











ON RECOMMENDATION OF THE

NORTHWESTERN UNIVERSITY HAS CONFERRED THE DEGREE OF UNIVERSITY SENATE

DOCTOR OF SCIENCE

UPON

ALFRED ROBERT BADER

DONE AT EVANSTON ILLINOIS THIS SIXTEENTH DAY OF JUNE IN THE WITH ALL THE RIGHTS AND PRIVILEGES BELONGING TO THAT DEGREE YEAR ONE THOUSAND NINE HUNDRED AND NINETY A.D.



Koleit & Menges SECRETARY OF HE SENATE Chall R al PRESIDENT OF THE UNIVERSITY



Robert Jr Menges SECRETARY OF HE SENATE Rule R. al PRESIDENT OF THE UNIVERSITY



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CHAIRMA OF THE BOARD OF TRUSTEES

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NORTHWESTERN

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U N I V E R S I T Y

ONE HUNDRED AND THIRTY-SECOND ANNUAL COMMENCEMENT

9:30 A.M., SATURDAY, JUNE 16, 1990 McGAW MEMORIAL HALL, EVANSTON, ILLINOIS



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ALFRED ROBERT BADER

DOCTOR OF SCIENCE

Ph.D., Harvard University, 1948. Chairman of the board of Sigma-Aldrich Company, Bader founded Aldrich Chemical Company in 1951 and built it into the world's foremost supplier of high-quality fine organic chemicals. By providing scientists with timely and reliable delivery of thousands of previously unavailable chemicals at reasonable price and by establishing close ties between his company and research chemists throughout the world, he has changed the fundamental approach of research chemists to organic synthesis. The company's catalog, of which more than a million copies are dis-tributed each year, is an internationally recognized handbook of fine chemicals and has become the starting point for the creation of many complex organic materials. He is author or coauthor of more than 25 scientific papers and holds numerous patents. In addition, Bader is recognized as a historian and collector of the works of 17th-century Dutch masters; in 1976 and 1989 he was curator of exhibitions at the Milwaukee Art Center of works from his collection. His 1988–89 Charles D. Hurd Lectures at Northwestern reflected his combined interests in chemistry, art, and business.

Presented by Frank W. Luerssen, Trustee, Northwestern University

PER-INGVAR BRÅNEMARK

DOCTOR OF SCIENCE

Ph.D., University of Lund, 1959. Professor of anatomy and head of the Institute for Applied Biotechnology at the University of Gothenburg (Sweden), Brånemark has been a pioneer in the development and scientific documentation of a clinical reconstruction procedure using implants directly connected to bone for the successful longterm support of oral and maxillofacial prostheses according to the osseointegration principle. His work has had important implications for the effective use of osseointegrated implants for use in the oral cavity, for retaining maxillofacial restorations, for retaining boneconducted hearing aids, and for numerous applications in orthopedic surgery. He is also director of Gothenburg's Laboratory of Experimental Biology, which investigates nerve tissue reconstruction, bone tissue regeneration, and microcirculation. Brånemark's research has been recognized by such awards as the Elander Award, the Schweitzer Research Award, and the Research Prosthodontics Award of the International Association for Dental Research. He is an honorary fellow of the American Academy of Denture Prosthetics, the Academy of Osseointegration, and the American Academy of Maxillofacial Prosthetics.

Presented by Ross L. Taylor, Professor and Director, Division of Removable Prosthodontics, Dental School

JOHN WERNER CAHN

DOCTOR OF SCIENCE

Ph.D., University of California, 1949. Currently senior fellow at the National Institute for Standards and Technology, Cahn has been a central figure in the advancement of materials science over the past three decades. Many of his papers have become landmarks in their field, establishing new areas for research both within materials science and in the field of statistical physics. In particular, his work has concentrated on such subjects as the free energy of nonuniform systems, wetting phenomena, and quasicrystalline materials. In collaboration with the late John Hilliard of Northwestern's Department of Materials Science and Engineering, he developed the widely recognized Cahn-Hilliard equation and the theory of spinodal decomposition. Before joining the National Bureau of Standards (the precursor to the National Institute for Standards and Technology) in 1978, Cahn taught at the University of Chicago and the Massachusetts Institute of Technology. He has received the prestigious Von Hippel award of the Materials Research Society and the Albert Sauveur Achievement Award of the American Society for Materials. Cahn is a member of the National Academy of Sciences and the American Academy of Arts and Letters.

Presented by Julia R. Weertman, Walter P. Murphy Professor and Chairperson, Department of Materials Science and Engineering, McCormick School of Engineering and Applied Science

SAM GILLIAM

DOCTOR OF ARTS

M.A., University of Louisville, 1961. Described in *Art in America* as "an astonishingly innovative artist whose search for new forms stems directly from his need to express ever more complex ideas," Gilliam has had solo exhibitions at such museums as the Phillips Collection in Washington, the Museum of Modern Art in New York, the Philadelphia Museum of Art, and the Walker Art Center in Minneapolis. Recognized as a daring innovator with color, form, and space, his abstract work has included varied media ranging from environmental draping of stained canvas to complex structures involving paint, glass, aluminum, and stone. His work is included in numerous permanent collections, including those of the Museum of Modern Art, the Corcoran Gallery (Washington), the Carnegie Institute (Pittsburgh), the Tate Gallery (London), the Art Institute (Chicago), the Musée d'art Moderne de la Ville (Paris), and the Boymans Museum (Rotterdam). He is a fellow of the John Simon Guggenheim Foundation and received the Norman Walt Harris Prize from the Art Institute of Chicago.

