

## HTRI Xchanger Suite

HTRI *Xchanger Suite*<sup>®</sup> was shipped to members in October 2001. *Xchanger Suite*, the next generation of heat exchanger design software, which builds on the unique Windows graphical user interface (GUI) developed for IST 2.0, handles

- all shell-and-tube heat exchangers including single phase, condensers, and reboilers
- economizer bundles
- air-cooled heat exchangers
- tube layouts

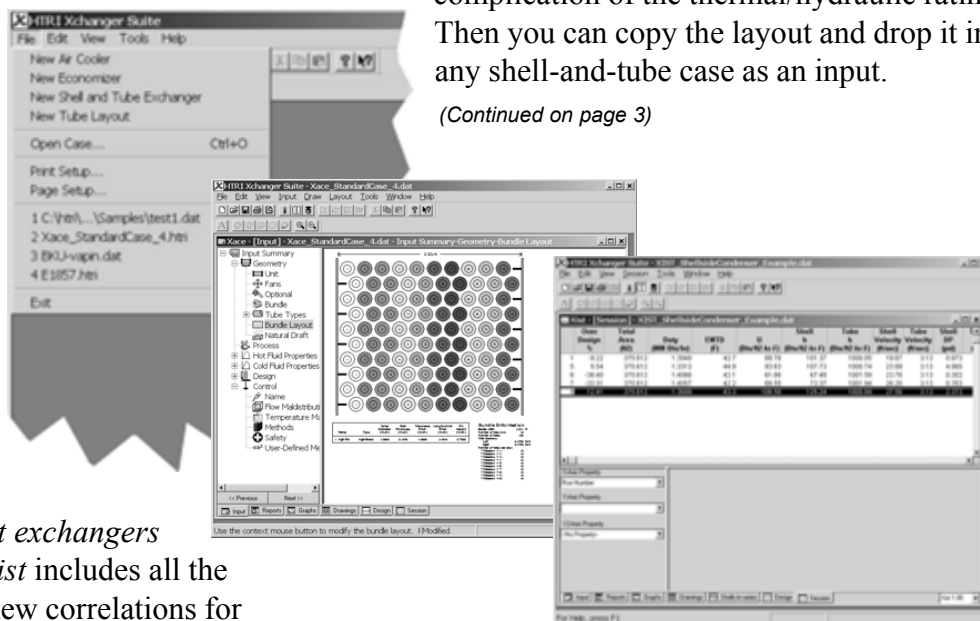
*Xchanger Suite*'s initial issue contains three modules:

- *Xist* for shell-and-tube heat exchangers  
Expanding on IST 2.0, *Xist* includes all the features of IST 2.0 plus new correlations for tubeside condensation.
- *Xace* for air-cooled heat exchangers and economizers  
Replacing ACE 3.2, *Xace* adds new high-finned tube correlations based on HTRI research data. *Xace* more accurately predicts operational heat exchangers. In addition to a full graphical interface, a unique graphical bundle layout makes entering complex bundles a snap.

- *Xtlo* for tube layouts

Starting with the tube layout output in IST 2.0, *Xtlo* takes it a step further. You can get the layout just the way you want without the complication of the thermal/hydraulic rating. Then you can copy the layout and drop it in any shell-and-tube case as an input.

(Continued on page 3)



## License PPDS2 Through HTRI

HTRI *Xchanger Suite* 1.0 provides several new physical property options from third party vendors. The properties can be specified through the use of our new "Property Generator", which runs third party applications from within the HTRI software. The physical property packages available through this mechanism are those of:

- HYSYS
- PPDS2
- REFPROP

### Included in this issue...

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Online help in *Xchanger Suite* has details on each of these packages. (Continued on page 4)

## Contact

Submit all correspondence regarding *The Exchanger* to:

Heat Transfer Research, Inc.  
Attn: *The Exchanger*  
150 Venture Drive  
College Station, Texas 77845 USA

+1-979-690-5050 *voice*  
+1-979-690-3250 *fax*  
Newsletter@HTRI.net  
www.HTRI.net

## Design and Layout

Jo Anne Smith

## Copy Editors

Kathryn E. Alexander  
Betty R. Haley

## Subscriptions

For a free subscription, write to HTRI or contact:

Newsletter@HTRI.net  
www.HTRI.net

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HTRI Recycles

# Property Grid NetSheet Available

HTRI has recently collaborated with WaveOne.com and Virtual Materials Group in the development of an HTRI property grid NetSheet. The NetSheet is a Microsoft Excel spreadsheet with special WaveOne.com extensions that allow it to run calculations over the Internet on servers at the WaveOne.com website, [www.waveone.com](http://www.waveone.com). By combining the power of the WaveOne.com thin-client and application hosting technology with the physical property prediction capabilities of the Virtual Material Group's package, HTRI users can obtain access to a low-maintenance and low-cost solution for their physical property needs. The HTRI property grid NetSheet performs advanced property and phase prediction calculations directly from a downloadable spreadsheet, and automatically creates a physical property grid that can be easily imported into HTRI applications such as HTRI *Xchanger Suite*.

