

## ANTI CLOSE UP



### Al Strasser

My first association with ANT International was in 1999; my company, Aquarius Services Corp., was founded in 1995 in order to continue my consulting services after retiring as President of the S.M. Stoller Corp.

#### Zirconium alloy

One of the most sought after topics during my role as a consulting metallurgist and materials scientist was the technology of zirconium alloys and their critical relationship to fuel performance and for that reason was the basis for establishing, as one of my projects, the Annual Review of ZIRCONIUM Alloy Technology, ZIRAT in 1996. In 1999 the ownership of the ZIRAT program was transferred to ANT International.

#### Running initial evaluations

Other activities since my "retirement", wearing the Aquarius hat, included running the initial evaluation of AOA in PWRs for EPRI, independent evaluation of fuel failures, evaluation of fracture toughness tests for zirconium alloy cladding and a variety of issues for the Swiss regulatory commission (HSK) relative to the operation of BWRs and PWRs in Switzerland.

#### Classical music

My degrees are in Metallurgy from Purdue University (BS) and Stevens Institute of Technology (MS). My spare time is taken up by a wife, a grown son, skiing, mountain climbing, tennis and singing classical music in the oldest chorus in New York City, founded in 1873.



## "ZIRAT has been of great value to me for a number of reasons"

MATT EYRE, EXELON CORP.

#### I don't have the time or the money to attend all those conferences!

ZIRAT attends and then distills the information from a number of industry conferences that I don't have the time, budget or inclination to attend. I can then attend one meeting at a great venue with ZIRAT experts that present the information in one meeting at a pace and level that I understand. I then get a more detailed document in the annual report for reference.

#### I need to cite a source as the basis for the technical position I take

ZIRAT helps me maintain my technical "edge" regarding zirconium alloy performance. The annual report and special topic reports provide the document that I can cite as a reference in the resolution of technical evaluations or problems that I encounter or that are given to me.

#### I need to grow in my chosen area of knowledge

Outside of going back to a university, ZIRAT is the only structured forum that exists solely for the transfer of information by acknowledged industry zirconium alloy experts. Actually, for nuclear industry engineers, the ZIRAT seminar format is better than returning to a university (that is assuming I still remember the materials basics).

#### I can talk to industry peers that I don't usually see

The ZIRAT participants are somewhat different than the EPRI Robust Fuel Program member participation. In meeting and break discussions, I am able to hear about plant performance issues that I don't hear in other meetings that I attend. Since ZIRAT has a very strong European participant base, the perspective I have an opportunity to hear is different than that of my US peers. This is revealing, informative and refreshing.

I am glad to be a member of ZIRAT.

BJÄRE GOLF CLUB, BÅSTAD, SWEDEN.  
AUGUST 26 2005.

## Welcome to Power Golf

Read more at our website [www.antinternational.com](http://www.antinternational.com)

## BOOSTING THE COMPETENCE

# Welcome to ZIRAT team



Professor **Ali R. Massih** is a senior consulting scientist at Quantum Technologies AB, based in Uppsala, Sweden. He is also an adjunct professor of solid mechanics at Malmö University in Sweden.

During his tenure in the ABB Company he has been involved in developing a number of computational codes for thermal mechanical analysis of nuclear fuel.



Dr **Rolf Riess** retired from Framatome ANP GmbH in October 2001, where he has held various Research and Managerial positions. In general, he was responsible for the resolution of all Chemistry Issues in LWRs.

Furthermore he has been active in areas such as Water Radiolysis, Commissioning of Nuclear Power Plants and Chemistry Training Programs.

## NEW PROJECT

# Water Chemistry Technology

Nuclear utilities have to reduce costs for operation, maintenance and fuel and at the same time keep the highest level of safety. Emphasis on these matters, point to the increased importance of high quality water chemistry and control.

### Independent meeting point

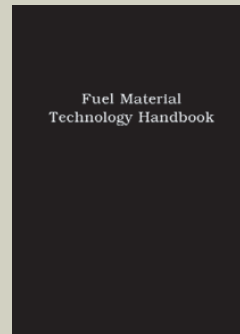
It is our goal that the new LCC (LWR Coolant Chemistry) program shall assist nuclear utilities in meeting all these water chemistry related challenges in a most efficient way. This new program will establish an independent meeting point for the utilities, which is free of big organisations and vendors. It will allow experts to have a free and critical discussion on the subject and will be a forum for a fruitful experience exchange. Ten plants have already signed up, or are in the process of signing up for the LCC program.

## Become an IZNA<sub>4</sub> member now

The overall object of the IZNA program is to provide the participating organisations (fuel vendors, regulators and research laboratories) with the only comprehensive, periodic, timely review and analysis of the new technology data in the public domain. By joining the IZNA 4-program as a member you will receive comprehensive and updated documentations and reports.

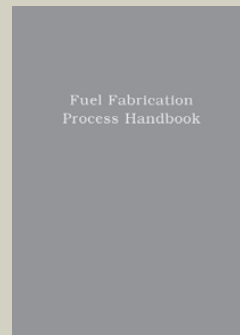
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## NEW HANDBOOKS



### Fuel Material Technology Handbook

The objective of this handbook is to provide guidance for you who need an initial understanding of fuel material technology. It will also be valuable for you who wish to update and refresh your memory. The handbook covers the range from basic information to current knowledge. First volume in a series of four is planned to be available in August 2006.



### Fuel Fabrication Process Handbook

The audit of the fabrication process is an important step to assure that the fuel will perform as designed. The Fuel Fabrication Process Handbook focuses on a "Process Audit" of BWR and PWR fuel fabrication and the audit of the process parameters most important for reliable fuel performance. It also provides guidance for setting up and carrying out an effective audit and how to handle deviations.

## NEW INTERFACE

The CD, attached to the Fuel Fabrication Process Handbook, is designed in a new, user-friendly interface. This is an ambition to develop the material to be more valuable and useful for you. This new CD interface has now been implemented into all our handbooks as well as the IZNA 4 Program.

Now you will fast and easy find what you are looking for, and you will also be able to search certain facts and words within the complete document.



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