



Traditio et Innovatio

Book of Abstracts

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for

Technical Thermodynamics

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INSTITUTE OF TECHNICAL THERMODYNAMICS

PROPERTY LIBRARIES SOFTWARE FOR EXCEL, MATLAB, MATHCAD, DYMOLA, SIMULATIONX, LABVIEW, ENGINEERING EQUATION SOLVER, SMART PHONES, TABLETS, POCKET CALCULATORS, AND ONLINE USE

Hans-Joachim KRETZSCHMAR, Ines STOECKER, Matthias KUNICK, Sebastian HERRMANN, Mariana NICKE

Department of Technical Thermodynamics, Zittau/Goerlitz University of Applied Sciences, 02763 Zittau, Germany. Tel. and Fax: +49 3583 61 1846, e-mail: hj.kretzschmar@hszg.de

The software developed for calculating the thermodynamic and transport properties for working fluids have been designed for very convenient use by engineers who routinely calculate heat cycles, steam or gas turbines, boilers, heat pumps, or other thermal or refrigeration processes.

The following software solutions will be presented: Add-In *FluidEXLGraphics* for Excel[®], Add-On *FluidLAB* for MATLAB[®], Add-On *FluidMAT* for Mathcad[®], Add-On *FluidDYM* for Dymola[®] (Modelica) and SimulationX[®], Add-On *FluidVIEW* for LabVIEW[™], and Add-On *FluidEES* for the Engineering Equation Solver[®].

The program *FluidDIA* was developed for calculating and plotting large-size and camera-ready thermodynamic charts.

Steam tables are available for iPhone, iPad and iPod touch, and for Android smart phones and tablets.

The software for using steam tables and property software on Texas Instruments[®], Hewlett Packard[®], and Casio[®] pocket calculators is particularly interesting for students.

The properties of several working fluids can be calculated at our website: <u>www.thermodynamics-zittau.de</u>.