

Proceedings of the Iowa Academy of Science

Volume 48 | Annual Issue

Article 2

1941

Officers, Committees, Past Presidents, and Members, Iowa Academy of Science

Let us know how access to this document benefits you

Copyright ©1941 Iowa Academy of Science, Inc.

Follow this and additional works at: <https://scholarworks.uni.edu/pias>

Recommended Citation

(1941) "Officers, Committees, Past Presidents, and Members, Iowa Academy of Science," *Proceedings of the Iowa Academy of Science*, 48(1),.

Available at: <https://scholarworks.uni.edu/pias/vol48/iss1/2>

This Front Matter is brought to you for free and open access by the Iowa Academy of Science at UNI ScholarWorks. It has been accepted for inclusion in Proceedings of the Iowa Academy of Science by an authorized editor of UNI ScholarWorks. For more information, please contact scholarworks@uni.edu.

IOWA ACADEMY OF SCIENCE

OFFICERS OF THE ACADEMY

1940-1941

<i>President</i> , CHARLES CARTER.....	Fairfield
<i>Vice-President</i> , ROY A. NELSON.....	Mount Vernon
<i>Secretary-Treasurer</i> , E. R. BECKER.....	Ames
<i>Editor</i> , L. R. WILSON.....	Cedar Rapids

CHAIRMEN OF THE STANDING COMMITTEES

<i>Biological Survey</i> , H. S. CONARD, 1940-44.....	Grinnell
<i>Conservation</i> , A. C. TROWBRIDGE, 1935-41.....	Iowa City
<i>High School Relations</i> , C. W. LANTZ, 1936-42.....	Cedar Falls
<i>Membership</i> , L. R. WILSON, 1937-43.....	Cedar Rapids
<i>Finance and Endowment</i> , J. B. CULBERTSON, 1938-44.....	Mount Vernon
<i>Legislation</i> , J. H. BODINE, 1941-45.....	Iowa City

SECTION OFFICERS

<i>Section</i>	<i>Chairman</i>	<i>Executive Committeeman</i>
Botany and Bacteriology.....	J. E. Sass	Louisa Sargent 1939-43
Chemistry, General, Physical.....	Jacob Cornog	W. C. Oelke 1937-41
Chemistry, Organic, Biological.....	J. B. Culbertson	Ben H. Peterson 1939-43
Geology.....	Louise Fillman	C. S. Gwynne 1938-42
Mathematics.....	J. Fred Robertson	C. Gouwens 1940-44
Physics.....	R. G. Wilson	E. H. Collins 1938-42
Psychology.....	Paul C. Greene	E. E. Emme 1937-41
Science Teaching.....	R. M. Getchell	J. B. Culbertson 1938-42
Zoology.....	F. G. Brooks	H. E. Jaques 1940-44

PAST PRESIDENTS

OSBORN, HERBERT.....	1887-1888	KELLY, HARRY M.....	1915-1916
TODD, J. E.....	1888-1889	STEWART, GEORGE W.....	1916-1917
WITTER, F. M.....	1889-1890	ROSS, L. S.....	1917-1918
NUTTING, C. C. (2 terms).....	1890-1892	BEYER, S. W.....	1918-1919
PAMMEL, L. H.....	1892-1893	STEPHENS, T. C.....	1919-1920
ANDREWS, L. W.....	1893-1894	KNIGHT, NICHOLAS.....	1920-1921
NORRIS, H. W. (1 term).....	1894-1896	MOREHOUSE, D. W.....	1921-1922
HALL, T. P.....	-1896	WYLIE, R. B.....	1922-1923
FRANKLIN, W. S.....	1896-1897	PAMMEL, L. H.....	1923-1924
MACBRIDE, T. H.....	1897-1898	SMITH, O. H.....	1924-1925
HENDRIXSON, W. S.....	1898-1899	CRATTY, R. I.....	1925-1926
NORTON, W. H.....	1899-1900	SEASHORE, C. E.....	1926-1927
VEBLER, A. A.....	1900-1901	WELD, L. D.....	1927-1928
SUMMERS, H. L.....	1901-1902	KAY, GEORGE F.....	1928-1929
FINK, BRUCE.....	1902-1904	SPINNEY, L. B.....	1929-1930
SHIMEK, B.....	1904-1905	RIETZ, H. L.....	1930-1931
AREY, M. F.....	1905-1906	LEES, JAMES H.....	1931-1932
BATES, C. O.....	1906-1907	JAQUES, H. E.....	1932-1933
TILTON, JOHN L.....	1907-1908	CABLE, E. J.....	1933-1934
CALVIN, SAMUEL.....	1908-1909	BARTOW, E. W.....	1934-1935
ALMY, FRANK F.....	1909-1910	BUCHANAN, R. E.....	1935-1936
HOUSER, GILBERT L.....	1910-1911	SHERMAN, L. P.....	1936-1937
BEGEMAN, L.....	1911-1912	TROWBRIDGE, A. C.....	1937-1938
BENNETT, A. A.....	1912-1913	MARTIN, J. N.....	1938-1939
KINNEY, C. N.....	1913-1914	MCCLENON, R. B.....	1939-1940
CONARD, HENRY S.....	1914-1915	CARTER, CHARLES.....	1940-1941

This Page Intentionally Blank

MEMBERS OF THE IOWA ACADEMY OF SCIENCE

HONORARY FELLOWS *

Arthur, J. C. (G).....Purdue University, Lafayette, Ind.
 Leverett, Frank (E).....1724 South University Ave., Ann Arbor, Mich.
 Osborn, Herbert (F).....State University, Columbus, Ohio
 Trelase, William (G).....State University, Urbana, Ill.

EMERITUS FELLOWS

Ball, E. D. (F).....Pasadena, Calif.
 Bruner, H. L. (F).....324 S. Ritter Avenue, Indianapolis, Ind.
 Goodell, F. E. (C).....3620 Adams Street, Des Moines

LIFE FELLOWS

Bartow, Edward W. (C).....State University, Iowa City
 Clarke, J. Fred (G).....Physician, Fairfield
 Conard, Henry S. (G).....Grinnell College, Grinnell
 Erwin, A. T. (G).....State College, Ames
 Fitzpatrick, T. J. (G).....State University, Lincoln, Neb.
 Gilman, J. C. (G).....State College, Ames
 Houser, G. L. (F).....State University, Iowa City
 Jones, David T. (F).....Vinton
 Kay, George F. (E).....State University, Iowa City
 Kemmerer, Mrs. Mabel C. (I).....Jackson, Miss.
 Keyes, Charles Reuben (E).....Cornell College, Mount Vernon
 Kuntz, Albert (F).....St. Louis University, St. Louis, Mo.
 Lindly, John M. (G).....Glenwood
 Martin, G. W. (G).....State University, Iowa City
 Norton, W. H. (E).....Cornell College, Mount Vernon
 Pellett, Frank C. (G).....American Bee Journal, Hamilton, Ill.
 Ricker, Maurice (F).....Los Angeles, Calif.
 Ross, L. S. (F).....Drake University, Des Moines
 Seashore, C. E. (I).....State University, Iowa City
 Summers, H. E. (F).....712 Edison St., Los Angeles, Cal.
 Sylvester, R. H. (I).....660 16th St., Des Moines
 Wylie, R. B. (G).....State University, Iowa City

