

Property Libraries for Working Fluids used in Calculating Heat Cycles, Boilers, Turbines, and Refrigeration Processes

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Humid Combustion-Gas Mixtures

Calculation as ideal mixture of the real fluids:

- CO2, N2, Ar, CO, O2, Ne, SO2, Steam and Water

At high pressures and high water contents

- Consideration of Condensation of steam, Dissociation, Pointing

Library LibHuGas

Humid Air

Calculation as ideal mixture of the real fluids:

- Dry air, Water and Steam

At high pressures and high water contents

- Consideration of Condensation of steam, Dissociation, Pointing

Library LibAirWa

Water & Lithium Bromide

for Absorption-Refrigeration Processes

Formulation of Kim and Infante Ferreira

Library LibWaLi

R134a

Formulation of Tillner-Roth

Library LibR134a

Ammonia & Water

for Absorption-Refrigeration and Kalina-Process

Formulation of Tillner-Roth and Friend

Library LibAmWa

Ammonia

Formulation of Tillner-Roth

Library LibNH3

Ideal-Gas Mixtures

Calculation as ideal Mixture of:

- Ar, Air, OH, Ethylene, Ne, NO, He, Propylene, N2, H2O, F2, Propane, O2, SO2, NH3, n-Butane, CO, H2, Methane, Iso-Butane, CO2, H2S, Ethane, Benzene, Methanol

