Minutes of the Program Committee Meeting

Thermal Hydraulics Division

2008 American Nuclear Society Annual Meeting
Disneyland Hotel, Anaheim CA

3:00 – 5:00 p.m., Sunday, June 8, 2008
Disney Exhibit Hall Room I

Attendees: K.Y. Suh, C. Unal, S.Y. Lee, S. Kim, K. Muftuoglu, F. Bill Cheung, J.H. Kim, C. Oh, S.T. Revankar, X. Sun, D.A. Powers (NISD Liaison), B.G. Woods, H. Ninokata, P. Saha, L. Leung, Y.A. Hassan, J. Rempe, J. Luxat, D. Guillen, S.B. y Leon (same order as in Attachment A)

1. Opening

Muftuoglu called the THD Program Committee Meeting to order at 3:08 p.m.

2. Approval of Meeting Agenda

The meeting agenda (Attachment B) was introduced and approved with minor corrections. The Committee also discussed the letter from Dr. Wulff (Attachment C). The Committee members noted that 'adequate peer review' for a computer code differed depending on its application. It was thus concluded that it would be difficult to develop 'rules' that would be generally agreed upon and accepted by various journals that publish thermal hydraulic papers.

3. Minutes from November 2007 Winter Meeting

The meeting minutes from the November 2007 meeting in Washington, DC (Attachment D) were approved as submitted with a minor fix for S. Kim.

4. Action Items from November 2007 Winter Meeting

a. NURETH-13 Hosting Plans

Ninokata briefed the committee that the conference would be held in Kanazawa, Japan from September 27 through October 2, 2009. The meeting category is Class IV. The Local Organizing Committee was established and had its first meeting in February 2008 at Nikko Hotel, Kanazawa, 100 km north of Kyoto, Japan. The National Program Committee is to grant preliminary approval in July in Chicago, IL.

b. NURETH-14 Host Planning

Muftuoglu announced that the proposals would be evaluated using the criteria in Attachment E. For the conferences organized abroad, there cannot be a financial

liability on the part of the society; therefore any revenue sharing is completely at the organizing institution discretion. Since the vitality of the division and the support for future activities depend on the revenue from these meetings, consideration will be given to favorable financial arrangements. Organizations are encouraged to propose alternate ways to provide financial support to THD. Interested parties should send their proposal electronically to the NURETH Proposal Screening Committee members: Rempe (Chair), Cheung, Hassan and Muftuoglu. The screening committee members will forward only the complete applications to the NURETH Selection Committee. The committee will evaluate and rank the proposals; then will make their recommendation to the THD Executive Committee for voting on the final decision. Selection of NURETH-14 (2013) will be completed by June 2009 giving organizers enough time for meeting planning and preparations.

5. Session Status of 2008 ANS Annual Meeting in Anaheim, CA

Muftuoglu reported on the status. There are a total of six sessions, including a panel and two half-length sessions, in the meeting as follows and detailed in Attachment F.

Session	# of	Time Slot	Chair(s)
	Speakers		
Computational Thermal	5	Monday p.m.	Woods
Hydraulics –I			
Thermal Hydraulic Aspects of	6	Tuesday a.m.	Oh,
Nuclear Hydrogen Systems			Revankar
(Panel)			
Two-Phase Flow Experimentation	8	Tuesday p.m.	Sun,
			Hassan
General Thermal Hydraulics – In	8	Wednesday a.m.	Vierow,
Memory of Gunol Kojasoy			Kim
Computational Fluid Dynamics	3	Wednesday p.m.	Ninokata
Analysis of Rod Bundles			
Computational Thermal	5	Wednesday p.m.	Guillen
Hydraulics – II			

This item was covered simultaneously with item 6.

6. Review of Session Assignments and Feedback

There were a total of 29 summaries, including 2 transfers from other divisions. Five of these summaries were accepted without further comments, 23 were accepted with revisions, and only one was rejected unless revised, which was later accepted to the meeting after the authors implemented the reviewer comments. There were no rejections due to failure of following the format guidelines. Reviews went smoothly. All the papers received adequate review on a timely basis. Only 8 had the minimum number of reviews, 14 had three reviews, 6 had four or more. There were a total of 86 review recommendations from 19 reviewers.