FELLOWS

Aikman, J. M. (G).....State College, Ames
 Aitchison, Alison E. (E).....State Teachers College, Cedar Falls
 Aitken, W. W.Iowa Conservation Commission, Des Moines
 Albright, C. L. (B).....Salem, Mass.
 Alcock, N. G. (F, O).....State University Hospital, Iowa City
 Anderson, J. P. (G).....Box 530, Juneau, Alaska
 Baker, J. Allen (C).....Simpson College, Indianola
 Bakke, A. L. (G).....State College, Ames
 Barnes, M. E. (O).....State University Hospital, Iowa City
 Bartsch, Paul (F).....1456 Belmont St., Washington, D. C.
 Beams, H. W. (F).....State University, Iowa City
 Becker, E. R. (F).....State College, Ames
 Begeman, Louis (B).....State Teachers College, Cedar Falls
 Benedict, A. A. (B).....State College, Ames
 Bennett, Walter W. (F).....Arnolds Park
 Berg, Clarence P. (C).....State University, Iowa City
 Biester, H. E. (F, O).....State College, Ames

* The letter in parentheses following the name indicates the section in which the member is interested, as follows: A, mathematics; B, physics; C, chemistry; E, geology; F, zoology; G, botany; I, psychology; O, bacteriology.

Bissonnette, F. H. (F, G)	Trinity College, Hartford, Conn.
Bodine, Joseph H. (F)	State University, Iowa City
Bond, P. A. (C)	P. O. Box 22, Iowa City
Boyd, Mark F. (O)	P. O. Box 997, Tallahassee, Fla.
Brooks, F. G. (F, G)	Cornell College, Mt. Vernon
Brown, F. E. (C)	Chem. Dept., State College, Ames
Buchanan, R. E. (O)	State College, Ames
Buchholtz, W. F. (G)	State College, Brookings, S. Dak.
Buffum, Hugh S. (I)	2300 Franklin St., Cedar Falls
Burk, Myrle (G)	Waterloo
Butler, L. W. (B)	State College, Ames
Cable, E. J. (E)	Cedar Falls
Carothers, E. Eleanor (F, G)	Iowa City
Carpenter, P. L. (O)	State College, Ames
Carr, A. B. (B)	Simpson College, Indianola
Carr, P. H. (B)	State College, Ames
Carter, Charles (G)	Parsons College, Fairfield
Chittenden, E. W. (A)	State University, Iowa City
Clark, J. C. (F)	Leland, Miss.
Clark, Norman A. (C)	State College, Ames
Cocroft, Robert (C)	Cornell College, Mt. Vernon
Coffin, L. M. (A)	Coe College, Cedar Rapids
Coleman, G. H. (C)	State University, Iowa City
Collins, Wm. B. (I)	Columbia College, Dubuque
Coover, W. F. (C)	State College, Ames
Cornog, Jacob (C)	State University, Iowa City
Coss, James A. (C)	Morningside College, Sioux City
Cox, B. B. (E)	Room 1141, 26 Broadway, New York
Craig, Allen T. (A)	Iowa City
Crozier, W. D. (B)	Terre Haute, Ind.
Culbertson, John B. (C)	Cornell College, Mt. Vernon
Daniells, Marian E. (A)	State College, Ames
Darnell, Lillian Hethershaw (F)	Tucson, Ariz.
Davis, George E. (B)	Duquesne University, Pittsburgh, Pa.
Davis, W. H. (G)	Agricultural College, Amherst, Mass.
Dawson, Helen (I)	Child Welfare, Iowa City
Decker, George C. (F)	State College, Ames
Dembo, Tamara (I)	Child Welfare, Iowa City
Diehl, H. C. (C)	State University, Iowa City
Dill, Homer R. (F)	State University, Iowa City
Dodd, L. E. (B)	1263 Woodruff Ave., Los Angeles, Calif.
Dole, J. Wilbur (G)	Fairfield
Doty, H. S. (G)	Simpson College, Indianola
Douglass, L. C. (I)	State University, Iowa City
Drake, Carl J. (F)	State College, Ames
Du Mont, Philip A. (F)	Arlington, Va.
Edgar, Rachel (C)	State College, Ames
Eldridge, J. A. (B)	State University, Iowa City
Emme, E. E. (I)	Morningside, Sioux City
Emmons, C. W. (A)	Simpson College, Indianola
Endres, E. A. H. (I, O)	Spokane, Wash.
Errington, Paul L. (F)	Zoology Dept., Ames
Evans, John E. (I)	State College, Ames
Eversole, W. G.	State University, Iowa City
Ewing, H. E. (F)	U. S. Nat. Museum, Washington, D. C.
Fleming, Annie W. (A)	State College, Ames
Fraser, C. M. (F)	University British Columbia, Vancouver, B. C.
French, Raymond A. (G)	University of Dubuque, Dubuque
Friley, C. E.	State College, Ames
Fritz, Martin F.	State College, Ames
Fulmer, Ellis I. (C)	State College, Ames
Gaessler, William G. (C)	State College, Ames
Gale, Grant (O)	Grinnell College, Grinnell

Gaskill, H. V. (I)	State College, Ames
Geiser, Sam W. (F)	So. Methodist University, Dallas, Texas
Getchell, R. W. (C)	State Teachers College, Cedar Falls
Gilman, Henry (C)	State College, Ames
Glockler, George (C)	State University, Iowa City
Goodman, George J. (G)	State College, Ames
Goshorn, Arthur (E)	Winterset
Gouwens, Cornelius (A)	State College, Ames
Grabber, M. E. (B, A)	Morningside College, Sioux City
Greene, Paul C. (I)	Coe College, Cedar Rapids
Greenwood, D. A. (C)	Chicago, Ill.
Grelck, William	3117 Ferndale Ave., Baltimore, Md.
Gwynne, Charles S. (E)	State College, Ames
Haber, E. S. (G)	State College, Ames
Hadden, David E. (B)	Alta
Hammer, B. W. (O)	State College, Ames
Harris, H. M. (F)	State College, Ames
Harrison, Bruce M. (F)	Univ. So. California, Los Angeles, Cal.
Hartzell, Albert (F)	Boyce Thompson Institute, Yonkers, N. Y.
Hauber, Ulrich A. (F)	St. Ambrose College, Davenport
Hawk, Grover C. (F)	Parsons College, Fairfield
Hayden, Ada (G)	State College, Ames
Heitkamp, G. W. (G)	Columbia College, Dubuque
Helmick, P. S.	Drake University, Des Moines
Helser, M. D. (F)	State College, Ames
Henderson, Mack T. (I)	Grinnell College, Grinnell
Hendrickson, Geo. O. (F)	State College, Ames
Henry, Lyle K. (I)	State College, Ames
Herr, Gertrude A. (A)	State College, Ames
Hershey, H. Garland (E)	Geol. Survey, Iowa City
Higbee, F. G. (A)	State University, Iowa City
Hightower, Pleasant R.	Danville, Ind.
Hines, Harry Matlock (C, F)	State University, Iowa City
Hinman, Jack J., Jr. (C, O)	State University, Iowa City
Hinrichsen, J. J. L. (A)	State College, Ames
Howell, J. W.	Loras College, Dubuque
Huff, George C. (F)	Drake University, Des Moines
Hufferd, Mrs. Margery Simpson (B)	Bradford, Pa.
Hughes, H. D. (G)	State College, Ames
Irion, Arthur L. (I)	State University, Iowa City
Jaques, H. E. (F)	Iowa Wesleyan College, Mount Pleasant
Jordan, Carl F. (F)	Des Moines
Kadesch, W. H. (B)	State Teachers College, Cedar Falls
Kalina, M. H. (C)	State University, Iowa City
Kambly, Paul E. (F, G)	University High School, Iowa City
Kay, G. Marshall (E)	Columbia University, New York City
Kent, G. C. (G)	State College, Ames
Kercheval, James C. (C)	Ypsilanti, Mich.
Keyes, Charles R. (E)	Des Moines
King, Robert L. (F)	State University, Iowa City
Knight, H. H. (F)	State College, Ames
Knight, Nicholas (E)	Cornell College, Mt. Vernon
Kountz, R. Rupert (F)	Iowa City
Krull, Wendell (F)	Logan, Utah
Kunerth, William (B)	State College, Ames
Ladd, Harry S. (E)	Washington, D. C.
Lantz, C. W. (G)	State Teachers College, Cedar Falls
Larsen, Julius A. (G)	2107 Graeber Street, Ames
Le Clerg, E. L. (G)	Baton Rouge, La.
Lee, Chester D. (O, F)	State College, Ames
Levine, Max (O)	State College, Ames
Lewis, Don (I)	State University, Iowa City
Lierle, D. M. (C, F, I, O)	State University Hospital, Iowa City

