

ANT INTERNATIONAL CLOSE UP**Rolf Riess***How did you get started as an engineer?*

I studied Chemistry at the Technical University in Darmstadt/Germany. There I got my Ph.D. in 1968.

Your career history?

I started as an Engineer at the Siemens Reactor Department in October 1969, working first on Water Radiolysis and the Optimization of Primary and Secondary Side Coolant Chemistry. After the integration of the Siemens Reactor Department into KWU I was directing, among other issues, the Chemistry Commissioning of new NPPs. In parallel the work-scope changed to more service oriented activities, both for nuclear and fossil plants. Examples for these activities are the development of Decontamination processes for Radiation Control and Chemical Cleaning methods of the Steam Generator Secondary Side. During all of my professional career in parallel to the line function, the Steam Generator performance was a challenging issue.

How did you get introduced to ANT International and the ZIRAT/LCC-Program?

I was asked by Friedrich Garzarolli and later by Peter Rudling in 2005 to contribute to the ZIRAT Program. This was followed by supporting ANT International in building up the LCC-Program.

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ZIRAT MEMBER

The ZIRAT* Programme and Rolls-Royce

**TED DARBY, COMPANY SPECIALIST -
NUCLEAR MATERIALS, ROLLS-ROYCE PLC**

The name "Rolls-Royce" is known around the world because of its gas turbine technology that is applied to aerospace, marine and energy systems. Some readers may also link the name to Rolls-Royce motor cars, but these have in fact been a completely separate business since the early 1970s. So why has Rolls-Royce been a member of the ZIRAT programme since 2000 (ZIRAT5). It is because nuclear propulsion systems, based on PWR technology, have been a key business for the company since the late 1950s.

I believe that Rolls-Royce set a trend by becoming the first non-commercial utility organisation to join ZIRAT: several others have followed since. I was unaware of the programme until I met Ron Adamson at a meeting in late 1999 and we had a conversation about some of the problems relating to maintaining skills and experience in specialist topics like Zr technology. Ron explained what ZIRAT was about and Rolls-Royce became members a few months later. The key factor in the decision was the reputation and expertise of the ZIRAT consultants.

* ZIRconium Alloy Technology

Rolls-Royce has a small team of materials technologists focused on Zr alloys and a vital part of their role is keeping up to date with relevant technology developments. We find ZIRAT a great help and, in a way, it's like having an extra person in the team. Some of the benefits that we see from ZIRAT membership are:

- Keeping experienced staff efficiently up-to-speed with external developments
- Introducing new staff to Zr technology
- Access to a network of consultants with vast experience
- Delivery of tailored seminars on topics of specific interest to us
- Rapid assistance on technical queries

It is also encouraging to see that, under the direction of ANT International, ZIRAT is continually evolving and improving, for example: even Brian Cox is now using PowerPoint for his presentations! I anticipate Rolls-Royce will be members of ZIRAT for many years to come.

[More about ZIRAT](#)

ROLF RIESS CONT.

How has the field of Water Chemistry changed during your career and how does the LCC Program fit in? During the 32 years of my activities with Siemens/KWU, Chemistry has changed from developing optimal environmental conditions in the reactor systems to providing operational support and services to the utilities. This latter point is to some extent identical with the help we are offering to the utilities in the LCC-Program.

What do you foresee for the future in the Nuclear Industry? It seems to me that the Nuclear Industry is in the early stages of a renaissance. The currently ongoing discussion about global warming requires a CO₂-free production of energy. However, this development is focussed mainly on Far East and India so that the European Countries must be careful not to loose contact.

How do you spend your leisure time? Listening to classical music and Jazz in concert, travelling, Nordic Walking, playing cards especially "Skat", gardening.

Thank you Rolf! [More about the Network](#)

LCC MEMBER

"Useful information for sunny and cloudy days"

MICHAEL BOLZ, HEAD OF CHEMISTRY DEPARTMENT
AT NPP PHILIPSBURG, GERMANY



In 1994 I started my career, as a research chemist, in the radio-chemical laboratory of the NPP Philippsburg, Germany.

I moved on to several different positions within the chemistry department and now I am head of this department. As such, I need to know the requirements of chemistry surveillance from the bottom and up. My practical experience, together with my educational background, has made me well prepared for this position. However I was not present when the plant was commissioned and I did not gather the valuable experience of elderly colleagues, who were

present at a time when deviations from normal operation required unusual measures. As a chemist of the second nuclear generation in Germany I therefore feel confident to be a member of the LWR Coolant Chemistry, LCC Program. The long experience of the LCC Expert Team provides useful information for "sunny and cloudy days" of a chemist job! The LCC Annual Report provide a quick overview of the latest developments in the nuclear water chemistry world. The LCC Special Topic Report collect, analyse and summarise issues and facts in depth that are essential for an understanding of the development and state of the art of nuclear chemistry. *I am looking forward to be present at the next LCC Meeting!*

[More about LCC](#)

NEWS FROM ANT INTERNATIONAL

Valuable Information in New Reports

Structural Material Degradation Report (SMDR) and Fuel Material Technology Report Vol I (FMTR) are now available and have already created large interest in the nuclear industry.

For more information and an offer please contact Peter Rudling at peter.rudling@antinternational.com



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[Read more](#)

Successful ZIRAT and LCC Seminars

At the **ZIRAT11 Seminars** in **Naples, FL** and **Valencia Spain** a total of 47 representatives from 21 organisations participated. At the **LCC2 Seminars** in **Naples, FL** and **Valencia, Spain** 35 representatives from 18 organisations participated.

For more information, seminar evaluations and pictures from the seminars, [please click here](#)

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