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*The HTRI property grid NetSheet is currently available for free download from the WaveOne.com website. For further details about this product, visit WaveOne.com's website [www.waveone.com](http://www.waveone.com).*

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The HTRI property grid NetSheet is currently available for free download from the WaveOne.com website. WaveOne.com and Virtual Materials Group are providing limited use free access to this physical property prediction package as well as professional level subscriptions for a monthly fee. For further details about this product, visit WaveOne.com's website [www.waveone.com](http://www.waveone.com).

For the latest information about HTRI software, future events, and registration forms for training and meetings, visit HTRI on the web:

**[www.HTRI.net](http://www.HTRI.net)**



# Software News

## HTRI *Xchanger Suite*

(Continued from page 1)

*Xchanger Suite* expands on the capabilities of the IST 2.0 GUI, adding several new features including

- a graphical tube layout input option for shell-and-tube heat exchangers
- a new session view

This option is one of the most powerful to ever come along! Ever wish that you could go back to the exchanger you tried four exchangers ago when you were working on a complicated design? Now you can. Just click on the exchanger in the session view and the inputs you used are restored.

- the ability to drag and drop information from one type of heat exchanger to another

It is as easy as point and click to copy properties and geometry from a shell-and-tube heat exchanger to an air-cooler and back.

*Xchanger Suite* completely replaces IST 2.0 and ACE 3.2 as well as the legacy software, CST, RKH, RTF, ST, and TWALL. The next module to be added to HTRI *Xchanger Suite* will be *Xphe* for rating and design of plate exchangers.

# HTRI

## e-Library

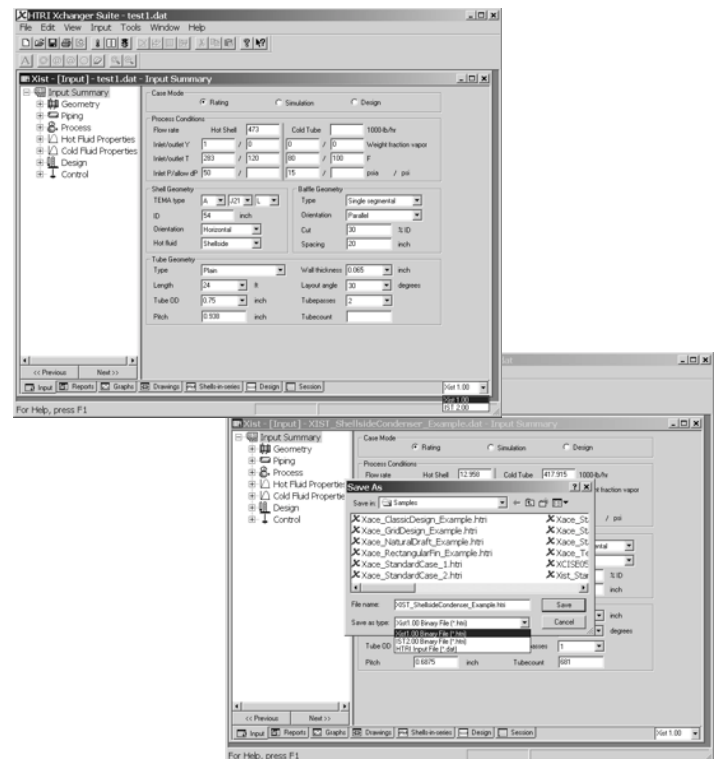
All HTRI members and auxiliary mailing subscribers (AMS) will soon be receiving a CD and Installation Guide for e-Library.

Depending on membership level, you may have access to: HTRI Membership Roster, Software & Publications, Q, and technical reports.

## *Xchanger Suite* - forward and backward capability!

Most software programs are forward compatible – they can open files created by older versions of the same program. They can sometimes even save files in previous formats. But they rarely, if ever, allow you to run older versions from the newer interface.

HTRI *Xchanger Suite* is an exception to this; it automatically detects IST 2.0 if it is on your system. In this case, it automatically appears as a pull-down menu on the bottom of the case. Just click on the pull-down and select IST 2.0. That is all you need to do to run the IST 2.0 calculation engine.



Because of new features added to the interface, .htri files created by *Xchanger Suite* cannot be loaded by IST 2.0. For that reason, we added an option to “Save as”. Just select IST 2.0 Binary File (\*.htri) and the file can be loaded by anyone with IST 2.0. In addition, *Xchanger Suite* automatically recognizes and loads data created using previous versions of HTRI programs, thus saving you from re-entering data.

# Software News

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## License PPDS2 Through HTRI

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*(Continued from page 1)*

In late 2001, we signed an agreement with TUV NEL Ltd. to integrate the PPDS2 package into HTRI software. We also became their agent, therefore able to offer a complete solution to our customers that includes thermal design coupled with a comprehensive and accurate thermophysical property package. PPDS2 is a powerful and flexible package that provides thermodynamic properties, transport properties, and phase equilibria behavior for multicomponent systems of liquids and gases. At the click of a button, the user can select standard thermodynamic models, including a range of both activity-based (Wilson, UNIFAC, UNIQUAC, NRTL) and equation of state-based (Redlich-Kwong-Soave, Peng-Robinson, Lee-Kessler-Plocker) models. For more information about PPDS2, visit TUV NEL Ltd.'s website [www.ppds.co.uk](http://www.ppds.co.uk) and their online e-commerce website [www.ppds.net](http://www.ppds.net).

