

NEWSLETTER

June 1999

MESSAGE FROM THE CHAIR



The Thermal Hydraulic Division (THD) remains a vital part of the American Nuclear Society with approximately 800 members and a new slate of officers and additional members for the Executive Committee. We have members involved in virtually every aspect of nuclear related thermal hydraulics from fuel pellet design to dry storage facilities for spent nuclear fuel.

Over the past year, the Division has been active in planning sessions for the ANS Summer and Winter Meetings, the National Heat Transfer Conference and a major topical meeting, NURETH-9. We have also been involved in developing a standard to preserve data and insights gained through years of thermal hydraulic testing. Our members have been supporting ANS Headquarters in providing comments on ANS Infrastructure III with an eye towards positive changes for the future.

The vitality of our Division depends on your participation and efforts to recruit new members who are willing to serve. On behalf of the THD Executive Committee, we hope you will continue to work with us and offer suggestions on how the Division can better serve you.

José N. Reyes, Jr.
1998-99 Chairman
Thermal Hydraulics Division

NURETH-9 MEETING

The Ninth International Topical Meeting on Nuclear Reactor Thermal Hydraulics (NURETH-9) will be held on October 3 - 8, 1999 at the Cathedral Hill Hotel in San Francisco. NURETH-9 is sponsored by the San Francisco Section and the Thermal Hydraulics Division together with many cosponsoring organizations from the international technical community. The meeting will provide a forum for specialists in nuclear thermal hydraulics to exchange information, present the results of new work, review the state-of-the-art, and discuss the future directions and needs for further development of nuclear power plant design, analysis and operation. Over 200 papers will be presented at the meeting, representing 18 different countries, and covering a wide breadth of thermal hydraulics topics.

Both research scientists and practicing engineers are invited to attend and participate in this conference. The meeting organization will provide ample opportunity for participants to interact in formal sessions and informal discussions. Participation and attendance from industry (utilities, vendors, and consultants) is particularly encouraged. An industrial forum on the role of thermal hydraulics in deregulated and competitive nuclear industry is also planned.

See the NURETH-9 web site at <http://www.nuc.berkeley.edu/NURETH9/NURETH9.html> for more information.

THD SPEARHEADS EFFORT TO PRESERVE DATA

Bob Henry, previous chair of the THD is spearheading a task force to preserve irreplaceable thermal hydraulic data that has been generated over several decades of research. This data has served an extremely important role in benchmarking the computer codes used to assess and license nuclear power plants. One of the key deliverables of the task force will be an ANS standard, "Documentation of Major Experimental Results For Direct Integration Into Computer Codes (Data Preservation)." This standard would provide a structured format for documenting fundamental thermal hydraulic studies. The plan is to embed the key thermal hydraulic data within large software systems (computer codes) so that it can be preserved and used to benchmark separate effects and integral system models. Since large computer codes will be a continual part of nuclear technology, documenting these experiments in this manner (embedded within the codes) would be a convenient way of assuring that the information

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will be retained for continued use by the nuclear community. Furthermore, having this information available for implementation into such large computer codes would strongly encourage the extensive benchmarking of computer models to further enhance the level of confidence in the computer codes. It is hoped that through the use of this standard that the important experimental information existing in the literature will be used by current and future analysts such that the important insights are retained and integrated into the decision-making processes. A draft standard has been prepared and issued to members of the THD task force involved in the effort.

AP600 RECEIVES FINAL DESIGN APPROVAL FROM NRC



In September 1998, the Nuclear Regulatory Commission issued its Final Design Approval for Westinghouse's next generation nuclear power plant, the AP600. In May 1999, the NRC issued its intent to certify the AP600 and a request for public comment (No. 99-100; opa@nrc.gov). Congratulations to the many THD members who were involved in the design, testing and analysis of this new passively safe design.

