



### **A great loss: Vale, Lou Vance**

We are deeply saddened to announce that Chief Research Scientist, Dr Eric 'Lou' Vance, has passed away suddenly.

Although he was a world-renowned researcher and authority on the development of wasteforms for nuclear waste, Lou kept a relatively low profile around the Lucas Heights site because of his humble, unassuming nature.

Colleague Daniel Gregg said Lou had always been extremely giving of his time, sharing his lifelong knowledge of wasteform engineering and materials science with the next generation of scientists. Gregg said that he was extremely lucky to have had the opportunity to spend countless hours working with Lou and learning from him and that he would be sorely missed not only by those in ANSTO but by the international nuclear wasteform community.

Many at ANSTO would agree that Lou's generosity in sharing his knowledge was boundless.

His career at ANSTO began first in 1968 when he undertook neutron diffraction studies of metal alloys and oxides at the then Australian Atomic Energy Commission.

After spending time at University College London, Pennsylvania State University and the Atomic Energy of Canada Limited where he studied nuclear wasteform science, he brought all his knowledge and experience back to ANSTO to contribute to the development of the Synroc Technology.

In 1987 he was made a senior research scientist at ANSTO and then progressed to more senior roles including 'Chief Research Scientist' in 2001 where he had continued his work on the Synroc Technology.

As a member of the Synroc Wasteform Team, Lou led research into the technology and its commercialisation prospects.

Lou was known to have an encyclopaedic knowledge of the innovative wasteform technology that he had acquired over more than 30 years.

During the 1990s Lou played a significant role in the Plutonium Immobilisation Project for the US, in which Synroc was chosen over the more mature glass technology. His technical expertise and advocacy for Synroc over the years has really been a force that has driven its successful advancement.

In more recent times, Lou was the architect for the Synroc wasteform to be used in the new SyMo waste treatment facility at ANSTO. This role involved creating a tailored, flexible and robust wasteform for ANSTO's molybdenum-99 waste.

Lou jointly shared the ANSTO CEO Award for a Sustained Contribution in 2018 with the late Dr Mark Reinhard.

Lou's influence and contribution to ANSTO will continue long into the future as his wasteform product will be produced by the SyMo Facility for the next 40 years.

Lou authored nearly 400 articles in international journals/refereed conference proceedings and was the co-author of 3 patents relating to Synroc. In demand as an invited speaker, he usually attended two to three international conferences a year to showcase the Synroc technology. His many affiliations included Fellow, Australian Institute of Physics (1987); Fellow, American Ceramic Society (2003); Fellow, Australian Academy of Technological Sciences and Engineering (2003); Fellow, Australian Ceramic Society (2008); Academician, World Academy of Ceramics (2008); long-time member of Materials Research Society; Member, Australian Nuclear Association; Co-editor of the Journal of the Australian Ceramic Society since 2002; Advisory Editorial Board member, Journal Nuclear Materials; Associate Editor, Journal American Ceramic Society; and international Advisory Board member of the Journal of Nuclear Science and Technology (2012).

To those who knew Lou well, it just won't be the same place without him.

"ANSTO has certainly had many individuals who have spent most of their career here, but some stand out. Lou is among those who will forever be part of our history," said CEO Adi Paterson.

"We are extremely saddened by his sudden passing. "