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*If you are interested in licensing PPDS2 and you are a member of HTRI, you can obtain a license at a discounted fee by ordering through us.*

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We are very excited about our collaboration with TUV NEL Ltd, which allows us to offer our customers a high quality thermophysical property package that works with HTRI software. If you are interested in licensing PPDS2 and you are a member of HTRI, you can obtain a license at a discounted fee by ordering through us. **To request a quote, send an e-mail message to [PPDS@HTRI.net](mailto:PPDS@HTRI.net) or a fax to any of the offices listed on the back page of this newsletter.**

# Research News

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HTRI has continued to make progress in three of its core areas of research, while beginning some CFD-aided design methods.

## Boiling

Tests of boiling with twisted tape inserts indicate that these devices solve two problems prevalent in tubeside boiling:

- inability to attain sufficient superheat
- top tube dryout in horizontal tube boiling at low flow

New heat transfer and pressure drop methods are being developed for these devices.

During this fiscal year, plans call for an additional test section for boiling in upflow, downflow, and U-bends.

## Condensation

According to new findings, heat transfer rates can be increased two to four times when twisted tape inserts are used in vertical tubes for condensation of mixtures.

Also, HTRI has begun conducting experiments in its newly completed shellside test section. These tests are designed to improve our shellside condensation methods for such difficult problems as desuperheating and condensation of mixtures on dense low-finned tubes.

## Fouling

HTRI continues to compare fouling behaviors of different crude oils. This information can be used to predict the amount of excess surface required for crude preheat exchangers to produce a certain on-stream time at given velocities and temperatures. Recently we concluded an initial study of the effects of fouling on finned surfaces. Results indicate that fins have some promise in permitting longer on-stream times for crude preheat exchangers.

## Computational Fluid Dynamics (CFD)

Using CFD, HTRI has begun investigating flow distribution in no-tube-in-window exchangers. Plans are to examine several other heat exchanger flow distribution problems.

# Upcoming Training

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## **MAASTRICHT, THE NETHERLANDS** Training Week - Europe April 22-26, 2002

Introduction to Process Heat Exchangers, April 22, 2002

*Xist*, April 23, 2002

*Xace*, April 24, 2002

Advanced Thermal Design of Condensers, April 25, 2002

Use of Fouling Models in Design, April 26, 2002

## **SAO PAULO, BRAZIL** *Xist*, May 7, 2002

## **SALT LAKE CITY, UTAH USA**

2002 Annual Meeting  
of Stockholders

July 22-26, 2002

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For details visit the HTRI website -  
[www.HTRI.net](http://www.HTRI.net)

## *Corporate News*

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### Representatives Appointed in Italy and Korea

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In January 2002, as part of our ongoing effort to provide a local presence and better service in more regions throughout the world, we established two additional representatives.

#### Italy

Sant' Ambrogio Servizi Industriali s.r.l., which has recently joined as an HTRI member, will provide marketing and technical support services in Italy. This representative will coordinate its activities with our European office in Guildford, United Kingdom, which has been supporting our European customers since May 2000. We currently have fifteen members and nine Participating Affiliates in Italy.

In addition to their experience in heat exchanger thermal design, Sant' Ambrogio Servizi Industriali s.r.l. markets mechanical design software. We have had an agreement with them for several years that resulted in an interface between HTRI's and their software, as we do with several other mechanical design software vendors.

#### Korea

Our new representative in Korea is UIT, Inc. Their primary role on our behalf will be that of marketing HTRI products and services to prospective customers and providing a local contact point for our current members in Korea. Our present customer base in Korea includes fifteen members and one Participating Affiliate. UIT, Inc. will work closely with our Asian office based in Chiba, Japan.

We are excited to add Sant' Ambrogio Servizi Industriali s.r.l. and UIT, Inc. to our team. You will find contact information for these two new representatives on the back cover of this newsletter.

## New HTRI Staff

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### **Stephanie D. Bull** Software Developer

In June 2001, Stephanie joined the HTRI staff after graduating with a B.S. in Chemical Engineering from the University of Texas, Austin, Texas, USA.

Stephanie had previously interned at HTRI, while a student at Texas A&M

University, as well as at BP p.l.c. (formerly BP Amoco). During her internship she worked on the GUI for EHT and the development of a customized spreadsheet under contract. Her current responsibilities include the development of *Xace*.



Stephanie D. Bull

### **Nathan W. Kidd** Software Developer

Nathan became a full-time member of the software development team in June 2001. He had previously worked on a part-time basis and interned at HTRI, implementing RODbaffle correlations into *Xist* and modeling closed feedwater heaters. Nathan recently

graduated magna cum laude from Texas A&M University, College Station, Texas, USA with a B.S. degree in Chemical Engineering. His current responsibilities include the development of FH.



Nathan W. Kidd

### **Kevin J. Farrell** Researcher

Kevin joins HTRI after working as a Research Engineer and Deputy Head of the Fluid Machinery Department of the Applied Research Laboratory (ARL) at Pennsylvania State University in University Park, Pennsylvania, USA.

During his sixteen years' tenure at ARL, he worked on numerous military contracts; his areas of interest and expertise include fluid dynamics and thermal engineering. Kevin graduated with his B.S., M.S., and Ph.D. in Mechanical Engineering from Pennsylvania State University. A licensed Professional Engineer (P.E.) in Pennsylvania, he is currently working in the areas of flow-induced vibration, computational fluid dynamics, and fired heaters.



