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Aktenzeichen:

Annual Report to the IAPWS Meeting 1995 in Paris

Activities in Steam Research

Development of equations for the backward functions $T=f(p,h)$ and $T=f(p,s)$ for subregion 1 (liquid) for the new Industrial Formulation

- Various equations structures were tested
- All requirements are fulfilled.

Development of equations for vapour pressure $p_s=f(T)$ and saturation Temperature $T_s=f(p)$ for the new Industrial Formulation

- A joint paper including the final results is being prepared together with Prof. Oguchi (Univ. Tokyo) and Prof. Dittmann, Mr. Willkommen (TU Dresden) for the Int. Journal of Thermophysics.

Test of the Candidate Equation for the new Scientific Formulation

- Comparison to IAPWS Skeleton Tables IST 85
- Comparison to experimental data of the International Input (16000 Data)
- Report to IAPWS (August 1995).

Fast interpolation of thermodynamic properties in process modeling

- Development of an algorithm for generating interpolation tables with optimized data density.

Dialog program and subprogram libraries for the calculation of thermodynamic properties

- In order to prepare the adoption of the new Industrial Formulation a dialog program including graphic representation under WINDOWS and OS/2 is being developed.

(H.-J. Kretzschmar)

(I. Stöcker)