The Johns Hopkins University
Conferring of Degrees at the Close of the
Ninety-sixth Academic Year

May 26, 1972
Keyser Quadrangle
Homewood
Baltimore, Maryland
ORDER OF PROCESSION

MARSHALS

MICHAEL BEER
GERALD S. GOTTERER
ROBERT E. GREEN
JOHN W. GRYDER
WILLIAM H. HUGGINS
MONROE LERNER
RICHARD A. MACKSEY
CHARLES B. MARSHALL
ALVIN NASON
EVERETT L. SCHILLER
PHOEBE B. STANTON
CHARLES R. WESTGATE

THE GRADUATES

*

MARSHALS

CARL F. CHRIST
ALSOPH H. CORWIN

THE DEANS
HONORED GUESTS
OFFICERS OF THE UNIVERSITY
THE TRUSTEES

*

MARSHALS

FRANCIS ROURKE
JOHN WALTON

THE FACULTIES

*

CHIEF MARSHAL

ROBERT H. ROY

THE CHAPLAIN

THE PROVOST OF THE UNIVERSITY
CANDIDATES FOR THE JOHNS HOPKINS UNIVERSITY
SOCIETY OF SCHOLARS
PRESENTORS OF THE HONORARY DEGREE CANDIDATES AND THE
HONORARY DEGREE CANDIDATES
CHAIRMAN OF THE BOARD OF TRUSTEES
THE PRESIDENT OF THE UNIVERSITY

*
ORDER OF EVENTS

STEVEN MULLER
President of the University, presiding

* * *

PROCESSIONAL
Festival March
Felix Mendelssohn Bartholdy

The audience is requested to stand as the Academic Procession moves into the area and to remain standing until after the Invocation and the singing of the University Ode.

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INVOCATION
CHESTER L. WICKWIRE
Chaplain of the University

* 

"THE STAR-SPANGLED BANNER"
"THE UNIVERSITY ODE"

* 

GREETINGS
ROBERT D. H. HARVEY
Chairman of the Board of Trustees

* 

INDUCTION OF NEW MEMBERS INTO THE SOCIETY OF SCHOLARS

RAY MORRIS BOWEN
E. G. D. COHEN
DERYL HART
ANNA MARTTA HIETANEN-MAKELA
ABRAHAM HORWITZ
GEORGE JAMES
LAWRENCE C. KOLB
ALEXANDER D. LANGMUIR
ROBERT Q. MARSTON
DAVID ALAN PRICE EVANS
CHAO-CHENG WANG
W. HOWARD WREGGINS

Scholars Presented by HARRY WOOLF
Provost of the University

* 

MUSICAL INTERLUDE
Divertimento No. 1 in B flat for Winds
St. Anthony Choral: Andante
Rondo: Allegretto
Franz Josef Haydn
CONFERRING OF HONORARY DEGREES

DON CAMERON ALLEN
RALPH EDWARD GIBSON
EDGAR AUGUSTUS JEROME JOHNSON
FRANK B. WALSH

CONFERRING OF DEGREES ON CANDIDATES

BACHELORS OF ARTS
BACHELORS OF ENGINEERING SCIENCE

Presented by
GEORGE E. OWEN
Dean, Faculty of Arts and Sciences

*   *   *

ASSOCIATES OF ARTS
ASSOCIATES OF SCIENCE
BACHELORS OF SCIENCE
BACHELORS OF SCIENCE IN ENGINEERING

Presented by
ROMAN J. VERHAALEN
Dean, Evening College

*   *   *

MASTERS OF SCIENCE
MASTERS OF EDUCATION
MASTERS OF LIBERAL ARTS
CERTIFICATES OF ADVANCED STUDY IN EDUCATION
OR LIBERAL ARTS

Presented by
ROMAN J. VERHAALEN
Dean, Evening College

*   *   *

MASTERS OF SCIENCE
MASTERS OF HEALTH SCIENCES
MASTERS OF PUBLIC HEALTH

Presented by
JOHN C. HUME
Dean, School of Hygiene and Public Health
CONFERRING OF DEGREES ON CANDIDATES
continued

MASTERS OF ARTS
Presented by
FRANCIS O. WILCOX
Dean, School of Advanced International Studies

* * *

MASTERS OF ARTS
Presented by
RUSSELL H. MORGAN
Dean, School of Medicine

* * *

MASTERS OF SCIENCE IN ENGINEERING
MASTERS OF ARTS IN TEACHING
MASTERS OF ARTS
Presented by
GEORGE E. OWEN
Dean, Faculty of Arts and Sciences

* * *

DOCTORS OF SCIENCE
DOCTORS OF PUBLIC HEALTH
DOCTORS OF PHILOSOPHY
Presented by
JOHN C. HUME
Dean, School of Hygiene and Public Health

* * *

DOCTORS OF PHILOSOPHY
Presented by
FRANCIS O. WILCOX
Dean, School of Advanced International Studies

* * *

DOCTORS OF MEDICINE
DOCTORS OF PHILOSOPHY
Presented by
RUSSELL H. MORGAN
Dean, School of Medicine

* * *
CONFERRING OF DEGREES ON CANDIDATES
continued

DOCTORS OF PHILOSOPHY

Presented by
GEORGE E. OWEN
Dean, Faculty of Arts and Sciences

* * *

STATEMENT TO THE GRADUATES

STEVEN MULLER
President of the University

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BENEDICTION

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RECESSIONAL

Rondo: Allegro in E Flat, Opus 71
Ludwig Van Beethoven

Music by
PEABODY WIND QUINTET
SIDNEY FORREST, Director

The audience is requested to remain standing after the Benediction until the members of the faculties and graduates have left the area.

* * *
AWARDS

THE DELTA SIGMA PI SCHOLARSHIP KEY
in the Division of Administration and Business of the Evening College
for the highest average for the entire course
Awarded to
DANIEL SHAW LANKFORD

THE C. RICHARD MARTIN AWARD
in Political Economy for outstanding work by a first or second year graduate student
Awarded to
ROBERT B. ANDERSON

THE SARAH & ADOLPH ROSEMAN ACHIEVEMENT AWARD
in Chemistry in recognition of outstanding accomplishment
Awarded to
GARY W. SCHNUELLE

THE ROBERT BRUCE ROULSTON PRIZE
for excellence in German
Awarded to
EDWARD L. BOGGS, III
FRANK J. GILLY, JR.

THE JULIUS TURNER AWARD
for the best senior thesis in Political Science
Awarded to
JACK N. GOODMAN

THE WALL STREET JOURNAL STUDENT ACHIEVEMENT AWARD
in the Division of Administration and Business of the Evening College
for outstanding scholarship and exceptional promise of future success
Awarded to
JANET MOYLE HARRYMAN
Mr. President, for thirty years Don Cameron Allen, the Sir William Osler Professor of English Literature, has served this University with extraordinary distinction.

Throughout his career he has been the master of that select band of polymaths whose expert knowledge of Renaissance literature and learning—from astrology and hieroglyphs to scriptural exegesis—has been fundamental for adequate interpretation of our erudite early authors. More than anyone else, he has shaped the modern study of Renaissance literature and kept steady its high standards not only in a score of books and more than a hundred articles but also through his teaching, his notably generous encouragement and assistance of young scholars and colleagues, and his long editorship of the Journal of English Literary History.

While some of his enormous erudition is that of the distant past, he has always remained intellectually young, effectively negotiating between antiquarian learning and modern critical interests and renewing for us with his critical responsiveness the depth and continuity of imaginative life in poetry that still demands our attention. Only one who has thorough command of scholarship could present it, as he does, with modesty and entertaining wit and observe St. Paul’s advice to “Let your speech be always with grace, seasoned with salt.”

Having been so notably responsible for setting high standards for graduate study, it was only to be expected that the Modern Language Association of America—which he had served as vice president and whose journal he helped edit for many years—should turn to him for a study of the Ph. D. program. The resulting Allen Report has had wide and salutary influence on the reformation of the American graduate curriculum. Among the many public recognitions of his accomplishments are his election to the American Philosophical Society and the American Academy of Arts and Sciences, and his honorary degrees from the University of Chicago and from his alma mater, the University of Illinois.

As his colleague for a quarter of a century, I am grateful to take part in the presentation of an honorary degree of Doctor of Laws to Don Cameron Allen, who has long honored this University.
Mr. President, it is a great pleasure to present Ralph Edward Gibson, a man who has had two distinguished careers at this University.

His first career began in 1946 when he became a member of the Applied Physics Laboratory. He served as its Director from 1948 to 1969. His 21-year tenure saw the Laboratory flourish under his warm and personal leadership. The Laboratory's role was broadened to encompass space, transportation, urban, and medical problems. It developed its Howard County site, and it officially became a division of the University.

Upon achieving the status of Director Emeritus in 1969 he began his second University career, this time as Professor of Biomedical Engineering in the School of Medicine. Here, in addition to his departmental activities, he brought his orderly and analytic talents to bear on a wide variety of problems ranging from reorganization of the medical record system to a consideration of the management of clinical units. He was elected as a charter member of the Medical School Council and was selected to be its Chairman pro tempore during its organization. He accomplished all of this and at the same time won the hearts of his colleagues on the medical faculty with his wry, good humor.

In recognition of his important contributions to the University, I am pleased to present Ralph Edward Gibson, and, in particular recognition of his contributions to the School of Medicine, he is presented for an honorary degree of Doctor of Medicine.
Mr. President, on behalf of the faculty and with the approval of the Board of Trustees, I present to you a candidate for the degree of Doctor of Laws.

Edgar A. J. Johnson is an innovator, an outstanding scholar, a superb teacher and a successful practitioner of shirt-sleeve diplomacy. I can think of no one who has made a greater contribution to our Johns Hopkins Bologna Center and to the School of Advanced International Studies where his tenacious dedication to high academic standards and his constructive interests in our programs of study have been a source of inspiration to us all.

Dr. Johnson was the co-founder of the Economic History Association and the first editor of The Journal of Economic History. His record also reflects a dozen years of experience as an able AID administrator and consultant in many lands—including Korea, Greece, Yugoslavia and India. He has taught at Harvard, Cornell, Maryland, Pennsylvania and other universities.

I believe it was August Comte who practiced the policy of cerebral hygiene; he refrained from reading any books except his own. Edgar Johnson has not yielded to this temptation although he does have a long shelf of books to his credit—some thirteen in all. These works consistently reflect creative scholarship of a high order. His Organization of Space in Developing Countries, published last year by the Harvard University Press, certainly breaks new ground, and his memoirs—also published last year—relate in delightful prose the life story of a professor-bureaucrat during an exciting period in American history. He has already embarked upon his fourteenth volume, The Foundations of American Freedom.

It might well be said that Dr. Johnson, like vintage wine, improves with each passing year.

Mr. President, it is a great personal privilege for me to present a wise and learned man—a vigorous advocate of constructive change—who has maintained constant fidelity to the principles of academic excellence. Would we had more professor-bureaucrats like E. A. J. Johnson!
Mr. President, Dr. Frank B. Walsh's contributions to medicine and ophthalmology have been fundamental and broad. He is "The Father of Neuro-ophthalmology" in America and in most of the other highly developed countries in the world today. This title is one of the highest honors that can be paid to a person in medicine for it indicates that that individual has entered and developed a specific field far beyond that of his predecessors. Dr. Walsh initiated and developed the various aspects of this subject in such a dynamic and far-reaching way that neuro-ophthalmology became an important aspect in the education of all students of medicine and especially of ophthalmologists and neurologists.

If one had to cite a specific accomplishment as Dr. Walsh's most outstanding achievement, it would be his encyclopedic three-volume book on medical and neuro-ophthalmology, which is now in its third edition. This book is the standard text for ophthalmic residents and ophthalmologists. In addition, it is a principal reference source for internists, neurosurgeons, neurologists and pediatricians.

As "The Father of Neuro-ophthalmology" almost every outstanding physician in this field has either studied under Dr. Walsh or has been tutored by one of his disciples.

Because of these outstanding accomplishments, Dr. Walsh has received honorary degrees from three universities and awards or prizes from ophthalmic and medical societies in this country, Germany, Canada, England and Ireland. Mr. President, it is most fitting that the University honor Dr. Frank B. Walsh with the degree of Doctor of Laws.
JOHNS HOPKINS SOCIETY OF SCHOLARS

The Johns Hopkins Society of Scholars was created on the recommendation of former President Milton S. Eisenhower and approved by action of the University Board of Trustees on May 1, 1967. The Society—the first of its kind in the nation—inducts former postdoctoral fellows at Johns Hopkins who have gained marked distinction in their fields of physical, biological, medical, social, or engineering sciences or the humanities, and for whom at least five years have elapsed since their postdoctoral work. The Committee of the Johns Hopkins Society of Scholars, whose members are equally distributed among the academic divisions, elects the Scholars from the candidates nominated by the academic divisions having programs for postdoctoral fellows. Each division has the privilege of nominating up to three candidates for each election year. The Scholars are invested during the graduation ceremony, the Commemoration Day ceremony, or on some similar occasion and are presented with a diploma and a medallion with black and gold ribbon to be worn around the neck with their academic costume.

Today's induction ceremony will honor the twelve new members of the Johns Hopkins Society of Scholars.

Ray Morris Bowen, associate professor of mechanical engineering and mathematical science at Rice University, holds degrees from Texas A&M and the California Institute of Technology and was a post-doctoral fellow in mechanics at Johns Hopkins in 1964-65. While at this University he was the first to attack the extremely difficult problem of extending the concepts of rational thermodynamics to mixtures of diffusing, chemically reacting substances. He has since become an authority in his field to the extent that modern theory of non-equilibrium thermochemistry is based partly on his work.

E. G. D. Cohen was a research associate in the Department of Physics at Johns Hopkins in 1958-59. He holds bachelor's and doctoral degrees from the University of Amsterdam and is presently professor of physics at Rockefeller University in New York. One of the world's leading exponents of classical statistical mechanics, Dr. Cohen has had the high honor of organizing a compilation of recent work in his area by leaders in the field, including his own work. He is one of a handful of physicists now working in the fundamental aspects of this highly important subject.

Dr. Cohen is unable to be present at the Commencement ceremony.

Deryl Hart received an M.D. degree in 1921 from Johns Hopkins, where he also served his internship and did post-doctoral study in surgery and pathology. He remained on the Johns Hopkins faculty until 1930 when he became professor of surgery and chairman of the Department of Surgery at Duke University School of Medicine. He served in those positions until 1960, and was president of the University from 1960 to 1963. He is a fellow and member of the board of governors of the American College of Surgeons, and officer or member of numerous other surgical societies.
Anna Martta Hietanen-Makela earned a Ph. D. at the University of Helsinki in 1938, and was a fellow in the Department of Geology at Johns Hopkins in the years just prior to World War II. After an interval in her homeland, she taught at Stanford University and Oregon State University. In 1949 she joined the U.S. Geological Survey as a geologist. A specialist in petrology, structural geology, metamorphism and metasomatism, she has distinguished herself both in field and laboratory work. Several years ago she was elected president of the oldest and largest section of the Geological Society of America.

Abraham Horwitz, a native of Chile, graduated from the University of Chile with an M. D. degree in 1936. For the next six years he taught at the University and did extensive work in infectious and communicable diseases. In 1943 he came to the Johns Hopkins School of Hygiene and Public Health and was awarded the M. P. H. the following year. In 1950 he drafted plans for the National Health Service of Chile, considered one of the most outstanding developments in Latin America in that decade. In 1960 he became director of the Pan American Health Organization and Regional Director General for the World Health Organization.

Dr. Horwitz is unable to be present at the Commencement ceremony.

George James was a leading figure in the public health field in New York City for many years. A 1945 graduate of the Johns Hopkins School of Hygiene and Public Health, he served first as epidemiologist with the New York State Health Department, then as Deputy Commissioner and Commissioner of Health in New York City. In 1965 he became associated with Mt. Sinai School of Medicine, serving as professor of community medicine and subsequently as president of the School. In his writing he contributed materially to the fields of epidemiology and health administration.

Deceased. The award will be presented posthumously.

Lawrence C. Kolb, professor and chairman of the Department of Psychiatry at Columbia University Medical School, received his M. D. from Johns Hopkins in 1934 and was a fellow in neurology at the Johns Hopkins Hospital from 1936 to 1938. He presently serves also as director of psychiatric service at New York’s Presbyterian Hospital. He holds positions in a number of foundations in the mental health field and has served as advisor to numerous organizations, including the National Institute of Mental Health, and to the City of New York. In 1968 he was president of the American Psychiatric Association.

Alexander D. Langmuir, professor of community medicine at Harvard University School of Medicine, is the holder of an M. D. from Cornell University Medical College and a Master of Public Health degree from Johns Hopkins. He was associate professor of epidemiology at Johns Hopkins from 1946 to 1949, then became director of the Epidemiology Branch of the National Communicable Disease Center in Atlanta, a position he held for over 20 years. He has written extensively on all phases of epidemiology on a global basis and is recognized internationally as a leading contributor in this field.
Robert Q. Marston, director of the National Institutes of Health, holds degrees from Virginia Military Institute, the Medical College of Virginia and Oxford University. In 1949-50, he served an internship at the Johns Hopkins Hospital. He then began a career in medical education successively at the Medical College of Virginia, the University of Minnesota and the University of Mississippi, where he was dean of the School of Medicine, director of the medical center and vice chancellor. His association with the National Institutes of Health began in 1966, and he became director in 1968.

David Alan Price Evans is professor of medicine at the University of Liverpool, from which he holds six degrees. He was a fellow of pharmacogenetics at the Johns Hopkins School of Medicine in 1958-59, during which time he did classical work on the genetic control of INH metabolism. He has since earned wide distinction internationally as a researcher and writer in his field. In 1968, the University of Liverpool created a personal chair for Dr. Price Evans as professor of medicine, which was unprecedented at that institution. He presently also serves as consultant physician to Broadgreen Hospital and the Liverpool Royal Infirmary.

Dr. Price Evans received the award in separate ceremonies on February 22, 1972.

Chao-Cheng Wang, one of the most productive scientists in basic continuum mechanics, holds a B.S. degree from the National Taiwan University and a Ph. D. from Johns Hopkins, which he earned in 1965. He was a post-doctoral fellow at the University in 1965-66, and the following year was appointed assistant professor of mechanics. He is now professor of mathematical sciences at Rice University. He is the author of more than 80 papers, most of them considered to be of fundamental importance, on general continuum mechanics and other aspects of his field.

W. Howard Wriggins, professor of government and director of the Southern Asian Institute at Columbia University, holds a B.A. degree from Dartmouth and an M.A. and Ph. D. from Yale. Following a period of government service which led to his appointment as Senior Staff Member of the National Security Council, Dr. Wriggins was a research associate of the Washington Center of Foreign Policy Research at the School of Advanced International Studies. During this period he wrote "The Ruler's Imperative," an important contribution to the understanding of problems of government in emerging states.
THE UNIVERSITY MACE

The University Mace carried by the Chief Marshal, Professor Robert H. Roy, was first used at the 1954 Commemoration Day Exercises. Eight symbols are hand wrought in sterling silver on an ebony staff. The symbols represent man's cultural development from ancient times, through the Middle Ages and the Renaissance, to the modern era.