Kevin J. Farrell

### **Thomas G. Lestina** Manager of Technical Services

With nearly twenty years of engineering project management experience, Tom joined the staff in July 2001. Previously, he had worked as a Lead Engineer for MPR Associates, Inc. in Alexandria, Virginia, USA.

Tom graduated with a B.S. from Union College, Schenectady, New York, USA, and an M.S. from Rensselaer Polytechnic Institute, Troy, New York, USA; both degrees are in Mechanical Engineering. He is a member of ASME and is serving as the chair of the technical committee for the ASME Performance Test Code 12.5, Single Phase Heat Exchangers. Tom is responsible for HTRI training, technical support, and contract services.



Thomas J. Lestina

## New HTRI Staff *(continued)*

### **Eiichiro Uraji**

#### **Software Developer**

Eiichiro Uraji is working with HTRI under contract with Toyo Engineering Corporation in Chiba, Japan, where he has been employed for nearly eighteen years. In January 2002, he joined HTRI as a Software Developer under a trainee visa. He will be developing enhancements to components of HTRI *Xchanger Suite*. Eiichiro was one of the original developers of the tube layout software on which *Xtlo* is based. Eiichiro graduated with a Bachelor of Engineering in Mechanics from Kyushu Institute of Technology in Fukuoka, Japan.



Eiichiro Uraji

### **Heike Wagner**

#### **Research Assistant**

In October 2001, Heike Wagner, a third-year student in Mechanical Engineering at the University of Stuttgart, Germany, joined HTRI under a six-month trainee visa. A native of Sindelfingen, Germany, she was introduced to HTRI by Dr. Hans Müller-Steinhagen, Director of the Institute for Technical Thermodynamics, German Aerospace Centre and Professor of Thermodynamics and Thermal Engineering, University of Stuttgart. During her internship, Heike is working with staff on both air-cooler and fouling projects, as well as gaining experience in data reduction techniques and correlation development. Heike previously interned in Germany with BMW in Munich and Daimler/Chrysler in Stuttgart.



Heike Wagner

## Staff Presentations

### **Fernando J. Aguirre**

*HTRI Technology for Design and Simulation of Heat Transfer Equipment*

AIChE South Texas Section, Process Engineering/  
Plant Operations Workshop

Houston, Texas, USA

November 1, 2001

*Crude Oil Fouling Research at HTRI*

6th European Meeting of the Crude Oil Refinery  
Fouling Working Party, ESDU International plc

London, United Kingdom

January 17, 2002

### **R. Stanley Kistler**

*Shell-and-Tube Heat Exchanger Software*

AIChE South Texas Section, Process Engineering/  
Plant Operations Workshop

Houston, Texas, USA

January 10, 2002

### **Joseph W. Palen**

*History of Fouling Research at HTRI and Strategy for the Future*

United Engineering Foundation Conference on Heat  
Exchanger Fouling - Fundamental Approaches  
and Technical Solutions

Davos, Switzerland

July 12, 2001

### **Hans U. Zettler**

*Advanced Software based on Industrial Research -  
HTRI Xchanger Suite 1.0*

17th HEXAG Meeting

Oxford, United Kingdom

October 25, 2001

*Advanced Software based on Industrial Research -  
HTRI Xchanger Suite 1.0*

Heat Transfer Society Meeting

London, United Kingdom

January 17, 2002

## Ten-Year Service Awards

**Catherine P. Meyer**, Assistant to the President, completed ten years of service at HTRI on May 3, 2001. A native of Zurich, Switzerland, Catherine graduated with honors from the International Hotel Management School in Lausanne, Switzerland, and worked in industry and academia before immigrating to the United States.



Catherine P. Meyer

Prior to joining HTRI, she worked for nearly twelve years in various senior administrative positions at Texas A&M University, College Station, Texas, USA. Catherine initially not only provided administrative support to the President but also assisted her with membership activity. In 1995 she was elected HTRI Corporate Secretary. Additionally, she manages international meetings and workshops, coordinates the Communication Committee correspondence, and monitors the business insurance coverage for HTRI. Catherine's fluency in several languages has made her a unique member of the HTRI team.

A member of the Bryan-College Station Chapter of the American Business Women's Association since 1989, Catherine has served as president of the local organization and editor of the chapter newsletter. She has worked as a tutor for the Literacy Volunteers of America and is currently on the Board of Directors for the Arts Council of Brazos Valley.

Catherine is married to Edgar Meyer, Professor of Biochemistry and Biophysics at Texas A&M University. They have three grown children—Erik, Claudia, and Felix—and one grandchild, Dominic.

**Zhihua “Frank” Yang**, celebrated his tenth anniversary at HTRI on December 9, 2001. Frank earned his B.S. in Power and Mechanical Engineering from Jiaotong University, Xi'an, China and an M.S. and Ph.D. in Mechanical Engineering from State University of New York at Stony Brook, New York, USA. Before joining HTRI, he worked briefly as a mechanical engineer with Analysis and Design Application Company (ADAPCO), New York, New York, USA, and as a research engineer and lecturer with the National Laboratory of Multi-Phase Flow and Heat Transfer at Jiaotong University, Xi'an, China. Since joining the research staff at HTRI, he has worked extensively in the area of condensation, and more recently with air-cooled heat exchangers. Over the years, Frank has presented workshops in China, assisted with HTRI's marketing there, and helped host Chinese delegations visiting our USA headquarters.



