

Steam 2020

to 150 GPa and 6000 K

**...just the color figures for those who got the B&W
printed book...**

by D. James Benton

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Forward

It has been twenty-five years since the IAPWS issued an updated scientific formulation for the thermodynamic properties of water. While these have served research and industry well, their range has been limited to 1273 K and 1000 MPa. Experimental data for much higher temperatures and pressures have been available since 1974. The time has come to update these important properties and extend their range up to 6000 K and 150 GPa. Agreement with experimental data and behavior are fair up to 250 GPa. As part of this effort, several deficiencies have also been corrected, including appropriate behavior beneath the vapor dome (exactly three real, positive roots), required by Maxwell's Criterion, as well as proper curvature in the supercritical region. All of the data, spreadsheets, and code are available free online, as well as an Excel AddIn with source code.

*All of the examples contained in this book,
(as well as a lot of free programs) are available at...*

<http://www.dudleybenton.altervista.org/software/index.html>











































































































