



Fig. 1. Images showing the versatility of traditional gypsum used for a) decorative plasterwork at the Alhambra fortress (Granada, IV century) and b) mortars and renders at the Ayyub castle in Calatayud (Zaragoza, IX century); and electron microscopy images of gypsum plasters prepared with gypsum calcined at c) 100°C containing mainly uncalcined gypsum; d) and e) 200°C showing typical gypsum crystals formed after hydration and some uncalcined gypsum, and f) 400°C showing feather-like unhydrated anhydrite II crystals.



Fig. 2. Decorative gypsum plasterwork (yesería) at the Alhambra fortress (Granada, Spain) showing crack formation and material loss, evidencing the need for compatible replacement materials.