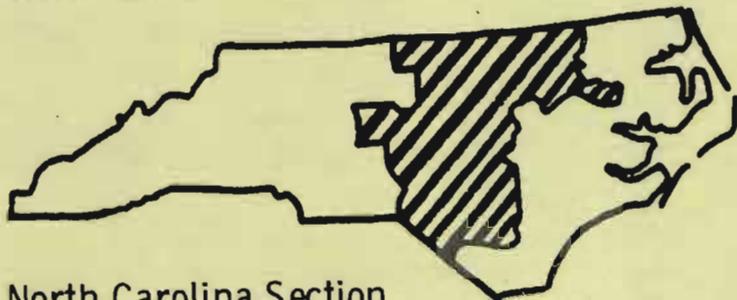


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ACTIVITIES



North Carolina Section
American Chemical Society

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November 1970

ELECTION MEETING NOVEMBER 10 AT RALEIGH

ELECTIONS COMING UP

At the November meeting of the section we will elect a chairman-elect for 1971. No other offices are to be decided this year.

The nominating committee has nominated Peter Smith as candidate for this office (see biography below). Other nominations may be made from the floor at the meeting. Remember that the meeting will be conducted according to the "old" by-laws since the new by-laws have not been approved as yet by the ACS Council.

Peter Smith

Peter Smith hails from Manchester, England. He earned his B.A., M.A., and Ph.D. (physical chemistry) degrees from Queens' College, Cambridge University where he earned a number of honors in addition to his degrees. He then spent about three years as a postdoctoral research fellow at Harvard University.

Peter's teaching career began in 1954 at Purdue University although he had taught a little prior to coming to the U.S. From Purdue he came to Duke University where he began as an assistant professor of chemistry in 1959. He was recently made a full professor of chemistry at Duke.

Peter holds membership in the ACS, Chemical Society (London), Association of Harvard Chemists, Alpha Chi Sigma, Phi Lambda Upsilon, and the American Physical Society.

His field of interest is physical chemistry especially the areas of reaction kinetics and electron spin resonance spectroscopy.

He is married (wife's name is Hilary) and has four children.

NOVEMBER MEETING

The November meeting will be held on Tuesday, November 10 in Raleigh. Activities will begin with a gratis social hour at 5:15 p.m. at the N. C. State University Faculty Club. Dinner will begin at the Faculty Club at 6:15. Advanced reservations are not necessary. The talk will begin at 8:00 p.m. in Room 124 of Dabney Hall on the N. C. State campus. Our speaker will be Dr. Felix Schreiner of the Argonne National Laboratory.

Dr. Schreiner was born in Hamburg, Germany and after receiving his education he became assistant professor at the Institute for Physical Chemistry of the University of Kiel in Germany. He then accepted a postdoctoral fellowship at Argonne National Laboratory where he has since become an associate chemist on the staff. His work has been in the area of low-temperature heat capacity and related physico-chemical measurements on the hexafluorides of transition metals and on noble gas compounds.

Dr. Schreiner will speak on "Recent Advances in Noble Gas Chemistry." A summary of his talk follows:

Summary

Nearly a decade has passed since the first true compounds of the rare gases xenon and krypton were discovered in 1962. Since then more than 50 compounds of these elements were prepared and characterized. The sustained research effort devoted to noble gas chemistry has led to a continuous widening of our knowledge and has contributed new developments especially in recent years. In particular, it was possible to enlarge the catalog of complex compounds formed between the xenon fluorides and fluorides of other elements substantially. For the first time xenon tetrafluoride was shown to participate in these reactions. Also, a new xenon oxide fluoride of

formula XeO_3F_2 was prepared and characterized. Another important development was the oxidation of bromate ions with xenon difluoride, leading to the preparation of the first weighable amounts of the rubidium salt of perbromic acid, $HBrO_4$. Naturally, a good deal of effort was also devoted to the study of the properties of known xenon compounds, sometimes resulting in important unexpected discoveries. While the list given here is by no means complete, it serves to illustrate the lively activity going on in noble gas chemistry, a field of research that is far from having been exhausted and still holds much promise for interesting discoveries in the future.