Library LibIdGasMix

Water and Steam

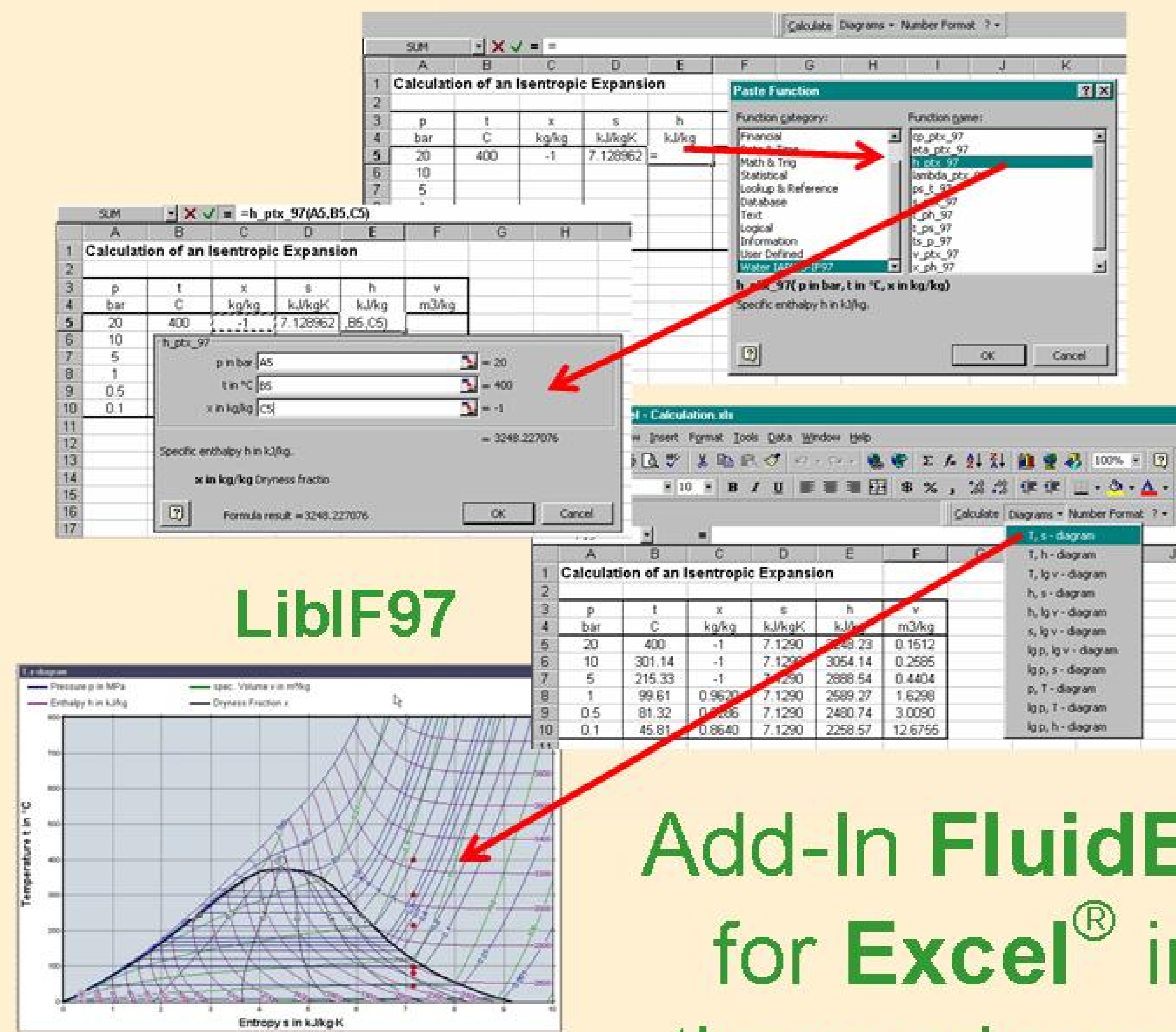
Industrial Formulation

IAPWS-IF97

and supplementary standards

- IAPWS-IF97-S01, - IAPWS-IF97-S03