THE PRESIDENTIAL INSIGNIA

University President Steven Muller is wearing the Presidential Insignia signifying the authority vested in the President by the Board of Trustees. It is a chain of sterling silver links worn around the neck. Portraits of each of the ten Johns Hopkins University Presidents are engraved on the faces of ten of the links. On the reverse are engraved the names and dates of office of each President. Ten blank links for future use are included. The University Seal completes the design.

ACADEMIC DRESS

The custom of wearing academic dress stems from the Middle Ages, when scholars were also clerics and wore the costume of their monastic order. The hood was originally a cowl attached to the gown, which could be slipped over the head for warmth. The cap, originally round, later became the square mortar-board as we see it today.

Today the cap is the same for all American degrees, although the recipient of a doctoral degree is entitled to wear a gold tassel. The gown varies for the respective degrees. The Bachelor's gown is worn closed and can be distinguished by its long, pointed sleeves. The Master's gown is designed to be open with the arms worn through the slits in the elbows of the sleeves. The Doctor's gown, also worn open, has full, bell-shaped sleeves with three horizontal bars stitched across the upper arm. There is a velvet panel draped around the neck and stitched down the front edges. This velvet trimming may be either black or the same color as the velvet border of the hood.

The hood also varies for the respective degrees. The Bachelor's and Master's hoods are of the same design, pointed at the base. The Bachelor's hood is three feet long; the Master's hood is three and one half feet long. The Doctor's hood is four feet long, of fuller shape and rounded at the base.

The hood is bordered with velvet, the color of which indicates the field of study in which the degree was earned:
The silk lining of the hood represents the institution which granted the degree. If more than one degree is held, the gown and hood of the higher or highest degree is worn. The Johns Hopkins University has adopted an alternative costume to be used by all holding Johns Hopkins doctoral degrees, both earned and honorary. The costume will consist of a gold robe with front and side panels in sable velvet and a six-sided Dutch academic cap with gold sweatband and tassel. The linings seen in today's academic procession may include:

Black, old gold chevron — Johns Hopkins
Light blue, white chevron — Columbia
Dark blue — Yale
Blue with white chevron — Duke
Dark blue, two orange chevrons — Illinois
Light blue, two white chevrons — North Carolina
Old gold, maroon chevron — Minnesota
Old gold — Iowa
Gold, blue chevron — California
Gold — Virginia
Purple, gold chevron — Northwestern

The truth shall make you free.

—St. John 8:32
PHI BETA KAPPA  
Members Elected in 1971-72

MARY D. AINSWORTH  
DENNIS J. AMATO  
MICHAEL J. ASKEN  
SAMUEL P. ASPER  
MICHAEL O. BALL  
DONALD W. BENSON  
JOHN A. BERTOLATUS  
BRUCE EDWARD BOUCHARD  
STEVEN L. BRESSLER  
DAVID J. BYER  
FRANCIS D. CARLSON  
JOSEPH A. CARLTON  
EUGENE B. CHANG  
BARTON CHILDS  
CARL F. CHRIST  
JAMES S. COLEMAN  
THOMAS W. COOPER  
JONATHAN A. DANTZIG  
MARK B. DERR  
GOTTFRIED DIETZE  
MICHAEL A. DOUKAS  
DAVID B. DUNCAN  
JOEL ELKES  
KIRK EMGE  
JERALD L. ERICKSEN  
EDWIN R. FITZGERALD  
CHARLES D. FLAGLE  
DAVID R. FOX  
RUTH B. FREEMAN  
W. BRUCE FYE III  
LARRY R. GERACE  
LARRY P. GOLDBERG  
WILLIAM H. GROVER  
ROBERT W. HALL  
WILLIAM F. HARRINGTON  
DANIEL M. HARRIS  
ERIK L. HEWLETT  
JOHN C. HUME  
JUN-ICHI IGUSA  
HARRIS C. JACOBS  
CHARLES M. JOHNSON III  
SHELDON E. JORDAN  
FREDERICK S. KAPLAN  
ALLYN W. KIMBALL  
MITCHELL L. KORNBLIT  
CORNELIUS KRUSE  
ALFRED ROBERT LIGHT  
VICTOR A. LOWE  
DONAL S. LUSE  
MANFRED M. MAYER  
DERMOT F. McALEESE  
RANDELL L. MCKENZIE  
GLENN T. MEADE  
GLENN E. MITZEL  
RAYMOND B. MONTGOMERY  
VERNON B. MOUNTCASTLE  
STEPHENV. NEVILLE  
WILLIAM I. NOTZ  
ALAN I. NUSSBAUM  
D. CHRISTOPHER OHLY  
GARY R. PASTERNAK  
AIHUD PEYNSER  
OWEN M. PHILLIPS  
RICHARD L. RILEY  
BARRY F. ROSEN  
ALAN I. RUBIN  
PATRICK D. RUSSELL  
JAMES G. SALERNO  
EDMUND SAMBUCO  
ALAN M. SCHIZ  
MELVIN A. SCHWARZ  
ROBERT M. SHAPIRO  
WALTER H. SHELDON  
JACK D. SIDOROV  
JAY E. SIMKIN  
LAMBERT STAMMER JOHN, JR.  
LEON STRAUSS  
WILLIAM J. STRIZEVER  
PAUL TALALAY  
CARL E. TAYLOR  
CLIFFORD TRUESDEL  
ALLAN H. VALGEMÆ  
ANDREW VAN TOSH  
MARK K. WEDEL  
HOWARD O. WEISSMAN  
ROBERT M. WETTSTEIN  
M. GORDON WOLMAN  
ROBIN MARK WOOD  
CRAIG L. WOODY  
HARRY WOOLF  
ROBERT D. WRIGHT  
ERIC A. WULFSBERG  
JOHN H. YOUNG

TAU BETA PI

The following graduating seniors have been elected to Tau Beta Pi—
the National Engineering Honor Society.

MICHAEL O. BALL  
LESTER L. CRAMER  
JONATHAN A. DANTZIG  
JOHN J. HEPNER  
GARRY L. JENKINS  
KIRK R. KARWAN  
DOUGLAS KELNER  
JOHN G. LANG  
WILLIAM E. NEWLAND  
ROBERT C. NILSON  
DANIEL H. OVERMAN  
MICHAEL J. RICHARDSON  
JOHN G. ROMANSKI  
ALAN R. ROSEN  
DONALD L. SCHLENGER  
THOMAS A. SCHULTZ  
LAMBERT W. STAMMER JOHN  
GARY R. STONEBURNER  
GEORGE WILLINGMYRE
Baccalaureate Candidates
in the Faculty of Arts and Sciences
Graduating with Departmental Honors

Robert P. Anderson
Michael O. Ball
Eric S. Bergofsky
Eugene A. Bonte
Tomlin P. Crowder
Edward R. Cummings
Jonathan A. Dantzig
Irvin C. Decatur
Thomas L. Duvall
Mark D. Forester
David R. Fox
Howard M. Fried
Steve C. Goldman
Robert P. Goodman
Harold D. Grinberg
Robert W. Hall
Richard A. Heddleston

Mary C. Hoffer
David X. Hoffman
John B. Holmblad
Steven C. Horii
Mark H. Houck
Tom R. Karras
Kirk R. Karwan
Douglas E. Kelner
Mitchell L. Kornblit
William H. Linder
William E. Little
Bruce J. MacPherson
Phyllis Magram
Donald S. Maier
Geoffrey E. Margrave
Charles W. Maxson
Paul E. McFarland

Daniel C. Ohly
Paul K. Prah
Frank L. Roediger
Richard E. Rosenthal
James C. Salerno
Edmund Sambuco
Richard S. Schafler
Thomas A. Schultz
Jay E. Simkin
Michael C. Snead
Lambert W. Stammerjohn
William J. Strizever
John R. Swanson, Jr.
Beverly J. Teel
Elliott R. Treby
Everett B. Waters
Scott A. Wolpert
Baccalaureate Candidates
in the Faculty of Arts and Sciences
Graduating with General Honors

Howard B. Adler  Mary C. Hoffer  Barry F. Rosen
Richard G. Appel  Michael K. Imura  Steven D. Ross
Richard J. Archer  Robert J. Ivry  Alan I. Rubin
Michael J. Asken  Andrew C. Jacobs  Gary R. St. Peter
Dean R. Backstrom  George W. Johnston  James G. Salerno
Michael O. Ball  Sheldon E. Jordan  Edmund Sambuco
John A. Bertolatus  Frederick S. Kaplan  Richard S. Schafler
Sean R. Bleck  Kirk R. Karwan  Donald L. Schleenger
Perry S. Block  George L. King  Thomas A. Schultz
Steven L. Bressler  Mitchell L. Kornblit  Melvin A. Schwartz
Edward S. Buescher  Howard S. Levenson  Edward P. Shapiro
David J. Byer  Arthur S. Levine  Robert M. Shapiro
David D. Celentano  Andrew W. Levinson  Douglas M. Shepard
Eugene B. Chang  Samuel N. Libber  Kenneth J. Silverman
Thomas W. Cooper  William H. Linder  Jay E. Simkin
Edward R. Cummings  John R. Lipsey  William J. Slotnik
Michael D. Danly  William E. Little  Joseph D. Smith
Jonathan A. Dantzig  Bruce J. MacPherson  Scott Snyder
Richard D. DeFuria  Phyllis Magram  James A. Solomon
Octavio J. de Marchena  Donald S. Maier  Alan P. Spielman
Mark B. Derr  Charles H. McGomas  Lambert Stammerjohn
George M. Dillanni  Paul E. McFarland  Elfrieda H. Steingasner
Robert E. Doherty  Randall L. McKenzie  Glenn H. Stevens
Michael A. Doukas  Carol B. McLaughlin  Leon Strauss
Howard L. Drescher  Glen T. Meade  William J. Strizever
David R. Fox  Dominic J. Nardi  Robert L. Sufit
Howard M. Fried  Dennis A. Noe  David K. Sykes
Larry P. Goldberg  Daniel C. Ohly  Peter A. Taves
Steven C. Goldman  Marjorie Z. Olds  William E. Triest
Robert P. Goodman  Lewis R. Pasternak  Fred M. Weinblatt
Darrell M. Gray  U. S. Grant Peuples  Howard O. Weissman
David A. Griesemer  Richard L. Posen  Edward L. Wender
William H. Grover  Mark D. Reutter  Robert M. Wettstein
Robert Wm. Hall  Martin R. Rewcastle  Robin M. Wood
Daniel M. Harris  Charles P. Ries  Mark P. Zimmett
Eric L. Hildebrand  William W. Robinson
CANDIDATES FOR DEGREES
As of May 15, 1972

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in the Faculty of Arts and Sciences

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Howard Bruce Adler, of New York, N. Y.
Lawrence Elliott Adler, of Princeton, N. J.
John Gerald Albertines, of Timonium, Md.
Arnold Leon Alper, of Irvington, N. J.
Thomas Henry Amalong, of Flossmoor, Ill.
Tracy Brett Ambler, of Hartford, Conn.
Lee Cameron Amsler, of Wheaton, Md.
Robert Philip Anderson, of Palmetto, Ga.
Peter Donald Andreoli, Jr., of Pelham, N. Y.
Steven John Antinelli, of Worcester, Mass.
Richard Gary Appel, of Meriden, Conn.
George Louis Apple, of Harrisburg, Pa.
Richard James Archer, of McLean, Va.
Steven G. Asin, of Newark, N. Y.
Michael Joseph Asken, of York, Pa.
James Alan Avery, of Wilmette, Ill.
Barry Elliot Messner Bacharach, of Baltimore, Md.
Dean Richard Backstrom, of Warren, Pa.
Kenneth Martin Bakalar, of Englewood, N. J.
Kermit F. Baker, of Lansing, N. Y.
Ronald Kent Barndollar, of Loudonville, N. Y.
Gerald Joseph Bates, of Joliet, Ill.
Joseph Elliot Baum, of North Merrick, N. Y.
Richard Eric Bautez, of Sudbury, Mass.
Robert Henry Bear, of Kenmore, N. Y.
Shawn Christopher Beaty, of Atlanta, Ga.
Jeffrey Haines Beck, of Fort Lauderdale, Fla.
Daniel Bellin, of Rochelle Park, N. J.
James Roland Bennett, of Springfield, Mass.
Morris Hillel Berg, of Merrick, N. Y.
Michael Allan Berke, of Evanston, Ill.
Leonard Herbert Bers, of Salisbury, Md.
John A. Bertolatus, of Roselle, N. J.
Sean Russell Bleck, of Palo Alto, Calif.
Steven Eric Blizzard, of Baltimore, Md.
Perry Stanton Block, of Merion, Pa.
Joel Alan Blumenthal, of Roslyn Heights, N. Y.
Toni Ann Boettger, of Cambridge, Md.
Gary Solomon Bondi, of Baltimore, Md.
Eugene Albert Bonte, of Woonsocket, R. I.
Charles Wayne Bowers, of Silver Hill, Md.
Kenneth Myron Braunstein, of Walterboro, S. C.
Steven L. Bressler, of Clayton, Mo.
Bradley Allen Bringgold, of Edina, Minn.
Gene Wilbur Brown, of Baltimore, Md.
Leonard Reid Brown, Jr., of Washington, D. C.
Keith Robert Bucklen, of Lancaster, Pa.
Edward Stephen Buescher, of Silver Spring, Md.
Gary Brent Burgee, of Frederick, Md.
Alfred Ely Burk, Jr., of Timonium, Md.
Jonathan Harris Burroughs, of York, Pa.
Alvin Craig Burstein, of White Plains, N. Y.
David Jay Byer, of Fairlawn, N. J.
Colin Bruce Campbell, of Weston, Conn.
William Frederick Canis, of Elmira, N. Y.
Edwin Steven Carr, of Gloversville, N. Y.
Ira Michael Casher, of Dayton, Ohio
Jill Casner, of Staatsburg, N. Y.
David Dupuy Celenzano, of Hyannis Port, Mass.
Chi-Chao Chan, of Hong Kong
Eugene Bing Chang, of Princeton, N. J.
Robert Earl Chapman, of Pittsburgh, Pa.
David Leslie Cherwitz, of Davenport, Iowa
Hugh Benton Chiodosh, of Carteret, N. J.
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Ted Robert Cmarada, of Clairton, Pa.
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Louis Selby Crouch, of Stevensville, Md.
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Edward Richard Cummings, of Livorno, Italy
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George William Dalphon, Jr., of Wilmington, Del.
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Wesley Roy Daub, of Hanover, Mass.
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JOHN DANIEL DIORIO, of Schenectady, N. Y.
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DAVID CHARLES ETER, of Dayton, Ohio
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WILLIE JAMES Ewing, of Ayer, Mass.
RICHARD JOSEPH FASTIGGI, of Verona, N. J.
KENNETH HOWARD FIFE, of Logansport, Ind.
JACK EUGENE FISCHER, of Cincinnati, Ohio
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JOHN JACOB FISHER III, of Mandarin, Fla.
MELANIE HOPE FISHTHIND, of Adelphi, Md.
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VINCENT FERDINANDO FORTE, of Newton, Mass.
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MITCHELL ALAN FRANK, of White Plains, N. Y.
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DOUGLAS HENRY FUCHS, of Manhasset, N. Y.
PHILIP EDWARD GALLAGHER, of Clarion, Pa.
NEAL JAMES GALICLO, of Ridgewood, N. J.
ROBERT WAYNE GARNET, of Lincolft, N. J.

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JAMES ELDRED GENTRY, of Lakewood, Ohio
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JOHN ROBERT GORE, of Hyattsville, Md.
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PAUL ARTHUR GREENE, of Brooklyn, N. Y.
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JAMES PETER GRENAFEE, of Huntington Station, N. Y.
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ROBERT MERLE HAMILTON, of Baltimore, Md.
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Daniel Webb Johnson, of Manassas, Va.
Jimmie Lee Johnson, of Teachey, N. C.
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Russell Cornish Jones, of Houston, Texas
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Sheldon Emanuel Jordan, of Brooklyn, N. Y.
Emerson Richelieu Julian, Jr., of Baltimore, Md.
Andrew Henry Kahn, of Wantagh, N. Y.
Stephen Martin Kane, of Gostonia, N. C.
Frederick Samuel Kaplan, of Highland Paak, N. J.
Richard Marc Kaplan, of Lawrence, N. Y.
Jeffrey A. Katz, of New York, N. Y.
Gary Steven Kelly, of Baltimore, Md.
Mark Alan Kessler, of East Meadow, N. Y.
George Liang King, of Richmond, Va.
Lucy Margaret Kirkman, of Darien, Conn.
Marvin Eli Kirsh, of Baltimore, Md.
Thomas James Knight, of Anniston, Ala.
Kathryn Ann Koch, of Bloomington, Ind.
Raymond William Koch, of Garden City, N. Y.
Jeffrey Hugh Koenig, of Poughkeepsie, N. Y.
Mitchell Lewis Kornblit, of Great Neck, N. Y.
Alison Victor Kothe, of Zionsville, Ind.
Stephen Kottler, of Augusta, Maine
James Christopher Kozlowski, of Philadelphia, Pa.
Muriel Mahon Kratz, of Vicksburg, Miss.
Kevin John Kresock, of Springfield, Mass.
Abram Joel Kronsberg, of Charleston, S. C.
Isaiah Kuperstein, of Norwich, Conn.
John Albert Lally, of Greenbelt, Md.
James Francis Lasser, of Scarsdale, N. Y.
Michael Charles Lauren, of Great Neck, N. Y.
Mary R. Lemon, of Baltimore, Md.
Michael Alan Lerner, of Brooklyn, N. Y.
William Jay Lesner, of Lawrence, N. Y.
Howard Stanley Levenson, of Quincy, Mass.
Arthur Steven Levine, of Great Neck, N. Y.
Andrew William Levinson, of Great Neck, N. Y.
Barry Edward Levy, of Baltimore, Md.
Thomas Edward Levy, of Biloxi, Miss.
Morgan Rhys Lewis, Jr., of Baltimore, Md.
Todd Ming Chun Li, of Glen Cove, N. Y.
Samuel M. Libber, of Kensington, Md.
Harvey Anton Light, of New York, N. Y.
Robert Henry Lindauer, Jr., of Simsbury, Conn.
William Henry Linder, of Scarsdale, N. Y.
Douglas Brian Lipman, of Jamaica Plain, Mass.
John Richard Lipsy, of Tokyo, Japan
Michael Harvey Long, of Maitland, Fla.
George Mark Loreto, of Whippany, N. J.
Bruce Joseph Mapherson, of Friendly, Md.
Phyllis Magram, of Silver Spring, Md.
Haynes Richardson Mahoney III, of Washington, D. C.
Thomas James Mahoney, of Indian Orchard, Mass.
Donald S. Maiers, of Paramus, N. J.
Clifford Luke Malanowski, Jr., of Baltimore, Md.
Geoffrey Edmund Margrave, of Washington, D. C.
Neil Jay Markwith, of Haddonfield, N. J.
David Albert Martin, of Beaver, Pa.
Rodney Carrington Mason, of Ashton, Md.
Wayne Charles Matus, of Lido Beach, N. Y.
Charles Wayne Maxson, of Severna Park, Md.
Jonathan Waldron McAdams, of Columbus, Md.
Eugene James McBride, of McKeensport, Pa.
Craig Lee McClure, of Stamford, Conn.
Charles Henry McComas III, of Bel Air, Md.
Richard Warren McDonnell, of Kansas City, Mo.
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Randell L. McKenzie, of Abilene, Texas
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Glenn Thomas Meade, of Mesa, Ariz.
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Leo Meire, of Glimp, Nebr.
Thomas Joseph Merimee, Jr., of New York, Mass.
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Vernon Buchheit Myers, of Rockville, Md.
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Gene Stewart Nagler, of Brooklyn, N.Y.
Dominic Jerry Nardi, of Springfield, Mass.
Steffi Ruth Nason, of Baltimore, Md.
Leo Sol Nechamkin II, of Baltimore, Md.
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David Allen Nelz, of Dix Hills, N.Y.
Paul Kurtz Newlin, of Wyomissing, Pa.
Adrienne Sandra Noble, of Rowayton, Conn.
Dennis Alan Noe, of San Antonio, Texas
Colegate Sheldon Nuttle, of Baltimore, Md.
Christine Helen Nye, of Harrisburg, Pa.
Francis Edward O'Donnell, Jr., of St. Louis, Mo.
Daniel Christopher Ohly, of Brooklyn, N.Y.
Marjorie Ruth Zagoria Olds, of College Park, Md.
Mark Alan Ozark, of Edgewood, Pa.
Robert Walter Ozarowski, of Baltimore, Md.
Robert Aubrey Parsley, of Miami, Fla.
Eric Dorsey Partridge, of New Orleans, La.
Lewis Reuven Pasternak, of Hempstead, N.Y.
Samuel Allen Peal, of Washington, D.C.
U.S. Grant Peoples III, of Emerson, N.J.
James Kendall Phelps, of Kendall Park, N.J.
Jeffrey Charles Pingpank, of Darien, Conn.
Charles Leonard Pinsky, of Scarborough, N.Y.
Jerome Orville Pitt, of Trenton, N.J.
Daniel Bruce Polin, of Elkins Park, Pa.
Eugene Anthony Pometto, Jr., of College Park, Md.
Richard L. Pose, of Great Neck, N.Y.
Paul Kodjo Prah, of Mpohor, Ghana, West Africa
Randall Nicoll Pratt, Jr., of Claymont, Del.
Robert Mark Price, of Wantagh, N.Y.
Edward Victor Prochownik, of Buffalo, N.Y.
Liam Oliver Purdon, of Cold Spring Harbor, N.Y.
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William Frederick Raskeb III, of Albuquerque, N.M.
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Martin Ralph Rewcastle, of Goudhurst, Kent, England
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Charles Edwin Riggs, Jr., of West Palm Beach, Fla.
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Ingram Mark Roberts, of Bethesda, Md.
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William S. Rosenberg, of Trumbull, Conn.

