Groupement Ampère

(Atomes et molécules par études radioélectriques)

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General Secretary,
Groupement Ampère

The "Groupement Ampère" came into being in rather special circumstances and it is difficult to fix an exact date of birth. The first Ampère colloquium, held in Paris in 1952, had been preceded by discussions in Rennes and Paris. Subsequent development, or at least some aspects of it, was not foreseen at all by the founders (including the author). The reason for the spontaneous development was that the Groupement fulfilled a need.

The Groupement consists essentially of scientists engaged in research. For a long time it remained a private informal gathering and only acquired statutes and became a legal association when it had to. Its members work either individually or in laboratories or research units: there are both senior and junior (post-graduate student) members, from various countries. Their common interest is radiofrequency and Hertzian spectroscopy, and the Groupement has evolved in parallel with developments in this field.

The XVIth COLLOQUE AMPÈRE, having as subject "Magnetic Resonances and Related Phenomena", will be held from 1 to 5 September 1970 in Bucharest, Rumania. Professor I. Ursu is President of the Organizing Committee. Authors of papers are requested to present, especially, contributions concerned with problems in physics. It is important that the authors dealing with applications in chemistry and biology limit themselves to new techniques and important basic research.

The sessions will be devoted to:

1) **invited papers;**
2) **short communications to be presented in formal sessions;**
3) **communications to be discussed in "Round Table" sessions.**

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History

The idea of setting up such a Groupement emerged just after the Second World War, when European countries became conscious of how far they had fallen behind in many scientific fields, and particularly in the field of radiofrequencies.

Their needs were in the first instance technical, and certain Directors of Laboratories in France decided to set up a group for the exchange of information. This made it possible to take a common stand towards the Government, on the initiative of Professor R. Freymann, the present President of the Groupement Ampère. He was strongly backed by scientists based in Paris, particularly Professor Yves Rocard, Director of the Physics Laboratory of the Ecole Normale Supérieure and colleagues such as Alfred Kastler and Pierre Grivet, both members of the Groupement Ampère "Comité Restreint". However, it soon emerged that the Groupement would not survive the critical period which had justified its creation if its aims remained purely technical and administrative. So the mutual exchange of information was soon extended to take in small colloquia where experienced scientists, young research workers and students could meet.

The theme of these meetings was the entire field of Hertzian techniques, from microwaves applied to certain specific fields like dielectric dispersion, Hertzian molecular spectra and most of all magnetic resonance. The new techniques of optical excitation of magnetic resonances, first initiated by Kastler and his group, were discussed right from the first colloquium. However, the incredibly rapid development of various lines of research led to a progressive concentration of scientific objectives: at present the principal field of interest remains the purely physical aspects of magnetic resonances.

The diverse origins had a great influence on subsequent development and activities took two main forms:

— an annual colloquium with publication of its proceedings;
— publication of a "Bulletin d'Informations Mutuelles" four times a year.

The number of Laboratories involved grew exponentially from a dozen to about four hundred. In 1952, the Groupement was purely French, but the following year it extended its membership to Laboratories in other French speaking countries, then to other Western European countries (in 1954 and 1955), and then to Laboratories in the rest of Europe (1956). This process continued up to saturation point as manifested at Pisa 1960, Eindhoven 1962 and Ljubljana 1966.

An interesting aspect is undoubtedly the fact that the research workers involved made it a habit to attend all the colloquia, which resulted not only in many scientific contacts but also in many personal friendships.

Although these regular colloquia were essentially European, many colleagues from distant countries such as India, Japan, Australia, and from Africa and Latin America also started to attend. In 1968, a large delegation came from the USSR, while China had already sent a group to the Bordeaux meeting of 1963. The USA with 60 member Laboratories now has the third largest representation inside the Groupement.

Predominantly European

The Groupement Ampère is European in the sense that its meetings (colloquia, committees and recently summer schools) are always held in Europe and that its regular participants live either in Europe itself or very near it. However, it is not a closed group, since many non-European scientists attend our meetings and pay regular membership fees. Our preoccupation to create quasi-permanent contacts in fact means that efforts are concentrated on European scientists who can meet at frequent intervals (and who are only a few hours, or not many dollars worth of tickets, away).

Present Objectives

The growing size of the colloquia is a problem. There have been several rather artificial attempts to restrict the field but developments in the subject itself have helped: dielectric dispersion has become less important than magnetic resonances, Hertzian molecular spectroscopy has caught up infrared and Raman spectroscopy and these are incorporated in colloquia on molecular spectroscopy. The high resolution in nuclear magnetic resonance has become the domain of chemists while atomic spectroscopy is covered by a Division of the European Physical Society with its own annual colloquium. The remaining field — physical aspects of magnetic resonances — remains sufficiently vast. A two-year interval between colloquia was decided on in 1966 and, on a Rumanian initiative, an Ampère Summer School takes place in the intervening years (the first session being held in Mangalia, Rumania, in September 1969).

The activities of the Groupement Ampère, coordinated with those of international and national organizations in this field, will benefit further from the coordination which the European Physical Society is making possible.

Organization

The Statutes of the Groupement set out the organizational structure in detail. Its main bodies are:

1) the "Assemblée Générale" which meets at Ampère colloquia and is the supreme body;
b) the "Comité Ampère", which decides on the general policy of the Groupement, on publications, organizations of colloquia and summer schools (usually meeting once a year);
3) the "Comité Restreint" which permanently runs the Groupement;
4) the Secretariat, consisting of the President and General Secretary, which is the executive body.

