



## Local Organizer's Report

### **3<sup>rd</sup> Annual Meeting of the Marie Curie Research Training Programme „AQUACHEM” (MRTN-CT-2003-503864)**

*Place and date of the meeting:* Debrecen, Hungary, 12-14 January, 2007

*Local organizer:* Prof. Ferenc Joó (Institute of Physical Chemistry, University of Debrecen, Debrecen 10, P.O.Box 7, H-4010 Hungary; [fjo@delphin.unideb.hu](mailto:fjo@delphin.unideb.hu))

*Venue:* The meeting was held in the Postás Üdülő in Debrecen, a hotel/resort house providing accommodation, meals and conference facilities under the same roof. This was extremely important to cope with the tight schedule of the conference. For those who requested, an airport transfer service was available ensuring smooth and fast travel from Budapest Ferihegy Airport direct to the hotel and back.

*Attendance:* The meeting was attended by participants from all the *eleven* collaborating laboratories of the Network. Total number of the participants was 44, including 20 early stage researchers (ESR) and experienced researchers (ER) in addition to 18 senior scientists of the participating laboratories. In addition, *six* students of the Debrecen school joined the activities of the meeting (and also provided help to make any arrangements).

*Scientific contributions:* Altogether 23 oral presentations were given, most of them by the ER-s and ESR-s of the Network. A small poster section of *seven* posters was organized for those young participants who just very recently joined one of the laboratories in the programme and for those former ER-s and ESR-s who have already finished their training. The abstracts of all contributions were collected and edited before the meeting, and the abstract book was handed over to each participant upon arrival.

#### *Summary of the organizational and scientific activities*

The meeting was started by an overview of the Network's activities since the last meeting in Almeria, Spain, December 2006, given by L. Gonsalvi, Network Manager, with special emphasis on the requirements of the financial and scientific report for 2006. It was concluded, that the Network is on time with the recruitment of ER-s and ESR-s, and their training is on the right track. The number of joint papers and conference presentations increased substantially in 2006 and several more are in print or in the submission phase. On the other hand, the young scientists should be encouraged and helped in attending more conferences, and making secondments. Checking the status of the deliverables, one field which requires more attention is the field of (solar) photochemistry, although some progress

has also been made recently in this direction. It was also mentioned, that senior participants of the MC RTN make efforts to get additional support for the research within the Network from national and international sources (the latter include e.g. COST, INTAS).

The oral presentations and poster contributions showed a wide variety of results, such as: the synthesis of water-soluble dendrimers and their transition metal complexes(LCC); synthesis of new phosphine- and N-heterocyclic carbene-type ligands and their complexes (UAL, LCC, ICCOM, UD); the catalytic activity of the mentioned new complexes in hydrogenation and isomerization reactions (LCC, UAL, UD, ICCOM); the study of the complex equilibria of higher oxidation state complexes and their use in catalytic oxidations (HUJI, LCC, ICCOM); synthesis and characterization of selective oxometalate sensors (YoK); the catalytic activation of C-F and C-H bonds (YoK); photochemical properties of new ruthenium(II)-complexes (UAL); new water-soluble scorpionate complexes of rhenium and iron (IST); Fe-catalyzed hydroxylations and epoxidations by peroxide (UEN); redox reactions of biologically active ruthenium complexes (UEN); the effect of solvents on proton transfer processes to and from metal hydrides (INEOS); theoretical investigations on metal complex-catalyzed reactions in aqueous media (UAB, UD); and electrochemical properties of Ru-cyclopentadienyl complexes together with the speciation of the resulting mixture by on line electrochemistry/ESI-MS studies. All these presentations mirrored the general high quality of research in the participating laboratories and the devotion of the ESR-s and ER-s to their training.

*Other activities:* Participants received a warm welcome from the organizers at the informal reception on the evening of January 12, while the long working day of January 13 was finished by a conference dinner in a relaxed and most enjoyable atmosphere.

Debrecen, Hungary, January 22, 2007.

Prof. Ferenc Joó  
University of Debrecen  
local organizer