Liggett, Thomas H. (C)	Pella
Lindsey, A. W. (F)	Denison University, Granville, Ohio
Lindstrom, Ernest W. (G)	State College, Ames
Loehwing, Walter F. (G, C)	State University, Iowa City
Lonsdale, John T. (E)	State College, Ames
Loomis, W. E. (G)	State College, Ames
Lyons, L. J.	Upper Iowa University, Fayette
MacDonald, G. B. (G)	State College, Ames
MacEwen, Ewen (O, F)	State University Hospital, Iowa City
MacGregor, J. B. (I)	Mt. Vernon
McBryde, C. N. (O)	Ames
McClenon, R. B. (A)	Grinnell
McClintock, J. T. (F)	State University, Iowa City
McCracken, Earl C. (B)	New York City, N. Y.
McGaw, F. M. (A)	Cornell College, Mount Vernon
McGeoch, John A. (I)	Iowa City
McKelvey, J. V. (A)	State College, Ames
McKenzie, R. Monroe (C, B)	Parsons College, Fairfield
McNutt, S. H. (O, F)	State College, Ames
Maney, T. J. (G)	State College, Ames
Manry, James C. (I)	Cambridge, Mass.
Marron, T. V. (F)	Des Moines
Martin, John N. (G)	State College, Ames
Mattill, Henry A. (C)	Biological Chemistry, S. U. I., Iowa City
Maxwell, H. L. (C)	Wilmington, Dela.
Meier, Norman C. (I)	State University, Iowa City
Melhus, I. E. (G)	State College, Ames
Miller, A. K. (E)	State University, Iowa City
Miller, B. L. (E)	Lehigh University, Bethlehem, Pa.
Miller, Lewis B. (C)	Ambler, Pa.
Mills, Wier R. (G)	Pierson
Moots, Elmer E. (A)	Cornell College, Mount Vernon
Moreland, F. B. (C)	State University, Iowa City
Morrow, Roger (F)	Mt. Pleasant
Mouden, Homer (B, C)	State College, Ames
Mueller, Herman A. (E, G)	St. Charles
Naylor, Nellie M. (C)	Ames
Neff, I. F. (A)	Drake University, Des Moines
Nelson, P. Mabel (C)	State College, Ames
Nelson, Roy A. (B)	Cornell College, Mount Vernon
Nelson, V. E. (C)	State College, Ames
Newell, W. S. (I)	Coe College, Cedar Rapids
Nichols, Mrs. Florence Willey (G)	Ames
Nollen, H. S. (A, B, C, E)	Des Moines
Norlie, O. M. (I)	Decorah
Norris, H. W. (F)	Grinnell College, Grinnell
Ojeman, Ralph H.	State University, Iowa City
Oleson, O. M. (G)	Fort Dodge
Orr, Ellison I. (E)	Waukon
Paddock, F. B. (F)	State College, Ames
Palmer, E. L. (F, G)	Cornell University, Ithaca, N. Y.
Parish, Jessie Augusta (G)	226½ Main Street, Cedar Falls
Park, O. W. (F)	State College, Ames
Parker, Ralph L. (F)	Agricultural College, Manhattan, Kan.
Patterson, T. L. (F)	Detroit College of Medicine, Detroit, Mich.
Patton, Leroy T. (E)	Texas Tech. College, Lubbock, Tex.
Pepinsky, Abe (A)	Assoc. Prof., Mus. Ed., Uni. of Minn., St. Paul, Minn.
Pettit, Don D. (C)	Iowa City
Plagge, Herbert J. (B)	State College, Ames
Plagge, Homer H. (G)	State College, Ames
Porter, R. H. (G)	State College, Ames
Prill, Edward A. (C)	Madison, Wisc.
Prindle, Bryce (O)	State College, Ames

Pultz, Leon M. (G)	Botany Dept., Ames
Raiford, L. Charles (C)	State University, Iowa City
Ramsey, Guy R. (G)	State College, Ames
Rath, H. Earl (F)	Teachers College, Cedar Falls
Ray, Francis E. (C)	Cincinnati, Ohio
Read, O. B. (C)	Teachers College, Cedar Falls
Reed, C. D. (B)	Weather Bureau, Des Moines
Reilly, John F. (A)	State University, Iowa City
Rider, A. J. (C)	Drake University, Des Moines
Rietz, H. L. (A)	State University, Iowa City
Risley, Paul L. (F)	State University, Iowa City
Robert, Maria M. (A)	State College, Ames
Robertson, W. R. (B)	State University, Iowa City
Robinson, P. G. (A)	State College, Ames
Rowley, H. H. (C)	State University, Iowa City
Runner, Joseph J. (E)	State University, Iowa City
Rusk, W. J. (A)	Grinnell College, Grinnell
Salit, P. W. (C)	State University Hospital, Iowa City
Sanders, W. E. (F, G)	613 Bankers Trust Bldg., Des Moines
Sargent, Louisa G. (G)	Grinnell College, Grinnell
Sass, J. E. (G)	State College, Ames
Scheck, M. George (I)	Elmira College, Elmira, N. Y.
Schoewe, Walter H. (E)	State University, Lawrence, Kan.
Schulte, Geo. N. (C)	Loras College, Dubuque
Schultz, J. A. (C)	306 Chemical Bldg., State College, Ames
Scott, Winfield (G)	Cedar Falls
Seeburger, Mrs. M. M. (E)	Des Moines
Sherman, Althea R. (F)	National, via McGregor
Sherman, L. P. (C)	Grinnell College, Grinnell
Shipton, Washburn D. (E)	Washington University, Saint Louis, Mo.
Skeels, H. M. (I)	Iowa City
Smith, Edwin R. (A)	State College, Ames
Smith, Erma A. (F)	Zoology Dept., I. S. C., Ames
Smith, F. F. (F)	Buena Vista College, Storm Lake
Smith, H. P. (O)	State University Hospital, Iowa City
Smith, Lothrop (B, C)	Chemistry Dept., State University, Iowa
Snedecor, George W. (A)	State College, Ames
Spinney, L. B. (B)	State College, Ames
Stainbrook, Merrill A. (E)	Texas Tech. College, Lubbock, Tex.
Stephens, T. C. (F)	Morningside College, Sioux City
Stewart, G. W. (B)	State University, Iowa City
Stiles, Bruce F. (F)	Council Bluffs
Stiles, Harold (B)	State College, Ames
Stiles, K. A. (F)	Coe College, Cedar Rapids
Stoddard, George D. (I)	State University, Iowa City
Stoner, Dayton (F)	Albany, N. Y.
Stookey, S. W. (E)	Coe College, Cedar Rapids
Stromsten, Frank A. (F)	State University, Iowa City
Strother, C. R. (I)	Iowa City
Stroud, J. B. (I)	Iowa City
Swanson, Pearl P. (C)	State College, Ames
Tauber, Oscar E. (F)	State College, Ames
Tester, A. C. (E)	State University, Iowa City
Theobald, John (A)	Loras College, Dubuque
Thomas, Byron H. (C)	State College, Ames
Trowbridge, A. C. (E)	State University, Iowa City
Tyndall, E. P. T. (B)	State University, Iowa City
Van Epps, C. (I)	College of Medicine, S. U. I., Iowa City
Vance, Thomas F. (I)	State College, Ames
Van Engen, Henry (A)	State Teachers College, Cedar Falls
Van Tuyl, Francis M. (E)	School of Mines, Golden, Colo.
Von Korff, R. W.	917 Locust St., Davenport
Ward, L. E. (A)	State University, Iowa City

