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VILA NOVA DE FOZ CÔA – A quarry delivers a stone segment.

POIO SCHIST AND NANOTECHNOLOGY

A grauwacke schist segment formed some 500 million years ago, coming from the quarries of Poio, is at the basis of the constitution of the International Iberian Laboratory of Nanotechnology (ILN), agreed at the Iberian summit of Braga.

The stone, Middle Cambrian age, took shape at the bottom of the extinct Paleo-Tethys Ocean, and goes back all the way to the origins of present Iberia. According to Mariano Gago, minister of Science, Technology and Higher Education, this stone ascertains that "Iberia belongs to Europe" and that there is "a profound identity between Portugal and Spain".

The nine-metre high segment was offered by Gustavo Duarte, the owner and chairman of the quarries of Poio. Creativity comes from the work of Rui Dias, a professor at Évora University and the actual director of the Live Science Centre of Estremoz.

The stone is embedded in a silicon wafer onto which the Portuguese and Spanish nanotechnology have engraved, using fifty-three long nanometre characters, only visible by microscope.

The first steps of nanotechnology occurred in 1959 when physicist Richard Feynman proclaimed in quite a nanometre-long definition: "one-billionth, or 10^{-9}; therefore one nanometre is one-billionth of a meter, atom scaled". Feynman explained how it was possible to type the 24 volumes of *Encyclopedia Britannica* onto the head of a pin and, furthermore, "how to record on nano-scales, how to develop electronic microscopes, how to miniaturize devices and to operate with individual atoms."

Minister Marian Gago, during the constitution of INL, reminded that physicist Richard Feynman added to all the afore-mentioned possibilities "a much more complex and stimulating challenge: to understand and transform biological systems to which information, action, code and movement are attached".

At Braga, the laboratory will have its own installations, to be built on lands ceded by the municipality. This lab will be granted an annual budget of thirty million euros and circa two hundred nanotechnology researchers will relate to it.

Gustave Duarte stated that this institute constitutes "another way for Foz Côa to be present in Europe, besides its rock art carvings and paintings". He also reminded the audience that the quarries of Poio have already provided schist, as proved by their Royal Highnesses Juan Carlos 1st and Sophia's country house (Spain), and museums in France, namely at the University of Nantes, amidst others.

Solicel was founded more than four decades ago, on the site of Poio, near Vila Nova de Foz Côa, on Côa riverbanks. The firm currently hires about forty employees and exports 60 to 70 % of its production of schist, destined to the civil construction and to decoration.

Spain, France, Germany, Poland, Sweden, and for polished schist, Israel, the USA and Sweden, are the main costumers of Solicel, among several other countries.

Formerly, the company's production was almost entirely destined to the agricultural sector as it provided the market with props in slate for vines and orchard, in particular. Yet, at present, those props are being substituted by other wood treated props or other kinds of material. The "Small and Medium -Sized Enterprise (SME)" classification was recently awarded to Solicel by IAPMEI. [1]

Solicel specialises in processing and selling schist and is, at the moment, on an ongoing global conquest as 95% of all its production, made in Portugal, is exported.

1 T.N.: IAPMEI : (Instituto de Apoio às Pequenas e Médias Empresas e à Inovação) a public institute whose mission is to provide some financial and brain support to small and medium sizes businesses, in order to innovate.