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Melvin Paul Rosenwasser, of Walden, N.Y.
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Eugene Michael Sarno, of Lake Mills, Iowa
Leonard Steven Sass, of Enfield, Conn.

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Richard Scott Schafler, of New York, N.Y.
Myron Paul Schamis, of Forest Hills, N.Y.
Philip A. Schechter, of Northbrook, Ill.
Laurence Howard Scheidle, of Meda, Pa.
Carlos Hugh Schenck, of New York, N.Y.
Jeffrey Herman Scherr, of Baltimore, Md.
John Brian Schoppert, of Baltimore, Md.
Richard Jay Schwartz, of Scranton, Pa.
Melvin Alfred Schwarz, of Cincinnati, Ohio
Stuart Arthur Seidel, of Baltimore, Md.
Michael Max Selikowitz, of Glen Rock, N.J.
Douglas Drake Seward, of Wappingers Falls, N.Y.
Edward Paul Shapiro, of Flushing, N.Y.
Robert Moses Shapiro, of Baltimore, Md.
Douglas Mitchell Shepard, of Englewood Cliffs, N.J.
Kenneth Charles Shepro, of LaGrange Park, Ill.
Kathryn Lambdin Sheridan, of Jacksonville Beach, Fla.
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Raymond Calistus Short, Jr., of Bridgeville, Del.
Stephen William Shriver, of Manheim, Pa.
Lynn Barbara Shteir, of Freehold, N.J.
Marcia Rochelle Silver, of Baltimore, Md.
Richard Barry Silver, of Baltimore, Md.
Kenneth Jay Silverman, of Rochester, N.Y.
Jay Edward Simkin, of Baltimore, Md.
Robert Steven Singer, of Brooklyn, N.Y.
Lamin Jalaman Sise, of The Gambia, West Africa
William Joseph Slotnik, of Newton, Mass.
Daryl Smiley, of New York City, N.Y.
Daniel Stuart Morse Smith, of Wilmington, Del.
Gregory Allcire Smith, of Washington, D.C.
Joseph David Smith, of Woodbury, N.J.
Michael Coleman Snead, of Frederick, Md.
Steven Lee Snively, of Denver, Colo.
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James Alan Soberman, of Norwalk, Conn.
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BEVERLY JAMES TEE, of Baltimore, Md.
NORMAN RICHARD THOM, of Boulder, Colo.
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LARRY ALAN THOMPSON, of Norfolk, Va.
ROBERT J. THOMPSON, of West Chester, Pa.
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ELLIOTT ROBIN TROY, of Bay Shore, N. Y.
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STEVEN LEE UTZ, of Bel Air, Md.
MICHAEL BAXTER VINCENTI, of Prospect, Ky.
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HOWARD OWEN WEISSMAN, of Woodbridge, N. J.
EDWARD LAWRENCE WENDER, of Pittsburgh, Pa.
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MAURICE JAMES WHALEN, of Massena, N. Y.
ROBERT DENNIS WHITE, of Buchanan, Mich.
EDWIN HABECKER WIEST, of Hershey, Pa.
GREGORY STEPHEN WILES, of Des Moines, Iowa
CLARA JOSTING WITT, of Chicago, Ill.
CRAIG GILBERT WOLFF, of New Orleans, La.
LARRY ALLEN WOLK, of Oreland, Pa.
SCOTT ANDREW WOLPERT, of Wilmington, Del.
RITA WONDRAK, of Chicago, Ill.
KAMEHAMEHA KAI-MIN WONG, Jr., of Timonium, Md.
MARK ROBERT WOOD, of Lake Park, Fla.
WAYNE DAVID WOODWARD, of Baltimore, Md.
BARBARA DARRELLE WYCHE, of Hopewell, Va.
BRUCE ALLEN YARUS, of Emmaus, Pa.
ANDREW MICHAEL YEAGER, of East Orange, N. J.
STEPHEN PHILIP YEAGLE, of Wilmington, Del.
CHRISTOPHER FRANCIS ZABAWA, of Belleville, Ill.
ROBERT A. ZALUTSKY, of Pittsfield, Mass.
WILLIAM WILLIAM WOLFE, of Sykesville, Md.
MARK PAUL ZIMMETT, of Highland Park, Ill.
JEFFREY LEONARD ZITMAN, of Springfield, Ohio
KENNETH MURRAY ZONIES, of Pennington, N. J.

(492)
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COLIN CLINE, of Leonardtown, Md.
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JONATHAN A. DANTZIG, of Baltimore, Md.
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DONALD EDWIN GIBSON, of Oxford, Md.
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MARK WARREN HILL, of Baltimore, Md.
STEVEN NEAL HIRSCHI, of Baltimore, Md.
DAVID STARR HOFMANN, of Baltimore, Md.
MARK H. HOUCK, of Baltimore, Md.
STEPHEN ERNEST HUTTON, of Baltimore, Md.
TOM NICK KARRAS, of Baltimore, Md.
KIRK RALPH KARWAN, of Cleveland, Ohio
ROBERT JOHN KELLEY, of Yorktown Heights, N. Y.
DOUGLAS EDWARD KELNER, of Morrisville, Pa.
THOMAS ANTHONY KING, of Ellicott City, Md.
DENNIS JOSEPH LANAHAN, of Baltimore, Md.
STEPHEN EARL LAWHORNE, of Savannah, Ga.

JOHN STUART LIPTON, of Baltimore, Md.
WILLIAM EDWARD LITTLE, JR., of Baltimore, Md.
MICHAEL CRAIG MALLOY, of Cumberland, Md.
DAVID CROCKFORD McGAW, of Wheaton, Md.
ESKANDAR NOORANI, of Baltimore, Md.
STEPHEN GENE PEARRE, of Baltimore, Md.
WILLIAM DITLOW PIERSON, of Eliot, Maine
ROBERT LOUIS POWELL, III, of Nottingham Village, Md.
HENRY NORMAN ROBEY, JR., of Baltimore, Md.
WILLIAM LAWRENCE ROBINSON, of Raleigh, N. C.
JOHN WALTER ROGENMUSER, III, of Drexel Hill, Pa.
JOHN GERARD ROMANSKI, of Kingsville, Md.
DONALD LEE SCHLENGER, of Baltimore, Md.
THOMAS ARNOLD SCHULTZ, of Walnut Creek, Calif.
ROBERT L. SIRIAN, of Baltimore, Md.
LAMBERT WALther STAMMERJOHN, JR., of Allentown, Pa.
GARY RICHARD STONEBURNER, of Denver, Colo.
GEORGE WISHERD TURNER, of Baltimore, Md.
IRA JEFF TURSHEN, of Elmont, N. Y.
SCOTT ANDREW TYNER, of Baltimore, Md.
STEPHEN LAWRENCE VANDOREN, of Chuckatuck, Va.
PETER CARL WEISS, of Westfield, N. J.
EDWARD MICHAEL WYSOCKI, JR., of Baltimore, Md.

ASSOCIATE OF ARTS
in The Evening College

ELEANOR SUTHERLAND, of Baltimore, Md.

ASSOCIATES OF SCIENCE
in The Evening College

ROBERT EUGENE BARKER, of Baltimore, Md.
MICHAEL ANTHONY BRENNAN, of Baltimore, Md.
JOSEPH MICHAEL CATALANO, of Reisterstown, Md.
DONALD CHARLES CULVER, of Baltimore, Md.
JOSEPH GERARD DOBRY, of Baltimore, Md.
EDWIN JACKSON GEBENDAFFER, of Fallston, Md.
STANLEY JOSEPH GLINKA, of Glen Burnie, Md.

WILLIAM WARREN KEATING, JR., of Baltimore, Md.
GEORGE LOUIS KOTROSA, JR., of Baltimore, Md.
ROBERT ERWIN McMORRAN, of Timonium, Md.
EDWARD JACOB SMITH, of Baltimore, Md.
ROLAND STERLING TURCOTT, of Baltimore, Md.
ROBERT CHARLES WINDHAM, of Baltimore, Md.

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BACHELORS OF SCIENCE
in The Evening College

CAROLYN AYERS ADKINS, of Columbia, Md.
WILLIAM CORNELIUS ALEXANDER, Jr., of Baltimore, Md.
KAREN MARIE ALLEN, of Baltimore, Md.
JOAN URSULA APPLESTEIN, of Baltimore, Md.
JAMES WILLIAM ARCHER, of Baltimore, Md.
IRENE BOGIUSLAVSKIS ARE, of Baltimore, Md.
DEMETRA BAHADOURIS, of Baltimore, Md.
ARDEN EUGENE BAUGHMAN, of Baltimore, Md.
RONALD PAUL BELLOT, of Baltimore, Md.
LUNSFORD EMMORY BENNETT IV, of Baltimore, Md.
THOMAS JAMES BEVANS, of Ellicott City, Md.
KENNETH ALAN BORIC, of Baltimore, Md.
JOHN GUSTAVE BOURGEOS, Sr., of Baltimore, Md.
DONALD HARRY BRANFLICK, of Baltimore, Md.
CAROL COHEN CAPLAN, of Baltimore, Md.
ULLA WIDMANN CHAPIN, of Los Angeles, Calif.
GEORGE EDWARD CROWLEY, of Lutherville, Md.
HOWARD DACHS, of Brooklyn, N. Y.
MARGARET KENN DANNER, of York, Pa.
WILSON SCOTT DAVIS, Jr., of Fallston, Md.
DORIS POEHLER DENTON, of Baltimore, Md.
EDWARD ELLIOTT DEPRINE, of Lutherville, Md.
CAROL MONISH DICK, of Beltsville, Md.
HARRIS MATTHEW DOLAN, of York, Pa.
ROBERT BRUCE CHARLES DORSEY, of Baltimore, Md.
MINERVA FERGUSON EADES, of Baltimore, Md.
MARTHA CRITCHFIELD EARECKSON, of Baltimore, Md.
WANDA JASKOWIAK EDWARDS, of Baltimore, Md.
HARRY COLE EICHELBERGER, of Baltimore, Md.
JOSEPH EDWARD ELLIGSON, of Baltimore, Md.
RUSSELL CHARLES EREB, of Baltimore, Md.
Rosalie Littlepage Craven Evans, of Severna Park, Md.
RICHARD MARTIN FARRELL, of Baltimore, Md.
DIANE MALLALIEU FREIDEL, of Bel Air, Md.
CAROL VICTORIA FRIEDMAN, of Baltimore, Md.
QUENTIN JAMES FROELICH, of Reisterstown, Md.
Penelope Miller Fuller, of Baltimore, Md.
CHARLES MCDOWELL GILLAN, Jr., of Baltimore, Md.
SARA LYNN GLASS, of Baltimore, Md.
HUGH JOHN GRIBBEN, of College Park, Md.
RONALD JAMES GUTOWSKI, of Baltimore, Md.
SABINA SITZAMER HAAR, of New York, N. Y.
SHERLY LOUISE HALL, of Baltimore, Md.
ROBERT JAMES HAMMEN, of Bel Air, Md.
PHILIP J. HARDY, of Baltimore, Md.
JANET MOYLE HARRISON, of Arnold, Md.
MONA MOWROR HARTZ, of Baltimore, Md.
PAUL CHARLES HAWKINS, Jr., of Glen Burnie, Md.

WILLIAM FREDERICK HECKNER, of Baltimore, Md.
ELLEN MOSES HELLER, of Baltimore, Md.
ALBERT PAIGE HICKMAN, of Baltimore, Md.
SYLVIA HORNSTEIN HIRSH, of Baltimore, Md.
FRANK Kwan-Tong HOM, of Baltimore, Md.
ANDREW JAY HOWELL, of Port Deposit, Md.
MARION WRIGHT JERVIS, of Baltimore, Md.
ESTELLA VIRGINIA JOHNSTON, of Denver, Colo.
RHAE EMERSON KELLEY, of Baltimore, Md.
HALL ALBRO KELLOGG, of Reisterstown, Md.
WAYNE EDWARD KING, of Baltimore, Md.
ROBERT ANDREW KOCIC, of Baltimore, Md.
CYNTHIA L. KOUNC, of Glenelg, Md.
MARY CHAMBERS KROFT, of York, Pa.
ALBERT EDWARD KUKLA, of Wilkes-Barre, Pa.
RAYMOND JERAD KULWICKI, of Reisterstown, Md.
RICHARD ANTHONY LAGANA, of Hazleton, Pa.
DANIEL SHAW LANKFORD, of Baltimore, Md.
CHARLES VERNON LEACH, of Baltimore, Md.
EDWARD GEORGE LEIMBACH, of Pasadena, Md.
BARBARA GERALDINE HUNT LOGAN, of Baltimore, Md.
JACK LOWENTHAL, of Baltimore, Md.
ROLAND LOUIS LOWMAN, of Severn, Md.
GARTH R. MACKENZIE, of Glen Burnie, Md.
GARY EDWARD MANSPERGER, of Baltimore, Md.
GREGORY MARVENKO, of Baltimore, Md.
WAYNE WINFREE MATTHAI, of Baltimore, Md.
CAROL E. DOBLES MATUSKY, of Minersville, Pa.
JAMES ANDREW MAYHEW, Jr., of Baltimore, Md.
MARY KATHERINE MELVILLE, of Baltimore, Md.
CHAIM JOSEPH MILIKOWSKY, of Baltimore, Md.
DORIS McCLURE MOOS, of Towson, Md.
DENNIS ANTHONY MORGAN, of Baltimore, Md.
WILLIAM FREDERICK MORRIS, of Baltimore, Md.
ROBERT CLAUDE MULLEN, of Linthicum, Md.
ROBERT OSCAR MUMPER, of Baltimore, Md.
KENNETH PAUL MURDOCK, of Pasadena, Md.
JOHN ALLEN NICODEMUS, of Baltimore, Md.
FRAN CURVA NORTHUP, of Baltimore, Md.
JAMES PETER O'CQUE, of Greenbelt, Md.
DOROTHY FRANCES OLSZEWSKI, of Baltimore, Md.
GLENN EUGENE PALMER, of Shrewsbury, Pa.
JONATHAN PATZ, of Baltimore, Md.
RAYMOND JOSEPH PELuso, of Baltimore, Md.
JAMES EDWARD PFEIFFER, of Baltimore, Md.
MYRON PLAUT, of Washington, D. C.
ROGER CHARLES POORE, of Timonium, Md.
JOHN JOSEPH PURCELL, of Reisterstown, Md.
JERRY QUEEN, of Joppa, Md.
Wolfram Radloff, of Baltimore, Md.
Andrew McKenzie Rayne, of New Carrollton, Md.
Sarah Saunders Reed, of Baltimore, Md.
Kenneth James Reese, of Baltimore, Md.
Rosalind Volotta Rivera, of Annapolis, Md.
Donald Hudson Roane, of Baltimore, Md.
Thomas Anthony Romanko, of Baltimore, Md.
Lamar Kenneth Rybak, of Baltimore, Md.
Arthur Gordon Sachs, of Baltimore, Md.
Donald Reid Sanner, of Reisterstown, Md.
Robert William Shenton, of Baltimore, Md.
Frank Siegel, of Baltimore, Md.
Joseph Francis Siekierski, of Baltimore, Md.
Thomas Simms, of Washington, D.C.
Jack Clark Slates, of Baltimore, Md.
Rachel D. Smoller, of Baltimore, Md.
Clarence Donald Spedden, of Towson, Md.
Norman Sylvester Stewart, of Ellicott City, Md.
Gregory Lynn Stottlemeyer, of Mt. Lena, Md.
James Mervin Sudduth, of Joppa, Md.

Anne Love Thomas, of Baltimore, Md.
George Frederick Troy, of Lutherville, Md.
Lynn Wesley Vosloh, of Greenbelt, Md.
James Andrew Wage, of Baltimore, Md.
Jo Ann Lois Sladics Walchli, of Glen Burnie, Md.
Ronald Alan Walper, of Baltimore, Md.
Walter Albert Webb, of Towson, Md.
James John Webber, of Baltimore, Md.
William Franklin Weser, of Towson, Md.
Diane Jean White, of Baltimore, Md.
Paul Peter Wilkes, of Baltimore, Md.
David John Windsch, of Baltimore, Md.
Harold Frederick Wolfging, Jr., of Ellicott City, Md.
Robert Oliver Colt Worcester, of Baltimore, Md.
Carl Stephen Young, of Ferndale, Md.
James Rudolph Zavadny, Jr., of Baltimore, Md.
Samuel Alexander Zerwitz, of Baltimore, Md.
John Robert Zukas, of Baltimore, Md.

