was entitled 'Structure and Bonding in Unsaturated Fivemembered Cyclic Disulphides'.

Asbjørn spent from October 1960 to March 1963 as Assistant Professor in Physical Chemistry in Addis Ababa, Ethiopia, at Haille Sellassie University. There he planned and built up a laboratory course in physical chemistry. In addition, he lectured in thermodynamics, reaction kinetics and electrochemistry for third and fourth year students. During that time, the summer of 1962 and spring of 1963, he was Visiting Professor to the Weizmann Institute where he continued work on cyclic disulfides, and picked up direct methods, while establishing many enduring friendships. Dov Rabinovich in turn came bringing computer programs to Bergen. From June to December of 1968, Asbjørn was a Research Associate at the Crystallography Laboratory at the University of Pittsburgh, again establishing many long-term friendships. He became Senior Lecturer at the University of Bergen in April 1963, and was appointed Associate Professor there in January 1969. He stayed in Bergen through September 1974. During that time, he trained, among others, Jorunn and Einar Sletten, who upon finishing their graduate work, also came to Seattle for 2 years (1967-1969), for postdoctoral work. Bjørn Birknes also trained with Asbjørn, and at Asbjørn's recommendation came to Seattle in 1973-1974 to learn protein crystallography. In 1974, Asbjørn was invited to 106 OBITUARY

start a crystallography group at the University of Tromsø, in Norway, north of the polar circle. This was a new University, and an entirely new Chemistry Department. Asbjørn relished the challenge and happily went north. Bjørn went with him to help in the initial stages of setting up the group. By the mid 1980's, Asbjørn had over 90 publications in crystallography, before starting on protein work. Although at the time I believe Asbjørn had no experience in protein crystallography, characteristically he was determined to start a protein crystallography group. He met Ed Hough, who was doing post-doctoral work in Oslo, and invited him to join the group in Tromsø. Asbjørn sent Ed to spend two weeks in Seattle with us as well, 'to learn protein crystallography' (!).

Slowly but steadily, Asbjørn was able to realize his dreams, with additional talented associates, Knut Junge and Lars Hansen. They worked together in the Institute of Mathematical and Physical Sciences and acquired one after the other all the accoutrements – equipment and expertise – for protein structural work. I was privileged to spend two months in Tromsø, on two different occasions, and flourished with the excellent facilities and wonderful spirit I found there. One of his colleagues writes, 'This group was systematically developed spurred by Asbjørn's never failing enthusiasm and by his impressive working capacity'. Asbjørn was Full Professor from 1974 to July 1991. In 1991, he became Research Professor at the University of Tromsø.

Asibjørn's professional life permeated his whole life. He was a natural and gifted teacher, essentially giving his whole attention to each of the students fortunate enough to work with him. He told me many times how he loved teaching physical chemistry and crystallography. Often teaching would be in small groups in his cozy office, arranged to accommodate a small group. It was evident how much pride he took in each student's personal accomplishments. He also told me how proud he was of comments written about the research group, in an outside review made after he had been in Tromsø ten years. The group was likened to a jewel, sparkling in the northern light.

During that time, Asbjørn also devoted many years to the Norwegian Research Council, and as such had a great impact on research all over Norway. He was a member of its governing board from 1983 to 1984, and head of its Council for Natural Sciences from 1980 to 1983. He was a wonderful advocate of research, and of Norway's place in it.

Asbjørn was elected member of the Norwegian Academy of Sciences in 1990, and was appointed Honorary Member of the Norwegian Chemical Society in 1994.

Asbjørn was Editor of the scientific journal *Acta Chemica Scandinavica* (the series covering inorganic, physical and theoretical chemistry) from 1990 onwards. During his time as Editor, the journal was opened to papers by non-Scandinavian authors.

Asbjørn was invited to consider becoming Secretary-Treasurer of the Union in late 1986. I remember how excited he was about the opportunity, and how he so thoroughly enjoyed his first meeting with the Executive Committee. I'm not sure he realized he would hold that office for nearly nine years, but he told me how much he enjoyed it. I know he loved to organize Finance Committee meetings in Tromsø so he could show off his Tromsø to visitors. He also told me of how much he enjoyed working with the very dedicated staff in Chester.

Asbjørn 'retired' several years ago, but could never really bring himself to retire completely. I believe he always felt strongly drawn to both Tromsø and to Hordvik (near Bergen), where he was converting a summer home into a somewhat more finished home. His plans were to move there permanently, soon after he'd completed his nine years of service to the IUCr, and after one more year as Editor of *Acta Chemica Scandinavica*. But there were things about both places that he loved and it was a difficult choice for him.

The words 'vital' and 'enthusiastic' and 'optimistic' are three that instantly leap to everyone's mind in thinking about Asbjørn. Asbjørn always enjoyed himself immensely (100% sure!) at whatever he was doing, and, in that, enhanced the lives of others around him. He was a practical man - I believe he thoroughly enjoyed the experimental details of crystallography as much as he enjoyed fixing neighbor's furnaces (which he did in Tromsø) and building garden furniture for a friend in Seattle. He was modest - he never felt compelled to claim credit for work done - the joy was in the doing, and in a job well done. He told me of the joy he felt in the craftsmanship going into his home in Hordvik - it pleased him no end. He also enjoyed people enormously - the annual Christmas party held at the Institute, or the 'shrimps' party when a Seattle visitor came to Norway, or the small Christmas party for his family in Bergen were all events he took great pleasure in arranging.

This love of science and the people in it certainly contributed to the excellent job he has done in the IUCr. He always welcomed people's input; loved the complexity of working with people – one of his favorite phrases was 'We shall find a way'. Well, we shall have to find a way without him now, but we are all richer for having shared parts of our lives with him.

**ELLIE ADMAN** 

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I would like to add a few lines to Ellie Adman's very moving article. Asbjørn was General Secretary and Treasurer of the International Union of Crystallography when I was President and I take this opportunity to say how much he did for the Union during his time of service and how much we all owe him. He was entirely devoted to the Union. With his easy and friendly way, his pragmatism and his never failing enthusiasm and optimism, he always 'found a way' to solve all problems. The Union is very large, with a very wide variety of scientific activities in so many different domains, it has many publications and launched several major ones when Asbjørn was in office, its finances are very complex, and the responsibilities that lie on the shoulders of the General Secretary and Treasurer are enormous. The

possibility of the Union to keep all these activities and in particular the very important support to young scientists depends on the health of the Union's finances and on the success of its publications. Asbjørn took everything in his stride in a very efficient way and his hand was behind all the Union's achievements. On a more personal note, I thoroughly enjoyed our collaboration, which led very rapidly to a close friendship. Many were the phone calls and e-mails we exchanged whenever a problem arose or a decision had to be made and we usually converged easily towards what we thought to be the best way for the Union. It was with great grief that I learnt of his unexpected passing away. I shall always miss him.

ANDRÉ AUTHIER