THE FIRST YEAR OF THE WISCONSIN JUNIOR ACADEMY
OF SCIENCE, 1944–1945

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

The Inception—Credit for the founding of the Wisconsin Junior Academy of Science should go to a committee composed of members of the Wisconsin Academy of Sciences, Arts and Letters and members of the faculty and staff of the University of Wisconsin. Instrumental in the inception of this project were: President E. B. Fred of the University of Wisconsin, C. J. Anderson, E. F. Bean, C. A. Dykstra, E. M. Gilbert, Frank O. Holt, M. H. Ingraham, A. W. Schorger, and H. A. Schuette. Much help was given in organization by Dr. Howard E. Enders of the Indiana Junior Academy of Science and Miss Alta S. McEvoy of the Illinois Junior Academy of Science.

The Start—In order to acquaint the science teachers and principals with the aims and proposed activities of the Wisconsin Junior Academy of Science several means were utilized. A letter from President Schuette was sent to each of the science teachers listed by Science Clubs of America as having a club or as being interested in science club work. In schools where no such teacher was listed, the same letter was sent to the principal. A listing of the names of the teachers and principals was obtained from the State Department of Public Instruction through the courtesy of Superintendent John A. Callahan. The letter, a statement of the general aims of the Junior Academy and an introduction to the appointment of J. W. Thomson, Jr. as Chairman of the Junior Academy Committee, follows:

"That it may serve and stimulate the development of scientific activities on the part of youth the Wisconsin Academy of Sciences, Arts and Letters has expanded its activities by setting up the Junior Academy of Science for which it assumes sponsorship. This sponsorship presupposes a cooperative arrangement with Science Service, Inc., which administers Science Clubs of America.

"Because of the suggestion which was made that participation in an activity of this type would constitute another off-campus service to the citizens of our State, the University of Wisconsin, not unmindful of the possibilities of being a factor in the discovery and development of scientific abilities and interests among the youth of Wisconsin, has cooperated in this program and generously given us its aid. This aid has found expression in the appointment of Dr. John W. Thomson, Jr., formerly of State Teachers College at Superior, as assistant professor of botany, who will devote his time not only to the supervision and management of the Junior Academy but also to the encouragement of scientific work at the pre-college level. The council of the Academy, in turn, has appointed Dr. Thomson chairman of its Committee on the Junior Academy of Science. In his hands has been placed the guidance of the Junior Academy. Steps have already
been taken to recruit the personnel of this committee from among the high school science teachers with due consideration to their past or present key positions in the several district educational associations of our State.

"Perhaps you have already had the opportunity of personally hearing Dr. Thomson discuss his plans. In any event, you may expect to hear from him by letter.

"May I bespeak for Dr. Thomson, and the Wisconsin Academy of Sciences, Arts and Letters, your cordial cooperation?

"I am, with much respect,

Very truly yours,"

(Signed) H. A. SCHUETTE
President

A second letter was sent as a follow-up. This letter, issued by the Chairman of the Junior Academy Committee, stated some of the specific objectives and proposed activities of the Junior Academy and invited the teachers or principals to return an enclosed questionnaire on science clubs. Inasmuch as this letter and questionnaire went to every high school in the state it was of material assistance in locating the active science clubs in this state. Replies were received from 188 schools. Some 60 out of the 487 high schools in Wisconsin are listed as having active science clubs at the present time. In comparison with some of the other states this reflects a serious neglect in the schools of a useful phase of development of science talent. Virginia, for example, has 115 science clubs in their Junior Academy alone.

While the questionnaire was being sent out, and while awaiting the replies in the mail, in the winter, the chairman of the Junior Academy Committee visited schools in southeastern Wisconsin, using the mailing list provided by Science Clubs of America. High schools in the following communities were visited at that time: Milwaukee, 27 schools; Jefferson; Albany; Janesville; Beloit; South Milwaukee; Racine, two schools; Burlington; Waterford; Union Grove; Sturtevant; Kenosha; Lake Geneva; Wilmot; Walworth; Columbus; Watertown; Hartland; Oconomowoc; Burnett; Waupun; Fond du Lac; North Fond du Lac; Lomira; Campbellsport; Kewaskum; Port Washington; Oostburg; Sheboygan, two schools; and North Sheboygan. The teachers were interviewed in these schools to determine the actual club situation in the field and to determine the needs of the club sponsors in encouraging scientific work at the secondary school level. In schools which have clubs the number varies from one to seven clubs operating in various fields of science. Reflecting present-day interests, the greatest number are general science clubs, and the others are biology, physics, or chemistry clubs in decreasing number.