1998 ANS THD TECHNICAL ACHIEVEMENT AWARDS



The 1998 THD Technical Achievement Awards ceremony was held on November 17, 1998 following the Tuesday afternoon THD technical session at the 1998 ANS Winter Meeting in Washington, DC. The THD annually presents a "Best Paper" award and a "Technical Achievement Award" at the Winter ANS Meeting. The THD Honors and Awards (H&A) Committee is tasked

with making the selections for these two awards. Special thanks go to this year's H&A Committee:

- T. K. Larson (INEEL) - H&A Chair
- D. Grand (CEA, France)
- Y. A. Hassan (Texas A & M University)
- G. Kojasoy (University of Wisconsin, Milwaukee)
- M. Pilch (SNL)

BEST PAPER AWARD

The Best Paper is selected from peer reviewed full papers presented at THD sponsored conference sessions from the preceding year. Papers presented at the Eighth International Topical Meeting on Nuclear Reactor Thermal-Hydraulics (NURETH-8, Kyoto, Japan, September 30-October 4, 1997), the 1997 ANS Winter Meeting (Albuquerque, NM, November 16-20, 1997), and the 1997 National Heat Transfer Conference (Baltimore, MD, August 10-14, 1997) were considered for the 1998 award.

For 1998, the Best Paper was awarded to S. S. Abalin, V. Asmolov, A. V. Merzlikov, V. D. Daragan, E. K. D'yakov, and V. Yu. Vishnevsky for their paper entitled "Corium Kinematic Viscosity Measurement" presented at NURETH-8. Each of these authors received a best paper award certificate which was presented at the awards ceremony.

TECHNICAL ACHIEVEMENT AWARD

The THD Technical Achievement Award (TAA) is presented annually to an individual who has made exemplary contributions in the field of thermal hydraulics. Associated with the receipt of the award is a beautifully engraved plaque and the opportunity to give a lecture on a relevant thermal hydraulics topic at the awards ceremony.

For 1998, the TAA was awarded to Dr. Wolfgang Wulff of Brookhaven National Laboratory. The inscription on the plaque presented to Dr. Wulff reads:

"In recognition of his many outstanding scientific contributions to the theory and practice of thermal hydraulics, service as

a standards-bearer to the Profession, and his impact on the international technical community as a researcher, editor, and leader promoting in-depth physical understanding and technical excellence"

At the awards ceremony, Dr. Wulff gave a lecture entitled "Thermal Hydraulics of Two-Phase Flow in Complex Systems."



Dr. Wulff receives 1998 Technical Achievement Award from THD Division Chair, Jose Reyes

INFRASTRUCTURE III - WHAT IS IT AND WHAT IS THE STATUS?

Last winter, ANS President Ted Quinn commissioned staff and division representatives to gather and help brainstorm reinvention of the American Nuclear Society. This effort was promulgated by recognition of the continuing decline in Society Membership, decline in National Meeting attendance, perception that the National Meetings were not meeting needs and expectations of the membership, the financial well-being of the Society and its Divisions, and so forth. It was recognized that the Society must change the way it does business in order to survive.

The group met for the first time at the Channel Inn in Washington, DC in late March 1999. The purpose of this two-day weekend meet was to set the stage and brainstorm relative to ANS reinvention. The Channel Inn meeting was moderated by a private consultant (with some background in reinvention) who kept the meeting on track and collected all the themes discussed from which a report containing 13 recommendations was produced. This report is available and the recommendations

contained in it were presented by the President to a special meeting of the Division Chairs, to the National Program Committee, to the Professional Division Committee, and to the board of Directors at the 1999 Annual meeting in Boston.

One of the recommendations of the Infrastructure III report was that a mini-task force be formed to examine a crucial item identified at the Channel Inn meeting. This item dealt with the number of National Meetings, improvement (technical content, attendance, session strength, technical tracks, etc.) of National Meetings, reversing the downward trend in meeting attendance, encouraging Divisions to participate in and support National Meetings and conduct strong topical meetings. T. K. Larson was part of the mini-task force formed to examine these issues. The mini-task force was given the goal of generating recommendations with teeth in three related areas including a) meeting planning, b) meeting improvements, and c) meeting finances. The conclusions/recommendations of this mini-task force are too lengthy to address here. Suffice it to say that a mini-task force meet was held at ANS Headquarters in La Grange Park, IL in late April 1998 to discuss the three issues. A virtual meeting (e-mail, fax, etc.) ensued until the mini-task force had iterated and produced a detailed report containing the results of the deliberations and the recommendations. The mini-task force report is available for review. Recommendations contained in the mini-task force report were presented by the President to a special meeting of the Division Chairs, to the National Program Committee, to the Professional Division Committee, and to the Board of Directors at the 1999 Annual meeting in Boston.