BACHELORS OF SCIENCE IN ENGINEERING
in The Evening College

Earl Ayres, of Baltimore, Md.
James Robert Baker, of Bel Air, Md.
Barry Lee Barger, of Silver Spring, Md.
Robert Gordon Bartenfelder, of Baltimore, Md.
Roger Milford Baumgartner, Jr., of Baltimore, Md.
Jerome Irvin Bien, Jr., of Ellicott City, Md.
Samuel Joseph Biondo, of Chevy Chase, Md.
James Marilyn Bishop, of Baltimore, Md.
David Thomas Bissell, of Laurel, Md.
Ervin Carroll Blimline, of Baltimore, Md.
Casper Joseph Bocklage, Jr., of Baltimore, Md.
Robert Francis Bradford, of Ellicott City, Md.
Anthony Walter Brajevich, of Baltimore, Md.
Henry Philip Brauns, of Baltimore, Md.
Thomas Edward Brown, Jr., of Elk Ridge, Md.
Joseph Frederick Carroll, of Baltimore, Md.
John Nelson Ciccone, of Baltimore, Md.
John Morgan Clayton III, of Forest Hill, Md.
Lester Lynn Cramer, of Johnstown, Pa.
Eduardo Oliveira Cunha, of Baltimore, Md.
David Fitzgerald Currie, of Baltimore, Md.
Anthony Joseph David, of Baltimore, Md.
Vernon Joseph Diggs, of Baltimore, Md.
Ronald Dean Distler, of Perry Hall, Md.
Gary John Emrhein, of Baltimore, Md.
Joseph Benjamin Ennis III, of Baltimore, Md.
Lawrence Gilbert Espenshade, of Silver Spring, Md.
Daniel Powell Evans, of Baltimore, Md.

William John Eland, of Wilkes-Barre, Pa.
Thomas Newton Fischer, of Reisterstown, Md.
Clyde Oliver Fitzhugh, of Stafford, Va.
Bronnie Ray Frias, of Baltimore, Md.
John Edward Friedel, Jr., of Upper Marlboro, Md.
Norbert Raymond Gebhardt, of Baltimore, Md.
Leslie Arthur Gibson, of Sykesville, Md.
Donald Nelson Halgren, of Baltimore, Md.
John Joseph Heffner, of Randallstown, Md.
Raymond Edward Heim, of Baltimore, Md.
Donald Edwin Hicks, of Baltimore, Md.
Robert Ench. Hicks, of Baltimore, Md.
John Howard Himes, of Baltimore, Md.
Carl Howard Hohenberger, of Baltimore, Md.
Robert Joseph Hohenberger, of Baltimore, Md.
Allen Clifford Howe II, of Baltimore, Md.
John Euel Hudgens, of Pasadena, Md.
Ronald Thomas Jackson, of Towson, Md.
Joseph Daniel Jeffords III, of Arbutus, Md.
Richard J. Johnson, of Baltimore, Md.
Edward Andrew Kaczmarek, of Baltimore, Md.
Leo Adam Kane, of Street, Md.
Andrew Michael Kaufman, of Glen Burnie, Md.
William Whidden Keys, Jr., of Woodstock, Md.
Dennis James Kline, of Baltimore, Md.
John Charles Lang, of Towson, Md.
Gerard Stanley Lipinski, of Baltimore, Md.
Joseph K. Love, of Randallstown, Md.
DAVID KENNETH LOYD, of Fairfield, Calif.
FRANK JULIAN MAGINA, of Columbia, Md.
ERNST VICTOR MARSH, of Springfield, Mass.
JAMES EDWIN MARTINUS, of Dundalk, Md.
FIELDING LUCAS MAURER, JR., of Baltimore, Md.
DILIP MAYABHAI MEHTA, of Baltimore, Md.
GERALD DEAN METCALF, of Laurel, Md.
CHARLES FRANCIS MEYERS, of Baltimore, Md.
FREDERICK OTTO RICHARD MIESERFIELD, of Joppa, Md.
PAUL ATHANASIUS MILASH, of Baltimore, Md.
ARMIN FRANCIS MOHR, of Baltimore, Md.
WALTER WESLEY MORGAN, of Fallston, Md.
NORVY FRANCIS MYERS, of Baltimore, Md.
THOMAS NAUGLER, of Rockville, Md.
GARY WILLIAM NENGEN, of Forest Hill, Md.
EUGENE FRANKLIN NERF, JR., of Baltimore, Md.
JOHN ANDREW NEUBERGER, JR., of Baltimore, Md.
ELDRIDGE FRANCIS NEWLAND, of Baltimore, Md.
WILLIAM EVERETT NEWMAN, of Glen Burnie, Md.
ROBERT CHARLES NIXON, of Kingsville, Md.
ROBERT MICHAEL NOVAK, of Baltimore, Md.
DAVID CHARLES NOVOTNY, of Baltimore, Md.
DANIEL HOWARD OVERMAN, of Baltimore, Md.
ROBERT LEON PAULSON, of Winter Haven, Fla.
GAURY ALBERT PFEIFER, of Baldwin, Md.
FREDERICK DAVIS REES, JR., of Perry Hall, Md.
MICHAEL JOHN RICHARDSON, of Baltimore, Md.
GERALD KENNETH ROACH, of Baltimore, Md.
JOHN FRANCIS ROBUSTO, of Baltimore, Md.
JAMES DONALD RODGERS, of Westminster, Md.
CARLOS EFRAIM RODRIGUEZ PEREDA, of Baltimore, Md.
JOHN PAUL ROLFES, of Baltimore, Md.
ALAN RICHARD ROSTEN, of Randallstown, Md.
RICHARD ALBERT SANDS, SR., of Baltimore, Md.
ROBERT THOMAS SAVIA, of Laurel, Md.
JAMES DUNCAN SCHEIDER, of Baltimore, Md.
HARRY ALBERT SCHILLER, of Baltimore, Md.
MARTIN WILLIAM SCHLINDING, JR., of Baltimore, Md.
JOSEPH JOHN SCHREIBER, JR., of Baltimore, Md.
THOMAS EMERSON SEIDEL, of Elkridge, Md.
RICHARD EDGAR SHAMELEFFER, of Baltimore, Md.
ROGER LEE SHOOK, of Timonium, Md.
ROBERT ANTHONY SILVESTRI, of Aliquippa, Pa.
AUBREY CHARLES SMITH, of Baltimore, Md.
ROBERT GRAY SPENCER, of Arbutus, Md.
THOMAS WATSON STATHAM, of Cockeysville, Md.
HARRY JAMES ST. AUBIN, of Bowie, Md.
THOMAS PHILIP SWIFT, of Baltimore, Md.
MOHAMMAD TAHAMI, of Fairfax, Va.
STEVEN TITO TAMMAAAR, of Baltimore, Md.
JOHN MARTIN WALKER, of York, Pa.
JOHN JOSEPH WALSH, JR., of Glen Burnie, Md.
GEORGE HENRY WEITZEL, JR., of Baltimore, Md.
WALTER WESLEY WIENER, of Baltimore, Md.
HOWARD RANDALL WILHELM, of Baltimore, Md.
THOMAS JOHN OILKINS, of Baltimore, Md.
JAMES LUCIN WILLIAMS, of Baltimore, Md.
GEORGE THOMAS WILLINGMYRE, of Silver Spring, Md.
ALBERT MICHAEL WREH, of Fallston, Md.
DAVID CARL ZALOUDER, of Baltimore, Md.

MASTERS OF SCIENCE
in The Evening College

ROBERT LOUIS BARD, of Baltimore, Md., B.E.S. The Johns Hopkins University, 1968. Space Technology.

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RAYMOND JAMES HARRINGTON, of Reisterstown, Md., B. S. E. The Johns Hopkins University, 1967. Electrical Engineering.


Calvin Obed Lawrence, of Falls Church, Va., B.S. Lamar State College of Technology (Texas), 1963. Numerical Science.


Silvio Soares, of Rio de Janeiro, Brazil, B.S.E.E. Instituto Tecnologico de Aeronautica, Brazil, 1959. Electrical Engineering.

Analysis of Optical Techniques and Holographic Methodology for Assessment of Dynamic Aerosols in a Wind Tunnel.


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MASTERS OF EDUCATION
in The Evening College

Mary Louise Ament, of Lutherville, Md., B.S. Towson State College (Md.), 1969.

Sandra Rebecca Becker Andrews, of Reisterstown, Md., B.S. Towson State College (Md.), 1967.


Ethelene Juanita Barland, of Baltimore, Md., B.S. Coppin State College (Md.), 1952.


Carol Graham Becker, of Baltimore, Md., B.A. Washington College, 1951.

Harvey Richard Bennett, of Aberdeen, Md., B.S. West Virginia University, 1964.

David Michael Benson, of Baltimore, Md., B.A. The Johns Hopkins University, 1969.

Sheila Denise Biddle, of Baltimore, Md., B.S. Morgan State College (Md.), 1966.


Joan Marsha Block, of Randallstown, Md., B.S. University of Maryland, 1966.


William Elrod Bray, of Baltimore, Md., B.A. University of Georgia, 1959.

Robin Smith Biddison Brosnahan, of Baltimore, Md., B.S. University of Delaware, 1959.

Alma B. Walker Brown, of Baltimore, Md., B.S. Coppin State College (Md.), 1957.

Linda Boyer Brundrett, of Baltimore, Md., B.S. University of Maryland, 1968.

Irene McCadden Bryant, of Baltimore, Md., A.B. University of Buffalo, 1947.


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MARY ANN NICHOLS CLARK, of Timonium, Md., B. S. George Washington University, 1957.

ESTHER EILEEN COHEN, of Baltimore, Md., B. S. University of Maryland, 1969.

THELMA JEAN CRAIG, of Baltimore, Md., B. S. Coppin State College (Md.), 1960.

ROSEMARIE VENTURA CRISTOSTOMO, of Baltimore, Md., B. S. Towson State College (Md.), 1968.

GEORGE ROGER CROOK, of Clyde, Texas, B. A. Hardin-Simmons University, 1954.

ROBERTA ELLA CHURCHILL CROSBY, of Randallstown, Md., M. A. New York University, 1948.

VAUGHN DANA CROWL, of Hagerstown, Md., B. S. Frostburg State College (Md.), 1968.


LYNN STEMPLE DEUTSCHMAN, of Baltimore, Md., B. S. The Ohio State University, 1967.


DAWN DOLORES DIXON, of Baltimore, Md., B. S. Towson State College (Md.), 1957.

ROBERT WESLEY DOMS, of Timonium, Md., B. G. E. University of Omaha, 1965.

BARBARA GLASSMAN DONICK, of Baltimore, Md., B. A. Goucher College, 1959.


JANET VALLI EDELMANN, of Baltimore, Md., B. A. Frostburg State College (Md.), 1966.

JANE JACKSON EDMONDS, of Abingdon, Md., B. S. Towson State College (Md.), 1968.


BETTY RIPPLE FANSHAW, of Reisterstown, Md., B. S. Towson State College (Md.), 1965.

DONNA SUE FEINBLUM, of Baltimore, Md., B. S. University of Maryland, 1968.


JANICE LORRAINE FLEMING, of Baltimore, Md., B. A. College of Our Lady of the Elms, 1968.


MATTIE EUGENIA FERGUSON GAINES, of Baltimore, Md., B. S. Morgan State College (Md.), 1957.

JOHN CHRISTOPHER GEORGE, of Frederick, Md., B. S. Georgetown University, 1968.


PATRICIA PETNIC GIBSON, of Hampstead, Md., B. S. Towson State College (Md.), 1964.

JEAN MCCOY GISKIEL, of Baltimore, Md., B. S. Boston University, 1961.

FRANCES RALPH GRAHAM, of Baltimore, Md., B. S. Coppin State College (Md.), 1946.

MARJORIE LEE GRIFFITH, of Baltimore, Md., B. A. Wells College, 1942.

BILLIE JEAN GRIGSBY, of Baltimore, Md., B. A. University of Richmond, 1966.

LYDIA LOUISE GRINAGE, of Baltimore, Md., B. S. Coppin State College (Md.), 1957.


SUSAN I. HACKERMAN, of Baltimore, Md., B. S. University of Maryland, 1969.

ROBERT JAMES HEWES, of Linthicum, Md., B. S. Towson State College (Md.), 1960.

ELVENIA CASHER HOPKINS, of Baltimore, Md., B. S. Morgan State College (Md.), 1955.

MAXINE DATES HURLEY, of Baltimore, Md., A. B. Morgan State College (Md.), 1964.

PHYLLIS HURWITZ ISAACSON, of Baltimore, Md., B. S. Towson State College (Md.), 1960.


IRIS YVONNE JACOBS, of Annapolis, Md., B. S. State Teachers College, Bowie, 1955.

HAVANAH GWENDOLYN MCBRYDE JEFFERSON, of Baltimore, Md., B. S. Morgan State College (Md.), 1968.

DELORES PATRICIA JOHNSON, of Baltimore, Md., B. S. Coppin State Teachers College (Md.), 1962.

MARY FRANCES JORDAN, of Baltimore, Md., B. S. Morgan State College (Md.), 1968.

JOAN GERSON KARR, of Monroeville, Pa., B. S. Ed. Temple University, 1965.
Robert Lawrence Keeley, of Linthicum, Md., B.A. Stu-
dium Generale of St. Thomas Aquinas, 1953.

Sarah Mandy Kern, of Baltimore, Md., B.S. University
of Maryland, 1966.

Lyman Coleman Knight III, of Baltimore, Md., B.S. Ed.
Muskimgum College, 1967.

Trude Neuman Kranzler, of Baltimore, Md., B.A. Towson
State College (Md.), 1971.

Deborah Simon Levinson, of Baltimore, Md., A.B. Goucher
College, 1968.

Susan Klein Lorch, of Randallstown, Md., B.S. University
of Maryland, 1968.

Marilyn Ann Bloom Lutz, of Phoenix, Md., A.B. College
of Notre Dame of Maryland, 1969.

Estelle Mallory Madison, of Baltimore, Md., B.S. Coppin
State College (Md.), 1958.

Elayne Ruth Magaziner, of Baltimore, Md., B.S. Towson
State College (Md.), 1968.

Edward Neil Magnus, of Baltimore, Md., A.B. St. Mary’s
Seminary and University, 1959.

Kathleen Jean Withers McDonald, of Baltimore, Md.,
B.S. University of Maryland, 1969.

Thomas Shipley McElroy, of Baltimore, Md., B.A. The
Johns Hopkins University, 1969.

Alma Lynn McLean, of Baltimore, Md., B.A. Frostburg
State College (Md.), 1968.

Thomas Michael McElroy, of Columbia, Pa., B.A. Mt.
St. Mary’s College, 1953.

Grace Hooper McNeal, of Baltimore, Md., B.S. The Johns
Hopkins University, 1969.

Thomas Claude McShane, of Fawn Grove, Pa., B.S. Tow-
son State College (Md.), 1970.

Anita Carol Press Miller, of Baltimore, Md., B.S. Uni-
versity of Maryland, 1969.

Iver Arnold Mindel, of Baltimore, Md., B.A. The Johns
Hopkins University, 1966.

Michael Francis Molloy, of Baltimore, Md., A.B. Loyola
College, 1969.

Sylvia Fox Naiman, of Baltimore, Md., B.A. University of
Maryland, 1963.

Winifred Mary Neville, of Baltimore, Md., A.B. Hunter
College, 1959.

Carol Ann Wright Nickel, of Baltimore, Md., B.A. Buck-
nell University, 1969.

Ronald Paul Nickel, of Baltimore, Md., B.A. Valparaiso
University, 1968.

Bonnie Lynn Orkin, of Baltimore, Md. B.S. University
of Maryland, 1969.

Carolyn Diane Otremba, of Kingsville, Md., B.S. Frost-
burg State College (Md.), 1967.

Frances Rose Palazzolo, of Baltimore, Md., B.A. Mt. St.
Agnes College, 1968.

Frances Adele Parks, of Baltimore, Md., B.S. Hampton
Institute, 1959.

Mary Elizabeth Passage Pederson, of Auburn, Wash., B.S.
University of Washington, 1967.

Charlotte Marcella Peltz, of Pikesville, Md., B.A. Par-
sons College, 1970.

Keith Maxwell Perry, of Savage, Md., B.A. University of
Maryland, 1968.

Herbert William Pipkin, of Baltimore, Md. B.S. The
Johns Hopkins University, 1971.

Nancy Cox Pipkin, of Baltimore, Md., B.S. University of

Ann Carol Rotnheimer Poltilove, of Columbia, Md.,
B.S. University of Maryland, 1970.

Abe J. Price, of Baltimore, Md., B.S. Ed. Bloomsburg State
College (Pa.), 1963.

Dorothy J. Browner Pringle, of Baltimore, Md., B.A.
Morgan State College (Md.), 1965.

Sumitra Seshagiri Rao, of Baltimore, Md., B.A. Queen
Mary’s College, Madras University, 1950.

Arianne Schrodel Regester, of Upperco, Md., B.S. The
Johns Hopkins University, 1970.

Robert William Reynolds, of Columbia, Md., B.E. The
Johns Hopkins University, 1933.

Arlene Rubin Rivkin, of Baltimore, Md., A.B. Goucher
College, 1959.

Edward Hamilton Robinson III, of Churchville, Md., B.A.
Marshall University, 1969.

Harriet Ann Rosenberg, of Ellicott City, Md., B.S. Uni-
versity of Maryland, 1969.

Florence Lumm Saito, of Honolulu, Hawaii, B.A. Univer-
sity of Hawaii, 1948.

Mary Margaret Sands, of Baltimore, Md., B.A. Mt. St.
Agnes College, 1968.

Shirley Boyd Saxton, of Baltimore, Md., B.S. Towson
State College (Md.), 1967.
JOHN FINLEY SCHNEIDER, of Glen Burnie, Md., B.A. Farm-
ment State College (W. Va.), 1964.

BERTY IRENE SAMUELS SEIDEL, of Baltimore, Md., B.S. The
Johns Hopkins University, 1942.
POLLY ELIZABETH PUGATCH SENKER, of Baltimore, Md., B.A.
Towson State College (Md.), 1969.

MARTHA BURNS SPEARS, of Baltimore, Md., B.S. East Caro-
olina University, 1968.

ROBERT JOHN STACK, of Silver Spring, Md., B.A. Washing-
ton & Lee University, 1968.

HARRIET HIRSCH SCHAROGRODSKY STEINBERG, of Baltimore,
Md., B.S. The Johns Hopkins University, 1941.

STEPHANY EINSTEIN STEINBERG, of Baltimore, Md., B.S. Uni-
versity of Maryland, 1968.

ANNE GOLDSMITH STERLOCK, of Owings Mills, Md., B.S. 
Towson State College (Md.), 1967.

LOIS ARLINE REESMAN STEVENS, of Sparks, Md., B.S. John
B. Stetson University, 1950.

MIRIAM INGRID STRAUS, of Baltimore, Md., B.S. University
of Maryland, 1969.

CHERYL MARGARET SWEENEY, of Keene, N.H., A.B. Em-
manuel College, 1966; M.A.T. The Johns Hopkins 
University, 1967.