Watson, Emery E. (A)	State Teachers College, Cedar Falls
Watson, Margaret Liebe (F)	Simpson College, Indianola
Webster, R. L. (F)	State College, Pullman, Wash.
Weeber, W. Keith (C, E, O)	City Hall, East Peoria, Ill.
Weigle, O. M. (C)	Westminster College, Fulton, Mo.
Weld, L. D. (B)	Coe College, Cedar Rapids
Wellhouse, W. H. (F)	State College, Ames
Werkman, C. H. (O)	State College, Ames
Whiting, James T.	Mt. Pleasant
Wifvat, Samuel J. A. (A)	1144 63rd St., Des Moines
Wilkinson, J. A. (C)	State College, Ames
Williams, Noel J. (F)	R. No. 3, Milford
Willson, L. H. (B)	State College, Ames
Wilson, L. R. (E, G)	Coe College, Cedar Rapids
Witschi, Emil (F)	State University, Iowa City
Witrock, G. L. (G)	Bronx Park, N. Y.
Wolden, B. O. (G)	Estherville
Wolfe, Russell M. (F, O)	Marshalltown
Wood, L. W. (E)	State Highway Com., Ames
Woodrow, Jay W. (B)	State College, Ames
Woods, R. W. (A)	Iowa City
Zucker, W. B.	Dubuque

ASSOCIATES

Aardal, A. A.	Wartburg College, Waverly
Adams, Clifford (E)	109 E. Prentiss, Iowa City
Adams, J. A. (F)	Grinnell
Adams, Wallace W. (E)	North Liberty
Allen, Edward S. (A)	State College, Ames
Allen, Robert M. (F, G)	Minneapolis, Minn.
Allen, Ted (F)	Mt. Pleasant
Amsden, T. W.	Iowa City
Anderson, Irvin J. (E)	132 Welch Ave., Ames
Anderson, W. A. (G)	Iowa City
Arnold, L. K.	Ames
Atanasoff, J. V. (A)	Ames
Augustine, D. W. (G)	Oskaloosa
Bailey, Reeve M. (F)	Dept. of Zoology, Ames
Bair, Roy A. (G)	State College, Ames
Bates, Herbert (C)	State College, Ames
Baxter, Richard (F)	Mount Pleasant
Beane, B. H. (G)	La Grande
Beery, Mrs. J. L. (G)	Ames
Beery, Harold F. (G)	Mt. Pleasant
Bender, W. R. (G)	McGregor
Bennion, Hugh (F)	Ricks College, Rexburg, Idaho
Benson, Edward (A)	Des Moines
Berg, J. Robert (E)	5 E. Fairchild, Iowa City
Berger, Bernard (F)	Champaign, Ill.
Bergman, H. D. (C, F)	Ames
Bishop, Everett L., Jr. (F)	Iowa City
Bissinger, L. L.	Prescott
Blexrud, Owen (E)	Iowa City
Bliese, John C. W. (F)	Cedar Falls
Blumer, J. C.	Clinton, Minn.
Bowne, George (G, F)	Coe College, Cedar Rapids
Boyd, I. L. (G)	Botany Dept., State College, Ames
Brand, Mary J. (I)	Grand Junction
Brandner, Fred (A)	State College, Ames
Brandt, A. E. (A)	Washington, D. C.
Brandt, Herman F. (I)	Drake University, Des Moines
Brasfield, T. W. (G)	Perkinson, Miss.
Brewster, Earl L. (E, G)	Sheldon

Brooks, Ivan.....	Mt. Pleasant
Brown, C. H.....	Ames
Brown, Elbert O. (G).....	San Antonio, Tex.
Brown, Mabel Estle (G).....	Conesville
Brown, Walter E.....	Newton
Bryan, A. W. (F, O).....	Iowa City
Buchanan, L. L. (F).....	Bureau of Entomology, Washington, D. C.
Burma, Benjamin H. (E).....	Geology Dept., Ames
Bush, Gow M. (F).....	N. Carolina College, Durham, N. Car.
Buurman, Clarence.....	Iowa City
Cameron, Lester W. (I).....	18 Beardshear Hall, Ames
Carstensen, G. D. (F).....	Mt. Pleasant
Chamberlain, L. H. (C, O).....	Des Moines
Chapin, Florence S. (E).....	2306 Upland Drive, Cedar Rapids
Chehak, Milo A. (C, O).....	Cedar Rapids
Chellevoid, John O. (A).....	Waverly
Clapp, Philip Greeley.....	Iowa City
Clark, Hugh.....	Des Moines
Clauson, L. F. (F).....	Kiron
Cline, L. M.....	Dept. of Geology, Ames
Cline, Wilbur.....	Centerville
Condit, F. H.....	Dubuque
Conkwright, N. B. (A).....	Iowa City
Conzett, John V. (C, O).....	Dubuque
Cook, Clarence P. (C).....	Des Moines
Cook, Howard L. (A).....	Bethesda, Md.
Cooper, Margaret M. (C).....	Raleigh, N. C.
Cox, Gertrude (A, I).....	State College, Ames
Crabbe, Wilfred D. (F).....	Ames
Craft, W. A. (F).....	Director, Regional Swine Breeding Lab., Ames
Craney, James B. (A).....	Loras College, Dubuque
Crosthwait, David N., Jr. (B, C).....	Michigan City, Ind.
Curtis, Dwight K. (E).....	Iowa City
Cuthbert, F. Leicester (E).....	Dept. of Geology, Ames
Cuthbert, Mabel Jaques (F, G).....	Madison, Wis.
Danielson, Loran L.....	Iowa City
Daum, Kate.....	State University, Iowa City
Davis, Dan A. (E).....	State University, Iowa City
Deam, Charles C.....	Bluffton, Ind.
Dean, H. L. (G).....	Iowa City
Deardorff, Dwight L. (B, C).....	Mt. Pleasant
Deeds, Orville J. (F).....	Cedar Rapids
Dennison, R. A. (G).....	Iowa City
DeVries, Louis.....	Ames
Dietz, S. M. (G).....	State College, Ames
Dodd, C. M. (C).....	State College, Ames
Dodge, A. F. (G).....	State College, Ames
Dreier, William (I).....	Ames
Drexler, Robert (G).....	Coe College, Cedar Rapids
Dunnam, E. W. (F).....	Stoneville, Miss.
Earls, Lester T.....	Physics Dept., Ames
Eastman, J. W.....	Des Moines
Edgecombe, S. W. (G).....	Ames
Edwards, J. F. (F, O).....	State College, Ames
Edwards, W. (F).....	Leon
Emme, Eugene M. (I).....	Sioux City
Engle, Paul R. (A, B, C).....	3523 Adams Ave., Des Moines
Englehorn, A. J. (C, E).....	State College, Ames
Evans, T. C.....	Zoology Dept., State University, Iowa City
Feaster, J. F. (C).....	Bellwood, Ill.
Fillman, Louise (E).....	Indianola
Fitch, C. L.....	Plant Lab., Ames
Foladare, Joseph (B).....	Dept. of English, Ames