rev, - IAPWS-IF97-S04, - IAPWS-IF97-S05

Library LibIF97



LibIF97

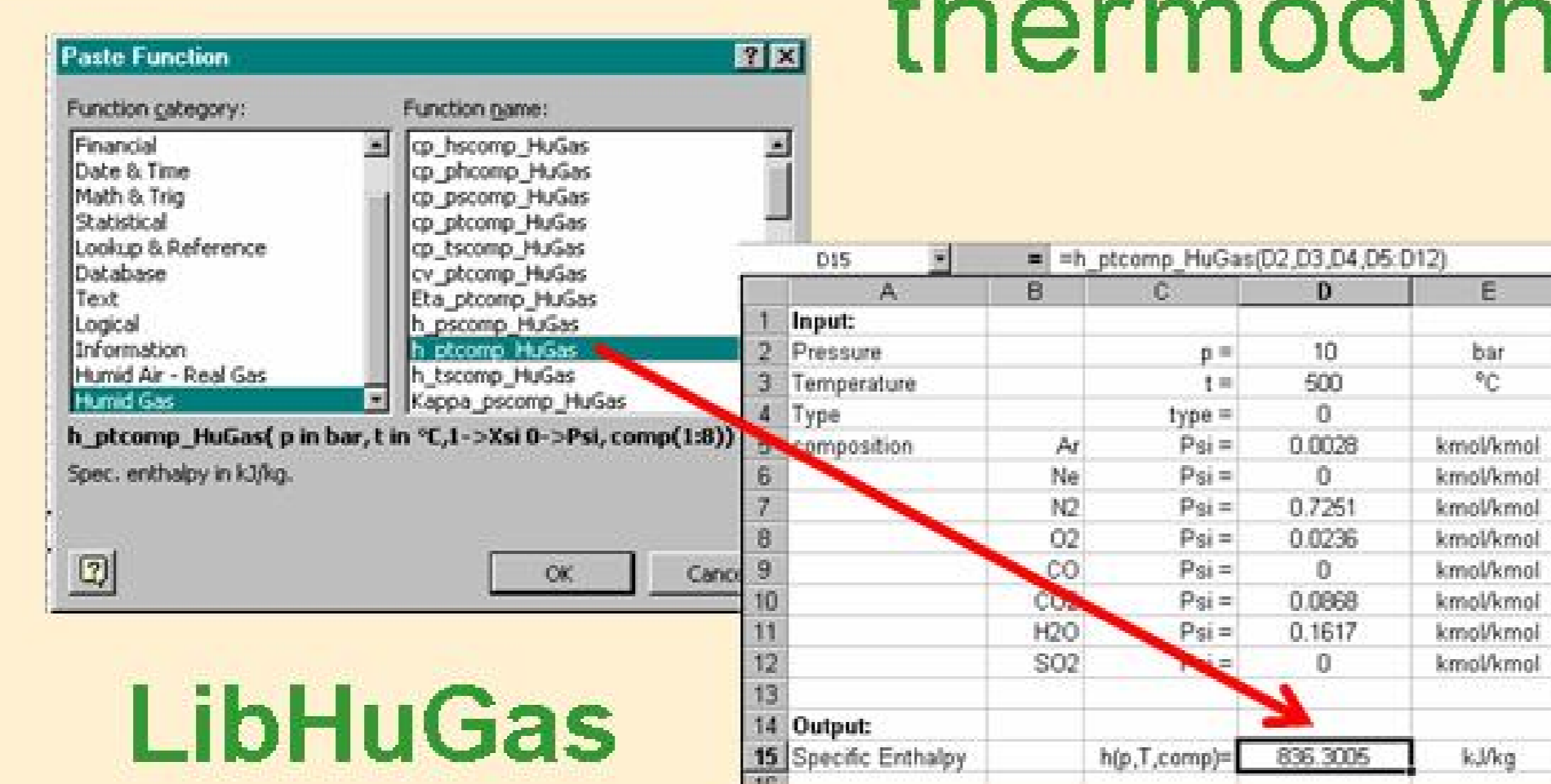
Add-In FluidEXL Graphics for Excel including thermodynamic charts