FRANCIS NEIL TILLMAN, of Baltimore, Md., B.S. Towson
State College (Md.), 1965.

MARY ANNE TOBIN, of Baltimore, Md., B.A. Avila College,
1964.

JOSEPH NORMAN TRAIGHTMAN, of Aberdeen, Md., O.D.
Pennsylvania College of Optometry, 1969.

MAUREEN KELLY VIERECKT, of Baltimore, Md., B.S. Towson
State College (Md.), 1966.

LAURETTA R. ABRAMS WALDEN, of Baltimore, Md., B.S. 
Coppin State College (Md.), 1952.

KENT GEORGE WASHBURN, of Pittsburgh, N.H., B.S. Uni-
versity of Oregon, 1966.

STEVEN JULIUS WEILER, of Baltimore, Md., B.Mus.Ed. Pea-
body Conservatory of Music, 1968.

THOMAS EDWARD WENZ, of Annapolis, Md., A.B. University

FLORENCE JONES WESTFIELD, of Baltimore, Md., B.S. Morgan
State College (Md.), 1967.

MARILYN MASON WHIPPS, of Baltimore, Md., B.S. Towson
State College (Md.), 1968.

BARBARA MELCKI WHITLOCK, of Upperco, Md., B.S. Loyola
College, 1966.

MINNIE LILLIAN WILSON, of Baltimore, Md., B.S. Coppin
State College (Md.), 1963.

DOLORES LUCRESCIA WINTON, of Baltimore, Md., B.S. Cop-
pin State College (Md.), 1961.

ALICE ACORS WISHARD, of Baltimore, Md., B.S. Towson
State College (Md.), 1968.

VIRGINIA LEE WOOD, of Aberdeen, Md., B.S.P.E. West
Virginia University, 1967.

MARY ANN WELDON YANNUZZI, of Baltimore, Md., B.S. 
St. Peter's College, 1970.

ROBERT STEPHEN YUHASZ, of Columbia, Md., B.S. Lehigh
University, 1966.

SARAH ANN HUNLEY ZUCKER, of Baltimore, Md., B.A.

MASTERS OF LIBERAL ARTS
in The Evening College

MAE FRANCES ALSTON, of Baltimore, Md., B.S. North Caro-
olina Agricultural Technical State University, 1956; M.A.
University of Michigan, 1962.

SUSAN CAROLE HUMMEL APPLEFELD, of Randallstown, Md.,
B.S. University of Maryland, 1962.

MICHAEL JAMES BALDWIN, of Dallastown, Pa., B.A. Eliza-
bethtown College, 1965.

I. MAX BAUMANN, of Baltimore, Md., M.A. University of
Maryland, 1949.

CAROLINE AMELIA RIEFLE BEATTY, of Baltimore, Md., A.B.
Duke University, 1935.

WILBUR VINCENT BECHTEL, of Baltimore, Md., A.B. St.
Mary's University, 1946.

KATHLEEN ANNE BERES, of Baltimore, Md., B.A. College 
of Notre Dame of Maryland, 1970.

CHERYL ELIZABETH HANSEN BIANCO, of Baltimore, Md.,
A.B. Mount St. Agnes College, 1969.

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ELIZABETH JANE BILISKE, of Baltimore, Md., B. A. Midland College, 1964.

JAMES BYRON BLACKBURN, of Evant, Texas, B. S. Tarleton State College (Texas), 1965.

ROBERT CHAFFEE BLOUNT, of Baltimore, Md., B. S. United States Naval Academy, 1944.

STUART ELOI BONWIT, of Silver Spring, Md., B. E. E. George Washington University, 1945.

SOPHIA LEUTNER BORTNER, of Baltimore, Md., B. S. The Johns Hopkins University, 1941.

TIMOTHY MICHAEL BRESLIN, of Catonsville, Md., B. S. Mount St. Mary's College, 1969.

DAVID BREWSTER, of Silver Spring, Md., B.S. The Johns Hopkins University, 1966.

MARY RUSSELL BROOKS, of Baltimore, Md., B.S. University of Maryland, 1959.


MARGARET HATCH BUTLER, of Towson, Md., B.A. Carleton College, 1946.

DORIS MAE HOOD CAMERON, of Baltimore, Md., B.S. Wheelock College, 1958.

MARSHA DIENER CAPLAN, of Baltimore, Md., B.A. University of Maryland, 1959.

SIDNEY CARTON, of Baltimore, Md., B.S. The Johns Hopkins University, 1964.

WILLIAM JOSEPH CARTON, Jr., of Baltimore, Md., Ph.B. Northwestern University, 1967.

BERNADETTE MARIE CLEMENS, of Baltimore, Md., A.B. College of Notre Dame of Maryland, 1968.

RONALD COHEN, of Baltimore, Md., B.A. University of Maryland, 1967.


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BEVERLY COURTNEY CROOK, of Phoenix, Md., B.S. Towson State College (Md.), 1939.

DONALD LEROY DAVIDSON, of Baltimore, Md., B.S. The Johns Hopkins University, 1967.

JOANNE MATTSON DEVoe, of Baltimore, Md., B.S.N. Cornell University, 1960.

THOMAS LEELAND DOVE, of Severna Park, Md., B.S. University of Maryland, 1963.


SAUL DRUCKER, of Madison, Wis., B.A. Duquesne University, 1967.

MARY ELIZABETH ROGERS ECTOR, of Linthicum, Md., B.S. University of Houston, 1956.


ELIZABETH CASSIDY ELIOTT, of Louisville, Ky., B.A. University of Delaware, 1963.


ELAINE MARGARET EWING, of Baltimore, Md., B.A. University of Maryland, 1968.

ALLAN PETER FAGAN, of Laurel, Md., B.S. Stetson University, 1958.

PATRICIA H. FAGAN, of Laurel, Md., B.S. Stetson University, 1958.


KATHERINE PARVIS FERRIS, of Baltimore, Md., B.A. University of Maryland, 1967.


ABRAHAM FINKEL, of Silver Spring, Md., B.E.E. College of the City of New York, 1947.


MARY JANES FISHER, of Baltimore, Md., B.S. Mary Washington College, 1946; M.Ed. The Johns Hopkins University, 1962.

SUSAN LOUISE SNYDER FLYNN, of Baltimore, Md., B.A. College of Notre Dame of Maryland, 1969.

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ELINOR SANDLASS FREEDENBURG, of Baltimore, Md., B.A. University of Maryland, 1967.


VICTORIA LYNN GARVEY, of Baltimore, Md., A.B. Mount St. Agnes College, 1970.
Catherine Russell Gira, of Columbia, Md., B.S. State Teachers College (Pa.), 1953; M.Ed. The Johns Hopkins University, 1957.

Andrew Harry Goldsmith, of Edgewood Arsenal, Md., M.S. Massachusetts Institute of Technology, 1968.

George Shannon Goudy, Jr., of Baltimore, Md., B.S. Towson State College (Md.), 1962.

Louis Theodore Grant, of Baltimore, Md., B.A. University of Maryland, 1966.

Kathleen Webert Halpin, of Baltimore, Md., B.S. Towson State College (Md.), 1969.

Charles Leslie Harris, of Baltimore, Md., B.F.A. Maryland Institute, 1964.

Peggy Lynn Wilson Hegwood, of Crofton, Md., B.A. Wake Forest College, 1966.


Patricia Joyce Homer, of Baltimore, Md., B.A. Thiel College, 1958; M.S.L.S. Western Reserve University, 1960.

Rehana Hussain, of Baltimore, Md., B.A. University of Karachi, 1969.

Sondra Kosowsky Itkin, of Baltimore, Md., B.A. New York University, 1954.


Joanna Barkalow Kann, of Baltimore, Md., B.A. North Carolina State University, 1965.

Dorothy Tucker Katzenstein, of Baltimore, Md., B.S. The Johns Hopkins University, 1965.

Lillian Cleaver Kazazian, of Baltimore, Md., B.S. Columbia University, 1961.


Joseph Donald Kilgallon, of Ellicott City, Md., A.B. King's College, 1962.


Janet Louise Tolbert Kueth, of Baltimore, Md., B.S. Towson State College (Md.), 1966.


Barbara Willing Lavery, of Baltimore, Md., B.S. Salisbury State Teachers College (Md.), 1941.


Pearl Zallis Lerner, of Baltimore, Md., B.A. University of Maryland, 1952.


Gary Jay Levin, of Baltimore, Md., B.A. University of Maryland, 1966.

Ghita Neufeld Levine, of Baltimore, Md., B.S. Columbia University, 1958.

Bertram Thomas Lloyd, of Columbia, Md., B.S. University of Maryland, 1965; M.Ed. Loyola College, 1968.

Brent Leslie Lloyd, of Alexandria, Va., B.S. University of Tennessee, 1969.

Stella Marie Loeffler, of Baltimore, Md., A.B. University of Denver, 1935.


Brian Charles Lysaght, of Baltimore, Md., B.S. Towson State College (Md.), 1970.

Michal Richard Makarovitch, of Baltimore, Md., B.S. Towson State College (Md.), 1968.
LINDA VIVIAN EPSTEIN MANDEL, of Baltimore, Md., B.S. University of Maryland, 1963.

THOMAS JEFFERSON MANUS, of Baltimore, Md., B. A. Middle Tennessee State College, 1964.

BRONWYN SOUTHWORTH MCCAFFEY, of Baltimore, Md., B.A. Towson State College (Md.), 1968.


FREDERICK GILBERT MEDINGER, of Baltimore, Md., B. A. The Johns Hopkins University, 1969.

ANNA ELAINE MENTZER, of Baltimore, Md., B.A. Western Maryland College, 1969.


BARRETT ALLAN MILLER, of Severna Park, Md., B.A. University of California, 1964.


MARGARET GRAY MILLER, of Sparks, Md., A.B. University of Michigan, 1965.

BARBARA ASSAID MILLS, of Baltimore, Md., B.S. Longwood College, 1954.


BARBARA TERRY MOORE, of Baltimore, Md., B.A. Western Maryland College, 1963.

GILBERT JAMES MOORE, of Baltimore, Md., B.A. University of Maryland, 1967.


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DENNIS MICHAEL O'KEEFE, of Baltimore, Md., A. B. Loyola College, 1968.

ALLAN BARRY OSHRY, of Baltimore, Md., B.S. Towson State College (Md.), 1959.

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ELFAZAR Parmly IV, of Baltimore, Md., B.S. United States Military Academy, 1946.

LEONARD LEE PESHKIN, of Baltimore, Md., B.S. The Johns Hopkins University, 1963.

HERMANN OTTO PFRENGLE, of Joppa, Md., B. A. Oakland University, 1970.

JANET ELIZABETH POLUNAS, of Baltimore, Md., A.B. College of Notre Dame of Maryland, 1969.

ROGER WAYNE PRICE, of Baltimore, Md., B. A. Towson State College (Md.), 1964.

ROBERTA RUTH WEST PROCTOR, of Owings Mills, Md., B.S. Towson State College (Md.), 1965.

MICHELLE MARTIN PULLIAM, of Baltimore, Md., B. A. University of Maryland, 1966.

JOSEPH EDWARD PURCELL, of Cockeysville, Md., M.Ed. Loyola College, 1968.

DALE WENTZ RAUSENSTINE, of Baltimore, Md., B.S. Pennsylvania State University, 1960.

ROLAND FRANCIS RECKER, Jr., of Laurel, Md., B.S. Loyola College, 1966.


JOAN DANA ROMBO, of Baltimore, Md., B.S. University of Maryland, 1968.

PATRICIA BECHAN ROSENQUIST, of Lutherville, Md., B.A. University of Nebraska, 1953.


JAMES RUDISILL, of Mt. Wolf, Pa., B.S. Indiana University of Pennsylvania, 1956.

SANDRA ROSALYNN WOODS SAFFER, of Baltimore, Md., B.A. College of Notre Dame of Maryland, 1966.

JAMES MORRIS SANDERS, Jr., of Baltimore, Md., B.S. Towson State Teachers College (Md.), 1954; M.Ed. The Johns Hopkins University, 1959.

JO ANN RAGLAND SCHMIDT, of Baltimore, Md., B.A. Western Maryland College, 1965.

MARY SCHMITT SCHREIBER, of Baltimore, Md., B.A. University of Houston, 1968.

BARBARA TRUITT DULEY SHANKLIN, of Monkton, Md., B.S. University of Maryland, 1964.

WILLIAM JOSEPH SHEA, of New City, N.Y., B.A. St. Francis College, 1962.

ARTHUR ADAM SIPES, of Baltimore, Md., M.Ed. Loyola College, 1970.

SISTER MARY WALBURGA SITO, F.S.S. J., of Baltimore, Md., B.S. St. Louis University, 1943.
JACQUELINE SOBLE SMELKINSON, of Lutherville, Md., B. S. The Johns Hopkins University, 1956.


JEANNE STUART BROWN SOLOMON, of Dover, Del., B. S. Towson State College (Md.), 1960.


BEATRICE SQUIRES, of Baltimore, Md., B. S. Virginia Union College, 1965.


SUZANNE HEDWIG STARR, of Baltimore, Md., B. S. Towson State College (Md.), 1970.


MICHAEL LOUIS STOREY, of Baltimore, Md., M. A. Niagara University, 1965.

JUNE ELISE STRECFSUS, of Baltimore, Md., B. S. University of Maryland, 1968.

CHERYL BAKER STUART, of Baltimore, Md., B. S. Pennsylvania State University, 1967.

JOHN PATRICK SULLIVAN, of Baltimore, Md., B. A. University of Minnesota, 1969.

JAMES RONALD SWAB, of Columbia, Md., B. A. Florida Atlantic University, 1965.

MONICA BETH THOMSON, of Baltimore, Md., B. S. N. The Johns Hopkins University, 1949; M. A. Teachers College, Columbia University, 1959.


JO ANN MARILYN TOMECK, of Baltimore, Md., B. A. Siena Heights College, 1969.


NORBERT BERNARD WAGNER, JR., of Perry Hall, Md., B. A. LaSalle College, 1970.


PATRICIA MADDEN WILHELM, of Baltimore, Md., B. S. Towson State College (Md.), 1969.

SONDRA JEANNE BOYLE WILLIAMS, of Darlington, Md., B. A. Towson State College (Md.), 1965.

GARY WAYNE WINCH, of Arnold, Md., B. A. University of Vermont, 1967.

LESLIE SUSAN WINNER, of Baltimore, Md., A. B. University of Maryland, 1966.

WILLIAM GLENN WORKMAN, of Reisterstown, Md., B. A. Transylvania College, 1951.

JUDITH ZUBIN, of Baltimore, Md., B. A. Ohio Wesleyan University, 1965.

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CERTIFICATES OF ADVANCED STUDY

in The Evening College

JEAN MARIE BOUTON, of Baltimore, Md., M. S. Smith College, 1966. Education.

DOROTHY BROWN BROOKS, of Baltimore, Md., M. Ed. Loyola College, 1958. Education.


JOAN SCHMIDT BURNETT, of Baltimore, Md., B. S. State University of New York, 1956; M. L. A. The Johns Hopkins University, 1968. Education.

IRVIN EDMOND COX, of Baltimore, Md., M. A. New York University, 1952. Education.

EILEEN SULLIVAN DESZELL, of Lutherville, Md., B. A. Trinity College, 1950; M. A. Teachers College, Columbia University, 1951. Education.

KATHLEEN JOY DRAKULICH, of Towson, Md., B. A. Butler University, 1968; M. A. Indiana University, 1970. Education.
MARIE THERESA GIZA, of Baltimore, Md., M.A. Catholic University, 1960. Education.

JOHN RAY HAMILTON, of Baltimore, Md., A.M. Temple University, 1960. Education.

DERRICK WALFORD HOCKIN, of Ellicott City, Md., B.A. Western Carolina College (N.C.), 1959; B.S., 1960; M.Ed. The Johns Hopkins University, 1970. Education.

BRITT INGALLA MONICA HOLMSTROM, of Hydes, Md., B.S. The Johns Hopkins University, 1967. Liberal Arts.

CATHERINE ELLEN RYAN HORMANSKI, of Baltimore, Md., A.B. Mt. St. Agnes College, 1959; M.Ed. The Johns Hopkins University, 1964. Education.


EDNA MAE JACKSON, of Baltimore, Md., B.S. Morgan State College (Md.), 1968; M.Ed. The Johns Hopkins University, 1969. Education.

RAYMOND WELTY JOHNSTON, of Glen Burnie, Md., B.S. California State College (Pa.), 1967; M.Ed. The Johns Hopkins University, 1969. Education.

RICHARD GARY KENNARD, of Bel Air, Md., M.Ed. Loyola College, 1966. Education.

JACQUELYN PHILLIPS KRAFT, of Lutherville, Md., B.S. Towson State College (Md.), 1964. Education.


CLARA FERREE NEWMAN, of Pasadena, Md., B.A. Duke University, 1947; M.Ed. The Johns Hopkins University, 1968. Education.

ELLA MAE SANDERS PHELPS, of Pasadena, Md., B.S. University of Maryland, 1965; M.Ed. The Johns Hopkins University, 1968. Education.


PAULINE ELIZABETH SCHWING, of Baltimore, Md., M.F.A. Maryland Institute, 1968. Education.

JOHN SCOTT, Jr., of Baltimore, Md., B.S. Morgan State College (Md.), 1954; M.A. University of Maryland, 1965. Education.

BENJAMIN STEINBERG, of Baltimore, Md., M.Ed. Loyola College, 1960. Education.

JEAN NICHOLAS WARFIELD, of Clarksville, Md., B.A. Western Maryland College, 1956; M.Ed., 1965. Education.


LOUIS MELOS WINKELMAN, Jr., of Baltimore, Md., B.S. Towson State College (Md.), 1964; M.Ed. Western Maryland College, 1966; M.L.A. The Johns Hopkins University, 1970. Education.

(29)

MASTERS OF SCIENCE
in The School of Hygiene and Public Health

DHIA NURA AL-MOUSSAWI, of Baghdad, Iraq. M.B.C.H. Baghdad University College of Medicine, 1961. Public Health Administration (Forensic Pathology).

Injury Pattern of Drivers in Fatal Automobile Accidents.


A Multivariate Analysis of Relative Income Relationship to Fertility.

PAULINO SANTOS CRUZ, of Bulacan, Philippines, B.S. University of the Philippines, 1960; M.D. University of the Philippines College of Medicine, 1965. Medical Care and Hospitals.

Allocation of Health Resources Using Available Data for a Small Rural Community.


Work Before the First Birth: Its Relation to Fertility and Contraceptive Practice.
Peter Allison Doob, of Melville, N.Y., B.A. The Johns Hopkins University, 1969. Public Health Administration.
Prospects for Simulation Gaming in Health Planning and Consumer Health Education.

Enhancement of Heavy Metal Toxicity by Hepatic Phagocytosis.

Effects of Continuous Irradiation of the Seminiferous Epithelium.

Difference in Chromosome Aberrations in Radiation Workers and in Non-Workers: A Model for Surveillance of Radiation Workers.

Edward Thomas O’Toole, Jr., of Lutherville, Md., B.S. University of Maryland, 1958. Epidemiology.
A Treponema pallidum Microhemagglutination Procedure.

