REPORT OF THE JUNIOR ACADEMY COMMITTEE, 1946

Last year the Senior Academy of Science met "on paper" and the papers and committee reports which ordinarily would have been given at the meetings were submitted for publication in the transactions. Among these reports is a description of the founding and the first year's activities of the Wisconsin Junior Academy of Science. Several of the hopes of last year have been realized, others remain to come to fruition, and still others spring anew from the activities and ideas of the second year of growth of the "teen-aged" affiliate of the Senior Academy.

With the addition of new science clubs as charter members of the Junior Academy, it became apparent that an additional district meeting would be necessary, so that two district meetings were held as preliminaries to the statewide meeting. On March 23, a district meeting was sponsored by the Sigma Zeta chapter of Central State Teachers College, Stevens Point. Clubs in the central part of the state were invited to participate in the meeting which was attended by 55 persons. Following the official program, our hosts of Sigma Zeta served some much appreciated refreshments. On the following programs, the papers starred were chosen by the club sponsors to be invited to be presented to the Junior Academy Section at the Academy meeting on April 13.

PROGRAM OF THE STEVENS POINT DISTRICT MEETING

Central State Teachers College, Stevens Point, Saturday,
March 23, 1:30 P. M.

Welcome, Ed Nigbor, President, and Betty Habercorn, Historian, Sigma Zeta, Central State Teachers College.

Address of Welcome—Professor H. A. Schuette, President, Wisconsin Academy of Sciences, Arts and Letters, 5 minutes.

"The Analysis of Water for Soluble Oxygen and CO2, pH, and Biochemical Demand and Alkalinity"—Donald Kauzbialek, James Kruger and Jack Molsberry, Chemistry Club, Lincoln High School, Wisconsin Rapids, 20 minutes.

*"Soil Analysis"—Anita Kaufman, Chemistry Club, Lincoln High School, Wisconsin Rapids, 15 minutes.

*"Lift and Drag Coefficients of Airfoil Sections"—James Check, Science Club, P. J. Jacobs High School, Stevens Point, 10 minutes.

*"Applications of Atomic Energy"—Kathryn Masterson, Science Club, P. J. Jacobs High School, 10 minutes.

*"Astronomy Hobby"—Robert Bard, Nature Club, Appleton High School, 10 minutes.

*Museum Project"—Dudley Pierce, Nature Club, Appleton High School, 8 minutes.

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"Plants as Chemical Indicators"—Molly Hack and Kenneth Beilke, Bios Explorers, Marathon High School, 10 minutes.

"Electrolysis—The Lead Tree"—John Bartlet and LaVerne Seubert, Superchargers, Marathon High School, 10 minutes.

The second district meeting held for the clubs of the Milwaukee area produced the following program:

PROGRAM OF THE MILWAUKEE DISTRICT MEETING

100 Science Hall, Marquette University, Sunday, March 31, 2 P. M.

Address of Welcome—Professor H. A. Schuette, President, Wisconsin Academy of Sciences, Arts and Letters, 5 minutes.

"Soil Analysis"—Sylvia Griffin, Bunsen Burners, Holy Angels Academy, 20 minutes.

"Blood Will Tell"—Patricia Kasper, Dolores Demski, Mercedes Ironside, Mercy Science Club, Mercy High School, 15 minutes.

"Backyard Insect Collecting"—Robert Zusy, St. John Cathedral High School, 10 minutes.

"Science Articles in the Milwaukee Journal for the Month of February"—Rose Mary Taylor, The Searchers, Girls' Tech High School, 5 minutes.

"Test of Soaps"—Mary Klein and other club members, Albertus–Magnus Math Science Club, St. Mary's Academy, 15 minutes.

"Organic Chemistry Demonstration"—Bob Mathes, Atom-Smashers, Boys' Tech High School, 15 minutes.

"Qualitative Analysis"—William Ewert, Lyle Fenski, and James Mintner, Atom-Smashers, Boys' Tech High School, 15 minutes.

"Cold Light"—Melbourne Rabideau, Seminar Club, Mary D. Bradford High School, 15 minutes.

"Assembling a Model Airplane"—Theresa Lukomski, Albertus–Magnus Math Science Club, St. Mary's Academy, 15 minutes.

"Rockets"—Alfred Neumann, Nature Study Club, Washington High School, 15 minutes.

"Hydroponics"—Lawrence Maurer, Seminar Club, Mary D. Bradford High School, 15 minutes.

"Giant Oudin Coil"—Jerome Pietrowski and Gerald Baykowski, Stan-Sci Club, St. Stanislaus High School, 10 minutes.

"Shortwave Walkie-Talkie"—Bernard Wright and Norman Krohn, Tesla Marconi, Central High School, West Allis, 15 minutes.

