

obituaries

Wallace Brode

Wallace R. Brode, an internationally known chemist, died on 10 August in Washington, D.C. at the age of 74. He was an outstanding chemist and a leader in the scientific community.

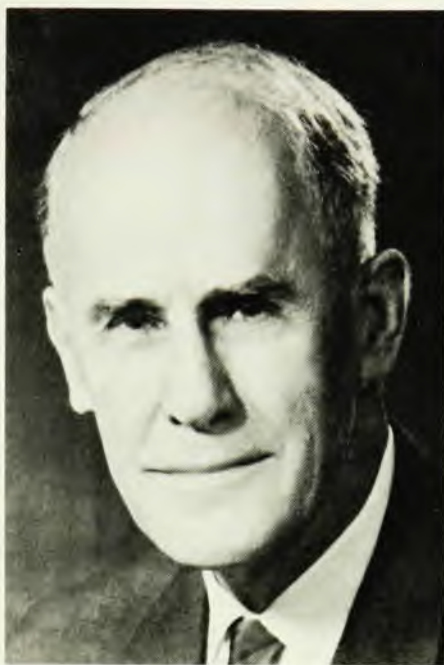
Born in Walla Walla, Washington, where his father was professor of zoology at Whitman College, Brode received his bachelor's degree at Whitman and the MS and PhD at the University of Illinois. After two years as a Guggenheim Fellow at Leipzig, Zurich and Liverpool he in 1928 joined the department of chemistry at Ohio State University, where he remained for twenty years.

His doctoral dissertation on the organic chemistry of dyes required spectrochemical methods, which led to further research on spectrographic methods in chemistry. Many of his forty doctoral students did their dissertations in this area. Brode became an acknowledged leader in the field and wrote a standard textbook on the subject.

In 1947 Brode left Ohio State University to become associate director of the National Bureau of Standards, where he remained until 1958. After two years as Science Advisor to the Secretary of State he retired to spend his time as consultant and member of advisory boards to the military and the Atomic Energy Commission.

For ten years he was editor of the *Journal of the Optical Society of America*. He served as president of the Optical Society of America, the American Chemical Society and the American Association for the Advancement of Science.

He was the recipient of three honorary degrees as well as the Priestley medal of the American Chemical Society, the medal of the Society of Applied



BRODE

Spectroscopy, and the Exceptional Service Medal of the Department of Commerce. For his wartime services in Europe during World War II with the Office of Scientific Research and Development he was awarded the Presidential Certificate of Merit. He was a member of the National Academy of Science.

Actively interested in the international exchange of scientific information and the teaching of science in the secondary schools, Brode collaborated on three textbooks in chemistry.

His administrative ability was evident in his work at the National Bureau of Standards, and as the first head of the Science Department of the Naval Ordnance Test Station at Inyokern, California.

RALPH A. SAWYER
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Wallace Waterfall

Wallace Waterfall, recently named Secretary Emeritus of the American Institute of Physics, and Treasurer and Secretary Emeritus of the Acoustical Society of America, died on 21 August after a long illness. He was 74 years old.

Waterfall served as a major pillar of the administrative side of American physics for nearly two generations. He was born in Columbia City, Indiana and received his BS from the University of Illinois in 1923. He began his working

career as a construction supervisor in Indiana schools.

After two years on the construction job, Waterfall joined the Celotex Corporation as an acoustical engineer, and from then on he belonged to acoustics and acoustics belonged to him.

During this early period, he picked up another degree from the University of Illinois, this one in engineering physics. At the same time, he continued to advance at Celotex and by 1942 he had become its director of research.

World War II interrupted this straightforward engineering career and

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Sample entries from the Quarterly Index (with Abstracts)*

● Physics-Astronomy
Classification No. and
Heading (PACS)

SUBJECT INDEX

25.60. ^3He and ^4He -induced reactions and scattering ($A \geq 5$)

00343. Elastic scattering of 60-MeV alpha particles by the even nickel isotopes. D. G. Madland, P. Schwandt, W. T. Sloan.

Physics Department, Indiana University, Bloomington, Indiana 47401; P. Shapiro, Naval Research Laboratory, Washington, D.C. 20375; and P. P. Singh, Physics Department, Indiana University, Bloomington, Indiana 47401, and Naval Research Laboratory, Washington, D.C. 20375. (Received 17 September 1973)

An optical-model analysis of the scattering of 60-MeV α particles by ^{58}Ni , ^{60}Ni , ^{62}Ni , and ^{64}Ni has been performed with particular emphasis placed on (1) the significance of the backward-angle data with respect to removal of potential ambiguities and (2) the extent to which α elastic scattering at this energy is sensitive to the interior detail of the potential. In the ^{58}Ni case, six equivalent potentials are found to fit the diffraction scattering region ($\theta < 70^\circ$), but only two of these simultaneously provide acceptable fits in the backward angle region. It is shown that the detailed form of the real potential significantly affects the scattering only at distances beyond ~ 4 fm. The 60-MeV α probe is not sensitive to the detail of the total potential inside of ~ 3 fm in any way that affects the elastic cross section.

