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The Antenna

NEWSLETTER FROM ANT INTERNATIONAL

NETWORK CLOSE UP

FRANCIS NORDMANN

How did you get started as an engineer?
I studied Chemistry at the Engineer School of Mulhouse, France. Then I got my Ph.D. in 1973 at the French Atomic Energy Commission in Nuclear Chemistry area.

Your career history?
I started as an Engineer at Framatome (now Areva) Chemistry and Corrosion Department in 1974, working on chemistry specifications as well as research and development on chemistry and corrosion. I was also in charge of international projects within French and American organisations. Then, in 1983, I joined Électricité de France, the French Utility, to be in charge of international programs with very different countries (in America, Asia, Africa, Eastern and Western Europe), preparation of the first full set of chemistry specifications, engineering studies, technical support to the French fleet of PWR Nuclear Power Plants, steam generator feedback.
I organised the International Chemistry Conference in 2002, with over 300 attendees from 32 countries. I also worked in various projects and OSART missions with IAEA (International Atomic Energy Agency).

How did you get introduced to ANT International and the ZIRAT/ LCC-Program?
I was asked by Suat Odar and later by Peter Rudling in 2008, during the International Conference on Chemistry in Berlin to contribute to the LLC Program.

How has the field of Water Chemistry changed during your career and how does the LCC Program fit in?
During the 33 years of my activities with Areva and EDF, Chemistry has permanently focused on dose rates in the primary coolant and steam generator tubing corrosion mitigation. However, now, a number of issues have

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NEW HANDBOOK

FQMH Vol. I

Available by the End of 2009

The first volume of the Fuel Quality Management Handbook, FQMH, will be available by the end of 2009.

Lack of adequate quality management in processes from procurement to disposal of nuclear fuel may have dramatic economical and political consequences for the nuclear industry.

The FQMH will not only give a comprehensive overview about the techniques currently used, but it will also provide an in-depth introduction into the state-of-the-art of quality management of nuclear fuel. It will cover the range from basic information to current state-of-the-art knowledge. The Fuel Quality Management Handbook contains four separate volumes. This is the first volume.

Read more about the FQMH vol. I

Check out our updated Website

We have updated our website in an effort to constantly improve and make the information about our offerings more accessible. Please check it out and give us your feedback.

Editor & publisher:Peter Rudling

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emerged due to design modification using less cobalt and the progressive use of more-resistant steam generator tubing material, Examples of such Issues are: Flow Accelerated corrosion of carbon steels, deposit on fuel (Crud Induced Power Shifts), corrosion products on the secondary side steam generator tubing (heat transfer and tube support plate blockage), operating and maintenance costs decrease, wastes consideration, limited use of condensate polishers have a growing importance. The above mentioned Issues are addressed with an international perspective in the LCC Program.

What do you foresee for the future in the Nuclear Industry?
With the increasing challenge of fossil fuel sources and global warming, nuclear energy should see it role increasing. Safety, environmental and economical issues must carefully be taken into account. Thus, optimisation of chemistry treatment selection and system purification need to be drastically optimised.

How do you spend your leisure time?
To a variety of activities going from volunteering participation in several associations, listening to music, free coaching of some people in different areas according to their specific situation, and ski (on water and snow). Last but not least; travelling in foreign countries.

Thank you Francis!

Read more about the Network of Experts

CUSTOMER FEEDBACK ON THE LCC PROGRAM

MEMBER OF THE LCC PROGRAM - WESTINGHOUSE ELECTRIC COMPANY, USA.

Ms. JAYASHRI N. IYER
Principal Engineer Materials and Fuel Rod Design

I started my career at the Commercial Nuclear Fuel Division of Westinghouse Electric Corporation in 1984 as a materials design engineer. During my tenure at Westinghouse, I have worked extensively in the areas of materials development, application and performance evaluation in pressurized water reactors (PWR). My dual educational background in material science and engineering and in chemistry prepared me well for my career.
During the past six or seven years I have seen rapid changes to reactor coolant chemistry with zinc injection and elevated lithium operation and have studied the impact of these changes on fuel performance. I have also seen experiences in PWR used to improve fuel performance in boiling water reactors (BWR) and vice versa. For example ultrasonic fuel cleaning was first developed and qualified for PWR application and later on was qualified for BWR application. The BWR experience with the role of sulfates in intergranular stress corrosion cracking of stainless steel components has been used to set limits for sulfates in the PWR spent fuel pool.

Thus, it is useful to find in one place both chemistry and materials performance related-experience for PWR, BWR and VVERs. For new engineers and chemists, this could be a very useful training tool. For experts in a given field, knowledge of experience in other related fields facilitates improvements in their own fields. ANT International plays an important role in fulfilling this need in the nuclear industry through the LWR Chemistry and Component integrity, LCC program.

Read more about the LCC Program

Please block the following dates in your agenda!

Hilton Head Island, SC, USA:
February 1st - 3rd 2010 ZIRAT14
February 4th - 5th 2010 LCC5

Bilbao, Spain:
March 9th 2010 LCC5 Stand Alone Report Presentations
March 10th - 12th 2010 LCC5
March 16th - 18th 2010 ZIRAT14

Photograph by Ron Adamson, Fremont, CA, USA.

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