Carbon Dioxide

for refrigeration technics and CO2-economy

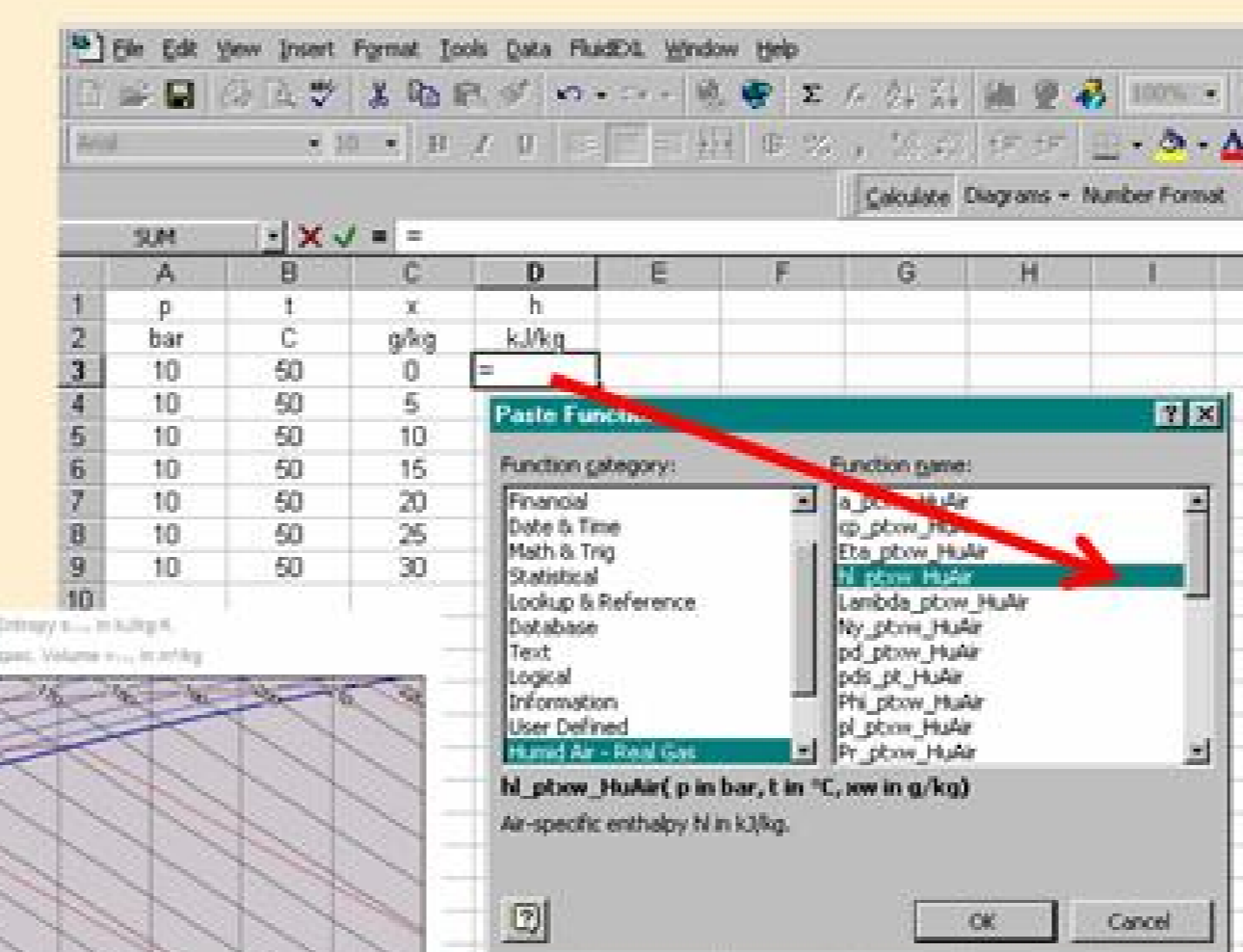
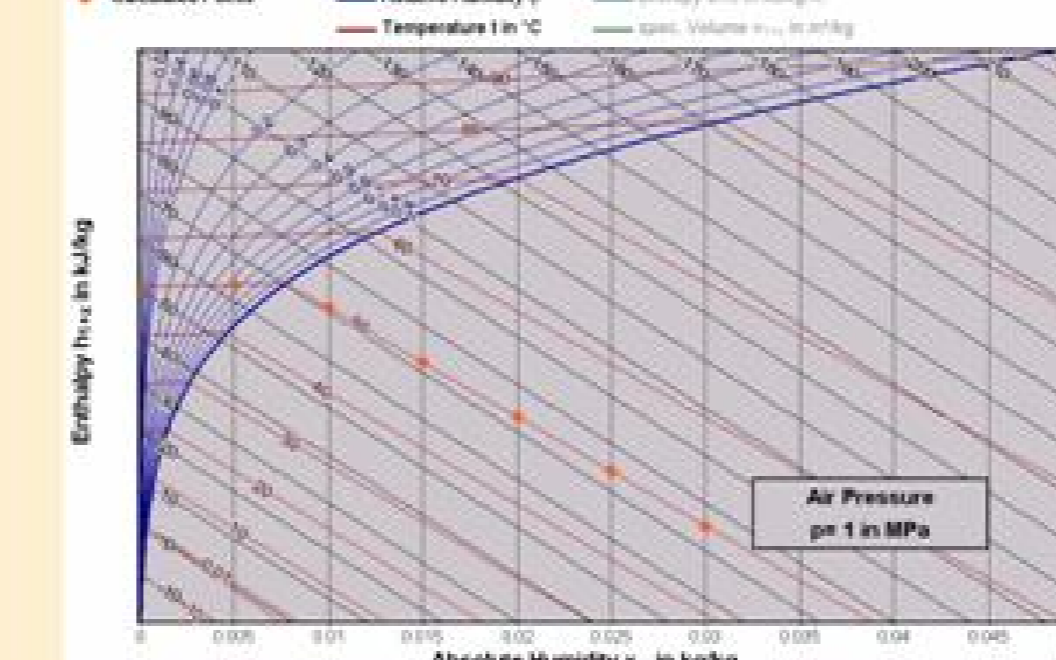
Formulation of Span and Wagner