"Experiments with Polarized Light"—Clayton Miller and Roland Meyer, West High Science Club, West High School, Madison, 15 minutes.

"Rocks I Have Found in Wisconsin"—Stanley Kulakow, Phi-Bi-Chem Club, Steuben Junior High School, 15 minutes.

From the eight papers chosen by the club sponsors to represent their areas at the Junior Academy Section meeting were chosen the recipients of the honorary memberships in the American Association for the Advancement of Science and the Wisconsin Academy. An impartial committee repre-
senting various fields of science judged the merits of the papers and demonstrations. Dr. A. W. Schorger, Dr. E. F. Bean, Dr. H. A. Schuette, Dr. L. E. Noland and Dr. J. G. Winans served on this committee. The prize of a war bond for the best paper was awarded to James Check for his paper on "Lift and Drag Coefficients of Airfoil Sections"; second prize of $6.25 in war savings stamps was awarded to Lawrence Maurer for his project on "Hydroponics." The generosity of an anonymous member of the Academy made these awards possible. The Gamma Alpha award of $10.00 for the most original work was presented to Robert Bard for his discussion of his "Astronomy Hobby." The A.A.A.S. memberships were awarded to Melbourne Rabideau of Mary D. Bradford High School, Kenosha and jointly to Mercedes Ironside, Dolores Demski, and Patricia Kasper of Mercy High School, Milwaukee.

Academy memberships were awarded to Robert Zusy of St. John Cathedral High School, Milwaukee, Anita Kaufman, Lincoln High School, Wisconsin Rapids, Kathryn Masterson, P. J. Jacobs High School, Stevens Point, Robert Bard, Appleton High School, Lawrence Maurer, Mary D. Bradford High School, Kenosha, and James Check, Jacobs High School, Stevens Point.

Memberships in the A.A.A.S. and in the Academy entitle the recipients to publications and other privileges of these scientific organizations. A.A.A.S. memberships are limited to juniors and the Academy memberships are open to all participants in the state-wide meetings.

There were about 75 persons present at the annual meeting this year. Clubs which sent delegates include: Seminar Club, Kenosha; Chemistry Club, Wisconsin Rapids; Mercy Science Club, St. John Cathedral Science Club, St. Stanislaus Science Club, Milwaukee; Tesla Marconi Club, West Allis; Nature Club, Appleton; Science Club, Jacobs High School, Stevens Point; West High Science Club, Madison; and Bios-explorers, Marathon.

At the meeting the club delegates voted to have co-presidents, Mercedes Ironside of Mercy Science Club, Mercy High School, Milwaukee, and Melbourne Rabideau of the Seminar Club, Mary D. Bradford High School, Kenosha being elected to serve for 1946–1947.

Services to the Clubs

To advise with the club sponsors and the club members, the Chairman of the Junior Academy Committee travels over the state visiting clubs and sponsors for conferences on Junior Academy activities. Thirteen schools in Milwaukee and schools in Wisconsin Rapids, Eau Claire, Wausau and Black River Falls have been visited during the past year for this purpose.

To help provide programs and suggest projects for the club members, lectures by Mr. Thomson on Wildflowers and on Bird Songs, illustrated by kodachrome and phonograph records were made available free of charge to the clubs. Fifteen clubs availed themselves of these services during the spring.

Newsletters are sent out at irregular intervals to keep the clubs informed on events in the Junior Academy. Five have been issued this year. The first, (No. 4) announced the winners of the awards at the Milwaukee District last spring, the acquisition of lantern slides from the collection of
the late E. R. Downing for loan collections for the schools, two free lectures for schools, the plans for a news bulletin by the schools and a list of the first 15 charter members. No. 5 announced the spring meeting dates and the start of the club publication. No. 6 gave the programs of the spring meetings, announced a co-operative project with the Soil Conservation Service, the readiness of a set of the Downing slides and the gift of a war bond by a member of the Academy to be presented at the annual meeting. No. 7 announced the state-wide meeting, the publication of the "Test Tube Times," the availability of a list of projects in forestry and offered Dr. Thomson's talks to the clubs. No. 8 described the state-wide meeting, the awards presented, the officers elected and the free materials available from the Junior Academy.

The first issues of the "Test Tube Times" appeared in March and April. Mercy Science Club, Mercy High School, Milwaukee prepared the first issue; Appleton High School Nature Club prepared the second. A third is expected to be prepared by West Allis High School Science Club. It is planned that the editing and production of this publication be rotated among the member clubs.

A further means of keeping the clubs in touch with each other's activities is the issuance of a list of all the science clubs of the state. This list states the interests of the clubs, the meeting time, the principal activities, the nature of the membership (boys or girls or both) and the sponsor's name. Sixty-nine science clubs are active in Wisconsin.

