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**Synthesis and characterization of  
hybrid congo red from chloro-  
functionalized silsesquioxanes**

Ahmet GÜLTEK

İnönü University, Department of Chemistry,  
Malatya, 44280, TURKEY

e-mail: agultek@inonu.edu.tr

 [Keywords](#)  
 [Authors](#)



[chem@tubitak.gov.tr](mailto:chem@tubitak.gov.tr)

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**Abstract:** Congo red dye has been bonded to the functionalized octameric polyhedral silsesquioxanes (POSS), which were prepared by hydrolytic condensation of chloro-functionalized organosilicon monomers in the presence of a catalyst. The binding reaction of congo red to the POSS with chloro groups was achieved via the addition of the congo red via NaCl elimination. The structures of POSS with chloro side groups provided an attractive site for binding congo red that not only retains some of its characteristic properties, but also has exceptional hybrid properties possessed by the silica. The dye characteristics of the material were determined by means of UV spectroscopy