7. 2008 ANS Winter Meeting Program in Reno, NV

Proposed technical sessions are:

- General Thermal Hydraulics: Revankar, S. Kim, Vierow, Rempe, Woods, Todd
- Young Professional Thermal-Hydraulics Research Competition: Todd, Marshall
- NUTHOS-7 Highlights: Suh, J.H. Kim, Ninokata
- General Two-Phase Flow: S. Kim, Sun, Cheung, Vierow
- Computational Thermal Hydraulics: Woods, Guillen, Saha, Ninokata, Hassan, Muftuoglu
- Thermal-Hydraulics of High-Temperature Gas-Cooled Reactor Technology: Oh, Sun, Marshall, Hassan

For further details, see a summary report distributed at the meeting (Attachment G).

Action Item: PC members shall solicit summaries.

8. Update on Session Organizer Participation

Action Item: Muftuoglu will email organizers reminding them of their duties and assignments.

9. 2009 ANS Annual Meeting Program in Atlanta, GA

Proposed technical sessions are:

- General Thermal Hydraulics (Hassan, Cheung, J.H. Kim)
- Rod Bundle Thermal Hydraulics (S. Kim, Ninokata)
- Thermal Hydraulics of Advanced Reactors (Woods, Hassan, Leon)
- Computational Thermal Hydraulics (Muftuoglu, Guillen, Luxat)
- General Two-Phase Flow (Sun, Kim, Saha)
- Severe Accidents and Fluid-Structure Interaction (Guillen, Rempe, Vierow, Unal)
- Thermal Aspects of Nuclear Material Handling and Environmental Monitoring (Lee, Oh)

The last item had initially been discussed as a session on 'Groundwater Performance Assessment' or 'Spent Fuel Thermal Hydraulics.' The organizers emailed Muftuoglu their proposal after the meeting.

10. NURETH-13 Update

Ninokata provided an update on this meeting. The Local Organizing Committee activities are in good shape. Now, efforts are being made in the Technical Program Committee activities. The ANS final approval of the meeting shall be obtained at the National Program Committee this July. Although it might be a little too late by now, the topical meeting manual indicates that the final approval request may be sent to

NPC 8 to 12 months in advance. Also, the guidelines for the Class IV category tend to be loose compared to those for Class I or III. At the moment they are in the process of identifying sessions and chairpersons. They are believed to wrap it up no later than the 2008 ANS Winter Meeting in Reno, NV, and be ready to send the request.

11. NUTHOS-7 Update

Suh provided a brief update on the conference as summarized in Attachment H. He reported that there were a total of 271 abstracts received from 26 countries. The upcoming dates are June 30, 2008 for full manuscripts; July 31, 2008 for notification of acceptance; August 29, 2008 for camera-ready manuscripts and pre-registration. He repeated that selected peer-reviewed papers will be recommended for publication in archival journals of Nuclear Science & Engineering, Nuclear Technology, Nuclear Engineering & Design, and Nuclear Engineering & Technology.

12. Old Business

None.

13. New Business

None.

The meeting was adjourned at 4:58 p.m.

Minutes prepared by K.Y. Suh

Attachment A

Attendee List

INSPIRE. INNOVATE. DREAM



Mame 82-2-880-8324 KyShh@shu.ac.Kr K.Y Suh Cetin Unal 505-665-2539 CUStant. gov 5i Y. Lee 803-725-8462 Si. lee @srnl. doe.gov SEUNGJIN KIM A14-867-1783 SXKF6@psu.edu 910-602-4556 KURSHAD MUFTUOGLU kurshad.muftuogluage.com F. Beec Change 814-863-4261 FXC4@psu. edec Jkim Depri, com JONG H. KIM 650-855-2671 7-8-256-2016 Changooh @ inl. gov CHANG OH shripade ecn. purdue. edu SHRIPAD T. REVANKAR 765-496-1782 614-247-7646 sun. 200 @OSU. edu Xiaodong Sun VANA A. POWERS (NISD LIAISON) 505-845-9838 dapower@ Sandia . gov Brian G. Woods brian. woods corapostate. edu 541-737-6335 Hisashi Ninokata +81-3-5734-3056 hninokat@nr.titech.ac.ip PRADIP SAHA 910-675-5498 pradip, saha @ ge. com Laurence Leung 613-584-8811 lennel@aeel.ea. 979-845 1096 Y-hassan@ Lamu.edu Yassin A. Hassan 208-526-2897 jay, rempe @ int.gov -ay Rempe Luxati @ increater. Ca Donna. Guillen @ inl. gov 905-525-9140 ex 24670 JOHN LUXAT 208-526-1744 Dana Guillen 43.1.2600. 22865 S. BILBAO(2) IAEA. ORG SAMA BILBAOYLEON Disneyland

