

Draft Minutes
ASME Subcommittee on Properties of Water and Steam
October 22, 2002

Attendees:

Dick Jacobsen
Dan Friend
Anneke Sengers
Allan Harvey
Jim Bellows
John Gallagher
Sergei Lvov
Bill Parry
Michael Tinkleman

Action items in bold italic.

Agenda approved with request for counsel on session topics by Dick Jacobsen.

Minutes approved.

Steam Tables Book:

- Total sales
 - 559 books
 - 439 professional software
 - 29 student software
- Selling about 90 books, 39 professional software, 2 student per year
- No need to update until new transport properties available
- ASME Press is not supplying latest Errata with purchased books, but buyers are given a Web link where the latest Errata can be downloaded.
- ***Allan will send a letter to Phil DiVietro that before the book is reprinted. We have corrections to be made and must have the opportunity to get them into the book.***
- ***Note minute from last meeting to buy copies—chair should buy new copies from custodial fund per that minute but need not buy the whole number authorized.***

Properties Software

- Discussion of bugs and testing
 - Normal heat balances run
 - Bill has found a problem with heat balances where turbine starts near 4500 psi and 900°F—has not solved problem yet but will investigate quickly
 - Drift problems still appear to be present—lower priority for fixing—to be mentioned in next version of documentation
 - ***Jim to find a FORTRAN compiler (check with Siemens Westinghouse for what they use) and reproduce his steam article graphs with it. This is not critical path for revision. His new compiler should be able to produce DLL files.***
- Longer range issues

- *Need to test student program in Windows XP—Allan will send Bill and Dick copies of latest version and they will test on the XP systems.*
- A full testing strategy is a subject for Gaithersburg 2003

No news on nuclear licensing issue.

Bill and Jim will push their company representatives to PTC-6 to adopt IF97.

US and IAPWS web pages

- *Jim will explore posting minutes on Website after subcommittee has had a chance to look at it.*
- IAPWS has all releases and guidelines on web. IAPWS minutes are only available on the web.

Formulation for General and Scientific Use

- NIST/ASME sold 89 copies (39 with source code) in FY2002.
- A book would await new transport properties—nobody has published a book based on IAPWS-95.

Transport properties

Plan in place in IAPWS with expectation of considerable progress in next year. New data suggest that improved formulations are possible. Heavy water formulations will simply be adjusted for change in temperature scale.

EPRI Report and proposal

Anneke and Allan will do this.

Finances

The custodial account has two purposes:

- Covering annual expenses for IAPWS representation and dues
- Share costs of next revision of industrial steam tables
- *We will prepare a statement of plan for the custodial fund as part of the royalty revenue issue.*

Licensing issues

- Third party licenses (including GE subsidiaries)
- GE site license

Plan:

- *Request status on the Society progress on the issues above through Michael Tinkleman. If ASME's policies still seem to be seriously hindering the ability of industry to make use of the software, then we will frame the issues in writing and request session with Committee on Legal Affairs. Chairman is to manage this issue.*

Revenue issues

- Proposal for entire society all products of committees—Jim to take to BRTD and higher

- 60% to publishing
- 30% to committee
- 10% to CRTD

Before or after cost of generation of salable product?

Is there a specific charge for the intellectual property development?

- Long term funding for projects of subcommittee—Jim to flesh out
 - Annual expenses
 - Annual income and uncertainty
 - Projected US share of revision of steam tables in 2017
- Custodial fund needs to cover these projects. We are not to our goal.

IAPWS Session

Anneke, Jim, and Allan are to pursue nomination of Karol Daucik as IAPWS Honorary Fellow.

IAPWS Gibbs Award ideas: one name was brought up, to be continued in May

Topics for ICPWS 2004:

- Fuel cells using high temperature aqueous solutions—data needs—Lvov, PCAS
- Condensation and crystal growth—Jonas
- Steam chemistry, volatility, organic compounds—Jonas
- PCAS list
- TPWS list

Questions about IAPWS

A questionnaire is to be prepared by an IAPWS committee and circulated to the national committees. We will need to be prepared to respond in May.

Respectfully submitted

James C. Bellows
Secretary