Uptake of 5-BUdr by H. influenzae.


DOCTORS OF SCIENCE
in The School of Hygiene and Public Health

The Ecology of Free—Roving Dogs in Baltimore City.

Robert Henry Brook, of Baltimore, Md., B.S. University of Arizona, 1964; M.D. The Johns Hopkins University School of Medicine, 1968. Medical Care and Hospitals.
A Study of Methological Problems Associated With Assessment of Quality of Care.

Factors in Enrollment in a Prepaid Group Health Plan.

William Boyd Hope, Jr., of Decatur, Ga., B.S. University of Tennessee, 1960; M.S. 1962. Medical Care and Hospitals.
A Study of Clinical Laboratory Tests Performed in Physicians Offices.

Pathobiology of Respiratory Mite Infection in Old World Monkeys.

Medical Education and Professional Socialization.

Peng-Tu Liu, of Taipei, Taiwan, B.S. National Taiwan University, 1962; M.S. University of the Philippines, 1967. Biostatistics.
Statistical Studies on the Demographic Impact of Intrauterine Contraceptive Device (IUD) Program.

Storrs Lovejoy Olson, of Tallahassee, Fla., B.S. Florida State University, 1966; M.S. 1968. Pathobiology.
The Evolution of the Rails of the South Atlantic Islands (Aves: Rallidae).

Observations on the Natural Histories of Six Madagascar Chamaeleontidae.

Israel Leo Praiss, of Haifa, Israel, M.D. Hebrew University Hadassah Medical School, 1959; M.P.H. 1965. Medical Care and Hospitals.
Study of Intra-Physician and Intra-Hospital Variations in Length of Patient Care.

The Effect of Rous Sarcoma Virus on XC and Other Rat-Transformed Cell Lines.


LysoSosomal Destruction of Cartilage Induced by a Virus Infection.


Barium—135m for Skeletal Imaging.


The Genetic Relationships of Aedea S. Malayensis and Aedes Polynesiensis Marks.


An Examination of the Problem of the Intensive Use of Hospital Services by a Relatively Small Proportion of the Population.

Jerry Leah Weston, of Arlington, Va., B. S. N. The Johns Hopkins University School of Nursing, 1955; M. P. H. Tulane University School of Public Health and Tropical Medicine, 1963. Medical Care and Hospitals.

Job Satisfaction Among Ex-Medical Corpsmen Employed on a Nursing Service and Their Acceptance by Female Nurses.

Duell Eugene Wood, of Las Cruces, New Mexico, B. S. New Mexico State University, 1961; M. S. 1963. Pathobiology.

Fatty Acid Metabolism of Trypanosomo Cruzi, Chagas, 1909 In Vitro.
MASTERS OF PUBLIC HEALTH
in The School of Hygiene and Public Health

JOSEPH OLUFUNSO ADEBIYI, of Lagos, Nigeria, M. B. Ch. B. University of Glasgow, 1966.

GRACIELA SOLIS DE ALARCÓN, of Lima, Peru, M. D. Universidad Peruana Cayetano Heredia, 1967.

RENATO D. ALARCÓN-GUZMÁN, of Lima, Peru, M. D. Universidad Peruana Cayetano Heredia, 1966.

JOHN CHARLES ALEXANDER, of St. Louis, Mo., B. S. St. Francis College, 1965; M. D. St. Louis University School of Medicine, 1970.

KRITA APIBUNYOPAS, of Bangkok, Thailand, M. D. Chulalongkorn Hospital Medical School, 1967.

HAROUTUNE KRIROR ARMENIAN, of Beirut, Lebanon, B. S. American University, Beirut, 1964; M. D. 1968.


JUAN M. BAERTL, of Lima, Peru, M. D. San Marcos University School of Medicine, 1953.

SALVACION GUASYKO BAION, of Quezon City, Philippines, B. S. N. University of the Philippines College of Nursing, 1964; M. Ed. University of the Philippines Graduate College of Education, 1971.

HARRY BASS, of Baltimore, Md., B. S. University of Maryland School of Pharmacy, 1958.

ROBERT AARON BENJAMIN, of Yonkers, N. Y., B. S. City College of New York, 1964; M. D. University of Kentucky, 1970.

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ELLIS ALINDO D'ARRIGO BUSNELLO, of Rio Grande do Sul, Brazil, M. D. Universidade do Rio Grande do Sul School of Medicine, 1955.


ARNOLD JOHN CAPUTE, of Baltimore, Md., B. S. Queens College, 1945; M. D. Hahnemann Medical College, 1947.

VERNE E. CHANEY, JR., of San Francisco, Calif., B. S. Virginia Military Institute, 1951; M. D. The Johns Hopkins University School of Medicine, 1948.


ANGEL CORDANO, of Lima, Peru, M. D. San Marcos University, 1954.

BRENDA ANN COSGROVE, of New York, N. Y., B. S. N. St. John's University, 1963.

TIMOTHY ALLEN CROFTON, of Adelphia, Md., B. A. University of Maryland, 1953.

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BOONCHUAY DULYASUKDI, of Bangkok, Thailand, M. D. University of Medical Sciences, 1964.

THERESA ANN DUPUIS, of Berlin, N. H., R. N. St. Louis Hospital, 1949; B. S. N. University of California, 1957.


JUDITH DAVONNE FETTERS, of Jacksonville, Fla., B. S. N. Florida State University, 1966.

ERIC MICHAEL FINE, of Baltimore, Md., A. A. George Washington University, 1962; M. D. University of Maryland, 1967.

ANN McCLUNG FONVILLE, of Glen Ferris, W. Va., B. S. N. West Virginia University, 1969.

DANIEL EGBERT FOUNTAIN, of Homer, N. Y., B. S. Colgate University, 1952; M. D. University of Rochester, 1956.

MARY STANG FURTH, of Baltimore, Md., B. S. University of Maryland, 1953; M. D., 1957.

IRMA ELAINE GIVENS, of Baltimore, Md., B. S. Hampton Institute, 1952.
ALDEMAR GOMEZ, of Cundinamarca, Colombia, M.D. University of Caldas Manizales, 1961.

MARY CLAUDIA GRAF, of Mobile, Ala., B.S.N. Mercy College of Detroit, 1965.

SUSAN M. HOROWITZ, of McClean, Va., B.S. Mercyhurst College, 1959.


LUZ ESFERANZA JEFFERSON, of Lima, Peru, M.D. Universidad Mayor de San Marcos, 1962.

DORIS JEAN JENKINS, of Severna Park, Md., B.S. Pennsylvania State University, 1962.


BEATRICE SCHNECK KOLCHIN, of Aberdeen, Md., B.S.N. Syracuse University, 1955.


PAULUS LAORA, of East Java, Indonesia, M.D. Medical Faculty, 1963.


GINNY BAILEY LEVENE, of Baltimore, Md., B.A. The Johns Hopkins University, 1967; M.D., 1970.

RONALD DAVID LUFF, of Bethlehem, Pa., B.A. Lehigh University, 1969.

JAMES MICHAEL LYNCH, of Chicago, Ill., B.S. DePaul University, 1959; M.D. Stritch School of Medicine, 1968.

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WILLIAM JAMES MAREK, of Baltimore, Md., B.S. University of Maryland, 1960; M.D., 1966.

ROBERT CHARLES MCDONNELL, of Westmoreland, Pa., B.S. University of Pittsburgh, 1966.


MAUREEN GRACE MEEHAN, of Farmingdale, N.Y., B.S. Niagara University, 1970.

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ELIZABETH MITCHELL, of Belfast, Northern Ireland, B.Sc. Columbia University, 1960.


PARVIN PARSIPOUR NAGHIBI, of Shiraz, Iran, M.D. Pahlavi University, 1965.

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ALLAN PEREZ, of Hollywood, Fla., M.D. Havana University Medical School, 1960.


RONALD CHARLES RICHTER, of Baltimore, Md., B. S. University of Pittsburgh, 1966; M. D. New York University School of Medicine, 1970.


LUKE ROBERT ROVIN, of Port Moresby, New Guinea, D. M. Papuan Medical College, 1965; C. P. H. University of the Philippines Institute of Hygiene, 1969; D. T. M. & H. Faculty of Tropical Medicine University Medical School, 1969.


ANJALI SAHA, of New Delhi, India, M. B. B. S. Lady Hardinge Medical College, 1958; D. P. H. Royal Institute of Hygiene and Public Health, 1961; M. D. Lady Hardinge Medical College, 1970.

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MOHAMMAD SHAMS ARDEKANI, of Akron, Ohio, M. D. Pahlavi Medical School, 1964.


JAMES DONALD SHELTON, of Norfolk, Va., A. B. Oberlin College, 1969.

DOROTHEA HILDEGARD ELISBETH SICH, of Stuttgart Gerockst, Germany, M. D. Humboldt University Medical School, 1957.

RUTH HARRIS SINGER, of Baltimore, Md., A. B. University of Pennsylvania, 1968; M. D. State University of New York Downstate Medical Center, 1968.


ELIAS SALIM SROUJI, of Beirut, Lebanon, M. D. School of Medicine American University of Beirut, 1944.

CHARLES HENRY STEINMETZ, of Baltimore, Md., A. B. Indiana University, 1950; Ph. D., 1953; M. D. University of Cincinnati, 1960.

GEORGE STUEHLER, Jr., of Baltimore, Md., B. E. S. The Johns Hopkins University, 1962; M. B. A. Wharton Graduate University of Pennsylvania, 1966.

MOYES SZKLO, of Guanabara, Brazil, M. D. School of Medicine Sciences of the University of the State of Guanabara, 1963.


MARY TALBOTT THOMS, of Baltimore, Md., R. N. Union Memorial Hospital, 1956; B. S. N. Western Reserve University, 1962; M. S. N. University of Pennsylvania, 1963.

SHEILA VAIDYANATHAN, of Maduranthakam, India, M. B. B. S. Madras Medical College, 1956; I. C. M. R. School of Tropical Medicine, 1960; D. T. M. & H. School of Tropical Medicine and Hygiene, 1964.

BARLOW JACOB WAGMAN, of Silver Spring, Md., B. S. George Washington University, 1953; D. D. S. Howard University, 1962.


CONNIE JO WORTHINGTON, of Fresno, Calif., A. S. Reedley College, 1964; B. S. School of Nursing University of California, 1967.

AURORA SANTOS YAPCHONGCO, of Quezon City, Philippines, B. S. N. Philippines Women's University, 1954; M. A. N. University of the Philippines, 1964.


WHITNEY BLAIR YOUNG, of Ogden, Utah, A. S. Weber State College, 1953; B. S. University of Utah, 1958; M. D. Kansas University School of Medicine, 1963.

HENRY DEARBORN ZIEGLER, of Baltimore, Md., B. A. The Johns Hopkins University, 1966; M. D. McGill University, 1970.

CAROLE RODEN ZUSMAN, of Randallstown, Md., A. A. New York City Community College, 1961; B. S. City College of New York, 1963; Sc. M., 1965; Ph. D. University of Massachusetts, 1968.
DOCTORS OF PUBLIC HEALTH
in The School of Hygiene and Public Health


National Health Planning in Ethiopia.


Epidemiologic Characteristics of Presumed Ocular Histoplasmosis.

David Bartlett Thomas, of Baltimore, Md., B.S. University of Washington, 1959; M.D. University of Washington School of Medicine, 1963; M.P.H. The Johns Hopkins University School of Hygiene and Public Health, 1969. Epidemiology.

Oral Contraceptives and Cervical Neoplasia.

John Wellman, of Detroit, Mich., B.A. Wayne State University, 1959; M.A. University of Kansas, 1962; M.D. University of Kansas School of Medicine, 1967; M.P.H. The Johns Hopkins University School of Hygiene and Public Health. International Health.


Effectiveness of Utilization of Training Abroad in Population Dynamics and Family Planning.

DOCTORS OF PHILOSOPHY
in The School of Hygiene and Public Health


Pressure Flow Relationships in the Excised Perfused Canine Abdominal Aorta.


Some Robust Point Estimation Sampling Strategies Under Certain Linear Regression Models.


Some Estimation Problems in Branching Processes.


The Effect of Hypoxia on Hypothalamic Mechanisms.

Mark Robertson Montgomery, of Cincinnati, Ohio, B.S. Purdue University, 1967. Environmental Medicine.

Effect of Carbon Monoxide Inhalation on In Vivo Drug Metabolism.


A Class of Models for Bivariate Point Processes.


The Effects of Temperature and Humidity on the Development of H. diminuta in vivo.


In Vitro Evidence for the Vesicular Synthesis of Acetylcholine.


Sodium Flux and Distribution in Skeletal Muscle. Role of Sarcoplasm and Sarcoplasmic Reticulum in a Two-Component Model.


Family Planning Attitude and Behavior and the Resultant Impact on Health Services.

Roberto Pablo Schlatter, of Santiago, Chile, D.V.M., University of Chile, 1967.
MASTERS OF ARTS
in The School of Advanced International Studies

PETER FREDERICK ALLGEIER, of West Orange, N. J., B.A. Brown University, 1969.

BRIAN ELLIS ANDERSON, of Logan, Utah, B.A. Utah State University, 1968.

RAYMOND VINCENT ARNAUDO, of Mountain View, Calif., B.A. Stanford University, 1969.

IAIN STEWART BAIRD, of Waldwick, N. J., B.A. The Johns Hopkins University, 1968.


JEFFREY WILLIAM BARRETT, of Foxboro, Mass., B.A. Notre Dame University, 1966.


GENE ERNEST BIGLER II, of San Bernardino, Calif., B.A. University of the Pacific, 1967.

RALPH WALTER BILD, of West Bend, Wis., B.A. Oberlin College, 1970.


VAUGHN RICHARD BLAKE, of San Francisco, Calif., B.A. University of Redlands, 1970.

WILLIAM DENNIS BLAYLOCK, of Hidden Hills, Calif., B.A. University of California, Los Angeles, 1970.

WOLF ISAAC BLITZER, of Williamsville, N.Y., B.A. State University of New York, Buffalo, 1970.

GORDON RAYMOND BOE, of Sioux Falls, S. D., B.A. Augustana College, 1968.

PHILIP PETERS BOLTON, of Cleveland, Ohio, B.A. Williams College, 1967.

JOEY BONNER, of Pasadena, Calif., B.A. University of California, Berkeley, 1970.


ANITA F. BROWNSTEIN, of Baltimore, Md., B.A. University of Maryland, 1968.

DAVID ALAN BRUCATO, of Mexico D.F., Mexico, B.A. Macalester College, 1970.

JEFFREY JOSEPH BUCZACKI, of Enfield, Conn., B.A. The Johns Hopkins University, 1971.

RICHARD POTTER BURNS, of Ormond Beach, Fla., B.A. Brown University, 1967.

PAUL DECATOR BUTCHER, of Baltimore, Md., B.A. Yale University, 1969.


FRANZ ANDREAS CEBE, of Innsbruck, Austria, Dr. of Law University of Innsbruck, 1968.

RICHARD LEONARD COLLINS, of Gales Ferry, Conn., B.A. University of Connecticut, 1970.

ROGER BARRY COOPER, of Shaker Heights, Ohio, B.A. Hiram College, 1970.


MICHAEL GOEFFREY CROSTHWAITE, of Toronto, Canada, B. A. University of Toronto, 1966.

BRIAN DEAN CURRAN, of Largo, Fla., B.S.F.S. Georgetown University, 1970.


ANN DORSEY DAY, of Virginia Beach, Va., B.A. Hollins College, 1968.

LUC DE SMENT, of Ghent, Belgium, Law Degree University of Ghent, 1969.

JOHN EDMUND DEVINE, of Ocean City, N. J., B. A. The Johns Hopkins University, 1969.

DAVID BRYAN DLOUHY, of Crosby, Texas, B.A. University of Texas, 1970.

EVE DUVAL, of Encino, Calif., B. A. University of California, Los Angeles, 1969.

JOHN ALAN ECKSTEIN, of Iowa City, Iowa, B. A. University of Iowa, 1970.


Patrik Johan Engellau, of Stockholm, Sweden, Civil Engineer Diploma, Stockholm School of Economics, 1968.

Claudia Beth Engelman, of Trenton, N.J., B.A. Mount Holyoke College, 1970.

John Philip Evans, of Cheverly, Md., B.A. The Johns Hopkins University, 1971.


Lawrence David Gilson, of Beverly Hills, Calif., B.A. Claremont Men's College, 1970.

Steven Charles Haas, of Leawood, Kansas, B.A. Stanford University, 1970.

Brian Shepard Hallman, of Falls Church, Va., B.A. College of William and Mary, 1969.

Eric Max Hameister, of Bashaw, Alberta, Canada, B.A. University of Alberta, 1970.

Lawrence M. Hannah, of New Westminster, B.C., Canada, B.A. Simon Fraser University, 1970.

Carol Margaret Harvey, of Bethesda, Md., B.A. Oberlin College, 1970.

Timothy John Hauser, of Pittsburgh, Pa., B.S.F.S. Georgetown University, 1970.

Linda Sue Hearne, of Oakland, Calif., B.A. University of California, Berkeley, 1970.

Steven Hecht, of Los Angeles, Calif., B.A. Occidental College, 1970.


Elaine Alison Hubert, of Germantown, N.Y., B.A. Hood College, 1970.


Peter Roff Johansson, of Vancouver, B.C., Canada, B.A. University of British Columbia, 1970.


Russell Cornish Jones, of Houston, Texas, B.A. The Johns Hopkins University, 1972.


Ernest Richard Keeton, of Austin, Texas, B.J. University of Texas, 1970.

Hans Albert Keller, of Shaker Heights, Ohio, B.A. Case Western Reserve University, 1970.

Janet Kelly, of Philadelphia, Pa., B.S.F.S., Georgetown University, 1969.


Roland Klaus, of Alexandria, Va., B.A. Queens College, 1969.

Angela U. Knippenberg, of Hameln, Germany, B.A. Bryn Mawr College, 1970.


Carlo La Porta, of Woodside, Calif., B.A. Indiana University, 1967.

Eric Jan Lapp, of Fairfax, Va., B.A. The American University, 1970.


Gilbert Neal Lendenmann, of Nokesville, Va., B.S.F.S. Georgetown University, 1969.


Dennis Powell Lockhart, of Bakersfield, Calif., B.A. Stanford University, 1968.

Carla N. Lofberg, of Chehalis, Wash., B.A. The American University, 1967.

Pavel Machala, of Prague, Czechoslovakia, B.A. Saint Olaf College, 1970.
JOAN E. MATHEWSON, of San Jose, Calif., B.A. University of California, Berkeley, 1970.


JAMES MECELLAS, of Fond Du Lac, Wis., B.A. Ripon College, 1942.


BRIAN JEFFERY MOHLER, of Schenectady, N.Y., B.A. The Johns Hopkins University, 1970.

JOHN VINCENT MOLLER, Jr., of Ho-Ho-Kus, N.J., B.A. Colgate University, 1970.

ELLEN KAVANAGH MORAN, of Massapequa, N.Y., B.A. University of Massachusetts, 1970.

SRENELLA MORELLI, of Ravenna, Italy, Degree in Law, University of Ferrara, 1969.