Arrangement of a District Meeting in Milwaukee—By the time many of these schools had been visited it was apparent that enough schools were interested to warrant holding a district meeting in the Milwaukee area during the spring of 1945. Therefore, a preliminary meeting of sponsors of clubs in the Milwaukee area was called on March 10. Through the courtesy of Prof. Ross H. Bardell, the preliminary meeting was held at the
Milwaukee Extension Center of the University of Wisconsin. Representatives from twelve schools attended this meeting and arranged for a tentative date and program for the middle of May. Estimates showed that so many club delegates would come that the large hall of Marquette University would be the only room with the necessary facilities able to accommodate the group. Through the kindness of Prof. John R. Koch, Head of the Department of Chemistry at Marquette University, and Father Keegan, the lecture room in the science building was made available for the Junior Academy meeting. The program of the meeting on May 20 follows:

Address of Welcome, Professor H. A. Schuette, President, Wisconsin Academy of Sciences, Arts and Letters, 5 minutes.
Red Blood Preferred, Catherine Backe, Dolores Deniski and Patricia Kasper, Mercy Science Club, Mercy High School, 15 minutes.
Butterfly Collecting, Wanda Provencher, Science and Camera Club, Messmer High School, 10 minutes.
Black Magic with Ultra-Violet, Dan Rasmussen and David Dalyrimple, Tesla-Marconi Club, West Allis Central High School, 20 minutes.
Tesla-Coil Demonstration, Fritz Dudi and Karl Dudi, Science Club, Rufus King High School, 20 minutes.
Automatic Crossing Switch, Carl King, Science and Camera Club, Messmer High School, 10 minutes.
Relationship of the Atomic Number to Conductivity, James Ringe- noldis, Chemistry Club, Custer High School, 6 minutes.
Pharmacy in Colonial America, James Tingstadt, Chemistry Club, Custer High School, 6 minutes.
Wisconsin Limestone and Minerals Found With It, Robert Zusu, St. John Cathedral High School, 10 minutes.
Volcanism, Alfred Newmann, Jr., Steuben Junior High Science Club, Steuben Junior High School, 20 minutes.

Exhibits

The Futer of Magnesium, a mural by Betty Woelm, Chemistry Club, Custer High School.

Attendance at the meeting was 180 with delegates from clubs as far away as Madison, Lake Geneva, Port Washington, and Kenosha attending to observe the proceedings.

Awards—The papers and demonstrations presented at the Milwaukee district meeting were of such high quality that it was difficult to choose the recipients of the honorary awards. By vote of the Science Club sponsors present at the meeting the following awards were made: one year honorary memberships in the American Association for the Advancement of Science went to Wanda Provencher, Messmer High School, and Dan Rasmussen and David Dalyrimple of West Allis High School. One year honorary memberships in the Wisconsin Academy of Sciences, Arts and Letters were voted for Catherine Backe, Dolores Deniski, and Patricia
Kasper, representing Mercy High School Science Club; Fritz and Karl Dudi, from Rufus King High School Science Club; Robert Zusy of St. John Cathedral High School; and Alfred Newmann, Jr., of Steuben Junior High School. Honorary mention was accorded James Tingstadt and James Ringenoldis of Custer High School and Carl King of Messmer High School.

The Honorary Junior Memberships in the American Association for the Advancement of Science entitle the recipients to the Association Bulletin and to Science News Letter for a year in addition to copies of reports of meetings of the association. The recipients of the one year memberships in the Wisconsin Academy of Sciences, Arts and Letters are entitled to the Transactions of the Academy and to any other material issued by the Academy for general distribution to the members as well as being privileged to attend the meetings.

Newsletters—Three newsletters were issued during the spring semester. The first, in response to the requests of the sponsors present at the preliminary meeting to arrange for the Milwaukee district meeting, consisted of sample programs of the annual meets of the Junior Academies of Science of other states. The programs were obtained from various programs and publications issued by the academies.

The second newsletter was a circular announcing the date of the Milwaukee meeting and mainly consisted of blanks to be filled in and concerned the registration for the Milwaukee meeting and joining the Junior Academy of Science.

The third newsletter announced the program of the Milwaukee meeting, the awards offered, a preliminary announcement of a news bulletin to be put out by the clubs next year, and two cooperative projects with state scientists on tree distribution and wildflower phenology.


