samples. Now their method is being called into question.

"In view of this latest data, these guys are really staying loose on their feet," says Dr. Louis S. Walter of the National Aeronautics and Space Administration's Goddard Space Flight Center and chairman of one of the AGU moon sessions. "No one wants to commit himself."

Nevertheless some new lunar origin theories are being advanced, if not wholeheartedly accepted.

Dr. A. G. W. Cameron of Yeshiva University proposes a complicated theory involving condensation of the moon, which is deficient in iron and volatile elements, from portions of a huge protoearth atmosphere in orbit beyond three present earth radii. His analysis is different but his resulting model is essentially the same as that proposed earlier by Dr. A. E. Ringwood for formation of the earth-moon system (SN: 1/10, p. 34).

Dr. John A. O'Keefe of NASA, by contrast, points to evidence that the moon was formed by fission from the earth after it was formed.

"The point," says Dr. Walter, "is that it is just too early to be selecting theories of lunar origin based on the Apollo samples."

**LEG 10** 

## Challenger in the Gulf

Some geologists have theorized that the Gulf of Mexico was shallow at one time and sank to its present depth sometime between 10 million and 100 million years ago.

In Leg 10 of the Deep Sea Drilling Project, completed April 5, 13 holes were drilled as much as 2,900 feet into the Gulf floor. The cores, report cochief scientists J. Lamar Worzel of the Lamont-Doherty Geological Observatory and William R. Bryant of Texas A&M University, establish that the Gulf of Mexico has been a deep-water basin for at least 65 million years and possibly for 100 million years. The drilling thus narrowed down considerably the time period during which the Gulf could have been formed.

The voyage also found deep deposits of thick, coarse sand, evidence of strong turbidity currents carrying vast amounts of sand to the deep basin 25 million years ago. Some scientists have believed such strong turbidity currents occurred only during the Pleistocene ice ages, a million or so years ago.

All holes drilled in the deep basin encountered natural gas, predominately methane. The voyage operated under severe restrictions on drilling in the northern Gulf floor, where the release of oil into the water was considered a possibility.

FASEB MEETING

## Breaking up a giant



FASEB McManus: An interesting experiment.

The nation's biologists, some 22,000 strong, held their annual celebration of the rites of spring last month in Atlantic City. From across the country, they traveled east for the 54th meeting of the Federation of American Societies for Experimental Biology to hear about the latest advances in research in the life sciences. More than 8,000 of their number were co-authors of one of 3,300 papers chosen for presentation at the world's largest multidisciplinary gathering of biologists.

But increasing interest in smaller meetings focusing on highly specialized topics is leading to change. Next year, the biochemists, officially the American Society of Biological Chemists, will take a leave of absence from the FASEB convention, drawing about half of the federation's members to a June meeting in San Francisco instead of the traditional April meeting which will be in Chicago. Then, in 1972 and 1973 the separatist biochemists will rejoin FASEB in Atlantic City, only to split again in 1974 to hold their meeting jointly with the Biophysical Society in Denver. Thereafter, they will decide whether to make the split permanent.

The possibility of parting from the massive FASEB meeting, according to Dr. Robert Hart, executive director of the Biological Chemists, has been under discussion for several years. Ironically, the catalyst to the upcoming split in an essentially apolitical organization (FASEB rarely speaks with a single voice on political questions) was the political havoc that prevailed in Chicago at the 1968 Democratic Convention and the federation's choice of Chicago as its 1971 meeting site. In protest to the Chicago violence, the biochemists elected to boycott that city.

There are pros and cons to the move,

and the outcome is unpredictable.

The federation is the administrative umbrella for six biological societies: the biochemists, the American Physiological Society, the American Society for Pharmacology and Experimental Therapeutics, the American Society for Experimental Pathology, the American Institute of Nutrition and the American Association of Immunologists. From its headquarters in Bethesda, Md., it handles the publication of journals in each specialty and runs the spring meeting which is virtually the only regular interdisciplinary convention in biology.

The massive FASEB gathering encompasses sessions on special problems such as the regulation of respiration, the physical chemistry of proteins, cardiovascular drugs and immunogenetics.

It sponsors special symposia, such as one this year on neurobiology, where only a few researchers speak about their work and map out future areas of investigation. And it brings the assembled researchers into contact with yet more generalized topics pertaining to their work.

Thus, in its scope and diversity, the FASEB meeting is a unique forum. Unlike the annual American Chemical Society meetings where chemists from various specialties gather but speak virtually only among themselves, significant numbers of biologists exploit the interdisciplinary offerings of FASEB, with physiologists attending papers on biochemistry and biochemists returning the interest. If the biochemists' departure is permanent, this quality will obviously be lost, especially for younger scientists who, in contrast to their department chairmen and mentors, do not cross the country from meeting to specialized meeting.

On the other hand, Dr. Hart points out, the biochemists were eager to break from FASEB's traditional Atlantic City-Chicago circuit, feeling that by holding their meetings in a variety of locations they will ultimately provide more young scientists, particularly those from the West, an opportunity to attend.

Dr. J. F. A. McManus, executive director of the federated societies, calls the biochemists' departure from the fold an "interesting experiment" in meeting protocol, and stresses that it reflects a reaction to the growing size of the FASEB meeting rather than a philosophical schism.

There is, he says, a growing interest in holding smaller meetings, evidenced by the fact that the pharmacologists and physiologists now hold specialized fall meetings in addition to participating in the spring FASEB convention. The nutritionists are considering a similar action. Whether the biochemists will ultimately choose the same course remains to be seen.

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