

FIGURE 5 Differential thermal analysis (DTA) and impedance (1000 Hz – $Z \sin \varphi$) of a 2 p. 100 solution of Cl Na in water during controlled freezing.

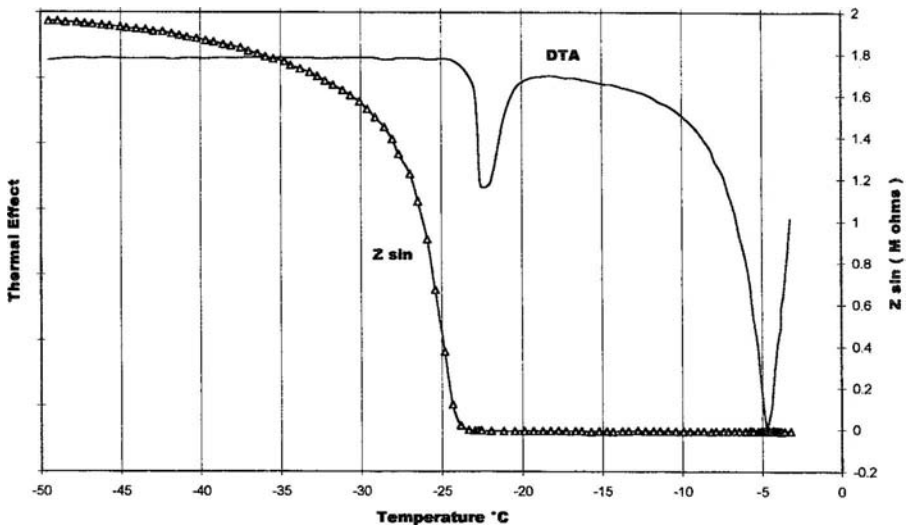


FIGURE 6 Differential thermal analysis (DTA) and impedance (1000 Hz – $Z \sin \varphi$) of a 2 p. 100 solution of Cl Na in water during controlled rewarming.

done at temperatures much lower than those, which could be derived from the DTA curves alone.

The evolution of electric properties is, thus, at least for us, a major parameter in the design and follow-up of a freeze-drying cycle. It can even be used for an automatic control of the whole operation, as we proposed in the past.