

GKB and Euromech

Most scientists and engineers associate the name of George Batchelor first with the founding and firm editorship of this Journal, then perhaps with the authorship of two widely influential books. Over the years, a considerable number have, as visitors to the Department in Cambridge which he founded and headed for twenty years, had the opportunity for scientific discussion with him, but a much larger number have had their work greatly influenced by the activities of 'Euromech', in which GKB was heavily involved from the start in 1964.

The first Euromech Colloquium (Berlin 1965, Chairman Rudolf Wille, 'Boundary layers and jets along highly curved walls – Coanda effect') arose out of ideas of the late Dietrich Küchemann and GKB for the promotion and strengthening, through small specialist meetings, of research in mechanics in Europe. Individual countries in Europe might often not have either the number or range of workers in fluid or solid mechanics to run effective conferences, especially on specialised topics, but taken as a whole there was interest, diversity and quality in mechanics research in Europe on a scale to need and justify a series of 'Euromech Colloquia', a name (emulated by less happy titles such as 'Eurovisc', 'Eurohyp' and many others) which has stuck from the start. These colloquia were seen at first, especially by Küchemann, as on a very small and specialised scale, extremely informal, and consisting largely of round-table discussions involving perhaps twenty participants. Such was the success of the first colloquia, and such the pressure for invitation to attend, that very quickly a somewhat more formal structure was needed, both for the planning of the series as a whole and for the running of individual colloquia – and thus the European Mechanics Committee (EMC) was born in 1966. GKB took the Chair and was re-elected without a break until 1987 when he firmly and finally declined the Committee's invitation to continue. Dietrich Küchemann was Secretary of the EMC until his untimely death in 1976, when Hans Fernholz (who had been involved from the start and was the administrative secretary of Euromech 1) took over this role and held it until the end of 1989. The first members of the EMC were Wladek Fiszdon, Dietrich Küchemann, Robert Legendre, Rudolf Wille and GKB.

Many readers of *JFM* will have attended a Euromech Colloquium, and will recognize their (intended!) features as different from those of most other regular conference series. The emphasis was, and remains, on informal discussion of up-to-date and probably incomplete work, with every opportunity for participation by young scientists. Participation was to be by invitation of the Chairman of the colloquium concerned, with a typical participation of 50 and a recommended maximum of 70 (exceeded, usually with much less success, on a few occasions by over-enthusiastic Chairmen, on one occasion with an attendance as high as 150). No parallel sessions were to be allowed, ten minutes of each half-hour presentation set aside for discussion, maximum opportunity given throughout the meeting for informal exchange of views, and costs held to an absolute minimum by use, wherever possible, of inexpensive dormitories and catering. Information about these colloquia was disseminated in announcements in major journals, and to assist Chairmen in the task of finding appropriate qualified and effective participants, a network of Euromech Correspondents was set up, with about 35 in solid, 35 in fluid mechanics at any time. The duties of these Correspondents, working in all countries in Eastern and Western Europe, included the recommendation of participants for particular colloquia and the identification of topics, chairmen and locations for future colloquia.

From the outset it was intended that scientists from Eastern Europe should be fully involved in Euromech – in the EMC, in attendance at colloquia, and in the running of colloquia in their own countries. For many years Wladek Fiszdon played a vital role on the Committee in seeing that good proposals came up from Eastern Europe, and over the years many successful colloquia have been held in Poland, Hungary, Czechoslovakia, Bulgaria and Romania. How to deal with the scientific strengths of the USSR without having the domination of most colloquia by Soviet scientists was a long-standing problem, and one only recently solved. Inevitably it was felt by some that Euromech discriminated against the USSR, and with some truth, the USSR certainly not coming within the intended category of a European country generally too small in isolation to run effective specialist meetings. This also led to some sustained friction with IUTAM, to which the USSR adheres strongly. GKB was always concerned that these problems should be seen in perspective, and resolved as the essentially complementary nature of Euromech and IUTAM meetings became established. No-one was more delighted than he when, in the past couple of years, great developments began to take place in Euromech relations with the USSR, after twenty years in which most Euromech colloquia had no Soviet participants and none more than two. In quick succession, five Soviet scientists took part in Euromech 228 (Exeter 1987, 'Boundary layer instability and transition'), Juri Engelbrecht joined the EMC at first by co-option and then as a regular member, the first Soviet Euromech was held (240, Tallinn, 'Nonlinear waves in active media', September 1988), the EMC had its annual meeting for the first time in the USSR (Tallinn, April 1989) and further Soviet Euromech colloquia were announced (256, Tallinn 1989; 271, Kiev 1990). At the same time, substantial balanced Soviet participation has become a feature of many Euromech colloquia.