Zhihua Yang

Frank is a licensed professional engineer in Texas and a member of both American Society of Mechanical Engineers (ASME) and the Process Heat Exchanger Society. He has presented papers at both National Heat Transfer and Engineering Foundation conferences and at AIChE meetings and has authored/co-authored several articles on phase change and mist flow.

Frank is married to Jinling Cheng, Supervisor of the Texas Veterinary Medical Diagnostic Laboratory at Texas A&M University, College Station, Texas, USA. Their son Joe is a student at Baylor University in Waco, Texas, USA.

# Training News

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With the release of *Xchanger Suite* 1.0, HTRI updated the software workshops. A two-day *Xist* workshop was held in conjunction with the 2001 Annual Meeting of Stockholders in Arlington, Virginia, USA. One-day *Xist* and *Xace* workshops to provide training for the components of the new software suite also have been created. Training will also be available for *Xphe* and FH 2.0 following their release.

Joseph W. Palen and LiDong Huang prepared a one-day course, *Advanced Thermal Design of Reboilers* that was unveiled at the European Meeting in Barcelona, Spain in October 2001. Another one-day course, *Advanced Thermal Design of Condensers*, was presented during Training Week-Houston in February 2002.

Training targets not only novice users, but also intermediate and advanced users; all can benefit from workshop examples, explanations of methods upon which the software is based, and interaction with other attendees. Participants in workshops and courses can take full advantage of the expertise of our staff in a classroom environment.

HTRI training is available at regularly scheduled meetings, during training weeks, and upon member request. Visit our website at [www.HTRI.net](http://www.HTRI.net) for a schedule of upcoming events or contact us at [Training@HTRI.net](mailto:Training@HTRI.net) or +1-979-690-5050 (voice) to arrange training at your site or at HTRI's corporate offices in the USA, Asia, or Europe.

## IST Workshop in Beijing, China

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Fourteen representatives from eight companies attended the IST workshop held at The Great Wall Sheraton Hotel in Beijing, China on May 8 and 9, 2001. Zhihua Yang, Senior Research Engineer, conducted the workshop in Chinese, assisted by Robert Lee, Bechtel Corporation, who is a member of the HTRI Technical Committee.

# HTRI

## 2002 Annual Meeting of Stockholders

Salt Lake City, Utah  
USA

July 22-26, 2002

Celebrating 40 Years  
1962-2002

Featuring previews  
of FH 2.0, *Xphe* and  
much more!

Visit [www.HTRI.net](http://www.HTRI.net)  
for additional information  
on this and other events

# Corporate News

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## 2001 Annual Meeting of Stockholders

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The 2001 Annual Meeting of Stockholders was held at the Ritz-Carlton® Pentagon City, Arlington, Virginia, USA from July 30 through August 3, 2001. The events included business meetings, technical presentations, a breakfast for first-time attendees, a Planning Session for FY 2002, roundtable discussions during lunch, a meeting of the Crude Oil Fouling Task Force, and the *Xist* and EHT workshops.

William M. Boyle, Chair of the Board of Directors presided at the stockholders' meeting on July 31, 2001. Claudette D. Beyer, President and Chief Executive Officer, and Fernando J. Aguirre, Vice President, reported on the corporate state of affairs, specifically the move to the new world headquarters in College Station, Texas, USA, the opening of the HTRI Asian office in Chiba, Japan, and our increased global representation. Boyle presented his predecessor, G. E. Kluppel, a gavel in recognition of his service as chair of the Board of Directors from 1993 to 2000.

The stockholders elected the following to the Board of Directors:

*William M. Boyle*, The Dow Chemical Company

*Larry G. Hackemesser*, Kellogg Brown & Root

*Peter D. Hoffman*, Celanese Ltd.

*G. E. Kluppel*, Hudson Products Corporation

*Donald W. Meyer*, Burns & McDonnell Engineering Co., Inc.

*Takashi Noto*, Chiyoda Corporation

*Jinn H. Wang*, UOP LLC

*David A. Winkworth*, Foster Wheeler Energy Limited

At their first meeting immediately following the stockholders' meeting, the new Board re-elected William M. Boyle as Chair, and Larry G. Hackemesser as Vice-Chair of the Board of Directors. Peter D. Hoffman was elected Treasurer.

During the Technical Advisory Committee business meeting, chaired by Stephen W. Johnston, the Technical Operating Plan for FY 2002 was adopted for approval by the Board of Directors, and the following Technical Committee members were elected:

*Stephen W. Johnston* (Chair), Shell Chemical Company

*Bill G. Ashenart* (Vice-Chair), S & B Engineers and Constructors, Ltd.

*Roger M. Benton*, Heat Transfer Equipment Company

*Jean-Jacques Delorme*, Technip

*Bennat J. Drazner*, Alfa Laval Inc.

*David C. King*, BP p.l.c.

*Robert Lee*, Bechtel Corporation

*Hitoshi Miyamoto*, Ishikawajima-Harima Heavy Industries, Co., Ltd.

