Version xxx: 22 September 2006 (still may be changing!)

# Programme of the 3<sup>rd</sup> RMC Conference (RMC-3) **'THE FIRST 18 YEARS OF REVERSE MONTE CARLO MODELLING'** (26-)28-30 September, 2006 Hotel Normafa, Budapest, Hungary

#### 26 September (Tuesday)

Reverse Monte Carlo tutorial, organised by L. Pusztai (Hotel Normafa)

We meet in the Hotel lobby at 1:00 pm.

*Lecture(s) - practical introduction (the method, algorithm details, possible applications)* (L. Pusztai)

## 27 September (Wednesday)

- 09:00 Morning session: *How to run RMC? Demonstration of several applications (basic RMCA; molecular systems; the new C++ code)* (L. Pusztai and Co.)
- 13:00 Lunch (in the Hotel)
- 14:30 Afternoon session: *Disorder in crystals: modelling total scattering data using RMC methods* (under the supervision of Matt Tucker (ISIS, UK))

## 28 September (Thursday)

- 08:50 Opening and introduction (L. Pusztai, RISSPO HAS, Budapest)
- 09:00 Pál JÓVÁRI (RISSPO HAS, Hungary): On the structure of some covalent glasses: neutron and X-ray diffraction and EXAFS + RMC modelling
- 09:45 Toshio KAWAHARA (University of Osaka, Japan): Possibility of Reverse Monte Carlo Modelling of Amorphous Si Deposited on the Reactive Ion Etched Si Substrate
- 10:15 Erzsébet SVÁB (RISPPO HAS, Hungary): Network structure of multi-component borosilicate waste glasses from high Q neutron diffraction study and RMC modelling
- 10:45 Coffee (and first glimpses at the POSTERS!)
- 11:15 Takashi ARAI (National Defence Academy, Japan) Structural changes of c/a-Ge<sub>2</sub>Sb<sub>2</sub>Te<sub>5</sub> due to RMC analysis with EXAFS and XRD data
- 11:45 Sándor KUGLER (TU Budapest, Hungary): Amorphous selenium molecular dynamics vs. RMC (... exact title to be announced...)
- 12:15 János LÁBÁR (RITPM HAS, Budapest): Electron diffraction: a possible open field for structural modelling?

13:00 Lunch

- 14:30 Matt TUCKER (ISIS, UK): Determining disorder in crystalline materials using RMCprofile
- 15:00 Martin DOVE (Cambridge Univ., UK): Understanding substitutional disorder in perovskites
- 15:30 Dave KEEN (ISIS, UK): Local structural disorder associated with negative thermal expansion and piezoelectricity
- 16:00 Coffee with POSTERS (Posters by Shuta TAHARA (JAP), László TEMLEITNER (HU), Ivan KABAN (D), Joanna ROPKA (CH), Ádám LŐRINCZI (RO), Viviana CRISTIGLIO (F), Szilvia POTHOCZKI (HU), Thor WIKFELDT (S), Yixin CHEN (UK), Vicky FITZGERALD (UK), Katsumi HAGITA (JAP), Gergely TÓTH (HU), Helen THOMPSON (UK), Margit FÁBIÁN (HU), ...)
- 17:00 Andrew GOODWIN (University of Cambridge, UK): Lattice and spin dynamics from diffraction
- 17:30 Simon BILLINGE (Michigan State University,USA) Real Space Rietveld and other PDF profile refinement strategies

## 29 September (Friday)

- 09:00 Gergely TÓTH (Eötvös University, Hungary): Interactions from structural data: historical overview of simulation assisted methods
- 09:30 Alan SOPER (ISIS, UK): Empirical potential structure refinement: where it came from, what it does, and why
- 10:15 Sylvia McLAIN (ISIS, UK): The structure of amino acids in aqueous solution: A combined neutron diffraction and empirical potential structure refinement study

## 10:45 Coffee

- 11:15 Ildikó HARSÁNYI (RISSPO HAS, Hungary) The structure of aqueous Rb and Cs salt solutions by RMC modelling
- 11:45 Barbara Gabrys (University of Oxford, UK): On the structure of liquid phosphorous tribromide (PBr<sub>3</sub>)
- 12:15 László TEMLEITNER (RISSPO HAS, Hungary): The structure of fluid phases of carbon dioxide (CO<sub>2</sub>)

#### 13:00 Lunch

- 14.30 László PUSZTAI (RISSPO HAS, Hungary): Water structure: do polarised neutrons help?
- 15:00 Yukinobu KAWAKITA (Kyushu University, Japan) RMC analysis of the local structure of eutectic liquid alloys between noble metals and IVb elements
- 15:30 Coffee with POSTERS
- 16:30 Discussion (proceedings, RMC-4 (!!))

17:30 ... free slots ... (or maybe a FREE EVENING ???)

### **30 September** (Saturday)

- 09:00 Orsolya GEREBEN (HU): RMCt modelling the dynamic sructure factor via RMC methods
- 09:45 Frederick BERNARDIN (MIT, USA): ...title to be announced later..
- 10:15 Per ZETTERSTRÖM (CSIC, Spain): A study of nano-porous carbon using neutron diffraction and RMC

#### 10:45 Coffee

- 11:15 Sascha Gruner (TU Chemnitz, Germany) Determination of partial structure factors in multi-component alloys
- 11:45 ... (possible) free slot ....
- 12:15 Robert McGREEVY (ISIS, UK): RMC: past, present, future (Conference summary)

13:00 CLOSING and lunch