The President of the Groupement, Professor R. Freymann (Paris), is also its founder. The author has been General Secretary since 1956. The "Comité Ampère" is made up of founder members and organizers of past and future colloquia and has a constantly changing membership. The "Comité" can also co-opt members, such as eminent participants of a colloquium. In its first ten years, the "Comité" was overwhelmingly French, but since then it has become truly European.

The Secretariat of the Groupement is housed in the "Ecole de Physique" of the Geneva University (32 Boulevard d'Yvoy, CH-1211 Geneva 4). Its funds, modest but sufficient, are almost entirely the generous donation of the "Département de l'Instruction Publique de la République et Canton de Genève" (annual subsidy of about 5000 Swiss francs and a part-time secretary).

Publications

1) The Ampère Bulletin was originally brought out in roneo-typed form by Professor Freymann between 1952 and 1956. Since then the author has been responsible for its publication as a quarterly journal, adding up to about 150 pages a year. It fulfils, as far as possible, the fundamental aim of exchange of information, i.e. news of other laboratories, publications and meetings. It also has some advertisement pages linked to the aims of the Groupement.
2) Reports on Ampère Colloquia have been edited in printed form since the second Grenoble colloquium in 1953. They were originally published by various French journals (between 1953 and 1955) then by the Geneva "Archives des Sciences" (1956 to 1961) and since then by the North-Holland Publishing Company. They contain verbatim transcriptions of the main contributions, as well as short communications and reports on "Round Table" discussions. Their size varies from 400 to 1200 pages.

The Groupement has cooperated in the setting up of the European Physical Society, which achieves for physics as a whole what the Ampère Group has been attempting to achieve in the last fifteen years in the field of radiofrequencies. From the outset, the Groupement was keen to take an active part in the European Physical Society and the links will become increasingly close in coming years.

Outlook for the Future

The Groupement Ampère's sole objective has been to serve radiofrequency research in Europe. As long as this mission has some meaning, there will be no need for an artificial effort to ensure either its development or its survival. However, it is equally clear that insofar as European scientific cooperation develops, above all thanks to the European Physical Society, to the point were bodies are created which can better fulfil its aims, there would no longer be any raison d'être for its continuation, and its eventual dissolution could be considered.

Professor R. Freymann a founder member and the present President of the Groupement Ampère.

Classified Advertisements

Europhysics News has agreed to publish "classified advertisements" drawing attention to posts vacant, publications and group activities of the physics communities under the following conditions:

Only standard type can be used and the material must be presented as "information" rather than as "display". For posts vacant, the heading should refer to the centre concerned and the text explain the nature of the post, with a conclusion stating the means by which application can be made.

Bearing in mind the very wide circulation enjoyed by Europhysics News the following rates have been established: 20 Sw. frs per single column line, minimum length 7 lines; 45 Sw.frs per double column line, minimum length 10 lines. Box numbers cannot be accepted. No Agency commission is given for insertions below 20 column lines equivalent; 15 % commission above. Copy must reach the Main Secretariat at least 21 days before the first of the month carrying the date of publication. The editor will make every effort to ensure accurate reproduction but can accept no responsibility for the information published.

University of Leuven (Louvain), Belgium

The Department of Physics has a vacancy in its Solid State Division for a senior physicist (Ph.D.), to head the research team "Pulsed magnetic fields". Activities include development as well as fundamental research in the megagauss range. The department has excellent new laboratories, workshop, low temperature and other facilities, including a departmental time sharing computer, and is located on a new campus, 3 km from the ancient university town of Leuven and 25 km from Brussels.

Experience on magnetic and solid state research (preferably in the megagauss range) is required. Rank and salary, depending on experience, are according to State-levels. Further information may be obtained from Professor L. Van Gerven, Physics Department, Naamsestraat 61, Leuven. Applications, including curriculum vitae, and names of two or three references, should be sent to the same address.

Europhysics Conferences

At the meeting of the Executive Committee of the European Physical Society which was held in Geneva on 4 November 1969 it was agreed that the EPS would sponsor a series of specialized meetings under the general title of **Europhysics Conferences** similar in character to the famous Gordon Conferences held in the USA.

The Gordon Conferences were started in 1931 by Professor Neil Gordon of Johns Hopkins University. They were for a time called the Gibson Island Conferences, but the name was later changed to honour their founder.

Each meeting lasts a week and consists of a three hour session each morning with evening sessions Monday to Thursday. The afternoons are available for recreation, reading or participation in discussion groups. It is the hope that each conference will extend the frontiers of science by fostering the free and informal exchange of ideas amongst specialists in the field. One feature of the Gordon Conferences that has contributed to their success and popularity is the ban on attributed publication. This is aimed at protecting individual rights and promoting free discussion at the conference. Although any participant may publish a paper presented at a Gordon Conference, he may not say that the paper was presented at or based upon the discussion at the Conference. The conferences are always held in sites of "pleasant isolation" conducive to relaxed but intensive discussion. Each conference caters for about 100 participants.

Similar meetings have, of course, been held in Europe. For instance, there exists a series of Euchem conferences and there have been a number of physics conferences of this general pattern. In 1968, for example, there were conferences at Chester (UK) on "Time Dependent Correlations in Liquids", at Morgins (Switzerland) on "Magnetic Impurities in Metals" and at Aviemore (UK) on "Acousto-Electric Phenomena in Semiconductors".

The Conference Committee of the European Physical Society will be responsible for the overall co-ordination of this series of meetings, although proposals for meetings on particular topics will be made to the Conference Committee by the Specialized Divisions of the EPS.

G.H. Stafford
Chairman, Conference Committee