

It is addressed, by members of bodies concerned with the interests of chemists and chemistry, to fellow-chemists, and it asks for increased collaboration between the respective bodies in the form of a federal body "to administer and guide, in accordance with the clearly-expressed will of its members, all the main activities that concern chemists as professional men and working scientists". Whatever the body created for such a purpose, its chief functions would be related to: (1) publications for the exchange and dissemination of chemical knowledge; (2) scientific meetings for the discussion of problems under investigation and for the survey of specific fields of knowledge; (3) libraries, both central and regional; (4) qualification, directed to the maintenance of a high standard of professional competence and of such methods of registration as the profession may decide, whether this registration have *de jure* or only *de facto* recognition by Government; (5) publicity, to ensure that the general public be accurately informed of what chemists and chemistry are doing and could do for the benefit of the community; (6) social security, whereby the economic position and the legal interests of all chemists may be safeguarded; (7) social functions.

A common secretariat, a central house, and close co-operation in all centres between bodies representing chemists are believed to be necessary for the discharge of such functions. As a first step in this direction, the councils of the Chemical Society, the Society of Chemical Industry and the Institute of Chemistry are asked to consider and report immediately on how to expedite the action advocated and to obtain advice as to whether the agreement constituting the Chemical Council can be amended so as to enable the Council to function as a central organization such as that envisaged. Should it be found that the Chemical Council cannot undertake the new functions suggested, it is asked that a new federal body be set up at once, to enable chemists to take their proper part in planning and building the post-war world.

The First Man-Carrying Aeroplane

THE Smithsonian Institution, Washington, has recently issued a pamphlet which settles a controversy that has existed for many years. It is universally acknowledged that the Wright brothers were the first to make sustained flights in a heavier-than-air machine at Kitty Hawk, North Carolina, on December 17, 1903. Earlier in the same year a machine built by Samuel Pierpont Langley was reported to have flown, and this was exhibited in the Smithsonian Museum with the label that this "Was the first man-carrying aeroplane in the history of the world capable of sustained free flight". These reported flights had never been officially observed, and in the light of later aerodynamic knowledge it was debatable whether the machine could have accomplished sustained flight under its own power. In order to settle this matter, the Institution re-conditioned the machine in 1914, when it was flown successfully, but the fairness of the test was challenged on the grounds that vital alterations were introduced during this rebuilding, which improved its aerodynamic and structural characteristics sufficiently to allow it to be capable of flight. It was claimed that without these changes, based on knowledge that was not available in 1903, the machine could not have flown. These claims have since been upheld by experts, and the Smithsonian Institution

has now issued a statement on the results to Dr. Orville Wright and changed the wording of the label on the Langley machine accordingly. Although the detailed explanation has only just been issued, the description on the exhibit was altered in 1928. As a result of this misrepresentation, the Wrights lent their original machine to the Science Museum at South Kensington, where it has been exhibited for many years. The Smithsonian Institution has expressed a hope that Dr. Wright will now consider bringing it back to the United States, where it will be given "the highest place of honour in the United States National Museum".

Meteors Seen in the United States

J. HUGH PRUETT has written an account of a detonating meteor (Ast. Soc. Pacific, Leaf. No. 165, Nov. 1942) under the title, "The Portland Meteor and Resulting Meteorite". The meteor was seen soon after 8 a.m. on July 2, 1939, and was not only a conspicuous fireball, but was also responsible for a panic among many people in Portland, Oregon, owing to the jarring of the houses while it passed over the town. From data supplied by a number of observers, it was found that the fireball became visible near the northern Oregon coast-line, and passing over northern Portland, disappeared beyond Bonneville at a height of 10 miles. It was moving in a direction opposite to that of the earth in its orbit and for this reason had a fairly high velocity—probably 40 miles a second. Next day a portion of the fireball was picked up on a farm near Washougal, fifteen miles east of Portland, and it was found that it belonged to the type of stony meteorites known as Howardites. Although search parties were organized, no other pieces were found; but it is fairly certain that the Washougal portion, weighing 225 gm., is not the only fragment which reached the earth. Howardites are described as friable and easily destroyed because the material composing them is cemented together rather loosely.

Another meteor is described by Oscar E. Monning in *Sky and Telescope* (November 1942). It appeared on August 7, 1942, at 9.30 c.w.t., when it was still twilight in the more western regions of its flight, and its magnitude was estimated to be -4. When first seen it was some miles north of Shreveport, and its height then was about 80 miles. In 30 sec. it had moved to a point less than 20 miles north and east of Guymon. Its length of flight may have been 600 miles and its motion was nearly horizontal, as its total drop was about 65 miles during this long flight. It had a long tail and left an evanescent train which was 30° in length as seen from some places, but it persisted for only 5-10 sec. No fragments of the meteor have been found and there were no detonations, so far as present evidence is available, but it is possible that additional information will be obtained which may assist in elucidating further important facts about this bright meteor.

New Projector for Navigational Stars

JAMES R. BENFORD has given a description of a Bausch and Lomb artificial star projector recently installed at the United States Air Station, Pensacola, Fla., which overcomes many of the difficulties of star charts (*Sky and Telescope*, November 1942). The instrument is located in the centre of a hemispherical dome upon which it projects images corresponding to 145 navigational stars. The instructor and the students sit inside the dome at a level a little below