Attachment B

Proposed Agenda

Thermal Hydraulics Division Program Committee 2008 American Nuclear Society Annual Meeting Disneyland Hotel, Anaheim CA 3:00 – 5:00 p.m., Sunday, June 8, 2008 Disney Exhibit Hall Room I

- 1. Opening (Kurshad)
- 2. Approval of Meeting Agenda (All)
- 3. Minutes from November 2007 Winter Meeting (Kune)
- 4. Action Items from November 2007 Winter Meeting (Kurshad)
 - c. NURETH-13 Hosting Plans
 - d. NURETH-14 Host Planning (Kurshad)
- 5. Session Status of 2008 ANS Annual Meeting in Anaheim, CA (Kurshad)
- 6. Review of Session Assignments and Feedback (Kurshad)
- 7. 2008 ANS Winter Meeting Program in Reno, NV (Kurshad)
- 8. Update on Session Organizer Participation (Kurshad)
- 9. 2009 ANS Annual Meeting Program in Atlanta, GA (Kurshad)
- 10. NURETH-13 Update (Hisashi)
- 11. NUTHOS-7 Update (Kune)
- 12. Old Business (All)
- 13. New Business (All)

Attachment C



Attachment D

Minutes of the Program Committee Meeting

Thermal Hydraulics Division
2007 American Nuclear Society Winter Meeting
Omni Shoreham Hotel, 2500 Calvert Street, NW, Washington, DC
3:00 – 5:00 p.m., Sunday, November 11, 2007
Parlor # 500

Attendees: K.Y. Suh, X. Sun, T. Marshall, K. Muftuoglu, B. Woods, W. Choe, J.H. Kim, S.T. Revankar, H. Ninokata, K. Vierow, J. Rempe, K. Robb, F. Bill Cheung, S. Kim, D. Todd, S. Zhang, D.A. Powers (NISD Liaison), Y. Hassan (same order as in Attachment A)

1. Opening

Muftuoglu called the THD Program Committee Meeting to order at 3:02 p.m.

2. Approval of Meeting Agenda

The meeting agenda (Attachment B) was introduced and approved with minor corrections.

3. Minutes from June 2007 Annual Meeting

The meeting minutes from the June 2007 meeting in Boston, MA (Attachment C) were approved as submitted.

4. Action Items from June 2007 Annual Meeting

a. NURETH-13 host proposals

The Topical Meeting Information Questionnaire was sent to NPC in June and subsequently in the screening subcommittee meeting in July. It was authorized that Japan would host NURETH-13 in Kanazawa in the last week of October 2009. The meeting category is Class IV. The availability of the conference site in Kanazawa, however, necessitated holding the meeting from September 27 to October 2, 2009, which was within the four week allowance for a change. The next action is to obtain a preliminary approval in March, 2008 and the final approval in July 2008. The official NURETH-13 website will be open in March 2008 to be preceded by an interim site for preliminary announcement in January 2008.

b. NURETH-14 host planning

Cheung proposed to send the call for proposals and go through formal process. The Screening Committee shall contact representatives in Canada, Italy, China and India. Zhang representing X. Cheng of Shanghai Jiatong University indicated that China would be interested in hosting NURETH-15 in 2013. Considering that NURETH-14 would be held either in Europe or in the US, NURETH-15 might be in the US or in Europe. The proposal was nonetheless welcomed by the committee. It was also suggested that China could explore a possibility of hosting NUTHOS-8 in 2010 after Seoul in 2008.

