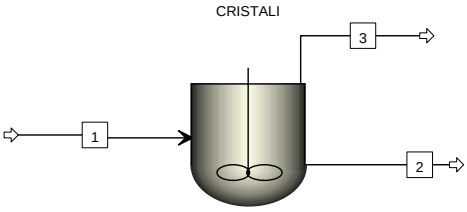
Exemplos de aplicação no Simulador de Processos ASPEN PLUS

VI. Projecto de um cristalizador

Plano de resolução

➔ **Template** — Unidades — **Chemicals metric**

Template — Run Type — **Flowsheet**



➔ Data Menu — Setup — Título CRISTALIZADOR — Stream class **MIXCISLD** (ver descrição)

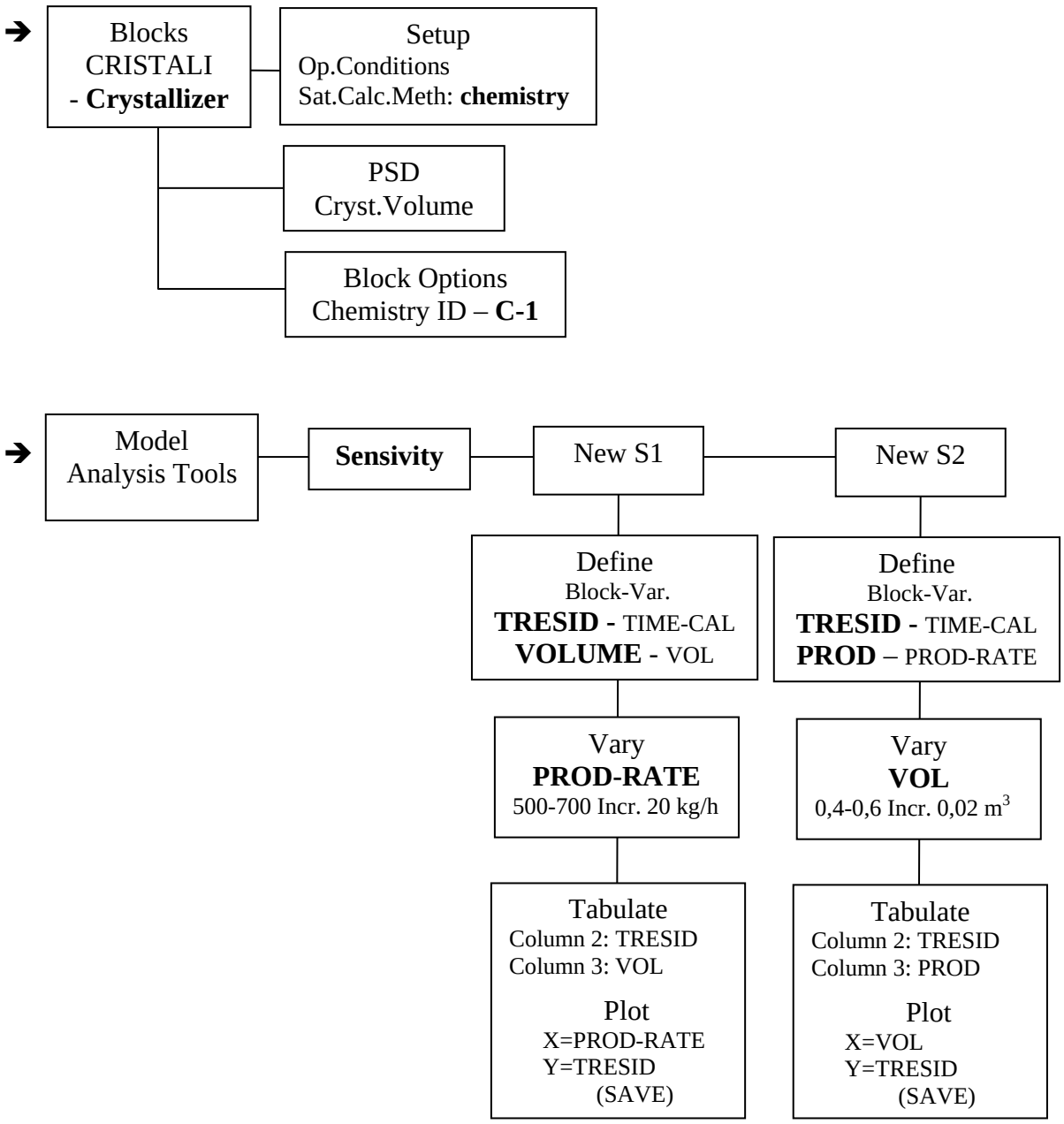
➔ Components — Conven: H2O, Na+, Cl- — **Solid**: NaCl

➔ Properties — Specifications — Método de cálculo: **ELECNRTL** (Property method) (ver descrição)

Properties — Parameters — Electrolyte Pair — aceitar os 4 pares c/ **N→**

➔ Streams — New: 1 – ALIM. — Spec. MIXED - Mole-Frac: 100;12,5;12,5 (Aspen normaliza)

➔ Reactions **Chemistry** — New ID – **C-1** — New ID – 1: **Equilibrium** - <-> New ID – 2: **Salt** – NaCl <-> NA+ + CL-


Blocks
CRISTALI
- Crystallizer
Setup
Op.Conditions
Sat.Calc.Meth: chemistry
PSD
Cryst.Volume
Block Options
Chemistry ID – C-1
Model
Analysis Tools
Sensivity
New S1
New S2
Define
Block-Var.
TRESID - TIME-CAL
VOLUME - VOL
Define
Block-Var.
TRESID - TIME-CAL
PROD – PROD-RATE
Vary
PROD-RATE
500-700 Incr. 20 kg/h
Vary
VOL
0,4-0,6 Incr. 0,02 m3
Tabulate
Column 2: TRESID
Column 3: VOL
Plot
X=PROD-RATE
Y=TRESID
(SAVE)
Tabulate
Column 2: TRESID
Column 3: PROD
Plot
X=VOL
Y=TRESID
(SAVE)