

THE PREDICTION OF RUSTY DEPOSITS GENERATION IN ORNAMENTAL GRANITES AFTER APPLICATION

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The exposure of granitic rocks to chemical aggressiveness of weathering agents or of any other nature can induce the change of its original tonality for the yellowish, brownish or reddish tonalities in consequence of the formation of rusty deposits under the form of less or more widespread stains or spots in the apparent dependence of minerals containing iron in its composition. The practical importance of the forecast of the occurrence of such modifications in the surface of the granites and similar stones used as ornamental, in the extent that they are injurious for their good aspect, is the cause for that we conceived two procedures of fast diagnosis, as follows: -Expedite identification of biotites with metastable structures, using X-ray diffraction spectra, and, -Expedite identification of the existence of free iron oxides in the rocky mass in conditions of forming coloured iron complexes or of another minerals containing iron with similar possibility, through an acid test. The remote purpose of these tests is to contribute to define from what point the degradation of biotitic structures can become the cause of the generation of rusty deposits, distinguishing that possibility from the ones when this mineral is not directly responsible for that event, then attributable to the removal of the iron that impregnates the rock or to other minerals containing iron in conditions of being freed.