I. Board of Governors Meeting

A meeting of the Board of Governors was held in conjunction with the Infrared Gordon Conference on August 26, 1964. Present were:

Board Members:  A. Lee Smith, President  
R. N. Jones  
J. Overend  
R. McDonald

Others:  W. J. Potts, Treasurer  
H. B. Kessler, Secretary  
C. Smith, Coblentz Spectra Committee

A. Nomination of New Board Members

A nominating committee was selected to present a slate of candidates for the forthcoming election. The members are M. Kent Wilson, Chairman, and Robert Brattain and Ernest Jones. M. K. Wilson requested that members send suggestions of nominees to A. Lee Smith, Dow Corning Company, Midland, Michigan, by October 20.

B. Joint Meetings with Other Societies

John Overend reported that as a result of discussion with Professor Robert Parry, Chairman of the ACS Inorganic Section, a joint session with the Coblentz Society has been arranged for the 1965 Fall ACS Meeting in Atlantic City. The committee for this session consists of:

Prof. John Overend (Coblentz), Chairman  
Prof. Robert Taylor (ACS)  
Prof. Stuart Tobias (ACS)  
Dr. Foil Miller (Coblentz).

This is the first step in the Coblentz Society effort to present the utility of Infrared Spectroscopy by organizing joint symposia with other societies.
C. Randall Symposium

The Coblentz Symposium at the next Pittsburgh Conference will honor Professor Harrison M. Randall. Professor Harold Nielsen will be the keynote speaker. The remainder of the program will be announced at a later date.

D. NSRDS Spectral Data Program

As a part of the new National Standard Reference Data System, a collection of certified standard infrared spectra will be reviewed and distributed by ASTM. The following description is abstracted from information presented to the Coblentz Society:

"The National Standard Reference Data System is a recently organized government-wide program for promoting and coordinating systematic data compilation and evaluation activities in all field of the physical sciences. The President's Office of Science and Technology has given the National Bureau of Standards responsibility for administering the program. To this end, NBS has set up an Office of Standard Reference Data under its Institute for Basic Standards. Coordination of standard reference data activities of all governmental agencies will be an important part of the task."

"The NSRDS will be concerned with ensuring that scientists and engineers have optimum access to evaluated data in all of the fields of physical science; the following technical areas have been selected for first attention: (1) Nuclear data, (2) atomic and molecular data, (3) solid state data, (4) thermodynamics and transport data, (5) chemical kinetics, (7) colloid and surface chemistry, and (8) mechanical properties of materials."

"The infrared spectral data project, which falls within the area of atomic and molecular properties, is planned primarily as a service to those using IR spectroscopy for analysis and identification purposes, rather than for theoretical studies. However, purity of samples, reliability of instrumentation and quality of experimental work will be considered in the evaluation process, and every effort will be made to ensure that standard reference spectra will be the best available."

"In the case of the IR Spectral Data Project, NBS has contracted with the American Society for Testing and Materials to collect, microfilm, index, and evaluate the spectra. The abilities and experience of ASTM Technical Committee E-13 in indexing IR spectra will be called upon. ASTM has sub-contracted for the full-time services of Dr. L.E. Kuentzel for evaluating the spectra and for scientific guidance. A separate subcontract will be let for microfilming the original collections."
"Compilation will begin with specialized collections of spectra now maintained independently by several government laboratories. One valuable collection of over 700 spectra of pharmaceuticals, and another of over 100 narcotic compounds are already being considered. Several thousand spectra should be available from such sources, although there may be much duplication. Later, contributions of spectral collections from private industrial organizations and academic institutions will be invited."

This program was discussed by Mr. Rossmassler of NBS. The Board of Governors of the Coblentz Society generally favored the effort to make spectra from the U.S. Government Laboratories available through ASTM. We are all very fortunate that Dr. L. E. Kuentzel is now working full time on this project, for his abilities should contribute considerably to the success of the program.

The Board of Governors offered to assist the NSRD project by contributing efforts of society members in evaluating the format and technical validity of the first set of spectra. In addition, the Society offered the following two suggestions:

1. The preferred method of verification is comparison by a competent spectroscopist of spectra on the same material from two independent sources.

2. Whenever possible, highest quality spectra obtained with a grating spectrophotometer should be used.

E. Publication of Infrared Spectral Data

Your President, A. Lee Smith, is continuing his efforts to find a satisfactory method for the publication of spectra presented in conjunction with papers presented in ACS Journals. Presently under consideration by the ACS is the following proposal:

a) Authors would, at their discretion, submit spectra of new or unusual compounds for publication with their manuscript. Some reasonable guidelines as to format would need to be established.

b) The spectra would be reviewed by a knowledgeable spectroscopist. The Coblentz Society would presumably be able to supply a list of competent volunteer reviewers.
c) Upon approval of the manuscript and the spectra, the former would be published as usual. The latter would be held until the end of the year, whereupon all the accumulated spectra would be published together.

d) The issue containing spectra would be considered as a supplement to the regular journal, subscribed to only by those who want it, and priced accordingly to cover publication costs.

e) Conceivably, all ACS journals could cooperate in such an arrangement and publish all spectra in a common supplement.

f) This system should also be applicable to other types of spectra (such as NMR).

F. Revised Constitution

Because of several minor changes in the constitution (discussed in Mailing No. 20), it will be reprinted. Since these changes only relate to changes in scheduling yearly functions, the Board agreed that no general mailing would be required. Copies will be available at the next general meeting in March 1965 in Pittsburgh and copies will be sent to those members submitting a request.

II. IUPAC Committee Meeting

A meeting of the IUPAC Committee was held in conjunction with the Gordon Conference. Under the chairmanship of Professor R. C. Lord, the following reports were presented:

A. Abe Savitzky reported briefly on the status of the subcommittee on Data Storage and Retrieval.

B. Dr. Rossmassler described the proposed NSRD Spectra Data Project. He estimated that the cost of these spectra would be approximately $0.10 per spectrum, with microfilm copies available at a lower cost.

There was considerable discussion, primarily concerning the methods of evaluating spectra and the format to be used.

C. Professor H. W. Thompson reported on the intensity work and on nomenclature. He presented several questions to the meeting. On the question of conversion to MKS units, the membership
wholeheartedly supported a proposal that the unit MICRON be retained in favor of the proposed micrometer. Professor Thompson noted that the DARK is presently appearing in the literature as a unit for measuring intensity. The suitability of this unit will be discussed at the next meeting of the IUPAC Committee.

Professor Thompson also noted that the symbol $\omega$ is sometimes appearing in the literature instead of the accepted symbol, $\sigma$ for wavenumber.

Dr. Thompson noted that a series of round-robin tests are being conducted using a special temperature controlled cell in order to obtain comparative data on intensity measurements. Attempts are also being made to establish a set of absorption bands which could be used to estimate the effective spectral slit width of a spectrophotometer.