*Jack J. Piparia*, BDT Engineering – BD AirFin

*Thomas M. Rudy*, ExxonMobil Research and Engineering Company

At the dinner following the stockholders' meeting, Beyer acknowledged the contributions of the Board of Directors and Technical Committee, especially those of outgoing Board member Albert E. Petras and outgoing Technical Committee member Himanshu M. Joshi. She also recognized the 10th year anniversaries of four HTRI staff members: Elaine M. Jimerson, J. Mike Creagor, Fernando J. Aguirre, and Catherine P. Meyer.

The 40th Annual Meeting of Stockholders will be held at The Grand America Hotel, Salt Lake City, Utah, USA, July 22–26, 2002.

## Technical Committee

**Himanshu M. Joshi**, Unfired Heat Transfer Equipment Team Leader, ExxonMobil Research and Engineering Company, served on the Technical Committee during FY 2001, but resigned due to a change in responsibilities. He continues to participate in the HTRI Crude Oil Fouling Task Force.



Himanshu Joshi

Joshi has 12 years with ExxonMobil Research and Engineering Company as a heat transfer specialist dealing with operation, troubleshooting, and design of heat exchangers, including four years of assignments at refineries. Before joining ExxonMobil Research and Engineering Company, he worked for four years as an Assistant Professor of Mechanical Engineering at Pennsylvania State University, University Park, Pennsylvania, USA. Himanshu M. Joshi holds a Ph.D. in Mechanical Engineering from Pennsylvania State University, University Park, Pennsylvania, USA. He is an active member of API committees on Standards 660, 661 (co-chair) and 662, and the ASME committee on Heat Transfer Education.

**Thomas M. Rudy**, Senior Engineering Associate, Lead Heat Transfer Specialist in unfired heat transfer technology and energy utilization for ExxonMobil Research and Engineering Company, Fairfax, Virginia, USA, is the newest member of the Technical Committee. He has more than 30 years' experience in heat transfer research, equipment design, and troubleshooting (10 years at York Air Conditioning, plus 20 years at ExxonMobil). Rudy has broad experience with all types of heat exchangers and the application of enhanced heat transfer technologies. He also coordinates the Energy and Advanced Furnace R&D programs.



Thomas M. Rudy

Rudy holds a B.S.M.E. from Youngstown State University, Youngstown, Ohio, USA, and an M.E.S. and Ph.D. from Pennsylvania State University, University Park, Pennsylvania, USA. He is a member and Fellow in ASME. Active in HTRI for many years, he served as chair of the HTRI Non-Tubular subcommittee and was a member of HTRI subcommittees on Boiling and Condensation, as well as a member of the Long-Range Planning Committee.

## WE HAVE MOVED!

Please update your records:



**Heat Transfer Research, Inc.  
150 Venture Drive  
College Station, Texas 77845  
USA**

+1-979-690-5050 voice  
+1-979-690-3250 fax  
HTRI@HTRI.net  
www.HTRI.net

## Pass it on!

If you've finished reading this copy of *The Exchanger*, please pass it on to a friend or a co-worker. If you would like to be added to *The Exchanger* mailing list, contact Jo Anne Smith at +1-979-690-5094 voice, +1-979-690-3250 fax, Newsletter@HTRI.net, or www.HTRI.net.

# Corporate News

## 2001 International Meetings

### Barcelona, Spain

October 8-12, 2001

The 2001 European meeting was held at the Hotel Meliá in the capital of Catalunya, Barcelona, Spain, October 8-12, 2001, and attracted 41 registrants. F. J. Aguirre, J. W. Palen, J. W. Holmes, and H. U. Zettler gave presentations, along with guest speaker J. R. Thome of the Swiss Federal Institute of Technology, Lausanne, Switzerland. J. W. Holmes and H. U. Zettler conducted the well-attended *Xist* workshop, with J. W. Palen teaching the *Advanced Thermal Design of Reboilers* short course.

The 2002 European meeting will be held in Lausanne, Switzerland.

### Yokohama, Japan

November 12-15, 2001

The Pan Pacific Hotel in Yokohama, Japan, was the site of the 2001 Asian meeting and workshops. A record 51 persons registered for the events, which included a CC-Japan meeting, called to order by Hitoshi Miyamoto, Ishikawajima-Harima Heavy Industries Co., Ltd., and then conducted by Hiroyuki Ishiyama, Chiyoda Corporation, the new chair of CC-Japan. Corporate and technical presentations were conducted by C. D. Beyer, F. J. Aguirre, J. W. Palen, and H. Uozu. H. Uozu, Manager of the HTRI Asian office, also conducted the *Xist* workshop in Japanese. J. W. Palen presented the *Advanced Thermal Design of Reboilers* short course.

The 2002 Asian meeting is scheduled to be held in Kyoto, Japan.

## Visitors

Two delegations from China have visited our new headquarters in College Station, Texas, USA. On May 30, 2001, we welcomed a group from SINOPEC consisting of Liang Longhu, LPEC/SINOPEC; Chen Jianjuan, Beijing Petrochemical Engineering Company/SINOPEC; Liu Yan, SINOPEC Science & Technology Development Department; Shelley Chui, SINOPEC Shanghai Pharmaceutical Industry Design Institute; and Meng Aiming, Maoming Petrochemical Design Institute.