Foust, H. L. (F)	Ames
Fox, Gerald W. (B)	Ames
French, Mrs. Minnie E. (I)	University of Dubuque, Dubuque
Freyermuth, H. B. (C)	Iowa City
Frye, John C. (E)	Lawrence, Kan.
Fryer, H. C. (A)	Dept. of Mathematics, Ames
Gauler, John V. (C)	Whiting, Ind.
Gemmill, Wm. H.	State College, Ames
Giese, Henry (B)	State College, Ames
Gilkey, H. J. (A, B, E)	Engineering Hall, Ames
Goggin, J. F.	St. Ambrose College, Davenport
Goldberg, Yale (A)	Des Moines
Goldsmith, Wm. M. (G)	Dubuque
Goodrich, James P. (F)	Iowa City
Gordner, Donald (F, G)	Iowa Wesleyan College, Mount Pleasant
Goshorn, Mrs. Arthur	Winterset
Gould, Charles, Jr.	Botany Dept., Ames
Goulding, Fern A. (I)	State College, Ames
Gowen, J. W. (O)	State College, Ames
Grace, Geneva N.	High School, Muscatine
Grant, J. G. (I, O)	College Hospital, Ames
Grant, Martin L. (G)	Cedar Falls
Gray, LuVerne (F)	Iowa City
Gross, George L.	Algona
Grove, Clifford T. (B)	Iowa City
Gunderson, Harold (F)	Ames
Gundy, Glen V. (C)	Platteville, Wis.
Hager, Anne (F)	Dept. of Zoology, Ames
Hall, O. Myrtle (F)	Iowa Wesleyan, Mt. Pleasant
Halstead, Alice B. (A, B, C, D, E, F, G)	Muscatine
Halvorson, Orville	Mt. Pleasant
Hammer, A. J. (B, C, E)	Ames
Hammond, W. E. (F)	Agric. Experiment Sta., Iowa State College, Ames
Haney, W. L.	Maquoketa
Hansen, Bena K. (I)	203 Campus Ave., Ames
Harber, William I. (C)	Ames
Harding, Delma E. (F, G)	Newton
Harper, Golda P. (F)	Iowa Falls
Harvalik, Z. V. (B)	St. Ambrose, Davenport
Hartman, George B. (G)	Ames
Haverkamp, H. G. (I)	Iowa City
Hazlet, Stewart E. (C)	State College, Pullman, Wash.
Heck, Kenneth (E)	2400 First Ave., NE., Cedar Rapids
Henderson, John H., Jr. (B)	Chicago, Ill.
Hendriks, Herbert E.	Syracuse, N. Y.
Hershelman, William L. (E)	Dept. of Geology, State Uni., Iowa City
Hewitt, E. A. (C, F)	Ames
Hilbe, James J. (F)	Des Moines
Hissong, R. D. (F, G)	High School, Sioux City
Hitchings, J. M.	Davenport
Hixon, R. M. (C)	Dept. Chemistry, I. S. C., Ames
Hjort, Lillian V.	Junior College, Osceola
Hobson, Robert	Grinnell
Holl, D. L. (A)	State College, Ames
Hoover, C. Dale (G)	State College, Miss.
Hoslett, Sherman A. (F)	Decorah
Hoxmeier, Sister Mary Claire (G)	Briar Cliff College, Sioux City
Huizinga, Henry (F, G)	Dept. of Zoology, Ames
Jacobsen, R. S. (A)	Decorah
Jahn, Theodore L.	Iowa City
Jerrel, Elizabeth (F)	Mt. Pleasant
Johns, I. B. (C)	Ames
Johns, M. Rae (G)	Davenport

Johnson, Leland P. (F, G)	Des Moines
Johnson, Wendell	Iowa City
Keck, Warren N. (F)	Coe College, Cedar Rapids
Kildee, H. H. (C, F)	Ames
Kirkman, Hadley (F)	Stanford, Calif.
Knowler, Lloyd A. (A)	Iowa City
Kopf, Kenneth (G)	Milford, Conn.
Kos, Charles G. (E)	Cedar Rapids
Kosanke, Robert M. (E)	528 S. Prospect Blvd., Park Ridge, Ill.
Kreider, Orlando (A)	Iowa Falls
Kyl, George	Bloomfield
Laffoon, Jean	Sioux City
Lahr, Paul H. (C)	Dept. of Chemistry, State University, Iowa City
Lambert, J. L. (E)	Iowa City
Lantz, H. L. (E)	Pomology Subsection, Plant Lab., Ames
Lapp, C. J. (B)	Iowa City
Larson, Flavia (I)	Ames
Larson, G. D. (E)	Iowa City
Lauer, A. R. (I)	State College, Ames
Lee, Robert E. (G)	Shenandoah
Lewis, E. (I)	Coe College, Cedar Rapids
Leyendecker, P. J. (C)	State College, Ames
Lillis, Gerald A. (C)	Davenport
Lockridge, Lowell (C)	Junior College, Red Oak, Ia.
Lonseth, A. J. (A)	State College, Ames
Lorenzen, R. N. (G)	St. Ansgar
Lotz, E. P. (F)	Burlington
Lucas, A. M. (F)	Ames
Lutz, Harry (G)	Albany, Georgia
Mac Gaw, B. K.	Mt. Vernon
Mahoney, John J. (F)	Iowa City
Mallams, Glen	Fremont
Marshall, Everett L.	DeKalb, Ill.
Martinson, Glenn O. (B, I)	Ames
Marts, Ralph O. (G)	Madison, Wis.
McClelland (A)	Drake University, Des Moines
McConaha, Marjorie (G)	Iowa City
McCreary, E. J. (C)	State University, Iowa City
McDonald, Malcolm (F)	Dept. of Zoology, State Uni., Iowa City
McKee, J. R. (G)	Spencer
McLaughlin, K. F. (A, B, C)	Iowa City
McLaughlin, Sister M. Aquinas (I)	Sioux City
McLaughlin, W. M. (E, F)	Des Moines
McNee, Marcia (I)	Dept. of Ed. and Psy., Morningside Col., Sioux City
Mears, John A.	114 E. Market St., Iowa City
Meyer, Alfred W. (A)	Cedar Rapids
Mickle, Ernest (E)	Coe College, Cedar Rapids
Miller, Edwin L. (F)	Baton Rouge, La.
Miller, Harry K.	Junior College, Centerville
Miller, Russel D. (B)	Ames
Miller, S. Porter	Storm Lake
Milleson, Helen K.	Storm Lake
Millsbaugh, Dick D. (F)	Mt. Pleasant
Miner, Neil A.	Mt. Vernon
Montross, George (B, C)	Dept. of Chemistry, Grinnell Col., Grinnell
Moore, John (G)	Mt. Pleasant
Morrison, J. W. (O)	Alta
Muench, V. O. (O)	Nichols
Mulsow, Frederick W. (O)	Cedar Rapids
Murley, Margaret (F, G)	Winthrop
Murphy, H. C. (G)	Ames
Murray, F. G.	Cedar Rapids
Mussey, Frances	Grinnell

