*//Partícula (Diferenças finitas)*

dCGdt(1)=6\*Deff(1,1)/ep\*(CG(2)-CG(1))/(Dr(1)^2)-REAC(1)

dCAdt(1)=6\*Deff(2,1)/ep\*(CA(2)-CA(1))/(Dr(1)^2)-REAC(1)

dCSdt(1)=6\*Deff(3,1)/ep\*(CS(2)-CS(1))/(Dr(1)^2)+REAC(1)

dCWdt(1)=6\*Deff(4,1)/ep\*(CW(2)-CW(1))/(Dr(1)^2)+REAC(1)

dCEdt(1)=0

CG(N+2)=CG2

CA(N+2)=CA2

CS(N+2)=CS2

CW(N+2)=CW2

for j=2:N;

REAC(j)= (1-ep)/ep\*rhos\*kc\*(ag(j)\*aa(j)-as(j)\*aw(j)/Keq)/((1+KSW\*aw(j))^n)

dCGdt(j)=Deff(1,j)/ep\*((CG(j+1)-2\*CG(j)+CG(j-1))/(((Dr(j-1)+Dr(j))/2)^2)+(1/(sum(Dr(1:j-1))))\*(CG(j+1)-CG(j-1))/((Dr(j-1)+Dr(j))/2))-REAC(j)

dCAdt(j)=Deff(2,j)/ep\*((CA(j+1)-2\*CA(j)+CA(j-1))/(((Dr(j-1)+Dr(j))/2)^2)+(1/(sum(Dr(1:j-1))))\*(CA(j+1)-CA(j-1))/((Dr(j-1)+Dr(j))/2))-REAC(j)

dCSdt(j)=Deff(3,j)/ep\*((CS(j+1)-2\*CS(j)+CS(j-1))/(((Dr(j-1)+Dr(j))/2)^2)+(1/(sum(Dr(1:j-1))))\*(CS(j+1)-CS(j-1))/((Dr(j-1)+Dr(j))/2))+REAC(j)

dCWdt(j)=Deff(4,j)/ep\*((CW(j+1)-2\*CW(j)+CW(j-1))/(((Dr(j-1)+Dr(j))/2)^2)+(1/(sum(Dr(1:j-1))))\*(CW(j+1)-CW(j-1))/((Dr(j-1)+Dr(j))/2))+REAC(j)

dCEdt(j)=0

end

*// Meio – Fase 2*

dCG2dt= -(1-eb)/eb\*3/Rp\*Deff(1,N+1)\*(CG2-CG(N))/(Dr(N)+Dr(N+1))

dCA2dt= -(1-eb)/eb\*3/Rp\*Deff(2,N+1)\*(CA2-CA(N))/(Dr(N)+Dr(N+1))

dCS2dt= -(1-eb)/eb\*3/Rp\*Deff(3,N+1)\*(CS2-CS(N))/(Dr(N)+Dr(N+1))

dCW2dt= -(1-eb)/eb\*3/Rp\*Deff(4,N+1)\*(CW2-CW(N))/(Dr(N)+Dr(N+1))

dCE2dt= 0