Professors Zhong-Hu Lin, Ting-Kuan Chen, and Yu-Shan Luo from Xi'an Jiaotong University, and Rui-Chang Yang from Tsinghua University, China, met with some of our staff and toured the Research Facility on June 5, 2001.



# Technical Support

## Worldwide

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Support @HTRI.net  
*(E-mail is preferred)*

+1-979-690-3250 fax  
*(Use "Fine" resolution to ensure clarity)*

<b>ASIA</b>	<b>EUROPE</b>
Support@HTRI.net +81-43-297-0354 fax	Support@HTRI.net +44-(0)1483-685101 fax

Technical support is available from all HTRI offices as well as from representatives in India, Italy, and South Africa.

## Communication Committees

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### CC-Germany

*H. Stiens*, BDT Engineering - Balcke-Dürr  
Energietechnik GmbH

### CC-Holland

*L. J. A. Zoetemeijer*, Shell Global Solutions  
International B.V.

### CC-Houston, TX (USA)

*A. C. Miller*, Kellogg Brown & Root

### CC-Japan

*Hiroyuki Ishiyama*, Chiyoda Corporation

### CC-Korea

*Sung-Gook Roh*, Daelim Industrial Co., Ltd.

### CC-Singapore

*S. W. Kong*, Chemtec Pte. Ltd.

### CC-Tulsa, OK (USA)

*M. D. Kindschi*, Hughes-Anderson Heat  
Exchangers, Inc.

### CC-United Kingdom

*N. R. Smith*, HALLIBURTON KBR, Halliburton  
Brown & Root Limited

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Committee rosters, agendas, meeting minutes, and HTRI responses can be found on the secured area on [www.HTRI.net](http://www.HTRI.net).

# The Exchanger

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**Heat Transfer Research, Inc.  
150 Venture Drive  
College Station, Texas 77845 USA**

**+1-979-690-3250 fax**

# Membership Update

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MAY 2001 THROUGH DECEMBER 2001

## New Members

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**All Nippon Engineering Corporation**  
*Yokohama, Japan*

**D & Z Engineers and Consultants Limited**  
*Stockport, United Kingdom*

**Daekyung Machinery & Engineering Co., Ltd.**  
*Ulsan, Korea*

**E.L. Nickell Co., Inc.**  
*Constantine, Michigan, USA*

**Electric Boat Corporation**  
*Groton, Connecticut, USA*

**Hitachi Ltd. (Thermal & Hydroelectric Systems Division)**  
*Ibaraki, Japan*

**Hudson HEI Pty Ltd.**  
*Bayswater, Victoria, Australia*

**Kure Kogyo Co., Ltd.**  
*Iwakuni, Japan*

**Reliance Engineering Associates (P) Limited**  
*Jamnagar, Gujarat, India*

**ST Architects & Engineers Pte Ltd**  
*Singapore*

## New Participating Affiliates

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**Chiyoda Kosho Co., Ltd.**  
*Yokohama, Japan*