Phys. Rev. C 9 (3), 1002-17 (Mar. 1974); CPM-7403C0963;

PACS 27.40.+ , 27.50.+

..... Study of deuteron-cluster deformation using the $^6\text{Li}(d, tp)^4\text{He}$ reaction. 00176.

Additional Title Listing

● Authors' Names

● Authors' Affiliations

● Date Article Received

● Current Physics Microform No.

● Abstract No.

AUTHOR INDEX

von Falkenburg, P.-03615
Vyaslav, John F.-00039

W

Wagner, R.F.-00015

Wagner, William P.-00010

Walch, R. Milton-00174

Wald, Gregory J.-01123

Walker, H. Alexander, Jr.-00036

00231, 00659,

Walker, Mary R.-00029

Wallace, A.W.-00247, 00542

● Author's Name

● Abstract No.

Sample entries from the Annual (Cumulative) Index*

● Physics-Astronomy
Classification No. and
Heading (PACS)

SUBJECT INDEX

71.60. Lasers

Laser emission at 1.065 μm from neodymium-doped anhydrous cerium trichloride at room temperature-S. Singh, L.G. Van Uitert, J.R. Patopowicz, and W.H. Groddiewicz. Appl. Phys. Lett. 24 (1), 10-2 (1 Jan. 1974); 00028; CPM-7401A00010

Optically stimulated x-ray laser-Isaac Freund. Appl. Phys. Lett. 24 (1), 13-4 (1 Jan. 1974); 00029; CPM-7401A0013

Transient thermal profile in optically pumped laser rods-W. Koechner. J. Vac. Sci. Technol. 11 (2), 352-8 (Mar. 1974); 00324; CPM-7403C0589

● Authors' Names

● Journal Title, Vol., No., Pages, Date

● Current Physics Microform No.

AUTHOR INDEX

Wagner, R.F.-Characteristics of infrared photodetectors produced by radiation doping-R.F. Wagner (Department of Applied Physics, New York University, New York, New York 10019) J. Appl. Phys. 45 (3), 910-37 (Mar. 1974); 00015; CPM-7403A0108

● Author's Name

● Journal Title, Vol., No., Pages, Date

● Current Physics Microform No.

● Abstract No.

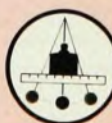
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took Waterfall to the division of war research at Columbia University, where he was a staff member from 1943 to 1945, and director of the summary reports group from 1945 to 1948.

Having listed two positions of employment in 1945, one would think that



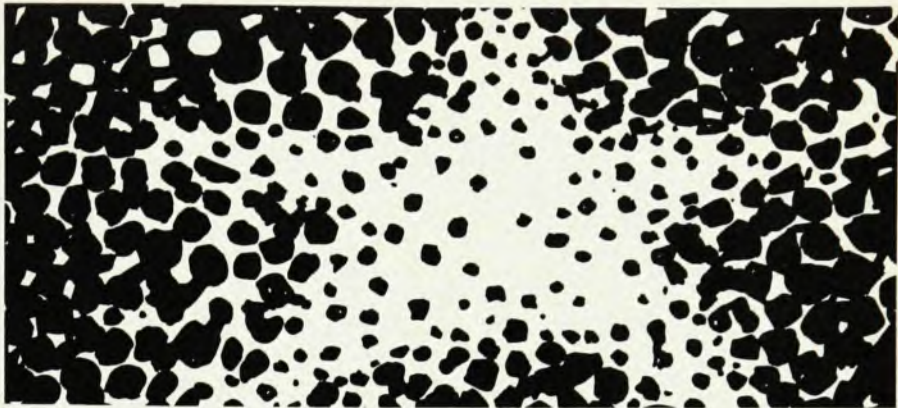
WATERFALL

the story of his employment for that year would be complete. Not so. For Waterfall one or even two jobs were never enough. In 1945, he took on the position of Secretary of the American Institute of Physics, and held that position until becoming Secretary Emeritus last March. During his years at the Institute, he also served variously as Treasurer, Deputy Director and Acting Director. He was at one time or another directly in charge of publishing, advertising, finance and society meeting arrangements. I personally can speak of his initial role in the establishment of the Russian translation program at the Institute, and of his continuing concern for it.

While still a young man, Waterfall attended the organizing meeting of the Acoustical Society of America near the end of 1928, and was elected its first Secretary when the society got underway the following year, an office that he held continuously for the next forty years. Finally feeling the press of the years, he stepped aside to become Secretary Emeritus of the Acoustical Society of America in 1969, but only after he had taken over the position of treasurer of that Society in the previous year, and treasurer he remained until his death.

