



Backward Roland Garros

It looks like a tennis ball on a clay court, but it is actually a microstructure that can be used as a basis for producing refractory ceramics. When viewed under an electron microscope, what appears to be a sphere is actually a cavity. The matrix of the material is composed of magnesium oxide, with the precipitation of the mineral spinel. The image, obtained during a study aimed at producing sustainable alternatives to aggregates containing chromium—which is toxic to humans and the environment in soluble form—won an award at the international conference of the American Ceramic Society in October.

Image submitted by materials engineer **Otávio Henrique Borges**, a doctoral student at the Federal University of São Carlos (UFSCar), obtained in partnership with his advisor, Victor Carlos Pandolfelli