

its crisis by selling more refined products, the tendency is good for chemists too. Things are now better even for biologists, although the genetic engineering industry is not yet expecting a huge market and a tremendous cashflow. The only difficulty is in the domain of earth sciences: the prices of oil and minerals are still very low, and the training of geologists will probably have to be modified in order that people could be used in civil engineering.

As the people not registered at Association Bernard Gregory do not seem to stay indefinitely unemployed after their thesis, one may raise the question of the utility of this Association. It has probably served as an example and encouraged people to leave the academic institutions to go out into the big world. It still helps some students to get jobs and some companies to find people; this business is as limited as that of the stock exchange: it does nothing, except help the laymen to get into contact with the market. Another point to be raised is that, because its own activity depends on the science job market, the Association has some rough knowledge of it; this may be used by the administration, when it wants to know what exists before taking a decision.

## **BIPM** Bureau International des Poids et Mesures **Editor** Metrologia and the publications of BIPM

The BIPM is looking for an experienced Ph.D. level physicist to edit the journal of scientific metrology 'Metrologia' and the scientific publications of the BIPM. The post will become available in October 1989 owing to the retirement of the present editor Dr. R.P. Hudson. A wide knowledge of physics is required as well as an interest in editing and preparing scientific manuscripts for publication. Since many of the BIPM publications are bilingual in English and French, a good knowledge of French is required in addition to the primary linguistic requirement of English.

The BIPM (see BIPM Profile, *J. Phys. E* 18 (1985) 368-371) is an international organization situated on the outskirts of Paris and offers good conditions of employment similar to those of other international organizations based in Paris.

Applications should include a curriculum vitae and the names of two referees and should be sent by 15 May to: M. le Directeur, BIPM, Pavillon de Breteuil, F-92312 SEVRES Cedex, France.

Further information on this post may be obtained from Dr. R.P. Hudson at the BIPM, Tel. +33 1 45077070.

Even more, one may wonder if it will be useful to generalise, and to amplify this activity all over the old Europe, to help the new one. It will probably be necessary at least to inform potential employers about the variety of training in the different countries. Otherwise,

how will people be able to recruit outside their traditional boundaries. That may be the main task for the next few years, and could be the subject of another article here, in ten years, ... or more.

#### REFERENCE

[1] *Europhysics News*, 6 (1975) 6, 1.

## **High $T_c$ at Villa Gualino**

**D. Baeriswyl and R. Monnier, Zurich**

Thanks to the efforts of Tullio Regge and Mario Rasetti a new member has recently been added to the family of famous science meeting places in Italy. After Erice, Varenna and Trieste the Institute for Scientific Interchange (ISI), located on a hill overlooking the city of Torino, discretely started its activities some four years ago. With the support of the authorities of the region of Piemonte and of the local industry, a large number of meetings on various topics in physics, biology and social sciences have been held at Villa Gualino, the dreamhouse of a finance magnate of the twenties.

From the outset it was clear to the initiators that the building with over thirty guest-rooms and sizeable office space should be more than just a place of brief encounters. Advantage should be taken of the facilities, to bring people together for longer periods during which they would not only exchange ideas but actively collaborate on a given problem. A first step in the direction of such an "Advanced Study Institute" was taken last fall with a three months long pro-

gramme on "High-Temperature Superconductivity: Concepts, Models and Methods", coordinated by D. Baeriswyl, D.K. Campbell, S. Lovesey and R. Zeyher. It was attended by over eighty theoretical physicists from fifteen countries, with an average stay per participant of the order of three weeks.

Each of the visitors had his own desk, but little time was devoted to lonely studies. Intensive discussions turned around the various proposed mechanisms like phonon-mediated strong-coupling superconductivity, Bose-Einstein condensation of local pairs, pairing involving excitons or charge fluctuations or more exotic proposals like the binding of holes immersed in a strongly fluctuating spin liquid. Usually, a debate would be initiated during the seminar talk of a participant or of an experimentalist joining the group for a couple of days to confront the theoreticians with the real world.

It is impossible to measure precisely the outcome of this exciting time at Villa Gualino, as several new research colla-

borations were started which will produce visible results only in the future. Many important questions were sharpened and several misunderstandings were eliminated. In addition, the setting was ideal for learning and practising new methods and algorithms. One highlight was the Quantum Monte Carlo method for which important advances have been recently reported, in particular by the Trieste group. These developments were intensively discussed during a short workshop on "Interacting Electrons in Reduced Dimensions" at the beginning of October which generated much interest.

Clearly, such a programme represents an enormous financial commitment with no immediate return. The willingness of the governments of the city of Torino and of the region of Piemonte to support this effort on a long term basis (the programme is due to continue for another three to four months in 1989) demonstrates an usual far-sightedness and trust, trust in ISI and the goals the founders have set for it.