ROMANIT
Abstract (final)

The project had as initial motivation an important scientific challenge, as complexity and as well as scientific impact, which was meant to test an inter-institutional partnership in such a vast – and, at the same time, little investigated field of research in Romania – that of archaeometry (exact and experimental sciences' interdisciplinary field of examination regarding the clarification of some problems raised by the archaeological practice). The amber was chosen, among other considerations, due to the fact that it was a completely unstudied branch in Romania.

Amber is part of the *prestigious* raw material set, together with gold, silver, bronze (in prehistoric societies), precious stones, or exotic material (such as warm-waters shells). The capability to procure get that kind of materials represented the test, possible for the others to see, of the organization's proficiency (be it tribal or stat-type) to have and maintain long distance contacts; long distance contacts has always been associated with *legends and myths*, being, at the limit, the testimony of divine assistance.

For Romanian archaeology, the evaluation of supply alternative with local amber (from the area of Buzău county) or with imported amber (Baltic) is not possible without the help of experimental sciences. The main phases of the project have been oriented towards (a) reference data aquisition regarding the Baltic amber and the one from Buzău area (two phases), (b) measurements and diagnose on archaeological materials (two phases) and a fundamental technologic re-evaluation (one phase). The artificial ageing experiment represented an interrogation of the consecrated techniques, searching the interpretation keys for analytical chemistry data with statistical tools.

The origin diagnose of amber is a more difficult operation than it is believed, due to the fact that the archaeological artefacts are altered materials, usually compared to those almost unaltered from the mineralogical collections. We reached this conclusion after we analyzed over 1000 different samples, in six analytical techniques, of which three were the main ones (FTIR-transmittance, FTIR-VAR, RAMAN).

The projects provided us an extraordinary gain of experience, the setup of new and improved research procedures.