

THE BRITISH VACUUM COUNCIL (BVC)

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The British Vacuum Council (BVC), which came into existence in 1959 under its original name Joint British Committee for Vacuum Science and Technology (JBCVST), is the body which was established by a number of professional, scientific and technological institutions (Institute of Metals, Institution of Electrical Engineers, Institute of Physics, the Faraday Division of the Royal Society of Chemistry) to co-ordinate meetings and similar activities of members interested in vacuum in the several Institutions. It is moreover, the British national vacuum body affiliated to the International Union for Vacuum Science, Technique and Applications and the official channel through which vacuum workers in the United Kingdom can collaborate with their colleagues overseas.

The need for a national body to serve the interests of the scientists and engineers engaged in expanding the field of vacuum science and technology in the UK became apparent in 1959. Because of the inter-disciplinary nature of the subject no single Professional Institution could be expected to give a complete service to all vacuum workers. Accordingly discussions took place between representatives of nine Institutions culminating in a meeting in June 1959 at which it was agreed not to recommend the formation of a new autonomous vacuum society but, instead, to set up a joint committee composed of representatives of the participating Institutions. It was further agreed that the Institute of Physics would provide a permanent secretariat for the Committee, which would be paid for from a small annual subscription levied on each participating Institution. The JBCVST held its first meeting in October 1959 at which Dr. R. W. Sillars (representative of the Institute of Physics) was elected as the first Chairman with Dr. H. R. Lang (Secretary of the Institute of Physics) being appointed Secretary.

Further examination of the role of the JBCVST after several years' operation led to the conclusion that it should continue but with the formulation of a proper Constitution to regularise its existence. As part of this reform the title was changed on 10 April 1969 to The British Vacuum Council. On 18th November 1985, it was accepted by the UK Charity Commissioners, giving the BVC charitable status (Reg No: 292999).

The original members of the BVC were: The Institute of Physics and the Physical Society, The Institution of Electrical Engineers, The Royal Society of Chemistry, The Institute of Metals, The Institute of Petroleum and The Institute of Chemical Engineers. Owing to changes in the member Institutes and their own members' interests, only the Institute of Physics and the Faraday Division of the Royal Society of Chemistry now remain as members of the BVC. The Institute of Metals withdrew in 1993. Membership of the BVC is open to other UK societies and associations having an interest in the field of vacuum science and technology. Some smaller groups such as the RGA Users' Group, UKSAF and SSBII maintain links with the Council.

The aims and objects of the BVC are to promote and advance the understanding and teaching of vacuum science, technology and its applications by:

- co-ordinating and promoting conferences, seminars and courses and publications in these fields,
- encouraging excellence amongst postgraduate and other young research workers in these fields, and
- representing the UK on the International Union for Vacuum Science, Technique and Applications.

The Charity Commissioners have to receive in writing and to approve any changes in these aims and objects or constitution.

In 2001, an amended and updated Constitution was adopted and accepted by the Charity Commission for England and Wales but with the same charitable aims and objectives.

The BVC is a founder member of IUVSTA and has been actively involved with the IUVSTA since its formation. The BVC hosted the 4th IUVSTA IVC in Manchester in 1968 and the 14th IVC in Birmingham in 1998 and has also hosted 12 ECM's. Professor J. Yarwood helped draft the resolution establishing the IOVST which later became IUVSTA. He served as Councillor and was for many years Recording Secretary of the IUVSTA Executive Council. Mr. A. S. D. Barrett was Secretary General of the IOVST and IUVSTA Councillor. Professor L. Holland served as President of the Union during the period 1977-1980. Professor J. S. Colligon was Recording Secretary from 1986-1989 and Secretary General from 1989-1998. Professor D. P. Woodruff was Scientific Director from 1992-1995 and President from 1998-2001. Dr R. J. Reid has been Secretary General during the period 2004-2013.

Councillors have included Professors C. J. Todd, D. A. King, D. P. Woodruff, J. H. Leck and R. W. Joyner, Drs G. J. Davies, R. J. Reid, D. E. Sykes and A. Shard. The BVC is normally represented on all the Scientific Divisions of the IUVSTA and plays a full and active part in its work, including organising Conferences and Workshops.

In 1970 the Council introduced into its calendar a special lecture, the BVC Annual Address, to be given annually by an outstanding worker in vacuum science or an allied subject. The first lecture was given by Professor L. Holland. In the early 1970's this annual lecture was presented at a special meeting held in London and hosted by one of the constituent bodies. Later, the format was changed so that the lecture was presented at several venues within the United Kingdom. More recently, it has been given at a suitable major national or international conference held in the UK.

In 1971 the Council, at the invitation of the Directors of Pergamon Press, took over editorial responsibility for the journal "Vacuum". The duties handed down included the appointment of the Editor and his editorial advisors. The council has been fortunate in its selection of editors. The first was Professor J. Yarwood from 1971 to 1980, who was followed on retirement by Professor J. S. Colligon (1981-1989) and, subsequently, Dr R. K. Fitch. All were extremely energetic in carrying out the general policy established by the council and in developing the International standing of the Journal. In 1995 Elsevier, who had taken over the publication of "Vacuum" from Pergamon, terminated this agreement and its associated royalties. During the period where royalties were received, the income had allowed the BVC to give financial support

to postgraduate students in the UK to enable them to attend scientific meetings both at home and abroad.

To encourage the awareness of young scientists and engineers of the subject, the Council instituted in 1977 a prize to be presented each year to a young scientist or engineer working in a UK laboratory, adjudged to have presented the best scientific paper in that year. In 1981 the Council was pleased when Dr. C. R. Burch agreed to allow his name to be attached to the prize in recognition of his pioneering work in vacuum science particularly in developing Apiezon oils some 50 years earlier.

The years 1988-89 saw the institution of two Prize Medals to be awarded by the BVC. In 1988 the BVC Medal and Prize was first awarded for distinguished contributions to British scientific research in the fields of vacuum science, surface science, thin films or any related topic in which vacuum science and engineering play an important role. It was presented to Prof R H Williams at the 1st European Vacuum Conference held at Salford in April 1988, immediately before the Annual Address. It was also felt that the presenter of the Annual Address should also receive a medal. Consequently, the John Yarwood Medal was instituted for this purpose and was first presented in 1989 to Prof C T Campbell.

The Prizes were reordered in 2006 into a Junior Prize and a Senior Prize. The recipient of the Junior Prize receives the BVC Medal and C R Burch Award (a cash award). The recipient of the Senior Prize receives the Yarwood Medal and BVC Prize (a cash award). Each Prize is normally awarded at a suitable Conference in the UK pertinent to the work for which the Prize winner has won it. Where possible the winner of the Senior Prize delivers a plenary lecture designated as the BVC Address.

The BVC has sponsored short courses on vacuum and related topics over the years, including a very successful training course on Vacuum Technology, run by Drs Chambers, Fitch and Halliday, which was first held in Glasgow in March 1986 and has since been repeated at various venues many times. It also sponsors conferences and workshops in the UK and Ireland relevant to the fields of interest of BVC/IUVSTA and will consider sponsoring IUVSTA workshops abroad where a main organiser is based in the UK.

Updated R.J. Reid, December 2011.