structure of γ-brass CuZn compressed to 90 GPa. The structural distortion of the γ-brass of CuZn in the pressure range up to 90 GPa, using synchrotron X-ray diffraction was detected. In the diffraction patterns above 40 GPa, the splitting of the bcc reflections, as well as appearance of weak superstructure reflections were observed. Splitting of the main reflections is explained by a trigonal distortion of bcc, while the additional reflections are due to a positional modulation along the trigonal axis.

H. Euchner (France) reported on the vibrational properties of the CMA $Zn_{11}Mg_2$. This phase containing 39 atoms in the unit cell and is a cubic packing of 'mini Bergman' clusters linked by Zn octahedra. *Ab initio* simulations, conducted with the programme package VASP, PHONON, as well as recent inelastic neutron scattering experiments showed exceptional vibrational properties in the low-energy range of the generalized vibrational density of states of $Zn_{11}Mg_2$. J. Wolny (Poland) analysed the Samson phase in beta Al–Mg, being one of the most complex intermetallic structures containing 1168 atoms, distributed over 1832 atomic positions. The lattice constant of the Samson structure was shown to be a gigantic one with $a = 2.8242(1)$ nm. It was reported that at a temperature of 214°C, the structure undergoes phase transformation to the rhombohedral (space group R3m, no. 160) with $a = 1.9968(1)$ nm, $c = 4.89114(8)$ nm. T. Yamada (Japan) reported diffuse scattering in single grained Zn_6Sc (1/1 approximant) located at the position of supertlattice reflections above 157 K. The ordering transition was shown to take place at temperature around 80 K. The nature of phase transformation was interpreted to be very similar to that of Cu–Zn beta brass. A. K. Shukla (France) studied quantum size effects in the thin metallic films (Ag–Bi) grown on either the 5-fold surface of icosahedral Al–Cu–Fe QC and the (100) surface of the $Al_{13}Co_4$ periodic approximant respectively. K. Nishimoto (Japan) reported low-temperature TEM observations of Cd_6M (M = Sr, Pr, Nd and Sm) approximants. The occurrence of the phase transition at low temperature is explained by orientational ordering of the tetrahedron at the centre of Tsai type cluster. J. Ivkov (Ljubljana) studied the Hall Effect of Y–(Al–Ni–Co) and $Al_{13}Co_4$ decagonal approximants in the temperature interval from 90 to 370 K. In these intermetallics the Hall coefficient R_H exhibits well-defined anisotropy and weak temperature dependence. The anisotropy in both crystalline and quasicrystalline materials was shown to originate from the specific stacked-layer structure and the chemical decoration of the lattice. T. P. Yadav (India) studied the stability of nanocrystalline vacancy ordered phases in Al–Ni–Cu alloy by high energy ball milling. Vacancy ordered phases are a class of complex intermetallics derived from the various degrees of ordering of the vacancies along the body diagonal, causing distortion of the parent lattice. The synthesis of nanospinel was demonstrated by annealing the nano-vacancy ordered phase in air.

In the concluding session Marc de Boissieu, the chairman of the Aperiodic Commission, IUCr mentioned that there was a proposal for merging both the Aperiodic and Quasicrystal (ICQ) conference series. It was pointed out that this issue would be further discussed in the forthcoming International Conference on Quasicrystals (ICQ11) at Sappro, Japan in June 2010. In this context, Y. Ishii, the Chairman of ICQ11 extended invitations to all the delegates together with a special request to scientists from the fields of incommensurate and commensurate-modulated crystals and polytypes. It was announced that the next Aperiodic conference (Aperiodic '12) would be organized under the chairmanship of R. L. Wither in Australia in 2012. Prior to that there would be an International Congress of Crystallography (IUCr) in 2011 in Spain where a symposium on aperiodic crystals would be organized. It was also mentioned that the proceedings of Aperiodic '09, containing the selected papers after peer review will be published in the *Journal of Physics Conference Series* (http:/www.iop.org/EJ/conf).

1. Gomez, C. P. *et al.*, *Inorg. Chem.*, 2008, **47**, 8258.
2. Zeng *et al.*, *Nature*, 2004, **428**, 157.
3. Fournée, V., Banthés-Labrousse, M.-G. and Dubois, J.-M., *Solid State Phenomena*, 2008, **138**, 407.

N. K. Mukhopadhyay, Centre of Advanced Study, Department of Metallurgical Engineering, Institute of Technology, Banaras Hindu University, Varanasi 221 005, India.
e-mail: mukho.met@itbhu.ac.in

Infosys Prize 2009

The Infosys Science Foundation has announced winners of its Infosys Prize 2009. The foundation was established in February 2009 to 'promote world-class research in natural and social sciences in India'. Aim of the prize is to recognize Indian scientists for their 'outstanding contributions to research'. The prize is given in five categories: Engineering sciences, Life sciences, Mathematical sciences, Physical sciences and Social sciences. The winners will receive the award from the Prime Minister on 4 January 2010 in New Delhi.

According to the Infosys press release, the winners of the prize in various categories are: Life sciences: K. VijayRaghavan (National Centre for Biological sciences, Bangalore); Mathematical sciences: Ashoke Sen (Harish Chandra Research Institute, Allahabad); Physical sciences: Thanu Padmanabhan (Inter-University Centre for Astronomy and Astrophysics, Pune); Social sciences: Upinder Singh (University of Delhi, Delhi) and Abhijit Vinayak Banerjee (Massachusetts Institute of Technology, Boston). No prize was given in the Engineering sciences category this year.

The prize consisting of a citation, a medal and cash award of Rs 50 lakhs is one of the largest monetary prizes in India. The prize will be given annually to 'elevate the prestige of scientific research in India and to inspire young Indians to pursue a career in scientific research'. For further details, visit: http://www.infosys-science-foundation.com/laureates.html

Richa Malhotra