**Dow Química de Colombia S.A.**  
*Cartagena, Colombia*

**Ecodyne UET Schweiz AG**  
*Uster, Switzerland*

**EniChem S.p.A.**  
*Porto Torres (Sassari), Italy*

**P. T. Heat Exchangers Indonesia**  
*Pulau Batam, Indonesia*

**Parsons Infrastructure and Technology Group Inc.**  
*Pasadena, California, USA*

**Sunoco, Inc.**  
*Philadelphia, Pennsylvania, USA*

**Tecnimont Planung und Industrienanlagenbau GmbH**  
*Salzgitter, Germany*

**TonenGeneral Sekiyu K.K.**  
*Kawasaki, Kanagawa, Japan*

**Tosco Corporation**  
*Roxana, Illinois, USA*

**W. E. Smith Hudson Pty Ltd**  
*Coffs Harbour, New South Wales, Australia*

**Union Carbide Corporation**  
*South Charleston, West Virginia, USA*

**AchemAmerica  
2002**

March 18-20, 2002

Mexico City, Mexico

# Membership Update

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## Member Renewals

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Alfa Laval Inc.  
APEMA - Aparelhos, Peças e Máquinas Industriais Ltda.  
Applied Engineering Pte. Ltd.  
Bantrel Inc.  
BDT Engineering - Balcke-Dürr Energietechnik GmbH  
Bharat Heavy Electricals Limited  
Black & Veatch Holding Company  
Bos-Hatten, Inc.  
Britannia Metal Industries (Vic.) Pty Ltd.  
Caterpillar Inc.  
Celanese Ltd.  
China Hualu Engineering Corporation  
Compañía Española de Compensadores S.A. - SACOME  
DELAUNAY et Fils  
Dunn Heat Exchangers  
Dynatherm  
ENPPI  
Equipos Industriales del Golfo, S.A. de C.V.  
EQUITHERM  
Fabryka Aparatury i Urzadzen "FAMET" S.A.  
Flovex S.p.A.  
FUNKE Wärmeaustauscher Apparatebau GmbH  
Gulf Coast Heat Exchangers, L.P.  
Gulf Engineering Company for Heat Exchangers Limited  
Hammco, Inc.  
HEATRAN  
Hitachi, Ltd.  
Hoffman Process, Inc.  
Idemitsu Engineering Co., Ltd.  
IZAR Construcciones Navales, S.A.  
J. W. Williams, Inc.  
Jacobs Engineering Group Inc.  
John Brown Technologies (India) Pvt. Ltd.  
KH-Engineering b.v.  
Koch Industrial Coolers Inc.  
Kvaerner Powergas India Ltd.  
Lurgi AG  
Melter, S.A. de C.V.  
MI-E Machinery Co., Ltd.  
Morton Machine Works, Inc.  
Officine LUIGI RESTA S.p.A.  
OLMI S.p.a.  
Pressure Vessels and Heat Transfer Consultants Ltd.  
PT. Tripatra Engineering  
S & W Heat Exchangers (S) Pte Ltd  
SSE GmbH (SCHELL Software & Engineering)  
Setal Engenharia Construções e Perfurações S.A.  
Spirax-Sarco S.r.l.  
Stamicarbon B.V.  
Syntroleum Corporation  
Tesoro West Coast Company  
Thermal Technologies International  
Titanium Fabrication Corporation  
Tokki Ltd.  
Tsukishima Kikai Co., Ltd.  
Vicoma B.V.  
Worley Limited (Brisbane)

## Current Software

HTRI Xchanger Suite ..	1.0
Xace .....	1.0
Xist .....	1.0
Xtlo .....	1.0
FH .....	1.01
PHE .....	2.0
ST Educational .....	1.1
VIB .....	1.0

### Software distributed by HTRI

EHT ..... 2.1

To order an update for any HTRI computer program, contact Product Distribution at [Orders@HTRI.net](mailto:Orders@HTRI.net)

## Upcoming Events

### AchemAmerica 2002

March 18-20, 2001  
Mexico City, Mexico

### Training Week - Europe

April 22-26, 2002  
Maastricht, The Netherlands

### Xist Workshop

May 7, 2002  
São Paulo, Brazil

### 2002 Annual Meeting of Stockholders

July 22-26, 2002  
Salt Lake City, Utah, USA

### ACHEMA 2003

May 19-24, 2003  
Frankfurt, Germany

### Eurochem 2004

March 30 -April 2, 2004  
NEC  
Birmingham, United Kingdom

For training schedule,  
see page 5

## To Reach Us...

**Heat Transfer Research, Inc.**  
150 Venture Drive  
College Station, Texas 77845 USA

### Worldwide

+1-979-690-5050 voice  
+1-979-690-3250 fax  
[HTRI@HTRI.net](mailto:HTRI@HTRI.net)  
[www.HTRI.net](http://www.HTRI.net)

– **Technical Support** –  
+1-979-690-5055 voice  
+1-979-690-3250 fax  
[Support@HTRI.net](mailto:Support@HTRI.net)

## OFFICES

### Asia

**Heat Transfer Research, Inc.**  
World Business Garden  
Marive East 14F  
Nakase 2-6, Mihamaku  
Chiba 261-7114  
Japan  
  
+81-43-297-0353 voice  
+81-43-297-0354 fax  
[HTRI.Asia@HTRI.net](mailto:HTRI.Asia@HTRI.net)

### Europe

**Heat Transfer Research, Inc.**  
The Surrey Technology Centre  
40 Occam Road  
Guildford, Surrey GU2 7YG  
United Kingdom  
  
+44-(0)1483-685100 voice  
+44-(0)1483-685101 fax  
[HTRI.Europe@HTRI.net](mailto:HTRI.Europe@HTRI.net)

*Technical support is available from all HTRI offices  
as well as from representatives in India, Italy, and South Africa.*

## REPRESENTATIVES

### India

**Alpha Project Services  
Private Limited**  
1-B, Patriot Complex  
Near Ellora Park  
Race Course Circle  
Vadodara - 390 007  
Gujarat, India  
  
+91-265-397316 voice  
+91-265-396407 fax  
[info@alpha-project.com](mailto:info@alpha-project.com)

### Italy

**Sant'Ambrogio Servizi  
Industriali s.r.l.**  
Piazza Carlo Donegani, 8  
20133 Milan  
Italy  
  
+39-02-7060-3113 voice  
+39-02-266-3546 fax  
[santambrogio@santambr.com](mailto:santambrogio@santambr.com)

### Korea

**UIT, Inc.**  
Rm 602 Shinan Bldg. #51-11  
Sungsan-dong, Mapo-ku  
Seoul 121-747  
Korea  
  
+82-2-3142-5091 voice  
+82-2-3142-0374 fax  
[uitinc@uitinc.co.kr](mailto:uitinc@uitinc.co.kr)

### South Africa

**Mass and Heat Transfer  
Technology (Pty) Ltd**  
Technology House  
#6 Panorama Office Estate  
Kudu Street  
Allen's Nek, Roodepoort 1715  
South Africa  
  
+27-11-675-0100 voice  
+27-11-675-0101 fax  
[info@mhtt.co.za](mailto:info@mhtt.co.za)

## AGENT

### Germany

**SSE GmbH (SCHELL Software & Engineering)**  
Birkenweg 3  
D-75228 Ispringen  
Germany  
  
+49-7231-82390 voice  
+49-7231-89309 fax  
[schell@schell-software.de](mailto:schell@schell-software.de)