

## LEON CATHEDRAL: GOTHIC SPLENDOUR AND MODERN DECAY

T. Palomar, M. Garcia-Heras, M.A. Villegas

The Cathedral of Leon (Spain) has the most important ensemble of stained glass windows not only in Spain but also in Europe. The Cathedral has over 1800 m<sup>2</sup> of stained glass windows which are distributed all around the building in three different levels. Most of the glasses are dated from the 14<sup>th</sup> and 15<sup>th</sup> century A.D. although the oldest ones are from the 13<sup>th</sup> century A.D. The most outstanding stained glasses are three big rose windows (8 m in diameter each one) in frontal and lateral façades and the 31 large windows (12 m in height) in the central nave with 83 rose windows over them. There are also numerous medium windows, spandrels and triangles.

The Gothic Cathedral is located in downtown Leon. The synergic effect of rainwater and gaseous pollutants (CO<sub>2</sub>, SO<sub>2</sub>, NO<sub>x</sub>) was the principal reason of decay on external surfaces of glasses. Fortunately, in the 90's the traffic around the building was banned, but much of the damage was done. The pathologies observed were pits, cracks and deposits. The main consequence for the stained glass windows was the lost of transparency and, therefore, the partial lost of the iconographic code.