JOHN THOMAS MORKEN, of Minneapolis, Minn., B.A. Macalester College, 1970.

PAUL THOMAS MURPHY, of Fairfield, Conn., B.A. Georgetown University, 1968.


PATRICK MICHAEL O'BRIEN, of McKeesport, Pa., B.A. The Catholic University of America, 1969.

ARUTO MILTON OTTOLENGHI, of Acqui Terme, Italy, B.A. The Johns Hopkins University, 1971.

CHARLA GREER PEAVY, of Lufkin, Texas, B.A. University of Texas, 1970.

ROBERT SCOT PERLIN, of Kings Point, N.Y., B.A. Brandeis University, 1969.


DOUGLAS K. RAMSEY, of Los Angeles, Calif., B.A. University of California, Los Angeles, 1970.


MYRON PAUL SCHAMIS, of Forest Hills, N.Y., B.A. The Johns Hopkins University, 1972.


KATHERINE ANNE SCHWERING, of Bethesda, Md., B.A. Northwestern University, 1970.

CRISTOBAL DAVID SENIOR, of Bogota, Columbia, Degree in Economics, National University of Columbia, 1965.

KEITH ARNOLD SHANGRAW, Jr., of Belmont, Mass., B.A. University of Maryland, 1970.

JONATHAN SHOWE, of Pittsburgh, Pa., B.A. Grinnell College, 1967.

SCOTT GAMBRELL SINCLAIR, of Carmel Valley, Calif., B.A. The Johns Hopkins University, 1971.


JEFFREY WARD STALLINGS, of Atlanta, Ga., B.S. E. Princeton University, 1967.

JACQUELINE ALICIA STARK, of Lima, Peru, B.A. The American University, 1969.

ARTHUR STEIN III, of Des Moines, Iowa, B.A. Tulane University, 1970.

JOHN FRANCIS STERLING, Jr., of Pelham Manor, N.Y., B.A. Colgate University, 1968.

BRIAN ELIOT SULLAM, of Honolulu, Hawaii, B.A. The Johns Hopkins University, 1971.


MICHAEL THEODORE TILLES, of Burbank, Calif., B.A. San Francisco State College, 1967.

MOHAMED JAWAD TUNIS, of Freetown, Sierra Leone, B.A. College of Great Falls, 1970.

SAINT ELMO PARLETTE TYNER II, of Mendon, Ohio, B.S. United States Military Academy, 1965.

PETER WILHELMUS VAN DEN DUNGEN, of Turnhout, Belgium, Licentiate St. Ignatius University, 1970.

MARGARET E. GRANT VANDERHYE, of Park Ridge, Ill., B.A. Northwestern University, 1970.

IR JORG JACOB CLEMENS VOORHOVE, of The Hague, Netherlands, M.A. Wageningen University, 1971.
DOCTORS OF PHILOSOPHY
in The School of Advanced International Studies

DENNIS JOHN AMATO, of Manhasset, N.Y., B.A. Boston College, 1966; M.A. School of Advanced International Studies, 1968.


The Domestic Dimension of Soviet Foreign Policy: The Kremlin Debate on the Test Ban, October 1962-October 1963.


Social Background of Modern Iraqi Politics.


Appeasement: A Reappraisal.


KUSOL VAROPHAS, of Bangkok, Thailand, B.S.F.S. Georgetown University, 1961; M.A. School of Advanced International Studies, 1963.

Traditional Institutions and Political Change in Thailand.


Russian and Black Africa before World War II.
DOCTORS OF MEDICINE
in the Faculty of Medicine

ROBERT FREDRICK AARSTAD, of Watertown, S. Dak., B. A. St. Olaf College, 1968; B. M. S. University of South Dakota School of Medicine, 1970.


ALEXANDER JEHOSCHUA ASCH, of Forest Hills, N. Y., A. B. Princeton University, 1968.

DAVID ALAN BLOCK, of Newport News, Va., B. A. Brandeis University, 1968.

MICHAEL STEVEN BORZY, of Cleveland, Ohio, B. A. The Johns Hopkins University, 1969.


JAMES KINGSBURY BROWN, of Kalamazoo, Mich., B. A. Yale University, 1968.


EDWARD JAMES BUSICK, JR., of Franklin Square, N. Y., B. A. The Johns Hopkins University, 1969.

LOUIS JAMES CALLI, JR., of North Vernon, Ind., B. A. The Johns Hopkins University, 1968.

MARY ANN CARLSON, of Montrose, Col., B. A. University of North Dakota, 1968; B. M. S. University of North Dakota School of Medicine, 1970.

JOSEPH A. CARLTON, of Grambling, La., B. A. The Johns Hopkins University, 1968.

JAMES FORREST CARROLL, of Santa Ynez, Calif., B. A. University of California (San Diego), 1968.

DONN ALAN CHAMBERS, of Atlanta, Ga., B. A. The Johns Hopkins University, 1969.

CHARLES SHIH-CHENG CHANG, of Baltimore, Md., B. A. The Johns Hopkins University, 1967.


ROBERT E. COHEN, of Baltimore, Md., A. B. Cornell University, 1968.

RONALD JAY COHEN, of Pittsburgh, Pa., B. A. University of Pittsburgh, 1968.

MARILEE CARVER SHEPLEER COLE, of Towson, Md., B. S. Bucknell University, 1968.


JOSEPH RAYMOND DEPAULO, JR., of Charleston, W. Va., B. S. Xavier University, 1968.

CHARLES HALLAM DIGGS, of Springfield, Ohio, B. A. DePauw University, 1968.


ANNE COLEMAN EGERT, of Baltimore, Md., B. A. The Johns Hopkins University, 1969.

ELIHU HARRIS ESTEY, of Brooklyn, N. Y., A. B. Yale University, 1968.


MICHAEL ROBIN FLICK, of Mexico City, Mexico, B. S. Duke University, 1968.

WALLACE BRUCE FYE, of Yardley, Pa., B. A. The Johns Hopkins University, 1968.

PAUL GESHELIN, of Los Angeles, Calif., B. A. The Johns Hopkins University, 1969.


RONALD LAWRENCE GINSBERG, of Baltimore, Md., B. A. The Johns Hopkins University, 1968.

PAUL EDWARD GORMLEY, of Baltimore, Md., B. E. S. The Johns Hopkins University, 1968.


Erik Lane Hewlett, of Oklahoma City, Okla., B.A. Westminster College, 1968.

Morley Donald Hollenberg, of Winnipeg, Manitoba, Canada, B.S. University of Manitoba, 1963; M.S. 1964; Ph.D. Oxford University, 1967.

Susan Margaret Ice, of Reading, Pa., B.A. The Johns Hopkins University, 1969.

Nicholas Taylor Illiff, of Arnold, Md., B.A. Williams College, 1968.


Donald Seyler Jacobs, of Cincinnati, Ohio, A.B. Cornell University, 1968.


Shahram Khoshbin, of Tehran, Iran, B.S. American University of Beirut, 1968.

Donald Lewis Lappé, of Millburn, N.J., B.S.E. Princeton University, 1968.

Thomas Walter Lawhorne, Jr., of Sylvester, Ga., B.S. University of Georgia, 1968.

James W. Lehninger, of Baltimore, Md., B.A. Wesleyan University, 1968.

Alan Jerome Levene, of Louisville, Ky., B.A. The Johns Hopkins University, 1969.


Gerald Eli Loeb, of Baltimore, Md., B.A. The Johns Hopkins University, 1969.


Dennis Paul Malinak, of Valley Stream, N.Y., B.S. Michigan State University, 1968.


James Harris Mersey, of Lynbrook, N.J., B.A. Amherst College, 1968.

Thomas Robert Miller, of Findlay, Ohio, B.A. Wesleyan University, 1968.

Stephen James Mohr, of Wheaton, Ill., B.A. The Johns Hopkins University, 1968.


Jonathan Edward Pederson, of Minneapolis, Minn., B.A. Augsburg College, 1968; B.M.S. University of South Dakota School of Medicine, 1970.


Terry Goddard Rehn, of Monmouth, Ill., B.A. DePauw University, 1968.


John Ballance Richardson, of Memphis, Tenn., A.B. Princeton University, 1968.

Ralph W. Rogers III, of New Kensington, Pa., B.A. The Johns Hopkins University, 1969.

Timothy A. Rogge, of Toledo, Ohio, B.S. University of Toledo, 1968.

James Ralph Schreiber, of Baltimore, Md., B. A. Rice University, 1968.

Daniel Adam Sherman, of Searingtown, N. Y., B. A. The Johns Hopkins University, 1969.


Mark K. Wedel, of Minneapolis, Minn., B. A. Valparaiso University, 1968.


Elizabeth Lancaster Wilder, of Florence Ala., B. A. Vanderbilt University, 1968.


Alan Ross Wofsey, of Stamford, Conn., A. B. Yale University, 1968.


Sing-Yung Wu, of Seattle, Wash., B. M. D. National Taiwan University School of Dentistry, 1963.

Eric Alan Wulfsberg, of Baltimore, Md., B. A. Luther College, 1968.

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MASTERS OF ARTS
in the Faculty of Medicine


A Descriptive Study of the Variation Occurring in Aedes Stegomyia scutellaris from Tafahi, and Hybridization Results Occurring between Aedes of Tafahi and Aedes polynesiensis.


Genetics and American Society.


On the Mechanisms of Inflammatory and Cytotoxic Reactions Mediated by Lymphoid Cells: Possible Role of Complement.


An Atlas of Stages in the Morphogenesis of the Heart in the Chick Embryo.


(5)
DOCTORS OF PHILOSOPHY
in The Faculty of Medicine

Morphogenesis in Neurospora crassa: Cytological and Biochemical Aspects of Mitochondrial Development.

WILLIAM CIEPLINSKI, of Baltimore, Md., M.D. National University of Mexico, 1964. Physiological Chemistry.
Studies of Histone V (F2c) of Chicken Blood and Erythropoietic System.

Specific Cleavage of SV40 DNA by Restriction Endonuclease from Hemophilus influenzae.


Studies on the Regulation of Coliphage MS2 Protein Synthesis.

A Thermodynamic Analysis of the Thermal-Unfolding Transition of Yeast Phenylalanine-Specific Transfer Ribonucleic Acid.

CHRISTINE MILCAREK, of Pittsburgh, Pa., B.S. Duquesne University, 1968. Microbiology.
Isolation and Characterization of Escherichia coli Mutants with Altered Exonuclease III Activities.

JOHN BAILY MOORE, Jr., of Baltimore, Md., B.S. Wake Forest College, 1966; M.S. Purdue University, 1968. Physiological Chemistry.
Chemical Modification Studies on Glyceraldehyde 3-Phosphate Dehydrogenase: I. Use of 1, 3-Dibromoacetone as a Potential Crosslinking Reagent. II. Selective Chemical Modification of Cysteine-153.

DOUGLAS McCREA MOORE, of Baltimore, Md., B.S. University of Delaware, 1967. Microbiology.
The Biosynthesis of Rabbit Leucocytic Pyrogen.

RAY ALBERT WEIGAND, of Baltimore, Md., B.S.A. Purdue University, 1967. Physiological Chemistry.
Extra Membranes in Escherichia coli Ollla: Their Formation, Isolation, and Partial Characterization.

Thermodynamic Studies Concerning the Interaction of Water with Biological Macromolecules.

(11)
MASTERS OF SCIENCE IN ENGINEERING
in the Faculty of Arts and Sciences

SULEYMAN OلاتUNJI Adeyemi, of Offa, Nigeria. Geography
& Environmental Engineering.
Stabilization Ponds: Parameters Affecting Their Performance.


BARRY IRA Castleman, of Baltimore, Md., B. E. S. The Johns Hopkins University, 1968. Geography & Environmental Engineering.
Asbestos—Effects on Health.

Extensions of the Linear Decision Rule in Reservoir Design and Operation.


LAWRENCE CARTER Kohlenstein, of Baltimore, Md., B. E. S. The Johns Hopkins University, 1962. Electrical Engineering.
Observer's Performance in Detecting Lesions in Radio-nuclide Scans.

A Review and Evaluation of Grit Chamber Design.

MART PEEP, of Baltimore, Md., B. E. S. The Johns Hopkins University, 1965. Electrical Engineering.
Small Gravity Waves on Crests and Troughs of Large Gravity Waves—A Statistical Energy Comparison.


The Effect of Entrainment on Several Species of Microcrustacea.

The Electrochemical Removal of Phosphate from Waste-water.


MASTERS OF ARTS IN TEACHING
in the Faculty of Arts and Sciences

ALAN JOSEPH Bouffard, of Pittsburgh, Pa., B. S. University of Pittsburgh, 1965.


JEANNE ANN Borenstein Hyatt, of Baltimore, Md.


(5)
MASTERS OF ARTS
in the Faculty of Arts and Sciences


Peter Clyde Allen, of Klamath Falls, Oreg., B.A. University of Maryland, 1970. Humanities.

Marc Arlen Anderson, of Brodhead, Wis., B.S. Wisconsin State University, 1967. Chemistry.


Catherine Micheline Archer, of Baltimore, Md. Romance Languages.


Paula Kaye Benkart, of Youngstown, Ohio, B.A. The Ohio State University, 1969. History.


Emilie Louise Bergmann, of St. Louis, Mo. Romance Languages.


Inge Bretherston, of Baltimore, Md., B.A. The Johns Hopkins University, 1971. Psychology.


Alfonso Caramazza, of Aragona, Italy, B.A. McGill University, 1970. Psychology.

Alasdair John Gibson-Craig-Carmichael. Chemistry.


JENNIFER MARY FAUNTLEROY CHAMBERS, of Washington, D.C. Biology.


YENG-FONG ROSALIA CHANG, of Shansi Province, China. Statistics.

TSING-CHANG CHEN, of Taiwan, Republic of China, B.Sc. National Taiwan Normal University, 1965; M.S. National Central University, China, 1968. Earth and Planetary Sciences.


WILLIAM GLEN CUMBERLAND, of Montreal, Quebec, Canada, B.S. McGill University, 1968. Statistics.


Cost-Benefit Analysis of Health Sector Programs: Conceptual Problems Involved in Application.


Spatial and Socio-Economic Aspects of Solid Wastes Collection Services: A Case Study of the City of Baltimore.

EDWARD HERBERT FRIEDMAN, of Richmond, Va., B.A. University of Virginia, 1970. Romance Languages.

JOHN JOSEPH GALLAGHER, of Baltimore, Md., A.B. St. Mary’s Seminary and University, 1951. Writing Seminars. Something Can Be Said.


DAVID BARRY GASPAR, of St. Lucia, West Indies, A.A. College of the Virgin Islands, 1966. History.


RUTH WILLIAMSON GODFREY, of Tallahassee, Fla., B.A. Florida State University, 1970. Classics.


ELLEN SUSAN GREENEBAUM GRANOVETTER, of New York, N.Y. Social Relations.

KEITH EDWARD GRAU, of Baltimore, Md. Chemistry.


CAROLYN ANN GREGA, of Seattle, Wash., B.A. University of Maryland, 1969. Writing Seminars. To Walk Through the Waters of the Nile.

ESTHER PAULA BLANK GREIF, of Baltimore, Md., A.B. Syracuse University, 1970. Psychology.


Bruce Wayne Hamill, of Baltimore, Md., B. A. Tufts University, 1964. Psychology.


Quakerism and the Liberal Arts College: Swarthmore College in the Twentieth Century.

Geeta Devi Heble, of Poona, India, B. A. University of Bombay, 1969. German.


Preparation for a Journey.

James Charles King Henley, of Meridian, Miss., B. A. University of Mississippi, 1959; M. A., 1969. Writing Seminars.

The Stalking Horse and Other Stories.

Gilbert Scott Heron, of Chicago, Ill. Writing Seminars.

Circle of Stone.


Driving Wheel.


Suburban Voting Behavior.


California Politics: Population Dynamics and Recent Political Trends.


Craig Thurlow Johnson, of New Berlin, Wis., B. A. University of Wisconsin, 1970. Psychology.


Christopher Magisto.

Peter George Kelk, of Toronto, Canada, B. A. University of Toronto, 1969. Political Economy.


The Taylor System of Scientific Management.


Gerda Steinhauer Koetter, of Baltimore, Md., German.


Fredrick Scott Kraly, of Whiting, Ind., B. A. University of Notre Dame, 1970. Psychology.


Externalities and Their Remedies.

Paul G. Kreiner, of Baltimore, Md. Writing Seminars.

Thirty Poems.


Carol Sana Lee, of Lincoln, Mass. Chemistry.

Suh-Jen Lee, of Tainan, Taiwan, B. S. Taiwan Cheng Kung University, 1969. Chemistry.


Diane Rachel Loiselle Levin, of La Mirada, Calif., B. A. University of California, Riverside, 1970. English.


Edward William Leyhe, of Baltimore, Md., B. A. The Johns Hopkins University, 1953. Education.


Robert Lancaster Lucke, of Norfolk, Va., B. A. The Johns Hopkins University. Physics.

Lawrence Wayne Markert, of Baltimore, Md. Writing Seminars.

Sleeves and the Shape of Hands.


Executive Calisthenics.


The Open Window.


Liselotte C. Mertsch, of Berlin, Germany, B. A. Towson State College (Md.), 1970. German.


Michael Jay Minot, of Harrison, N. Y. Chemistry.


William Charles Murphy, of Shamokin, Pa., B. S. Villanova University, 1970. Chemistry.


Dream of a Devil.


Tsun-Shi Nancy Hsin Nee, of Taiwan, Republic of China, B. S. National Tsing Hua University, Taiwan, China, 1970. Chemistry.


Whiteguard.


Mary Joan Orzolek, of Baltimore, Md., B. A. University of Maryland, 1971. Writing Seminars.

Confederate Angels.


Mauricio Barata de Paula Pinto, of Sao Paulo, Brazil, B. E. S. University of Minas Gerais, 1968. Political Economy.

Roger Luc Poirier, of Paris, France, Baccalaureat University of Paris, 1957; M. A. Western Reserve University, 1968. Romance Languages.

Janet Carolyn Pollock, of Minneapolis, Minn., B. A. Lawrence University, 1970. German.

Terry Eugene Porter, of Jacksonville, Fla., B. S. Florida State University, 1964. Writing Seminars.

The Assassination of Huey Long.


Margaret Ellen Rice, of Denver, Colo. Writing Seminars.

Was There Ever a Harry Potts.


Poems and Translations.


Osborne Robinson, Jr., of Baltimore, Md. Writing Seminars.

Dimensional Portrait.


Kraft H. W. Rompf, of Hamburg, Germany. Writing Seminars.

In the Seeing House.


Pippin: A Collection of Poems.


Bureaucratic Policy and Organizational Scale.

Leonard Gene Schulze, of Schenckburg, Texas, B. A. University of Texas, 1969. Comparative Literature.

Larry Edwin Schutz, of Manhattan Beach, Calif., B. A. University of California, Los Angeles, 1970. Psychology.


Jay Edward Simkin, of Baltimore, Md. Political Science.

Persia and the Crisis of Imperial Security.


Ana Maria Snell, of Santander, Spain, Certificate University of Madrid, Spain, 1955. Romance Languages.

Mark Howard Snyder, of Brooklyn, N. Y., A. B. Syracuse University, 1971. Writing Seminars.