Niles, Stanley B.	Mt. Pleasant
Nitz, Otto (C)	Fairfield
Norman, A. G. (C, O)	Dept. of Soils, Ames
Oberg, Edwin N. (A)	Iowa City
Oelke, W. C. (C)	Grinnell
O'Harra, Roberta (G)	Omaha, Nebr.
Otto, Edna Hartmann	Des Moines
Ough, Lee D. (C)	Clinton
Overley, C. A. (B, C)	Chicago, Ill.
Owen, Billy (F)	Mt. Pleasant
Padley, Carroll	Mt. Pleasant
Palmer, Lulu (I)	Montevallo, Ala.
Paris, Clark D. (G)	Clarinda
Patterson, Mary (I)	Sioux City
Perisho, F. W. (A, B, C)	Ft. Collins, Colo.
Peterson, Ben H. (C)	Dept. Chemistry, Coe College, Cedar Rapids
Peterson, Harold D. (E)	Pottstown, Pa.
Peterson, John B. (G)	Berkeley, Calif.
Péwé, Troy (E)	Iowa City
Phillips, Earl (A, B)	High School, Morley
Pierce, Fred J. (F)	Winthrop
Pierce, Guy R. (E)	Iowa City
Plass, Everett D. (C)	Iowa City
Platz, G. G.	Lamoni
Poneck, Esther N. (I)	Saugerties, N. Y.
Porges, Nandor (C)	U. S. D. A., New Orleans, La.
Potterbaum, Sister M. Edward (C)	Sioux City
Price, Edwin O. (C)	Mt. Pleasant
Price, H. V. (A)	University High, Iowa City
Pullman, R. (I)	Sioux City
Radloff, H. (C)	Cedar Rapids
Ralston, F. Paul (C)	Knoxville
Reddy, C. S. (G)	State College, Ames
Rice, William N. (G)	Botany Dept., Ames
Rich, Catherine (I)	Sioux City
Richardson, Charles H. (F)	State College, Ames
Robertson, J. Fred (A)	Ames
Rochford, Sister M. DePazzi (A)	Sioux City
Rohret, L. A.	Davenport
Romm, H. J. (G)	Tuskegee, Ala.
Rose, Edward S. (C, O)	Iowa City
Rothe, Erich (A)	Oskaloosa
Rothfus, L. J. (B)	R. 7, Des Moines
Runkel, S. T. (G)	Cedar Rapids
Russel, John (F)	Mt. Pleasant
Saint John, Nina B. (B, C)	Lamoni
Savage, David (G)	Mt. Pleasant
Scantlebury, Ronald S. (F, I)	Detroit, Mich.
Schaefer, Walter (F, G)	Wartburg College, Waverly
Schild, Donald T. (I)	221 Stanton Ave., Ames
Schuldt, Walter C. (E)	Iowa City
Schwarte, L. H. (C, O)	Ames
Schweet, Richard (F, I)	Ames
Semeniuk, George (G)	Ames
Shafer, W. M. (C)	State College, Ames
Shawhan, Mrs. Fae McClung	2725 Moyer, Des Moines
Shepherd, Donald (G)	Ames
Shepherd, Gerald (B)	Eagle Grove
Shipley, James	Wilmington, Ill.
Simonson, Roy W. (C, E, G)	Dept. of Soils, Ames
Simpson, Violet L. (C)	Springville
Smith, Afton (I)	Iowa City
Smith, Helen F. (A)	Ames

Snyder, Rev. Chas. E.	Davenport
Speaker, E. B. (F)	Des Moines
Sprague, G. F. (C)	State College, Ames
Stanley, Phyllis (O)	Newark, N. J.
Stickler, W. Hugh (B, E, F)	Villisca
Stiles, Margaret (F)	Des Moines
Stolpe, Stanley (F, G)	Dept. of Zoology, State University, Iowa City
Stroud, D. C.	3925 Cornell Ave., Des Moines
Sulkin, Norman N. (F)	Iowa City
Sweeny, O. R. (C)	Ames
Swenson, A. W. (C)	Waverly
Swenson, Frank (E)	Davenport
Swertfefer, Floyd F.	Fairfield
Swygard, Bill	Birmingham
Tallman, R. W. (I)	Jewell
Tanzer, L. K. (C)	College Station, Texas
Taubman, J. B. (F)	Iowa City
Therese, Sister M. Joseph	Dubuque
Tibeau, Sister M. Etienne (A, F, G)	Cedar Rapids
Tillapaugh, Iola	Cedar Rapids
Timm, Edgar W.	Ames
Tintner, G. (I)	Ames
Todd, John N. (F)	Miami, Fla.
Trachsel, Chas. S. (B, I)	High School, Iowa City
Trumbower, Jno. A. (G)	Ames
Tulk, Marvin E. (G)	Mt. Pleasant
Tumble, H. C. (A)	Cedar Falls
Turrell, Frank M. (G)	Riverside, Calif.
Twining, P. E. (I)	Ames
Uhlaner, J. E. (I)	Ames
Underkofler, L. A.	Chemistry Dept., Ames
Underwood, B. J. (I)	Iowa City
Unklesbay, Athel G. (E)	Dept. of Geology, State Univ., Iowa City
Uthoff, Lualis (I)	Ames
Venzke, W. G. (F)	Ames
Vorhis, R. C. (E)	Iowa City
Vinton, Catherine	Ottumwa
Volz, E. C. (G)	Ames
Voris, H. H.	Davenport
Wagner, Charles (C)	415 N. Park Rd., La Grange, Illinois
Waldeland, C. R.	Decorah
Walker, Mabel (A, I)	Mt. Pleasant
Watson, Jeannette B. (C, F, G)	Estherville
Webster, Ruth	Cedar Rapids
Weeks, Carl (C)	124 Des Moines St., Des Moines
Welch, Donald L. (C)	Iowa City
Wenberg, Edwin H. (E)	Iowa City
Wendell, Richard G. (G)	18 Beardshear, Ames
Wendland, Roy (C)	Cedar Rapids
Wetzstein, H. L. (C)	Iowa City
Widmer, J. M. (C, O)	Physician, Cedar Rapids
Wilhelm, H. A. (C)	State College, Ames
Williams, George T. (B, C, O)	Davenport
Williams, R. M.	Fairfield
Wilsie, C. P. (G)	Ames
Wilson, R. G. (B)	Dubuque
Wilson, W. B. (E)	Box 661, Tulsa, Okla.
Winsor, C. P. (A)	Ames
Wissink, G. M. (B)	Mankato, Minn.
Wolden, Ida Iverson (G)	Estherville
Wolfe, Otis	Marshalltown
Woodrow, Margaret (A, B)	2322 Baker St., Ames
Woodyard, Floyd	1019-21st St., Des Moines