5. Session Status of 2007 ANS Winter Meeting in Washington DC

The technical sessions are:

- a. Research Needs and Current Developments in Best Estimate Computational Thermal-Hydraulic Codes I. Paper session [Mon. p.m.] Chair: Woods (5 summaries)
- b. Thermal Hydraulics of Conceptual and Innovative Reactor Designs [Mon. p.m.] Chair: Sun, Sabharwall (4 summaries)
- c. General Thermal Hydraulics I [Tue. a.m.] Chairs: Hassan, Revankar (7 summaries)
- d. Research Needs and Current Developments in Best Estimate Computational Thermal-Hydraulic Codes II. Panel session [Tue. p.m.] Chair: S. Bajorek, Cancelled
- e. General Thermal Hydraulics II [Wed. a.m.] Chairs: Woods, Hogan (8 summaries)
- f. Young Professional Thermal Hydraulics Research Competition [Wed. p.m.] Chairs: Revankar, Todd, More judges needed (6 summaries)
- g. Experiments and Validation in Thermal Hydraulics [Thu. A.m.] Chair: Revankar (8 summaries)
- h. General Two-Phase Flow [Thu. p.m.] Chair: S. Kim (7 summaries)

This item was covered simultaneously with item 6.

6. Review of Session Assignments and Feedback

Muftuoglu reported that the division received 45 summaries and a couple of sessions were divided in parts. He stated that he had had difficulties in securing session chairs on account of proximity with NURETH-12 to the extent that he was forced to turn to graduate students. Concerns were expressed that that it was not appropriate to have students chair sessions at national ANS meetings. There was a supporting argument that co-chairs be solicited from junior members such as students because it offered them an opportunity to gain technical experience. It was nonetheless countered that the co-chairs were expected to be equally qualified as chairs so that the student chairmanship ought to be reconsidered. Muftuoglu brought it to a close that he would reflect on ways to maintain qualified chairs and co-chairs in upcoming meetings and be more careful about organizing a panel session.

For further details, see a summary report (Attachment D) distributed at the meeting.

7. 2008 ANS Annual Meeting Program in Anaheim, CA

Proposed technical sessions are:

- a. Panel on Thermal Hydraulic Aspects of Nuclear Hydrogen Systems (joint panel session with the Nuclear Hydrogen Working Group) Revankar, Oh
- b. General Thermal Hydraulics Ninokata, Vierow, Woods
- c. Two-Phase Flow Experimentation Hassan, Sun
- d. CFD Analysis of Rod Bundles Hochreiter, Frepoli, Ninokata
- e. Thermal Hydraulics of Spent Fuel Arndt, Hochreiter
- f. Thermal Hydraulic Aspects and Licensing of Gen III and Gen III+ Reactors Hochreiter, Frepoli, Suh, Bilbao y Leon

For further details, see a summary report distributed at the meeting (Attachment E).

Action Item: PC members shall solicit summaries.

8. Update on Session Organizer Participation

Action Item: Muftuoglu will email organizers reminding them of their duties and assignments (see Attachment F).

9. 2008 ANS Winter Meeting Program in Reno, NV

Proposed technical sessions are:

- a. Panel NUTHOS-7 Highlights Suh, J.H. Kim, Ninokata
- b. Young Professional Thermal Hydraulics Research Competition Todd, Marshall (judges as well as chairs are needed)
- c. High-Temperature Gas-Cooled Reactor Technology Marshall, Sun, Hassan, Oh
- d. General Thermal Hydraulics Shripad, Vierow, Rempe, S. Kim, Saha
- e. General Two-Phase Flow S. Kim, Sun, Cheung, Vierow
- f. Computational Thermal Hydraulics Woods, Powers, Saha, Ninokata

10. NURETH-12 Update

Muftuoglu provided an update on this meeting as summarized in Attachment G.

11. NUTHOS-7 Update

Suh provided a brief update on the conference. The abstract deadline is December 17, 2007. He said that the selected peer-reviewed papers will be recommended for publication in the archival journals of Nuclear Science & Engineering, Nuclear Technology, Nuclear Engineering & Design, and Nuclear Engineering & Technology.

12.	Old	Busin	ess

None.

13. New Business

None.

The meeting was adjourned at 5:09 p.m.

