

## **Ashok Vijh: passionate about research for more than 50 years**

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Considered one of the most prominent electrochemists today, Ashok Vijh celebrated 50 years of service last August. Master of research at IREQ, he returns to his impressive career. When Ashok Vijh joined IREQ on August 11, 1969, Neil Armstrong had just set foot on the moon. The young researcher was about to embark on a career punctuated by great scientific achievements, with awards and honors. "I cannot believe 50 years have passed since my first day at IREQ. Time has passed in a flash!" he contemplated.

Born in the Indian province of Punjab, Ashok Vijh came to Canada in 1962 to pursue a PhD in electrochemistry at the University of Ottawa. "Young, poetry attracted me more than chemistry, but it is in the field of science that offered scholarships," says the researcher.

### **Contribution to the influence of IREQ**

After completing his doctorate, Ashok Vijh worked for some time in the United States before being recruited in 1969 by IREQ founding director Lionel Boulet, a man for whom he had the highest regard. "He made me an offer I could not refuse," says the researcher laughing. But with this proposal came an obligation: to position IREQ on the international scene and to make it shine. "The pressure was great, but the atmosphere was electrifying and stimulating," he adds. From the beginning at IREQ, I knew I was going to devote my career to research. "The first offices of IREQ were located on the 11th floor of the current head office. "We were about twenty researchers from various countries," says Vijh. "There was a healthy emulation between us. "

Dubbed the "father of physical electrochemistry," Ashok Vijh has since contributed to more than 380 articles and seven books. Recognized worldwide, his research has focused on interfacial electrochemistry, energy conversion (fuel cells) and storage (advanced batteries and hydrogen), and even the electrochemical treatment of cancer cells. They have contributed to various fields of engineering, be they chemical, physical, electrical, mechanical, metallurgical or civil engineering.

In addition to his work, Mr. Vijh has devoted a part of his time to mentoring the next generation and teaching at the Energy Materials Telecommunications Center of the National Institute of Scientific Research (INRS).

### **An exemplary journey**

During his career, the distinguished researcher has received an impressive number of distinctions and rubbed shoulders with several personalities from the political, cultural and business fields. "I had the honor of being named knight of the Ordre national du Québec in

1987 alongside Paul Gérin-Lajoie, Jean Drapeau and René Lecavalier," he says with pride, adding that he was promoted to the Order's Officer category in 2008.

His wife, Ratna Ghosh, is also a prominent researcher working in the social sciences. Recipient of the Order of Canada, the National Order of Quebec and the Order of Montreal, like her husband, she is currently Distinguished James McGill Professor and Macdonald Chair in Education at McGill University. Together for 33 years, the couple has published joint articles that build bridges between the social sciences and electrochemistry.

### **What is electrochemistry?**

This discipline covers the study of the chemical reactions triggered by the circulation of an electric current between two electrodes, as well as chemical reactions that are used to produce electricity, for example in batteries and fuel cells.

### **A passion that continues**

Ashok Vijh's interest in research has never waned over the years. His current research contributes to problems related to corrosion of pylons and advanced batteries. And proof that he is interested in everything, he recently released the book *Maximum Healthspan*, which contains science-based advice to increase one's life expectancy.

Retirement is a word that is not part of Ashok Vijh's vocabulary, contrary to excellence. "The notion of excellence must remain at the heart of our priorities and, for that, we must continue to recruit the cream of the researchers," he concludes with conviction.

### **Some of the distinctions received by Ashok Vijh**

- Urgel-Archambault Award
- Killam Award, one of Canada's most prestigious research awards
- Marie-Victorin Award - The Prix du Québec
- Officer of the National Order of Quebec
- Officer of the Order of Canada
- Knight of the Order of Montreal
- Fellow of The Institute of Physics of Great Britain
- Fellow of the Royal Society of Canada
- Queen Elizabeth II Diamond Jubilee Medal
- President of the Academy of Science of the Royal Society of Canada (2005-2007)