Wyckoff, R. C.	Buena Vista College, Storm Lake
Yoder, Lee (E).....	Drake University, Des Moines
Yoder, Lester.....	Chemistry Section, Ames
Yoho, Herbert (E).....	St. Mineral Survey, Clayton, Ga.
Young, G. Y. (G).....	Ames
Young, Victor J. (B).....	Iowa City
Zabel, H. E.....	3208 S. Sheffield Ave., Chicago, Illinois

MEMORIALS

Clarence Preston Gillette	35
Russia Harris	40
Murray L. Hutton	42
Daniel Walter Morehouse	44
William R. B. Robertson	46

TITLES OF PAPERS PRESENTED

Selected papers:

Theoretical genetics, E. W. Timm	51
Recent advances in applied plant genetics, I. J. Johnson	59
Application of genetics to animal breeding, J. L. Lush	65
Recent advances in human genetics, K. A. Stiles	73
Academy Dinner Address: Simultaneity and originality in human thought, George Glockler	83
Academy Address: An outline of Iowa archeology, C. R. Keyes	91

Botany-Bacteriology

Illustrations of the Fleshy Fungi of Iowa. Joseph C. Gilman	99
Adaptation Studies of Plants for Soil Conservation Purposes in Southern Iowa. J. M. Aikman and Ivan L. Boyd	117
Forest Communities of the Quetico Provincial Park of Ontario. R. V. Drexler	123
Additions to the Flora of Mahaska County, Iowa. D. W. Augustine	129
Diseases of Potatoes in Iowa. I. E. Melhus, D. R. Shepherd and Marie A. Corkle	133
The Earliest Known Epiphytotic of Rust in Iowa. Marie A. Corkle and I. E. Melhus	147
The Development of an Educational Program in Iowa State Parks. I. E. Melhus, J. L. Fults and Elizabeth A. White	159
The Prolific General Jack Rose. Clark D. Paris and T. J. Maney	175
Tensiometers for Following Soil Moisture Conditions in the Field. Roy A. Bair (Abstract)	191
A Simple Method for the Germination of Pollen of Maize and Potato. Roy A. Bair and W. E. Loomis. (Abstract)	191
The Use of Tetrachlorethane in the Eradication of the European Bindweed. A. L. Bakke. (Abstract)	192
Notes on Iowa Plants. George J. Goodman (Abstract)	193
The Genus <i>Lysimachia</i> in Iowa. George J. Goodman and P. J. Leyendecker (Abstract)	193
A Second Supplement to the Catalogue of Plants in the Iowa State College Herbarium. Ada Hayden. (Abstract)	193
Water and Salt Balance in the Growth of Annual Plants. Walter F. Loehwing (Abstract)	194
Effects of "Over-liming" an Iowa Soil with Gypsum. M. E. Loomis (Abstract)	194
<i>Argyria polyhedron</i> (Schev.) Morgan an ascomycete. G. W. Martin (Abstract)	195
A Preliminary Report on the Developmental Anatomy of Red Clover, <i>Trifolium pratense</i> L. Harry Joseph Romm. (Abstract)	195
The Critical Period for Floral Initiation in <i>Tulipa</i> . John E. Sass. (Abstract)	196
Epiderman Patterns in Haploid, Deploid, and Tetraploid Tomatoes. J. E. Sass and E. W. Lindstrom. (Abstract)	196
The Relations of Some Bacterial Plant Pathogens to the Coliform Bacteria. E. L. Waldee. (Abstract)	197
Observations on the Leaves of Aborescent Lycopods from the Pennsylvania Rocks of Iowa. L. R. Wilson and Iola Tillapaugh. (Abstract)	197

The Eocene Vegetation of the Red Desert in Wyoming. L. R. Wilson and R. M. Webster. (Abstract)..... 198

Organic Chemistry

The Influence of Sodium Fluoride upon the Composition of Tibiae of Rats Partially Recovering from Rickets. C. A. Kempf and V. E. Nelson 199

A Micro Method for the Determination of Ethyl Alcohol. V. B. Fish and V. E. Nelson 207

Relation of the Structure of Sugars to their Dissimilation in the Butyl-Acetic Fermentation. James F. Guymon, L. A. Underkofler, and Ellis I. Fulmer 213

Saccharification of Starchy Grain Mash for Ethanol Fermentation. Use of Mold-Amylase Preparations. L. A. Underkofler, Kenneth J. Goering, and G. Warren Buckaloo..... 225

Fermentative Utilization of Cassava. The Butyl-Acetic Fermentation. Julian Banzon, Ellis I. Fulmer and L. A. Underkofler 233

Simplified Blood Cholesterol Method. T. U. Marron 237

Effect of Hydrogen Ion Concentration upon the Hydrolysis Rates of Ketimines. (Abstract) I. Johnson and J. B. Culbertson 247

Four Hundred Drunken Drivers. T. U. Marron..... 241

A Neutral Sizing Material for Insulating Board. L. K. Arnold and J. B. McLeod. (Abstract)..... 245

Condensation of Vanillin and Substitution Products with Hippuric Acid. L. C. Raiford and C. H. Buurman. (Abstract)..... 245

Activity of the Carbonyl Group of 4, 7-Dimethyl Indanone-1. Robert Cocraft (Abstract)..... 245

Pyrrolidine from H-Alkyl-N-Chloroureas. George H. Coleman and Glen Alleger. (Abstract)..... 246

Azoyl Derivatives of Sugars and Separation by Chromatographic Adsorption. George H. Coleman and Alfred G. Farnham. (Abstract)..... 246

Action of Thionyl Chloride on Urethanes. H. B. Freyermuth and L. Charles Raiford. (Abstract)..... 248

The Action of the Ethanolamines on Cornstalk Lignin. Elton Fisher. (Abstract) 248

Carcinogenic Hydrocarbon Effect on Rat Liver Vitamin A. T. U. Marron. (Abstract)..... 249

Alcohol in Preserved Blood Specimens. T. U. Marron. (Abstract)..... 249

Effect of Added Salts on Solubility of Hippuric Acid in Urine. T. U. Marron. (Abstract)..... 250

The Friedel-Crafts Reaction with Long-Chained Alkyl Bromides. R. N. Meals and Henry Gilman. (Abstract)..... 250

Unsymmetrical Organoanatomy Compounds. L. A. Woods and Henry Gilman. (Abstract) 251

General and Physical Chemistry

Measurement of Adsorption Isotherms for Mixed Vapors. H. H. Rowley and W. B. Innes 253

A Method of Maintaining the Proper Copper Concentration in the Treatment of Water. O. R. Sweeney and O. G. Fife 259

A Rapid Method of Correcting Fuel Value Determinations Using the Oxygen Bomb Calorimeter. Herbert T. Bates..... 263

Some Observations on the Dropping Mercury Electrode. Wm. C. Oelke and M. Shields 267

Mechanism of the Formation of the Tetraphenyllead From Lead Chloride and Phenyllithium. Ernest Bindschadler and Henry Gilman 273

The Thickness of a Rigid Water Layer on Quartz from Measurements of Newton's Rings. W. G. Eversole and Paul H. Lahr. (Abstract) 275

Vapor-Pressure Lowering of Sulfur Dioxide Solutions of Potassium Thiocyanate from 15° to 25°C. W. G. Eversole and G. H. Wagner. (Abstract) 275