Minutes prepared by K.Y. Suh

Attachment E

Announcement

The American Nuclear Society (ANS) Thermal Hydraulic Division (THD) sponsors the International Topical Meeting on Nuclear Reactor Thermal Hydraulics (NURETH) with support of domestic local sections or international institutions.

This is the informational announcement for solicitation of proposals for future NURETH organizations.

The NURETH meetings have a history of close to three decades.

- 1 1980 Saratoga Springs, New York USA
- 2 1983 Santa Barbara, California USA
- 3 1985 Newport, Rhode Island USA
- 4 1989 Karlsruhe, Germany
- 5 1991 Salt Lake City, Utah USA
- 6 1993 Grenoble, France
- 7 1995 Saratoga Springs, New York USA
- 8 1998 Kyoto, Japan
- 9 2001 San Francisco, California USA
- 10 2003 Seoul, Korea
- 11 2005 Avignon, France
- 12 2007 Pittsburgh, Pennsylvania USA

The next conference in series, NURETH-13, will be held in Kanazawa, Japan, from September 27 through October 2, 2009.

Since 2001, the meeting is held every other year. The proposals will be considered for 2011 and beyond. In case of more than one acceptable proposal, the future meetings will be scheduled by giving the geographic considerations.

The proposals will be evaluated using the attached criteria. For the conferences organized abroad, there cannot be a financial liability on the part of the society; therefore any revenue sharing is completely at the organizing institution discretion. Since the vitality of the division and the support for future activities depend on the revenue from these meetings, consideration will be given to favorable financial arrangements. Organizations are encouraged to propose alternate ways to provide financial support to THD.

Interested parties should send their proposal electronically to the *NURETH Proposal Screening Committee* members: Dr. Joy Rempe (Chair) (joy.rempe@inl.gov), Prof. Fan-Bill Cheung (fxc4@psu.edu), Prof. Yassin Hassan (Hassan@ne.tamu.edu), and Dr. Kurshad Muftuoglu (PCChair@thd-ans.org). The screening committee members will forward only the complete applications to the *NURETH Selection Committee*. The

committee will evaluate and rank the proposals; than will make their recommendation to the *THD Executive Committee* for voting on the final decision. Selection of NURETH-14 (2013) will be completed by June 2009, giving organizers generous time for meeting planning and preparations.

Inquiries for more information can be made to the screening committee.

NURETH Criteria for Proposal Evaluation

1. Technical Program Chairman

Does the proposed Technical Program Chair have extensive experience in topical meeting subjects?

2. Local Section Involvement in Topic

Are there influential local section members involved in the proposed work related to NURETH?

3. Experience in Organizing and Conducting Topical Meetings

Has the local section/organizing institution demonstrated its experience and ability in successfully conducting topical meetings, both technically and financially?

4. Allocation of Excess Revenue

What percentage of the excess revenue will be return to ANS Thermal Hydraulics Division and what is the estimated amount?

5. General Chairman

Is the proposed General Chairman well versed to serve as the General Chair of NURETH?

6. Hotel Cost and Facilities

What is the rate of the hotel? Does it have all the required facilities?

7. Location

Is the location convenient for airline service, hotel access from airport; and attractions for non-meeting participants, i.e., spouses and families?

8. Steering Committee (SC) and Technical Program Committee (TPC)

Do the SC and TPC proposed appear to be adequate?

9. Publication of Proceedings

Is the scheduling/anticipated cost of publication acceptable?

10. Technical Tours

Is there an attractive technical tour? What are the proposed tours and the costs?

Attachment F

ANS 2008 Annual Meeting, Anaheim CA

There were total of 29 summaries, including 2 transfers from other divisions.

Five of these summaries were accepted without further comments, 23 were accepted with revisions, and only one was rejected unless revised, which was later accepted to the meeting after the authors implemented the reviewer comments.

There were no rejections due to failure of following the format guidelines. Authors of couple summaries resubmitted their work before the deadline, when reminded of the format requirements.

