

**Pesquisa FAPESP - 09.2002 - Edição 79**

Editorial >

## **The saint explained (scientifically)**

Since its origin, **Pesquisa FAPESP** has been, by definition, a magazine for the popularization of science, written in a strictly journalistic language. In other words, it is in the intrinsic nature of its editorial project to endeavor to translate the results of research and scientific concepts into a common language, intelligible to any well educated reader, regardless of his area of studies. For that very reason, scientific articles frequently serve as the basis for what is published in the magazine, but, traditionally they do not appear on the pages of the magazine in the same way as they were written. This time, though, we have made an exception. And we are not only publishing a scientific article by Professor Edgard Dutra Zanotto, from the Federal University of São Carlos (UFSCar), but have made it the fine cover story of this issue of the magazine.

As it will be seen, there are good reasons for breaking the rule. Firstly, it is a paper that counters any temptations for a mystical interpretation with a strict scientific explanation for the phenomenon of the appearances of stains on glass that evoke sacred images, so it is extremely opportune, when the media are trying to dissect, from the most varied angles, the story of the saint on the glass in Ferraz de Vasconcelos ( A suburb of the city of São Paulo). Just to refresh the reader's memory: in July, a stain was found on the window of a humble dwelling in this small town in Greater São Paulo, recalling an slender Madonna. It resisted all the cleaning products used by the owner of the house, Ana Maria de Jesus Rosa, and every day attracted a multitude of both the faithful and the curious to the Antônio Bernardino Corrêa street.

Secondly, at this moment when a committee of specialists, including physicists and chemists, put together by Paulo Mascarenhas Roxo, the bishop of Mogi das Cruzes, to draw up an official opinion on the phenomenon, it is a decision that has everything to do with **Pesquisa FAPESP** 's proposition: to show how science overlaps our actual daily lives. And, in this case, it has to be pointed out that the specialist, a Ph.D. in glass technology, is simply one of the greatest Brazilian authorities in this field. This was the background that Zanotto brought with him in 1998 and 1999, when he published two articles in the *American Journal of Physics* .

The first of them, commented on in *Science*, dismantles the myth that medieval churches like Notre Dame, as they have stained glass that is thicker at the base than at the top, constitute a proof that glass is viscous. That glass is a viscous liquid, he does not dispute, but he showed that for it to run to the point of reaching the thickness seen in the churches would take millions and millions of years. Based on an analysis of 350 medieval stained glass windows, he concluded that the differences of thickness in question are actually just the result of defects in the manufacture of the glass.

Finally, we have broken, in this issue, our rule for not publishing scientific articles, because this is a case where we are dealing with an implicit contraposition of one view of the world with another, and of one language with a very different one; we thought it would be enriching for debate and for our readers to preserve the internal logic of scientific discourse - which here, by the way, has attained an extraordinary clarity.

This issue brings many other novelties. A few examples: factors that increase and others that reduce the risks of a heart attack for Brazilians, a Brazilian technology for radioactive capsules that treat prostate cancer, or a discussion on ethics in science prompted by the publication of a book on the father of the H-bomb, and the autobiography of Russian Andrei Sakharov. And, to conclude, we are inaugurating a new space for advertising in the magazine: **Pesquisa FAPESP** classified ads, where researchers, institutions and companies can offer their services straight to the right public.