Planning of Euromech colloquia is done by the EMC at its annual meeting, where proposals are considered in a style long established by GKB and which would amaze anyone unfamiliar with GKB's thoroughness. Two full days are given over to an agenda not obviously needing more than one, and each proposal discussed from every possible angle – the significance of the topic, its breadth, its coherence, the personality of the chairman and his ability to attract enough and the right scientists to his meeting, his adherence to the spirit of Euromech colloquia, the likely administrative and social arrangements, the balance of topics between fluid and solid mechanics, and scientific-political issues. Titles and scope statements are minutely analysed, and often rewritten for negotiation with the proposers, all with a seriousness and fairness that invariably leaves new committee members at first astonished and then admiring. More than one excellent (French) lunch has been declined by GKB, acting for the committee, in the face of the needs of the agenda. Yet one comes away from such meetings have learned some science, so extensive are these discussions over the whole field of mechanics, and even more about how to handle a multinational committee to produce a common aim – of strengthening mechanics research in Europe – from members whose national interests and structures differ widely, one from another. Nor should I leave the reader with the impression that the deliberations of the EMC are all conducted in grim earnest; far from it. GKB set a very congenial tone for the meetings and discussions, was warmly appreciative of the hospitality provided wherever we met and would always turn in a witty and polished vote of thanks at dinners whether thoroughly informal (on a patio, for example) or less so (in Luleå, for example, GKB was, without prior notice, given the Freedom of the City).

Naturally, GKB's contributions to Euromech work did not end when he

relinquished the chair. He has enthusiastically supported a recent idea (building on the running, via the EMC, of larger-scale 'Turbulence Conferences' in 1986 and 1988) of a series of European Fluid/Solid Mechanics Conferences, the First EFMC to be held in Cambridge, the First ESMC in Munich, both in September 1991. These are seen as broad conferences with as much informality and emphasis on up-to-date work as possible, but aiming also to educate participants in areas outside their speciality through carefully planned mini-symposia, invited surveys and contributed talks and posters. EFMC and ESMC Committees have been set up to manage the scientific programmes for these meetings, and GKB was the unanimous choice of the EMC for Chairman of the EFMC. Disliking the term Sub-committee, GKB headed off the danger of having to chair such a body with the suggestion (approved by the members and, from correspondence I have received, widely by frequenters of Euromech colloquia) that the time had come, after 25 years and with 250 successful meetings in the bag, for the EMC to give itself the title European Mechanics Council, with three Committees (Turbulence Conference, EFMC, ESMC) reporting to it.

Euromech is one of several uniquely successful contributions which GKB has made to his scientific love. How did he do it all? His own reply, to a questioner once in DAMTP, was 'Work; work; and more work'; necessary probably, sufficient certainly not. Personal qualities are vital too, whose delineation here would embarrass him, but which are obvious to those who have had the privilege of working with GKB on the development of Euromech. On behalf of them and the many thousands who have taken part in Euromech activities, I wish George a Very Happy 70th Birthday, and many more productive years at the forefront of fluid mechanics research.

DAVID G. CRIGHTON
Chairman, European Mechanics Council