In Memoriam Cornelius Keller (1931-1994)

Profile of a radiochemist ahead of the times







Stadlbauer, Ernst & Bacher, Walter

...Speak Memory Speak...

On May 23 was the thirtieth anniversary of the death of Professor Dr. Cornelius Keller. This radiochemist is far in excess of Germany known by his books on Transuranium Elements and Radiochemisty. We all were lucky sharing years with him. He enriched the life each of us. Thus, we bow to his lifetime achievements.

In 1959 Dr. Keller joined Karlsruhe Nuclear Research Center working with Prof. Dr. Walter Seelmann-Eggebert, a former co-worker of Prof Dr. Otto Hahn awarded the Nobel Prize 1944 for the discovery of nuclear fission. Keller habilitated in 1964 qualifying as Professor of Radiochemistry in 1970.



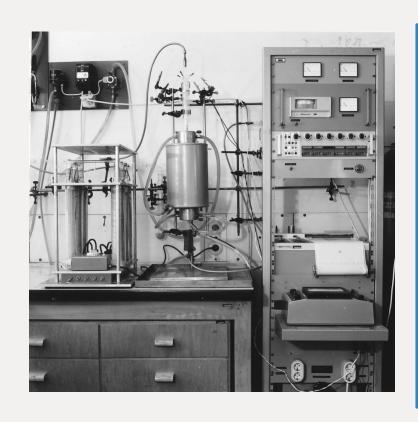
Career Path



In 1975 he became Head of School of Nuclear Technology, Karlsruhe Nuclear Research Center, now integrated part of Karlsruhe Institute of Technology, KIT.

In this position he put into effect a multitude of advanced training courses both on a national and international level as outlined in detail before...





His experimental work focused on:

- > Metal Complexes of Actinides
- Mixed Oxides and
- > Intermetallic Materials.

It is presented in more than 45 peer reviewed papers. He was and still is well recognized and respected in the scientific community...

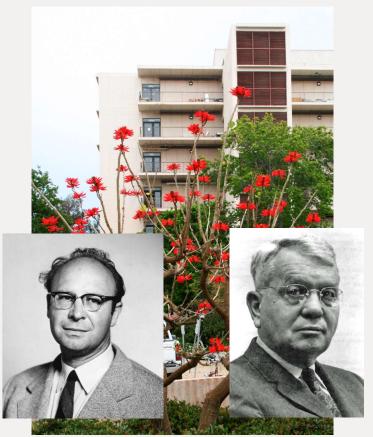




In 1974 Keller gave a talk on Intermetallic Compounds at UCSD, La Jolla. Experimental work had been done by his student Bernhard Erdmann in his doctoral thesis.

Professor Dr. Harold Urey, - one of the founding members of UCSD's school of chemistry -, was among the audience. Urey had received the Nobel Prize in Chemistry in 1934 "for his discovery of heavy hydrogen". Later he had helped to develop the field of cosmochemistry...





Also attending was Prof. Dr. Hans Suess, who had established a laboratory for carbon-14 determinations at UCSD. Together with Professor Roger Revelle he is famous for the discovery of the dilution of atmospheric radiocarbon by carbon dioxide from fossil fuels burned since the industrial revolution.

This dilution is known as the **Suess effect** giving rise to the anthropogenic greenhouse effect and climate change.





At the end of Keller's lecture Professor Harold Urey stood up, congratulating Keller on the topic presented which in his view played a role in meteoric bodies.

Later on, we were invited to the private home of Hans Suess in La Jolla and had - among others - a lively debate on the importance of the peaceful use of nuclear energy in avoiding dramatic climate change in the near future. How prospective in 1974...



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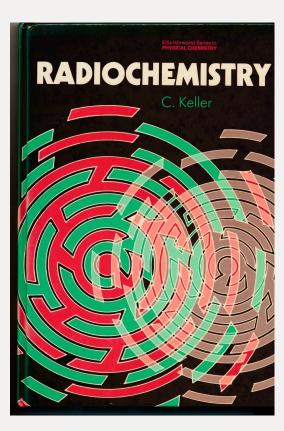
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Excellence in Research

- ➤ Professor Keller was chief editor of several volumes of "Gmelin Handbook of Inorganic Chemistry", e.g. At, Tc, U, Th...
- ➤ He is author of the monography: "The Chemistry of the Transuranium Elements", 1971
- ➤ Die Chemie des Neptuniums, in: Fortschritte der Chemischen Forschung, 1969/70



Excellence in Teaching



- > Teaching at KIT and University of Stuttgart
- ➤ Textbooks: Radiochemistry; Editions starting in 1981 in Chinese, English, German, Japanese, Portuguese, Russian
- ➤ Die Geschichte der Radioaktivität, 1982

I have been using both textbooks in my own classes at the University of Applied Sciences, THM, Gießen.



Bridge Builder between Science and Society



Prof. Keller rendered outstanding service to public understanding of science thru cooperation with journalists & public magazines in Germany, e.g.:

- > Bild der Wissenschaft
- > Chemie in unserer Zeit
- > Chemiker Zeitung
- > GIT, Fachzeitschrift für das Laboratorium...

In doing so he helped creating acceptance for new technical developments in modern societies.



Care & Career Responsibilities in Academia

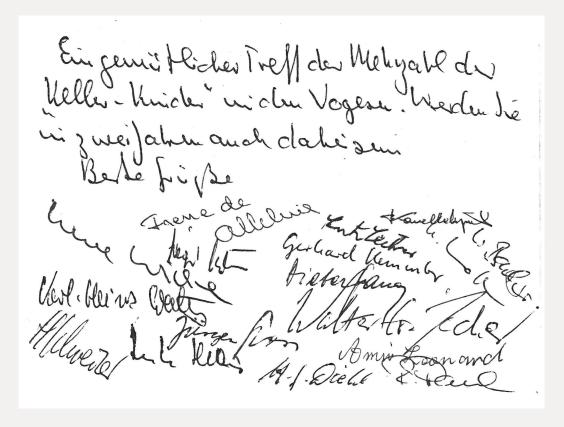


- ➤ He supervised 39 Ph.D.-students.
- Once a year Keller was going to invite his research fellows to an excursion. We always enjoyed animated discussions for a day or two at different locations. In his memory we are holding on to this tradition till today.
- As his former students we are very grateful for his encouragement, promotion and both professional as well as private advice...

KKK Keller Kids Karlsruhe

Once upon a time in the Vosges...





Non fui, fui, non sum, non curo

Inscription of an ancient Roman Gravestone