Copper Content in Various Water Supplies due to Copper Plumbing. R. Rupert Kountz and C. H. Buurman. (Abstract)..... 276
 Study of the Three Component System Diethyl Ether—Water—Magnesium Bromide at 25°C. H. H. Rowley and M. H. Bartz. (Abstract) 276
 An Attempt to Determine Beryllium in the Presence of Aluminum Conductometrically. Robert Torley and Louis Waldbauer. (Abstract) 277

Geology

Durability Tests on Iowa Limestones and Dolomites. Lyman W. Wood 279
 Motion of the Wisconsin Ice in Story County, Iowa. Charles S. Gwynne 289
 Crinoids Varied in Color at Le Grand, Iowa, B. H. Beane. (Abstract) 295
 Permian Nautiloids from Western and Southwestern United States. A. G. Unklesbay. (Abstract)..... 295
 Etched Boulder at Ames, Iowa. Charles S. Gwynne. (Abstract)..... 296
 Pleistocene History of Mississippi River. A. C. Trowbridge, A. J. Williams, J. C. Fry, and F. A. Swenson. (Abstract)..... 296
 The Occurrence of Plant Microfossils in the Pennsylvanian Coals of the United States. L. R. Wilson. (Abstract)..... 297

Mathematics

A New Proof of a Formula of Kuratowski. E. W. Chittenden 299
 On the Independence of Operators on a Lattice. Frank Haight..... 301

Physics

Angular Distribution of Gamma Rays from Fluorine Bombarded with Protons. Stanley Atchison. (Abstract)..... 305
 Interesting Case where the Heat Flow Increases the Heat Conductivity of a Fluid. Sulamith, Bereskin and G. W. Stewart. (Abstract) 305
 High Intensity Flash Tube. T. Robert Burnight. (Abstract)..... 305
 The Evaporation of Metals from Hot Filaments. Wallace C. Caldwell. (Abstract) 306
 Scattering of Potassium Ions in Various Gases. John A. Eldridge. (Abstract) 306
 The Elements of Surface Tension. John A. Eldridge. (Abstract).... 307
 Construction of the New Pressure-Insulated Electrostatic Generator at the State University of Iowa. A. Ellett and G. J. Plain. (Abstract) 307
 Rigidity Modulus for Beta-Brass Single Crystals. Walter A. Good. (Abstract) 307
 Resonance in B₁₁ + H₁. James Jacobs and W. B. McLean. (Abstract) 308
 Physics Concepts in Grade School Science. C. J. Lapp. (Abstract) 308
 Compact Ionization Chamber-First Stage Unit. W. B. McLean and James Jacobs. (Abstract)..... 308
 Scattering of Na Ions in Hg Vapor. F. W. Parker. (Abstract) 309
 An Open-Air Ionization Chamber Roentgen Meter for Routine Measurements of X-ray Intensities. L. E. Pinney. (Abstract) 309
 A Voltage Stabilizing Device for Rectified A. C. Power Sources. L. E. Pinney. (Abstract)..... 309
 Interpretation of Variation of Partial Molal Volume of the Solute with Aqueous Solutions of Strong Electrolytes. G. W. Stewart. (Abstract) 310
 Rigidity Modulus of Lead Single Crystals. Irvin H. Swift (Abstract) 310
 An Electrical Circuit Designed for Use in a Calculating Instrument. Ray Wendland. (Abstract) 310
 A Precise Method for Determining the Efficiency of Electric Range Units. Margaret Woodrow. (Abstract) 311

Psychology

Spread of Effect of Reward and Punishment in a Multiple Choice Situation. Isadore Farber..... 313
 The Effect of Thickness of Stroke on the Legibility of Letters. Julius E. Uhlener..... 319
 Retroactive Inhibition as a Function of the Relative Serial Positions of the Original and Interpolated Items. Arthur L. Irion..... 325

A Preliminary Study of the Visual Field in Athletics. Robert Hobson and M. T. Henderson.....	331
An Extension of Kirkendall's Study of Incentives in the Motivation of Children. Lyle K. Henry and Mary J. Brand.....	337
A Language Test of Children in Differential Rural Environments. G. M. Worbois.....	345
Ocular Patterns as Indices of Intellectual Achievement. Herman F. Brandt.....	347
The Effects of Punishment in Serial Verbal Learning. B. J. Underwood Implementing Recall. H. J. Haverkamp.....	349
An Empirical Study of Compensation. A. R. Lauer and Lualis Uthoff	357
Some Relationships Between Placement Scores and Scholastic Rating. Paul C. Greene.....	361
Recent Personnel Research Significant to Vital Educational Procedures. Earle E. Emme and Eugene M. Emme.....	373
Recent Research on Predicting College Success. E. E. Emme and Mary Patterson.....	375
Factors in the Religious Development of Thirty-eight College Students. E. E. Emme and Catharine Rich. (Abstract).....	395
The Problem of Night Driving in Relation to Accident Prevention. A. R. Lauer. (Abstract).....	395
A New Technic for Measuring the Effect of Practice Upon Individual Differences. W. A. Owens, Jr. (Abstract).....	396
Standards for Research in Personality. Edward Rice and R. H. Sylvester. (Abstract).....	396
Further Studies in the Technique of Evaluating Biological Background. Richard Schweet. (Abstract).....	397

Science Teaching

The Prediction of Vocational Success. Dewey B. Stuit.....	399
---	-----

Zoology

The Histology of the Digestive Tract of the Cluster Fly, <i>Pollenia rudis</i> . David T. Jones.....	407
Observations on Colonial Peritrichs (<i>Ciliata; Protozoa</i>) of the Okoboji Region. Everett L. Bishop, Jr. and Theodore L. Jahn.....	417
A Comparative Study of the Hardening Effects of Various Fixatives Dehydrating, Clearing, and Embedding Agents. Karl A. Stiles and Thomas N. Stewart.....	423
Late Fall and Winter Bird Records, 1938 to 1941, in the Sioux City Area. Jean Laffoon.....	425
A Preliminary List of Pipunculidar (Diptera) of Iowa. Ivan C. Brooks	437
A Case of Unusual Inheritance in Mulattoes. Fae M. Shawhan.....	441
Selective Mating in the Earthworm. (<i>Lumbricus Terrestris L.</i>) Hugh Clark.....	445
The Effects of Ultracentrifuging Germinating Seeds of Onion and Rye. James J. Hilbe.....	457
The Biological Action of Rotenone on Fresh-Water Animals. Howard Laverne Hamilton.....	467
Iowa Non-Biting Midges. (<i>Diptera; Chironomidae</i>). James C. Beyer. (Abstract).....	481
The Embryology of the English Sparrow. Warren N. Keck. (Abstract)	481
Experimental Modification of X-ray Injury to the Skin of New-Born Rats. J. P. Goodrich, T. C. Evans, and J. C. Slaughter. (Abstract).....	482
Changes in Susceptibility to X-rays of Certain Embryonic Cells of the Grasshopper. J. C. Slaughter, T. C. Evans, and J. P. Goodrich. (Abstract).....	482
The Inheritance of the Pitted Ear. Karl A. Stiles. (Abstract).....	483
A Method of Mounting Diglycol Stearate Sections upon Slides. Karl A. Stiles and Kenneth Heck. (Abstract).....	484
A Progress Report on a Method for Histological Preparations Eliminating Fat Solvents. Karl A. Stiles and Jean Peterson. (Abstract)	484