Reviews went smoothly. All the papers received adequate review on a timely basis. Only 8 had the minimum number of reviews, 14 had three reviews, 6 had four or more. There were total of 86 review recommendations that I have coordinated from 19 reviewers. Following individuals (in alphabetical order) contributed to the reviews of Anaheim summaries:

Steve Ardnt Bill Cheuna Mohammed El-Genk Donna Guillen Tom Larson Jean-Marie LeCorre Bob Martin Kurshad Muftuoglu Chang Oh Joy Rempe Shripad Revankar Jovica Riznic Barış Sarikaya Undine Shoop Kune Suh Xiaodong Sun Don Todd Karen Vierow Brian Woods

I would like to encourage especially the new PC members to participate with the reviews. I will be adding new names to the reviewer pool, please let me know if there are any recommendations.

There are total of 6 sessions, including a panel and two half-length sessions, in the meeting. These are:

Session	# of speakers	Time Slot	Chairs
Computational Thermal Hydraulics –I	5	MON p.m.	Woods
Thermal Hydraulic Aspects of Nuclear	6	TUES a.m.	Oh, Revankar
Hydrogen Systems (Panel)			
Two-Phase Flow Experimentation	8	TUES p.m.	Sun, Hassan
General Thermal Hydraulics – In Memory of	8	WED a.m.	Vierow, Kim
Gunol Kojasoy			
Computational Fluid Dynamics Analysis of	3	WED p.m.	Ninokata
Rod Bundles			
Computational Thermal Hydraulics – II	5	WED p.m.	Guillen

All the sessions will be held in "Dreams A". To appoint session chairs, I have again used the level of participation in the reviews, stimulation efforts as the assigned organizer as a guide by balancing with the need of new active participants and avoiding repeat chairs according to the HQ expectations. I have confirmed with individuals in advance by inquiring their availability to avoid having too many missing chairs. Hopefully, this worked for everyone.

Session organizers should note that sessions with low submittals are risking being folded into other general sessions.

The sessions with a theme need session organizers stimulation.

K. Muftuoglu PC Chair

Attachment G

ANS 2008 Winter Meeting THD-Sponsored Sessions

General Thermal Hydraulics Shripad Revankar (Purdue) Seungjin Kim (Penn State) Karen Vierow (Texas A&M) Joy Rempe (INL) Brian Woods (Oregon State) Donald Todd (AREVA)

In this General Thermal Hydraulics sessions the following subjects are solicited: Small and large-scale thermal-hydraulic experiments, laboratory and industrial measuring methods for thermal-hydraulic processes, basic single, two-phase and multiphase flow and heat transfer, thermal hydraulics simulations, system and component thermal-hydraulic codes development, separate thermal-hydraulic effects (critical heat flux, flooding, flow pattern transitions, two-phase chocked flow, etc.), sub-channel thermal hydraulics, containment thermal hydraulics and aerosol transport, integral nuclear power plants behaviors under transient and malfunction conditions, thermal-hydraulics of molten core and severe accidents, coupling to system codes (like neutron kinetics, BoP, I&C).

(SA1202239366)

Young Professional Thermal-Hydraulics Research Competition Donald Todd (AREVA) Theron Marshall (INL)

This professional development session will enhance the technical writing and presentation skills of young professionals working in the area of Thermal Hydraulics through preparation and presentation of an abstract related to the Thermal Hydraulics profession. A panel of judges that will provide constructive feedback on ways participants can improve their written and verbal communications skills in a technical forum will critique accepted abstracts and presentations.

(SA1202239512)

NUTHOS-7 Highlights Kune Suh (Seoul National University) Jong Kim (KAIST-EPRI) Hisashi Ninokata (Tokyo Inst. of Tech)

This session will include summaries of the best papers from the Seventh International Topical Meeting on Nuclear Reactor Thermal Hydraulics (NUTHOS-7). The overviews will address the most important points presented in each topic of the meeting and tentatively will be presented by the NUTHOS-7 chairs/organizers.

(SA1202239637)

General Two-Phase Flow Seungjin Kim (Penn State) Xiaodong Sun (Ohio State) Fan-Bill Cheung (Penn State) Karen Vierow (Texas A&M)

This session is intended to provide an opportunity to the engineers and scientist to present recent developments in basic two phase flow and heat transfer. In this sessions the following subjects are solicited: experiments in basic two phase flow and heat transfer involving gas and liquids, gas and solids in pipe or channels; instrumentation and new methods of measurement of two-phase flow parameters such as interfacial area concentration, void fraction and bubble drift velocity; development of models on key two phase flow phenomena, such as entrainment, flooding, critical flow, flow regime transition, and others.