Library LibCO2

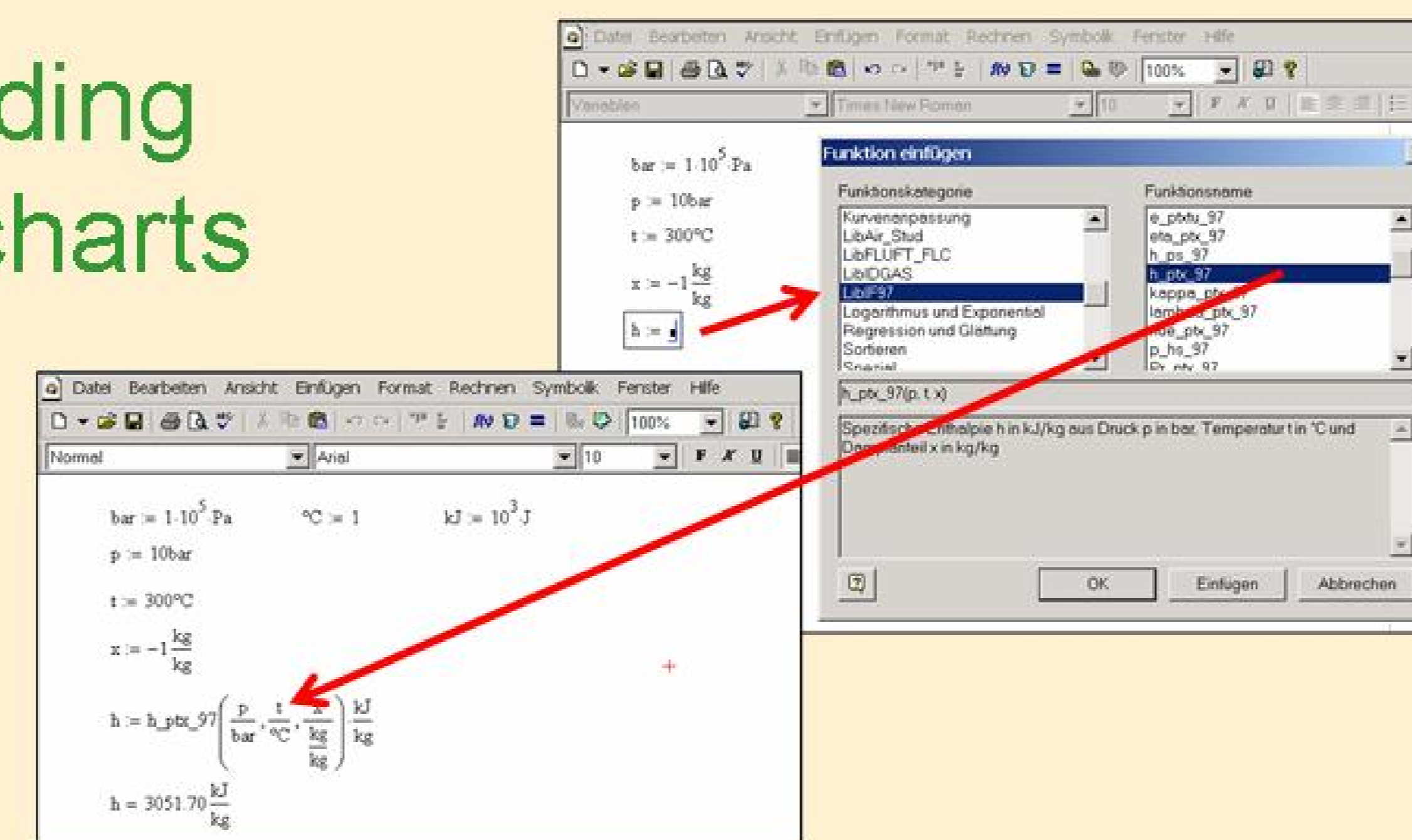


LibHuGas

LibAirWa



FluidMAT for Mathcad



Helium for high temperature reactors

Equation of State of McCarty

Library LibHe



Software for Pocket Calculators



Hydrogen

for Hydrogen Turbines, Fuel Cells and Hydrogen Supply

Equation of State of Younglove

Library LibH2

Iso-Butane and n-Butane

Formulation of Buecker et al.

Library LibButane_Iso, Library LibButane_n

Propane

Formulation of Buecker et al.

Library LibPropane