When the Acoustical Society began its Journal in 1929, Waterfall was there

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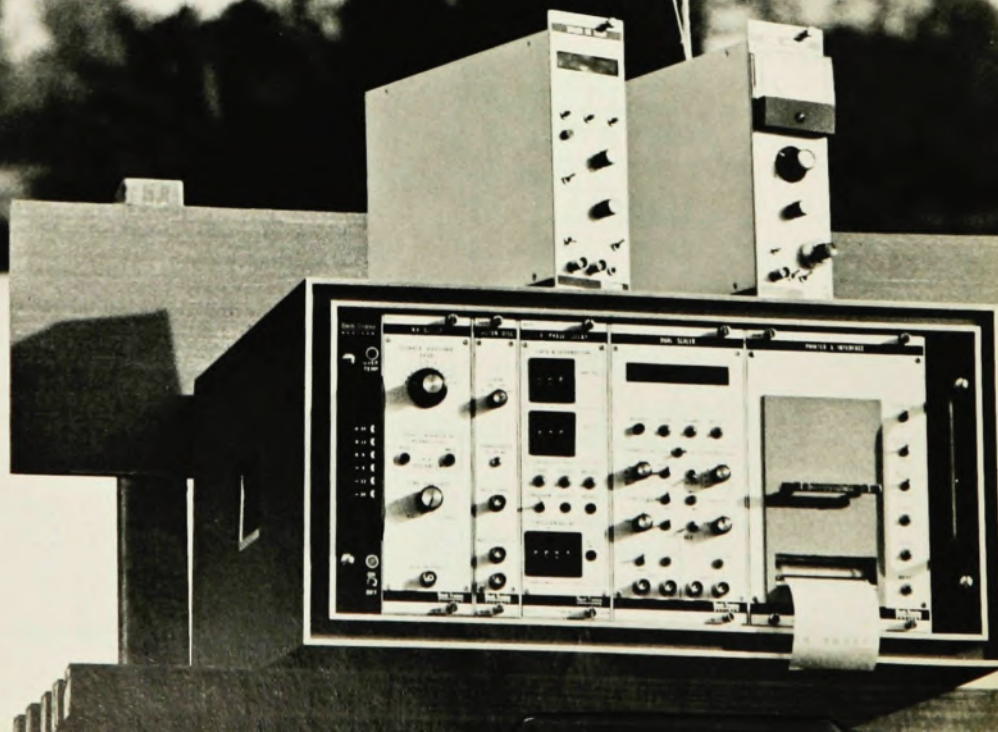
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to serve as its editor, until 1933. In the years since 1929, nothing has happened to acoustics that was not his concern. Every decision of the society had Waterfall's imprint on it. Every new president of the society was guided by him throughout the term of office. After I returned from the meetings this spring, at which he was able to make only the briefest appearance, I recalled in a note to him the lines of Thomas Moore,

"I feel like one who treads alone
some banquet hall deserted."

Waterfall was absent, and the presence of everyone else could not fill that vacancy.

In 1954, the Acoustical Society created a new award, the Gold Medal, and awarded it to him at his twenty-fifth anniversary banquet that year. But perhaps more meaningful to him was the large silver tuning fork, complete with hammer and resonance box, given him by the former presidents of the Acoustical Society in 1969.

If all this activity suggests that Waterfall had no time for his family, that would be an error of major proportions. He married Fern Riley in 1923, and their attendance at meetings of the Acoustical Society and the International Congress on Acoustics seemed like one long honeymoon. They had one son and three grandchildren. His wife's untimely death in an automobile accident in 1973 had a tragic effect on Waterfall. His decline proved to be a rapid one.

Waterfall's professional role cannot be better summed up than was done in the certificate given him by the American Institute of Physics on the occasion of his transition from Secretary of the Institute to Secretary Emeritus:

"From industry, he brought essential sharply honed skills of the business world to a non-profit enterprise. His innate honesty with himself has made legendary his ability to serve both the Institute and its societies and to be their loving, but unflinching, critic. His inexhaustible fund of knowledge of the Institute and its history as well as its lore served him well in his frequent roles as guardian of the budget and mentor of his colleagues. His skillful diplomacy in handling negotiations, his kindness with people, his generosity of himself, his modesty about his own accomplishments, and his wise counsel have had an impact on the Institute, its staff and its members that will long be felt and affectionately remembered."

ROBERT T. BEYER
Department of Physics
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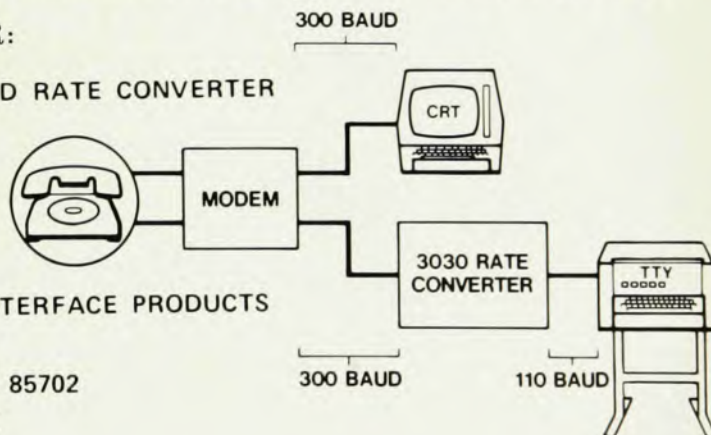
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