The following conclusions can be withdrawn from this thesis:

Meat Sorption Isotherms

- The addition of NaCl into meat induces important changes on the meat sorption isotherms. Salted meat exhibits sorption isotherms typical for solids containing soluble components: a drop of moisture content around a_w = 0.75 is observed. In dry-cured products drying processes, where the air relative humidities around 75% are used, sorption isotherms must be accurately described below and above a_w = 0.75 with models which consider the drop of moisture content at this point.
- The temperature has an important influence on sorption isotherms. This can be explained satisfactorily using the Clausius-Clayperon equation approach.

- The temperature effect on water content at a_w above 0.90 depends on NaCl content. Therefore, the models used to describe isotherms must take into consideration the temperature and NaCl effect at the same time.

- The predictive Ross's method yields satisfactory results. However, the residual deviation increases at a_w > 0.90 and high salt contents. In this case, the best predictions can be obtained using a modified Mujica model, which includes the salt content and temperature effect.

Effective water diffusivity

The results obtained by using different methods are variable, even though the observed differences are consistent. In order to model the drying process, it is important to use a model that uses the same hypothesis s the ones used for the determination of D_e.

- One should always be aware of the evolution of Bi number during the process of determination of D_e, in order to take into consideration or not the external mass transfer resistance on boundary conditions into the model. Otherwise, by neglecting the external mass transfer resistance, the D_e value obtained can be underestimated in about 30%.

- The mathematical model considering the effect of shrinkage that was used in this thesis did not improve the meat drying curve prediction.

- The effect of the temperature and salt content on D_e and isotherms must be considered in order to model drying kinetics of salted meat.

- Without considering the effect of the bio-chemical changes during meat drying, some simplifications can be done in modelling the pork ham drying: meat can be considered as an isotropic product and ham may be modelled as one whole muscle.

- The initial meat pH should be considered as a classification parameter in order to obtain a more homogeneous drying process.