Přílohy

Funkce pro výpočet tlaku a teploty nasycení převzané z [18]

```c
/*——————————————Saturation  Pressure——————————————*/
    double  wetst_satP(double T){
      double ws_Tc = 647.286    ;/* Critical  Temp. */
      double ws_Pc = 22089000.00  ;/* Critical  Pressure */

      double psat;
      double SUM=0.0;
      double pratio;
      double F;
      double a1 = −7.41924200  ;
      double a2 = 2.97210000E−01;
      double a3 = −1.15528600E−01;
      double a4 = 8.68563500E−03;
      double a5 = 1.09409899E−03;
      double a6 = −4.39993000E−03;
      double a7 = 2.52065800E−03;
      double a8 = −5.21868400E−04;
      double ws_aaa = 0.01  ;
      double ws_TPP = 338.150  ;

      if (T > ws_Tc) T = ws_Tc ;
      F  = ws_aaa*(T − ws_TPP)   ;
      SUM = a1 + F*(a2+ F*(a3+
            F*(a4+ F*(a5+ F*(a6+ F*(a7+ F*a8)))))) ;
      pratio = (ws_Tc/T − 1.0)*SUM;
      psat  = ws_Pc *exp(pratio) ;
      return psat; /*Pa */
    }
```

```c
/*————————————Saturation  Temperature————————————*/
    double wetst_satT(double P, double T){
      double ws_Tc = 647.286   ;/* Critical  Temp. */

      double tsat;
      double dT, dTA,dTM,dP,p1,p2,dPdT;
      double dt = 1.e−4;
      double const TEMP_eps = 1.e−3;
      int i;

      for ( i=0; i<25; ++i){
        if (T > ws_Tc) T = ws_Tc−0.5;

        p1= wetst_satP(T)   ;
        p2= wetst_satP(T+dt) ;
        dPdT = (p2−p1)/dt;

        dP = P − p1 ;

        dT = dP/dPdT   ;

        dTA = fabs(dT);
        T = T + dT;
        if (fabs(dT)<TEMP_eps*T) {
          break;
        }
      }
      tsat = T;
    return tsat; /*K */
    }
```