It is my understanding that the Board of Directors will make some kind of an informed judgment/decision on the recommendations using results of votes taken on the subject recommendations in the various committee meetings.

-T. K. Larson-

RESULTS OF ANS MAY 6, 1999 ELECTIONS

The ANS elections were held on May 6, 1999. Congratulations to our new Thermal Hydraulics Division Officers and additions to our Executive Committee. Their term of office begins at the close of the summer THD executive committee meeting. This team will lead us into the millennium.

Chair, THD

Fan-Bill Cheung, fxc4@psu.edu

Vice Chair/Chair Elect

Martin M. Pilch, mpilch@sandia.gov

Secretary

Martin Bertodano,
bertodan@helios.ec.purdue.edu

Treasurer

Necdet Kurul,
necdet.kurul@nyga.gov

Executive Committee (3 years)

David Bessette, deb@nrc.gov
Alan E. Levin, ael@nrc.gov
Robert P Martin,
robert_martin@nfuel.com

UPCOMING MEETINGS

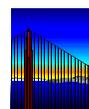
33 National Heat Transfer Conf.



Hyatt Regency Hotel
Albuquerque, New Mexico
August 15-17, 1999

Call for papers can be found at
<http://www.ne.rpi.edu/ansth/nht/nht99.html>

NURETH-9



October 3 - 8, 1999
Cathedral Hill Hotel
San Francisco, California
Information about NURETH-9 can be found at:

<http://www.nuc.berkeley.edu/NURETH9/>

1999 ANS Winter Meeting



November 14-18, 1999
Long Beach, California
Information about the 1999 ANS Winter Meeting can be found at:

<http://www.ans.org/prof.divs/>

THD SUPPORT ANS STUDENTS

This term, the THD donated \$300 to the Student Conference at RPI, \$250 to the Student Celebration at the Summer ANS Meeting in Boston, and \$300 to Student Conference at University of Illinois.

THD '98-'99 OFFICERS

The following is the list of our current officers:

José N. Reyes, Jr.	<i>Chair</i>
Fan-Bill Cheung	<i>Vice Chair</i>
Necdet Kurul	<i>Secretary</i>
Martin Bertodano	<i>Treasurer</i>

Members

Fan-Bill Cheung	2000
Dominique F. Grand	1999
Mamoru Ishii	1999
Barclay G. Jones	2001
Necdet Kurul	2001
Martin Bertodano	1999
Martin M. Pilch	2001
José N. Reyes, Jr.	1999
T.G. Theofanous	1999
Cetin Unal	2001
Richard R. Wenzel	1999

Ex Officio

Joseph C. Braun
Robert E. Henry

Staff Liason

Sharon S. Kerrick



We Want You

THD of the ANS cordially invites you to serve in the following areas:

- Review papers
- Write papers
- Serve on the Program Committee
- Public Relations
- Student Conferences
- Plan, Organize, and Chair sessions
- Serve on the Editorial Committee
- Serve on the Membership Committee
- Executive Committee

If you are able to and willing to help, contact the chair of the THD. Also, if you would like to nominate a colleague for membership in the ANS please contact the chair of THD or send in the following form to 555 North Kensington Avenue, La Grange Park, IL 60526.

Colleague Nomination:	
Name _____	Title _____
Company _____	
Address _____	
Email _____	
Phone _____	Fax _____
Areas I would like to help/serve on:	
<input type="checkbox"/> Review papers	<input type="checkbox"/> Plan, Organize, and Chair sessions
<input type="checkbox"/> Write papers	<input type="checkbox"/> Serve on the Editorial Committee
<input type="checkbox"/> Serve on the Program Committee	<input type="checkbox"/> Serve on the Membership Committee
<input type="checkbox"/> Public Relations	<input type="checkbox"/> Executive Committee
<input type="checkbox"/> Student Conferences	
Name _____	Title _____
Company _____	
Address _____	
Email _____	
Phone _____	Fax _____