Co-operative projects are another means of motivation of high-school science work. Two projects are at present offered by the Junior Academy, one on Distribution of Wisconsin Trees, and one on Phenology. Clubs cooperating in this program are located in Milwaukee, Appleton, Neenah, Black River Falls, Marathon and Superior. More are needed to make this project a satisfactory one and every effort is being made to include more individuals and clubs in the project. A co-project with the U. S. Soil Conservation Service in this state also makes it possible for clubs interested in this phase of science to obtain much help. Other co-projects with federal agencies are also available through the efforts of Science Clubs of America.

Other services made available to the clubs included a bibliography of books and pamphlets dealing with science club projects; a bibliography of plays on science and scientists; a descriptive instruction list of projects on forestry for conservation clubs; and lantern slides from the collection of the late E. R. Downing, one set thus far being ready with a prepared talk to accompany a set on "Forestry."

Publicity

An important factor in the development of any young and growing organization is the attempt to acquaint as broad a public as possible with the aims and activities of the organization. At the convention of two of the locals of the W. E. A., the Southern Wisconsin Education Association on February 8, 1946, and the Northwestern Wisconsin Education Association on October 12, 1945, talks were given on the activities of the W. J. A. S. At the meeting of the Milwaukee Archdiocesan Science Teachers' Associa-
tion, opportunity was given to present the aims and activities of the W. J. A. S. to a large group of Catholic science teachers.

Radio broadcasts have also been used to obtain publicity. On October 8, 1945, Mr. McNeel, "Ranger Mac," very kindly devoted his broadcast to the W. J. A. S. so as to acquaint the young people ready to enter high school with the possibilities of science work in high school. On April 2, 1946, the opportunity was taken on the Homemakers program to acquaint that group with the phenology project of the W. J. A. S.

Much has been written in the newspapers this year about the activities of the Junior Academy and it has not been possible to obtain all of the references about which we have heard. Known articles have appeared in the University Press Bulletin for February 20, 1946; The Wisconsin State Journal for February 20, 1946; The Capital Times, March 17, 1946 and March 22, 1946; The Milwaukee Journal, April 1, 1946; The Milwaukee Sentinel, April 1, 1946; and The Appleton Post Crescent, April 1946. Additional articles which we have not seen but which were reported to us appeared in The Appleton Post Crescent and The Minneapolis Herald Tribune. The Wisconsin Journal of Education carried two notes on the W. J. A. S. activities in the December 1945 and March 1946 issues. A fine series of pictures taken by Phil Harrington at the Annual Meeting appeared in The Milwaukee Journal for May 12, 1946.

Membership

Growth of the organization has been very satisfactory. Twenty-nine clubs were enrolled by May 1946 with a total of about 1,100 boys and girls as Junior Academy members. Those clubs which are new charter members this year are:

Nature Club, Appleton High School, Appleton.
Students of Science, Cochrane High School, Cochrane.
Science Club, Eau Claire High School, Eau Claire.
Seminar Club, Mary D. Bradford High School, Kenosha.
Phy-Chem Science Club, Central High School, Madison.
Science Club, West High School, Madison.
Super Chargers Club and Bios-Explorers Club, Marathon High School, Marathon.
Atom Smashers, Boys Trades and Technical High School, Milwaukee.
The Searchers, Girls Trades and Technical High School, Milwaukee.
Albertus-Magnus Club, St. Robert School, Shorewood.
Conservation Club, Neenah Senior High School, Neenah.
Science Club, Wauwatosa High School, Wauwatosa.
Chi-Rho-Beta Science Club, Cathedral High School, Superior.
Science Club, F. J. Jacobs High School, Stevens Point.
Science Club, North Division High School, Milwaukee.

Our Hopes

What are our aims for the following year? Of course we expect to continue the activities initiated during the past two years, but we hope to expand the services offered to the clubs and to the high-school youth.
(1) Our most important objective is a science talent search for those of scientific ability in Wisconsin. We need to have scholarships offered by the colleges of this state to worthy boys and girls, and we need to organize a search for these students.

(2) We need to enlarge the list of speakers available to the science clubs. Will some of the Academy members offer their services here?

(3) If the organization continues to grow, more district meetings will have to be held and more areas in the state covered.

(4) More co-operative projects with state scientists need to be in operation. The fields of physics and chemistry especially need encouragement. Can the Academy members help with such suggestions?

(5) Circulating loan collections need to be obtained and started.

(6) More sets of slides from the Downing Memorial collection will be made ready with prepared lectures for loan to the clubs.

(7) We still need an advertising folder.

(8) Radio programs.

Signed:

JOHN W. THOMSON, JR.
Chairman, Junior Academy Committee