

Report: 5ª Escuela de Síntesis de Materiales: Procesos sol-gel

The 5ª Escuela de Síntesis de Materiales: Procesos sol-gel was held 27 september-7 october 2011. This School held every 2 years in Buenos Aires since 2003 is co-organized by the Universities of Buenos Aires (UBA) and San Martín (UNSAM), Argentina.

45 students from different Latin American countries attended the 48 hours of lectures. 33 students (6 from Brasil, 3 from Venezuela, 1 from Colombia, Bolivia, Uruguay, Peru and Mexico, and 19 from different regions of Argentina) were selected from more than 60 applications for carrying out the experimental work in 30 hours dedicated to the synthesis and characterization of sol-gel materials. In the lab, the students worked in groups of 3 members supervised by a tutor (a professor or a trained lab assistant), and emphasis is made in the control of chemical and processing variables. A workshop with poster presentations of their PhD project was held on Sunday with active participation of all professors and assistants.

The basic lectures were given by the school organizers (Alberto Regazzoni, Galo Soler-Illia, Matías Jobbagy, Roberto Candal and Sara Aldabe Bilmes) covering the fundamentals of sol-gel: hydrolysis-condensation reactions, precursors, colloids, gelation, thermal treatment, biomaterials and characterization techniques. Special topics were covered by invited professors: Felix Requejo (U. La Plata) and Iris Torriani, (UNICAMP) introduced synchrotron techniques; Clément Sanchez (College de France) presented the synthesis of hybrid materials and their applications, and Marc Anderson (U. Wisconsin-Madison) discussed the scaling and environmental applications of sol gel materials.

All students succeed the final evaluation and, as in previous schools, after two weeks in close relationship a network of young researchers has been established. The organizing committee thanks to Centro Argentino Brasileño de Nanociencias y Nanotecnología (CABNN), Fundación Argentina de Nanotecnología (FAN), Asociación Argentina de Investigación Físicoquímica (AAIFQ) and the International Sol-Gel Society (ISGS) for their support.

www.qi.fcen.uba.ar/sol-gel2011

<http://www.youtube.com/watch?v=kL84qlqojS4&feature=relmfu>