Presented by Betty A. Van Gorkom, Trustee, Northwestern University



JÜRGEN HABERMAS

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DOCTOR OF HUMANE LETTERS

Ph.D., University of Bonn, 1954. Professor of philosophy at the University of Frankfurt, Habermas is widely recognized as the leading philosopher and social theorist in Germany today. Serving as a major public conscience for postwar Germany, he led the fight for civil liberties within the academy when the "Tendenzwende" of the 1970s threatened them and the fight against the "normalization" of the Holocaust by revisionist German historians in the 1980s. His numerous books and articles range across fields as diverse as sociology, political science, psychology, history, and philosophy. Among his most important works are the two-volume Theory of Communica-tive Action (1981), which offers a sociological and philosophical analysis of contemporary society, its historical genesis, and future prospects, and The Philosophical Discourse of Modernity (1985) which critically examines the challenges of contemporary relativism. He has held such distinguished American lectureships as the Tanner at Harvard, the Gauss at Princeton, and the Howison at Berkeley. In recognition of his contributions to postwar German life and letters, he has been honored by many major German awards, including the Hegel, Freud, Adorno, and Geschwister-Scholl prizes.

Presented by Kenneth Seeskin, Professor and Chairperson, Department of Philosophy, College of Arts and Sciences

CHARLES EVERETT KOOP

DOCTOR OF SCIENCE

M.D., Cornell University, 1941. Following a distinguished career as a pediatric surgeon at the University of Pennsylvania and editor of the Journal of Pediatric Surgery, Koop was appointed surgeon general of the United States in 1981, a position from which he recently retired. As surgeon-in-chief at the Children's Hospital of Philadelphia, he established the country's first neonatal surgical unit and perfected techniques for the surgical correction of congenital defects in infants. Though Koop's nomination as surgeon general was highly controversial, once in office, he reestablished the role of the surgeon general as a principal spokesperson for national health-related issues. In particular, he gained recognition for his independence from political pressures and his campaign against smoking, his advocacy of sex education, and his refusal to bow to administration pressure and assert that abortions were psychologically harmful to women. His 1986 report on AIDS, which combined compassion for its victims with frank discussion of the disease's dangers and prevention, served to make the AIDS crisis a central part of the national agenda. He currently chairs the National Safe Kids Campaign, an injury prevention program. He was awarded this year's Public Welfare Medal of the National Academy of Science.

Presented by Harry N. Beaty, Professor of Medicine and Dean, Medical School

FRANCIS CHRISTOPHER OAKLEY

DOCTOR OF HUMANE LETTERS

Ph.D., Yale University, 1960. Currently professor of history and president of Williams College, Oakley is one of the country's foremost scholars of medieval history and the history of Western culture. Among his numerous books are *The Political Thought of Pierre d'Ailly* (1964), *Council Over Pope?* (1969), *The Medieval Experience* (1974), The Western Church in the Later Middle Ages (1979), and Omnipotence, Covenant, and Order (1984). In these works, as in numerous contributions to books and journals, he has explored the links between late-medieval religious life and the Reformation and the centrality of conciliar thought for the Western political tradition. Oakley joined the Williams faculty in 1961 and served as dean of the faculty there from 1977 through 1984; he was appointed president of the college in 1985. He has served as a member of the Institute for Historical Research at the University of London and as a member of the Institute for Advanced Study in Princeton. He is a member of the editorial board of the Journal of the History of Ideas and a fellow of the Medieval Academy of America.

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Presented by the Honorable John J. Louis, Jr., Trustee, Northwestern University

HENRY TAUBE

DOCTOR OF SCIENCE

Ph.D., University of California, 1940. Recently retired from his position as professor of chemistry at Stanford University, Taube has been one of the pioneers in the revival of inorganic chemistry. Through a series of ingenious experiments measuring the myriad reaction rates and charting the paths of electrons as molecules break apart and recombine, he showed that certain atoms or molecules can serve as bridges for the exchange of electrons between molecules. Providing the first concrete models of what takes place during these reactions, he laid the foundation for understanding the chemical reactions that produce energy in living organisms and led to the development of catalysts that made possible more efficient industrial processes for making chemicals. Taube has been a member of the faculty of Cornell University, the University of Chicago, and since 1961, Stanford. A member of the National Academy of Sciences, the American Academy of Arts and Sciences, and the Royal Physical Society (London), Taube received the National Medal of Science in 1977. He was awarded the Nobel Prize in Chemistry in 1983.

Presented by Fred Basolo, Charles E. and Emma H. Morrison Professor of Chemistry, College of Arts and Sciences

LOIS WILLE

DOCTOR OF HUMANE LETTERS

M.S.J., Northwestern University, 1954. Currently editorial page editor of the *Chicago Tribune*, Wille won her first Pulitzer Prize for public service in 1963 for a series of articles in the *Chicago Daily News* describing the refusal of state and local public health services to provide birth control information and services to indigent women. Having joined the *Tribune* in 1984, she received her second Pulitzer Prize in 1989 for editorial writing; she was cited in particular for ten editorials, which were characterized by alternating outrage and irony, dealing with local governmental bodies and their officials. A 1982 series of editorials in the Chicago *Sun-Times* on the city's financial base and its current and future needs won a Peter Lisagor award from the Inland Daily Press Association. Wille's reportorial experience includes coverage of the United Nations, the 1976 Democratic and Republican national conventions, and President Jimmy Carter's campaign from its beginning in Plains, Georgia. She is author of the book *Forever Open*, *Clear and Free: The Historic Struggle for Chicago's Lakefront* (1972).

Presented by Martin J. Koldyke, Trustee, Northwestern University