Talks to Clubs—During the spring semester, scheduled trips were made to central, northern, and eastern Wisconsin to talk with the science club members about the activities of the Junior Academy of Science. The schools in which these talks were given are located in Black River Falls, Rhinelander, Goodman, Marinette, Florence, Wonewoc, Eau Claire, Oshkosh (three schools), Berlin, Wisconsin Rapids, Pittsville, Stevens Point, and Wausau. In addition club sponsors were visited in a few communities in which the clubs were not meeting in time for scheduled talks. These were in Bloomer, Medford, Dorchester, and Plainfield.
As part of the assignment of encouraging pre-college level scientific activity, nature study talks were given in several conferences for the Regional Recreational Laboratories in Whitewater and Antigo and at the 4H Club Leadership Camps at Green Lake, Hudson, and Pigeon Lake near Drummond. Talks at the Lincoln County Achievement Days at Tomahawk and Merrill and to the Edgerton Rotary Club and Methodist Men’s Club were given in the same vein. In addition to a talk on wildflower conservation, a conference on the Junior Academy possibilities interested the biology society, the Zeta Chapter of Sigma Zeta, of Central State Teachers College, Stevens Point, in being hosts to the high school science clubs at a district meeting in the future.

A talk on the Junior Academy was given at the Lake Superior Education Association convention on October 12, 1944. A similar talk was scheduled for the Southern Wisconsin Education Association convention to have been held in March, 1945. The ban on conventions by the Office of Defence Transportation cancelled this. Barring similar difficulties this fall, arrangements have been made to speak at the Milwaukee convention of the Wisconsin Education Association and at the convention of the Northwestern Wisconsin Education Association.

*Services to the Clubs*—In addition to the news bulletins issued to help the clubs three other important projects were prepared. In response to requests from several clubs a list of plays on science and scientists was made available. These were reviewed and briefly annotated in the listing. The greatest immediate need felt on the part of the club sponsors, it was found on visiting the schools, was a list of sources to which the teachers and students could turn for ideas for club projects and experiments. By writing the publishers for the loan of books and by scanning every available source, a list of books and pamphlets covering this field was compiled. The contents were noted on the listing in order that the club sponsor would know what materials the book covered.

Directions were prepared for two projects for the clubs which are interested in cooperating with state scientists. The projects are on the distribution of Wisconsin forest trees, and on the phenology, or blooming and fruiting dates, of the common wildflowers and trees. Data of considerable value is expected to accrue from these projects.

Further materials resulting from club requests is a list of the clubs in the state with their interests and activities mentioned as well as the sponsor names and other data of assistance to the clubs in keeping in touch with each other.

*Membership*—Charter member clubs started joining the Junior Academy in April, the Science Club of Rufus King High School, Milwaukee being the first. By June, fifteen clubs with a total membership of 433 pupils were enrolled in the Wisconsin Junior Academy of Science. This, compared with the initial years of the junior academies of some of the other states, seems very satisfactory. Indiana started with eight, Kansas with six, Alabama with seventeen, Iowa with thirteen, Minnesota with seven, Pennsylvania with fourteen and Oklahoma and West Virginia with sixteen.
First Year Charter Members

Science Club, Rufus King High School, Milwaukee
Science Experiment Club, South Milwaukee High School, South Milwaukee
Tesla-Marconi Club, West Allis High School, West Allis

St. John Cathedral High School, Milwaukee
Mercy Science Club, Mercy High School, Milwaukee
Stan-Sci Club, St. Stanislaus High School, Milwaukee
Chemistry Club, Custer High School, Milwaukee
Science and Camera Club, Messmer High School, Milwaukee
Phi-Bi-Chem Club, Steuben Junior High School, Milwaukee
Albertus Magnus Math-Science Club, St. Mary's Academy, Milwaukee
The Searchers, Girl's Trades and Technical High School, Milwaukee

Port Washington High School, Port Washington
C Y Science Club, Peckham Junior High School, Milwaukee
Albertus Magnus Club, St. Robert School, Shorewood
Seminar, Kenosha High School, Kenosha

Looking Ahead—Some of the services which the Junior Academy would like to offer to the clubs of Wisconsin are listed below. Some of these are already maturing. The presentation of the very fine lantern slide collection of the late Prof. E. R. Downing to the Junior Academy by his widow will make possible a circulating loan collection for the clubs. Dr. Downing was a former member of the Wisconsin Academy of Sciences, Arts and Letters and this gift will enable us to render a very useful service to the clubs.

1. A news bulletin edited by the clubs.
2. A circulating lantern slide collection.
3. Lectures to the clubs.
4. Can we obtain help to offer scholarships for excellent work?
5. More cooperative projects.
6. Organization of a central Wisconsin district.
7. Selection of student officers.
8. Circulating loan collections of booklets on projects and of materials useful for club exhibits on plastics, etc.
9. An advertising folder.
10. Radio programs.