(SA1202239849)

Computational Thermal Hydraulics Brian Woods (Oregon State) Donna Guillen (INL) Pradip Saha (GE-Hitachi) Hisashi Ninokata (Tokyo Inst. of Tech.) Yassin Hassan (Texas A&M) Kurshad Muftuoglu (GE-Hitachi)

This session is intended to provide an opportunity to the engineers and scientist to present recent computational thermal hydraulic development, application, validation and verification, code comparison and benchmarking, and uncertainty determination. Papers are solicited which deal with any aspect of thermal hydraulic calculation and Computational Fluid Dynamics (CFD) work. Authors and presenters are invited to participate in this event to expand understanding and promotion of efforts and disciplines in the area of Computational Thermal Hydraulics and Fluid Dynamics (CFD), Neutronics Methods and Coupled Codes. Dissemination of knowledge by presenting results, new developments, and novel concepts in computational techniques, Neutronics methods and coupled Codes, CFD and thermal-hydraulic codes coupling are solicited.

(SA1202240109)

Thermal-Hydraulics of High-Temperature Gas-Cooled Reactor Technology Chang Oh (INL)
Xiaodong Sun (Ohio State)
Theron Marshall (INL)
Yassin Hassan (Texas A&M)

This session will focus on the thermal hydraulics aspects of system integration, efficiency, advantages and disadvantages of the high-temperature gas-cooled reactors. Papers are solicited from all parties involved in the design of the gas-cooled reactors. Focus is the understanding of key thermal-hydraulic phenomena that have been considered in assessing the plant safety margins. Contributions are expected in the identification of scenarios, analysis of experiments, the development of modeling techniques, the assessment of the models against test data and the determination of their bias and uncertainties.

(SA1202240259)

Attachment H

The 7th International Topical Meeting on **Nu**clear Reactor Thermal Hydraulics, **O**peration and **S**afety October 5-9, 2008, Grand Intercontinental Hotel, Seoul, Korea

Important Dates

April 18, 2008	Abstracts Due for Review	July 31, 2008	Notification of Acceptance
April 30, 2008	Notification of Acceptance	August 29, 2008	Camera-Ready Manuscripts Due
June 30, 2008	Full Manuscripts Due for Review	August 29, 2008	Pre-Registration Due

Preliminary Program

	3	400	125+125	70+70	60	30
		GB I& II	Orchid I & II	Chrysan I & II	Camelia	Azelea
10/05~10/09	All day					Secretariat Office
10/05~10/08	All day					
Sun. 10/05	18:00~21:00		Reception			
Mon. 10/06	08:40~12:20	0, P				
	13:40~14:20		KL 1,2			
	14:40~18:20		TS 1,2	TS 3,4	TS 5	
Tue. 10/07	08:40~10:00			TS 6,7	TS 8	
	10:00~10:40		KL 3,4			
	10:40~12:20		TS 9,10	TS 11,12	TS 13,14	
	13:40~14:20		KL 5,6			
	14:40~18:20		TS 15,16	TS 17,18	TS 19	
	18:30~21:30	Banquet				
Wed. 10/08	08:40~10:00		TS 20,21	TS 22,23	TS 24	
	10:00~10:40		KL 7,8			
	10:40~12:20		TS 25,26	TS 27	TS 28	
	13:40~14:20		KL 9,10			
	14:40~18:20		TS 29,30	TS 31,32	TS 33	
Thu. 10/09	08:40~10:20			TS 34,35	TS 36	
	10:40~12:20			TS 37,38	TS 39	
	13:30~14:30			Closing		

Abstract Stats

Country	#	Country	#
Algeria	1	Japan	29
Brazil	2	Korea	129
Canada	4	Lithuania	1
China	19	Norway	2
Czech Republic	1	Romania	1
Egypt	2	Russia	5
Finland	3	Spain	4
France	11	Sweden	7
Germany	6	Switzerland	2
India	18	Taiwan	3
Indonesia	2	The Netherlands	3
Iran	1	U.S.	12
Italy	2	Vietnam	1
		Total	271