

Overturning the very concept of restoration, as it was conceived in its traditional meaning, by using experimental technologies and new materials: this is one of the main goals of Cores4n, specialised in the conservation of Cultural Heritage since 1985.

This company, based in the province of Varese, provides its public and private clients the expertise it has gained in 35 years of activities that can meet every conservative need for cultural and artistic heritage, in Italy in particular, but also overseas. Among the many excellent projects, Cores4n can include the cleaning, the desalination and securing of the stone surfaces in the Grotto of the Annunciation in Nazareth, Israel.

“Our intervention philosophy”, says the company’s legal representative, the restorer Salvatore Napoli, “is mainly conservative, with an approach that does not exclude the use of innovative materials and technologies.

In fact, this is our final goal, to be achieved by involving various specialisations, through the convergence of various professions. To the present day restoration can no longer be considered as a purely artisanal intervention: it is a much more complex, technological action.

Often, by using new technologies and suitable materials, it is possible with minimum intervention to obtain far superior conservative results if compared to the ones achieved in the past using traditional methods”. Salvatore Napoli and his staff have been, among the other things, the first in Lombardy to use nano-technologies applied to the conservation of cultural heritage: in 2004-2005 in Gravedona (Como), on the Chiostro di Santa Maria delle Grazie, they carried out the first intervention using the nanophases of calcium hydroxide to consolidate the painted surfaces. The results of this intervention helped to refine the application techniques and were presented at the conference organised by Fast (the Federation of Scientific and Technical Associations in Milano) and then at the first Argentine congress of Archeometry at the Universidad Nacional de Rosario in October 2005.

The new frontier is in continuous research

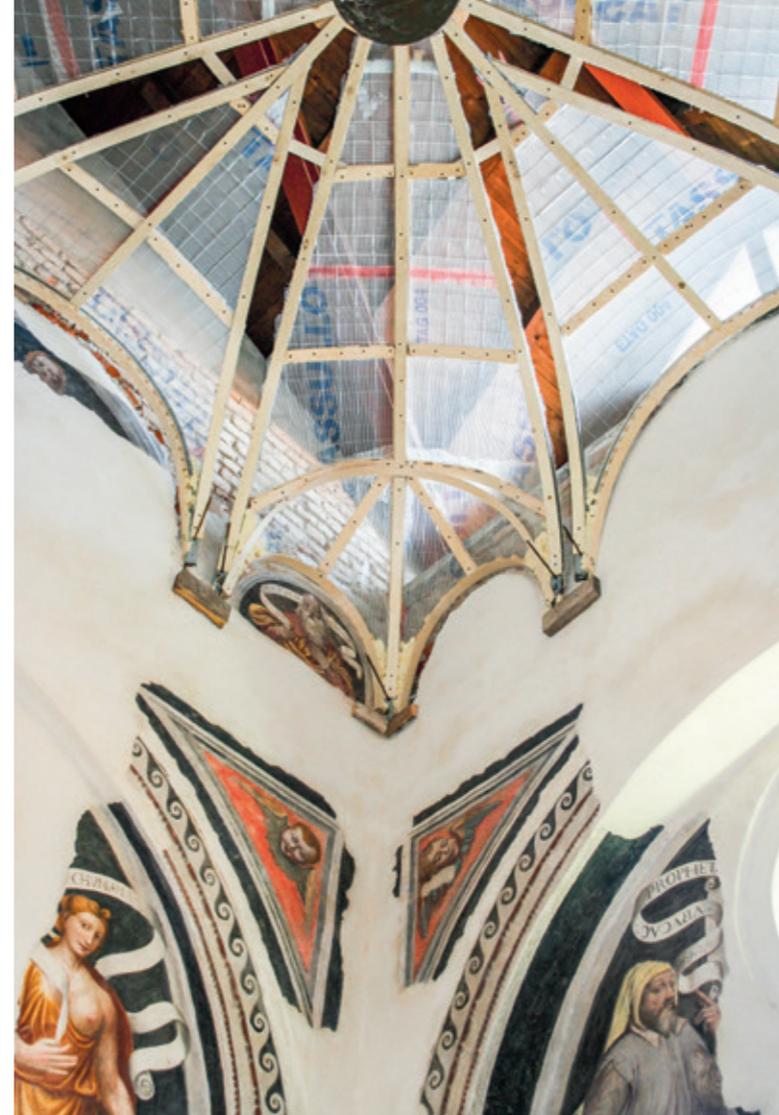
For conservative interventions **Cores4n** bets on innovation



TEMPIETTO DI SAN CONCORDIO - LUCCA

In 2018, Cores4n was chosen by the Veneranda Fabbrica del Duomo di Milano for a conservative intervention on the Gugliotto Amadeo, a spire dated back to the 16th century and situated next to one of the four pillars of

the Tiburio that supports the Guglia Maggiore (the largest spire). In addition to the cleaning, consolidation and plastering of the joints using traditional methods, an innovative silica-based protective treatment applied



EX CHIESA DI SAN GIULIO - CASSANO MAGNAGO (VARESE)

onto the stone surface was also used in this case. The continuous research activity carried out by Cores4n has been embracing biotechnologies for years, through the use of sulphur-reducing bacteria on surfaces. This type of intervention was utilised for first time for the frescoes in the Basilica di San Pietro in Ciel d’Oro in Pavia: “The bacteria metabolise the sulphur and remove it from the layer where it is applied on, allowing a more delicate, selective cleaning”. A bio-nano technique was used on the vault of the second bay of the Basilica’s left aisle. This type of intervention is part of preventive conservation, a branch of restoration that has not really become successful yet. “It is a message that we try to spread, but it is not yet popular. Even though”, says Napoli, “from an economic and heritage conservation point of view, it would provide considerable advantages”. One example? Right now, Cores4n has an active construction site in Lucca (Tuscany) aimed at restoring the Nottolini aqueduct, in particular the Tempietto

di San Concordio. In 2002, an evaluation showed its extremely precarious nature and, 18 years later, due to lack of regard and neglect, “in 2020 we find ourselves facing an extremely complex intervention, with a much higher use of energies and resources if compared to what could have happened before”. Cores4n’s technical staff – comprising the restorer Julian Napoli, the restoration collaborator Serge Cattini and Lavdosh Quazimi and Salvatore Oliverio, specialists in ancient building techniques – are assisted in marketing and quality management by Anne Shari Napoli and Beatrice Calcagnile, and in administration by Ulrike Foltz and Giulia Valtolini. It is a young, highly-specialised team that allows the company to continue to collaborate with public organisation for the restoration of monuments, mural paintings and historical buildings (Cores4n is accredited by the Ministry for Cultural Heritage and Activities) and at the same time to open up to the much-varied private work, in Italy and abroad. ■

The technical skills of the Cores4n team and the partnership with the Aerospace Engineering Department of the Università Alma Mater in Forlì allowed to create from scratch a vault in the Ex Chiesa di San Giulio in Cassano Magnago (Varese), after a stylistic study and a comparison with pre-existing data



DUOMO DI MILANO