Employment Listing Service

There was discussion at the recent Executive Committee meeting and at the last business meeting regarding the employment situation facing chemists and engineers. Specifically the suggestion has been made that the North Carolina Section provide an employment listing service for its members.

As it is presently being thought of, a specific amount of space would be reserved in each issue of ACTIVITIES for "employment wanted" ads. The ads would be free to all members of the section. Unemployed members would receive first priority, employed members desiring a change second, and students who are not members would receive third priority. Such priorities would be invoked only if and when there were more ads submitted than there was space available.

For such a service to be used it is necessary to provide a mechanism whereby an "advertiser" may remain anonymous. While the details of this have not been worked out it does not pose any serious problem.

More important, however, the proposed service will fall flat on its face if the ads are not made known to employers of chemists and engineers. Therefore it is necessary to contact all employers in the area and perhaps a few outside the bounds of our section. Several directories of companies and research institutions in the area are already available to aid in this task.

The groundwork has been laid and the need for an employment listing service appears to be real. There is one problem, however. Someone is needed to operate this service--or better, yet, several people are needed. The task is not difficult but it will require some time, especially at first.

If you wish to serve your section in this capacity contact Bob Ghirardelli or the editor of ACTIVITIES. Will some of you volunteer or will you all merely read this, nod your head approvingly, and then do nothing about it? It's up to you--after all it's your section.

Report on October Meeting

Dr. Kupchan presented an interesting and informative overview of his work on tumor inhibitors found in plants. He described his group's approach to studying plant extracts for anti-tumor activity; namely, to fractionate the extracts on the basis of biological activity rather than on the basis of predetermined classes of compounds. This approach has resulted in their finding the unusual range of compounds that they have submitted for testing. This range includes epoxides, diterpenoids, steroids, and others in addition to alkaloids. Several of the compounds they have isolated are presently undergoing larger scale evaluation at the National Cancer Institute.

At the business meeting which followed the talk, the proposed by-laws changes were adopted by a vote of 15 for and 1 against. These changes will not become effective until they have been approved by the ACS Council. In the discussion prior to voting on the changes, several incon-

sistencies in wording were identified. Therefore after the ACS Council has approved the by-laws changes, the new by-laws will be published in ACTIVITIES so that every section member will have a copy.

Anyone for Bridge?

Ed Mendell and James C. Masson of our section won the "open pairs" sectional bridge tournament in Raleigh. This accomplishment took place in September.

CALENDAR OF EVENTS

- Nov. 5 at UNC-CH (4:00 PM) DAVID R. KEARNS (Calif.-Riverside)
- Nov. 6 at Duke (3:30 PM) A. IAN SCOTT (Yale)
- Nov. 10 at NCSU. NOVEMBER MEETING featuring FELIX SCHREINER (Argonne Labs) "Recent Advances in Noble Gas Chemistry". ELECTION OF CHAIRMAN FOR 1972.
- Nov. 12 at UNC-CH (4:00 PM) R. T. SIMPSON (NIH)
- Nov. 13 at Duke (3:30 PM) A. P. ALTSHULLER (NAPCA)
- Nov. 16 at NCSU (4:10 PM) N. ALLINGER (Georgia) "Determination of the Structure of Organic Molecules"
- Nov. 18 at UNC-CH (8:30PM) H. E. ZIMMERMAN (Wisconsin) Venable Lecture
- Nov. 20 at Duke (3:30 PM) C. N. REILLEY (UNC-CH)
- Nov. 20 at NCSU, 124 Dabney Hall (2:00 PM) H. EYRING (Utah) "Dynamics of Life"
- Nov. 21 At NCSU, 124 Dabney Hall (10:00 AM) H. EYRING (Utah) "Models in Scientific Research"
- Nov. 30 at NCSU (4:10 PM) R. A. SNEEN (Purdue) "Identification of Discrete, Distinct Ion Pairs"
- Dec. 2,3,4, at New Orleans Joint SE/SW Regional A.C.S. Meeting

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Section officers for 1970: R. G. Ghirardelli, Chairman; V. Stannett, Chairman-elect; H. R. Carmichael, Secretary-Treasurer; C. N. Reilley, K. Lawson, Councilors.