Malachi Berkeyev.

Mark William Springgate, of Champaign, Ill. Chemistry.


The Myth of the China Market.

Arthur Jay Tobias, of New York, N. Y. Writing Seminars.

Gambrills.


Kathleen Rose Valentine, of Newburgh, N. Y., B. A. C. W. Post College of Long Island University, 1969. Political Science.


Daun Roell Van Ee, of Seattle, Wash., B. A. University of South Carolina, 1967. History.


Eugenio Emilio Vogel, of Temuco, Chile, Licenciado in Physics University of Concepcion, Chile, 1969. Physics.


Ellis Archer Wasson, of Rosemont, Pa. History.

D. C. Moore and Reform, The Political Premises of the Reform Cabinet of 1832.

Richard Waterhouse, of Sydney, New South Wales, Australia, B. A. The University of Sydney, 1968. History.


Philip Michael Whipple, of Portsmouth, Ohio, B. A. Arizona State University, 1969. Romance Languages.


Samuel Alexander Zervitz, of Baltimore, Md. Writing Seminars.

Ravin's God.
DOCTORS OF PHILOSOPHY
in the Faculty of Arts and Sciences


The Logic of Condillac and the Structure of French Chemical and Biological Theory, 1780-1801.


Structural and Functional Characterization of Chick Embryo Chromatins.

ROBERT EDWARD ANDERSON, of Urbana, Ill., B.S. Stanford University, 1966. Political Economy.


ANDREW CHASE BACKUS, of Silver Spring, Md., B.A. The Johns Hopkins University, 1966. Chemistry.

The Solvolysis of Benzhydryl-type Lactones.


Politics of Continuity: Maryland Political Parties, 1861-1868.


An Integer Programming Approach to Capacity Expansion and Production Planning.


Studies on Women at Mari: Politics and Religion.

GEORGE WILLIAM BENEDICT, of Columbus, Ohio, B.A. Williams College, 1959; M.D. Vanderbilt University, 1963. Biology.

The Partial Purification and Characterization of a DNA Polymerase from Baker's Yeast.

SUE ELLEN BERRYMAN BOBROW, of Pasadena, Calif., B.A. Pomona College, 1959. Social Relations.


WILLIAM JAMES BOETTINGER, of Baltimore, Md., B.E.S. The Johns Hopkins University, 1968. Mechanics.

Surface Relief Cinemicrography of the Unsteady Solidification of the Lead-Tin-Cadmium Ternary Eutectic.


Carbon-14 Tracer Studies of the Secondary Reactions in the Cracking of Hexadecane Over Zeolite Catalysts.

ELIYAHU BORUKHOV, of Jerusalem, Israel, B.A. Hebrew University, Jerusalem, 1961; M.A. The Johns Hopkins University, 1971. Political Economy.

City Size, Land Use, and Transportation Costs.


A Study on the Chemical Behavior of Zinc in Chesapeake Bay Water using Anodic Stripping Voltammetry.

DEREK KINGSLEY BRADY, of Auckland, New Zealand, B.E. Auckland University College School of Engineering, 1956; M.S.E. The Johns Hopkins University, 1961. Geography and Environmental Engineering.


BERNARD GERARD BRICKS, of Pittsburgh, Pa., B.S. Memphis State University (Tenn.), 1963; M.A. The Johns Hopkins University, 1969. Physics.

Excitation and Heating Processes in a Pulsed Argon-Ion Laser.


Subcellular Distribution of Labeling of Phospholipids and Acetylcholine in Rat Sympathetic Ganglia at Rest and in Activity.

DENNIS ROBERT CAPOZZA, of Providence, R.I. Political Economy.

Transportation and the Urban Economy.


Cigoli Studies.

Miocene-Pliocene Beach and Tidal Flat Sedimentation, Southern New Jersey.


Elements of Organization in Les Chants de Maldoror.


International Trade and Technology: Models of Dynamic Comparative Advantage.

ARTHUR COHEN, of Morristown, N. J., B. S. Newark College of Engineering, 1956; M. S. E. Syracuse University, 1958. Electrical Engineering.

Analysis and Synthesis of Bit Synchronizer Loops Controlled by Zero Crossing Epochs.

MARTIN LEWIS COHEN, of Baltimore, Md., B. E. S. The Johns Hopkins University, 1963. Electrical Engineering.

Robust Procedures and Autoregressive Models in Communication Theory.


Ecoliers to Fauves, Matisse, Marquet and Manguin Drawings: 1890-1906.

ROBERT MILTON DAVIES, of Wichita, Kans., B. A. University of Kansas, 1965; M. S. Wichita State University (Kans.), 1968. Geography and Environmental Engineering.

The Entrainment of Zooplankton into the Cooling Water Systems of Three Steam Generating Stations.

JAMES McMURRIN DEAN, of Berkeley, Calif., B. A. University of California, Riverside, 1966. English.


The Histories, Travels and Essays of Carl Julius Weber.


The Development of Self-Esteem: Theory and Measurement.

WILLIAM ELDER DOLL, Jr., of Detroit, Mich., A. B. Cornell University, 1953; M. A. Boston University, 1961. Education.

Analysis of Dewey's Educational Writings Interpreted with Reference to his Concept of Change.

BARBARA ANN DREYER, of Holliston, Mass., B. S. Concordia Teachers College, 1953; M. Ed. The Johns Hopkins University, 1958. Education.

The Influence of the Mental Hygiene Movement of the Education of Children during the Early Decades of the Twentieth Century in America.

MIN-WEN DU, of Taiwan, China, B. S. National Taiwan University, 1966. Computer Science.

Multiple Fault Detection in Combinational Circuits.


Ferdinand Lassalle's Significance for Our Time.

BETTYE KIRKPATRICK EIDSON, of Summerville, Ga., A. B. University of Chattanooga, 1961; M. A. University of Georgia, 1963. Social Relations.


Administration of Complaint Procedures by Department of Housing and Community Development in City of Baltimore.


Non-Recontracting, Recontracting and Equitable Trading Processes.


Deuterium Isotope Effects in the Barton Reaction.
Stereospecificity in Acid Cleavage of 1-Methoxynortri-cyclane and 1-Acetoxy-nortri-cyclane.

Russell Inslee Fries, of Dallas, Texas, B. A. Yale University, 1963; M. A. The Johns Hopkins University, 1968. History.
A Comparative Study of the British and American Arms Industry, 1790-1890.

Sarel Paulette Fuchs, of Baltimore, Md., A. B. College of Notre Dame of Maryland, 1964; M. A. The Johns Hopkins University, 1965. Education.

Hajime Fujita, of Tokyo, Japan, B. S. Nihon University, 1965; M. S. E., 1967. Mechanics.
Unsteady Response of an Airfoil to Wake Cutting.

The Emergence of Biological Reductionism.


The Other Emancipation: Studies in the Society and Economy of Alabama Whites during Reconstruction.

Some Psychological Phenomena and the Nature of Perception.


Cooling Water Temperature Models.

An Essay on the Concept of Collective Rationality.


Frog Rhodopsin in situ: Orientational and Spectral Changes in the Chromophores of Isolated Retinal Rod Cells.

The Sediments and Sedimentary Processes of the Holocene Tidal Flat Complex, Delmarva Peninsula, Virginia.


Stereoisomerism of Triarylmethyl Carbanions.

Soviet Russia's Economic Relations with Germany, 1918-1922.

Verbal Propositions in J. S. Mill's Logic.

Howard Steven Hock, of Brooklyn, N. Y., B. S. Polytechnic Institute of Brooklyn, 1962; M. A. The Johns Hopkins University, 1969. Psychology.
The Role of Structure in the Perception of Familiar and Unfamiliar Stimuli.


Logic, Language, and Intensional Objects.

Self-perception and Perception of Others.


The Avellana or Conflictus Virtutum et Viciorum by Wilhelm Jordaens (d. 1372).


An Information-Combining Model for the Formation of Performance Expectations in Small Groups.


Tensile Waves of Finite Amplitude in a Crystalline Solid.


The Use of Land and Water Resources in the Past and Present Valley of the Oaxaca, Mexico.


The Filocolo of Giovanni Boccaccio.

Juan Igal Korenbrot, of Mexico City, Mexico, M.A. The Johns Hopkins University, 1970. Biophysics.

Dark Ionic Current and the Effect of Light in Isolated Rod Outer Segments as Determined by Their Osmotic Behavior.

Vlasta Bonacic Koutecky, of Split, Yugoslavia, Diploma Zagreb University, 1967. Chemistry.

Some Consequences of the Nonlinearity of the Hartree-Fock Approach.


Frederick Clarke Withers, 1828-1901.


Replication and Recombination in Ligase-deficient rII Bacteriophage T4D, and Polynucleotide Ligase in Bacteriophage T4D Recombination.

Wen-Ishung Kuo, of Formosa, B.A. Tunghai University, 1962; M.A. State University of New York, Buffalo, 1968. Social Relations.

The Political Behavior of Big City Mayors.


A Methodology for Comparison of Computer Aided Diagnosis Programs.


Magnetic Interactions and Magneto-Crystalline Effects in TbPO₄ and TmAsO₄.

Steven Eric Levitsky, of Montreal, Canada, B.A. Acadia University, 1968; M.A. The Johns Hopkins University, 1970. English.

The Discovery of Sir Gawain and the Green Knight.


Mark Willard Lipsey, of Memphis, Tenn., B.S. Georgia Institute of Technology, 1968. Psychology.

Scientific Values and Scientific Knowledge: A Test of an Evolutionary Model.

Lewis I-shih Liu, of Taipei, Taiwan, China, B.S. National Taiwan University, 1964. Mechanics.

On Irreversible Thermodynamics.

Lokia Liu, of An-hwei, China, B.S. National Taiwan University, 1966; M.S. National Tsing Hua University, 1968. Electrical Engineering.


The Juridical Terminology of International Relations in Egyptian Texts Through Dynasty XVIII.


Development of a Two-Section Ge(Li) Compton Polarimeter with Applications in the 2s-ld Shell.

* Posthumously.

System Identification Using Lyapunov-Designed Model Builders.


Who Wants Bureaucracy?


Import Demand, Protection and the Effects of Trade Liberalization on the Irish Economy.


The Effective and Ineffective Practices of College Supervisors of Student Teachers.


Multiple Hemoglobins of the Embryonic and Adult Rabbit.

CARL HENRY McMILLAN, Jr., of Annapolis, Md., A.B. Yale University, 1952. Political Economy.

Aspects of Soviet Participation in International Trade.


An Experimental Study of Wind Velocity Profiles over a Plowed Field.


Wave-Induced Instabilities in Stratified Fluids.


Re-allocation of Student Nurses to Match Patient Requirements in Different Hospitals.

DONALD EDWARD MORTON, of Mexia, Texas, B.A. Rice University, 1961; M.A. The Johns Hopkins University, 1963. English.

Eccentric Sage: The Development of Form in the Works of George Meredith.


Measurement and Analysis of Thermal Inhomogeneities Developed during the Plastic Deformation of Copper.

MARKUS FREDERICK MOTSCH, of Landshut, Germany, B.A. University of Waterloo, Canada, 1963; M.A., 1965. German.

Die Poetische Epistle in der Deutschen Dichtung und Literaturkritik des Achtzehnten Jahrhunderts.

GEORGE LINCOLN MURPHY, of New Wilmington, Pa., B.S. Ohio University, 1963. Physics.

Topics in Relativistic Magnetohydrodynamics.


Mathematical Analysis and Optimization of Health Services Systems.


Mechanisms of Oxygen Transport and Transfer by Bubbles.


The Electrical Properties of Neurons in Necturus Retina.


A Derepressible Active Transport System for Glucose in Neurospora Crassa.


MICHAEL DAVID ORNSTEIN, of Montreal, Canada, B.S. McGill University, 1967. Social Relations.

Entry into the American Labor Force.


Universal Base Functions and Modules for Realizing Switching Functions and Sequential Machines.


Microwave Transport Properties of n-type Germanium.

HERBERT LEON PETRI, of Hamilton, Ohio, B.A. Miami University, 1967; M.A. The Johns Hopkins University, 1969. Psychology.

Functions of Cues Associated with Reinforcement and Nonreinforcement.


Henry Draper: A Scientific Biography.
Political Thought of John Locke.

ROBERT EMMET PROCTOR III, of Los Angeles, Calif., B.A. University of San Francisco, 1967; M.A. The Johns Hopkins University, 1970. Romance Languages.
Emanuele Tesauto's Cannocchiale Aristotelico: A Study of the Lie in the Arts.

The Location of the Antigen Binding Site of Guinea Pig Antibodies by Affinity Labeling.

Light Scattering Study of the Soft Modes of KD₄PO₄.

Absorptive Capacity and Optimum Growth.

The Development of the French Executive in The Revolution, 1789-1794.

Purification and Properties of Tryptophanyl-tRNA Synthetase from Neurospora Crassa.

ABRAHAM LANDIS RILEY, of Baltimore, Md., B.E.S. The Johns Hopkins University, 1963; M.S. 1968. Electrical Engineering.
Effects of a Band-Tail on the Low Temperature Conduction of Indium Antimonide.

Computer Simulations of Turbulent Dispersion.


The Traveler from Zierkzee: The Religious, Intellectual and Political Development of A. J. Muste from 1885 to 1940.

A Quantitative Study of Eye Movements Evoked by Cerebellar Stimulation in the Alert Monkey.

The Far Ultraviolet Spectrum of Venus.

The Effects of Changes in Government Monetary and Fiscal Policies in an Open-Economy One-Sector Monetary Growth Model.

Dialogues of the Dead in 18th Century Germany.

YASSIN SANKAR, of Guyana, South America, B.A. McGill University, 1966; M.A. University of Toronto, 1968. Education.
The Dynamics of Bureaucratic Change in Education: Towards the Resolution of Conceptual Conflicts.

The Use of Formamide in Nucleic Acid Reassociation with Emphasis on Problems Encountered with Eukaryotic Genomes.

Theoretical Studies of Molecular Electronic Structure: Valence Bond Methods Revisited.

The Glycolipids of Normal and Transformed BHK Cells.

Die Mentor-Zögling-Konfiguration im Deutschen Roman des Achttzehnten Jahrhunderts.

English Conceptions of Colonization in the Sixteenth and Seventeenth Centuries.

Dispersion Measurements of a Fluid Sheet in Two Turbulent Flows.

The Effect of Organ-Chlorine Insecticide Exposure on Adaptation to Thermal Stresses in the Johnny Darter, Etheostoma Nigrum Rafinesque.


On Using Model Potentials to Study the Vibrational and Electronic Properties of Molecules.

MADELEINE ANJUBAULT SIMONS, of Alençon, France, M. A. The Johns Hopkins University, 1969. Romance Languages.

Sympathie des âmes et Volupté d'ange: Recherches et reflexions sur un texte des Confessions.


Decoupling in Linear and Nonlinear Systems by State-Variable Feedback.


A Study of Autoregressive Dependence in Nonparametric Detection.


Two-Spin Cross-Relaxation between Two Paramagnetic Spin Species.


Robert Lansing and the Paris Peace Conference.

JOHN ABERNATHY SMITH, of Pulaski, Tenn., B. A. Vanderbilt University, 1961; M. A. The Johns Hopkins University, 1967. History.


Some Statistical Methods for Data Grouped by Quantiles.


An Empirical Evaluation of Import Substitution in Five Large Latin American Countries.

RICHARD HENRY SMITH, JR., of Baldwin, Md., B. E. S. The Johns Hopkins University, 1966. Electrical Engineering.

Multiplier Functionals for Programming in Normed Spaces.


FRANK JOSEPH SPARZO, of Waterbury, Conn., B. A. University of Connecticut, 1957; M. A. Appalachian State Teachers College (N. C.), 1958. Education.

Administrative Experience and Attitudes Toward Education.


The Evolution and Divergence of Repetitious DNA in the Rodents.

GORDON MCNETT STEWART, of Charlottesville, Va., B. A. Union College, 1965; M. A. The Johns Hopkins University, 1966. German.

The Literary Contributions of Christoph Daniel Ebeling.

LAWRENCE DUNCAN STOKES, of Toronto, Canada, B. A. University of Toronto, 1962; M. A. The Johns Hopkins University, 1964. History.

The Sicherheitsdienst (SD) and the Reichsführer SS and German Public Opinion, September 1939–June 1941.


Analytical Evaluation and Computation of Molecular Integrals and Application to the 3B State of Methylene.

SUBIDEY TOGAN, of Istanbul, Turkey, B. S. Middle East Technical University, 1967. Political Economy.

Trade, Growth and International Investment: A Study in Comparative Dynamics.

ALICE SOOK HUANG TU, of Swatow, China. Biology.

Purification and Functional Characterisation of a Steroid Receptor from Chick Embryo Liver.

ERIK ALFONS OSWALD JOZEF VAN HOVE, of St. Lambrechts-Woluwe, Lic. in Phil. Philosophical Faculty S. J. Heverlee, Louvain, 1964; Lic. in Sociology Catholic University of Louvain, 1968. Social Relations.


Theoretical Models of Macroeconomic Policy.

A Group Theoretic Dynamic Programming Algorithm for Linear Integer Programs.

Daniel Anthony Williams, of Frederick, Md., B.A. University of Maryland, 1964; M.A. The Johns Hopkins University, 1967. Romance Languages.

The Social Poetry of Miguel Hernández.


An Experimental Study of the Growth of Mechanically Generated Surface Water Waves when Subjected to a Fully Developed Turbulent Channel Air Flow.


Studies with Transcription Complexes from Bacillus Subtilis.


Internal Procedures, Role Perceptions and Judicial Behavior: A Study of Four State Courts of Last Resort.


Histidyl-tRNA Synthetase Mutants and Regulation of the Histidine Operon in Salmonella Typhimurium.


A Symmetric, Top-Down Structured Approach to Computer Program/Proof Development.


The Status of Fiction in Nerval's Work.
For those who use the Commencement Program as an official record of the awarding of degrees, please note the following changes to the 1972 Commencement Program.

**ADDITIONS AND DELETIONS**

1. Arts and Sciences Baccalaureate Candidates Graduating with Departmental Honors

   Add:  
   - Charles A. Backoff
   - Earl W. Grogan
   - Isaiah Kuperstein
   - Henry N. Robey
   
   John G. Romanski
   Robert M. Shapiro
   Gary R. Stoneburner

2. Arts and Sciences Baccalaureate Candidates Graduating with General Honors

   Add:  
   - Andrew Van Tosh

3. Bachelor of Arts Degrees (Arts and Sciences)

   Add:  
   - Charles Conover Talbot, Jr.
   - Andrew Van Tosh

   Delete:  
   - Daniel Bellin
   - Kevin Michael Fitzgerald
   - Ronald Lewis Gilbridge
   - Thomas Warren Jackson
   - Elwyn Monroe Jordan
   - Jeffrey A. Katz
   - Thomas Allan McVicker

   New Total - 482

4. Bachelor of Engineering Science Degrees (Arts and Sciences)

   Delete:  
   - John Edward Duker III
   - Donald Edwin Gibson

   New Total - 44

5. Bachelor of Science Degrees (Evening College)

   Delete:  
   - Kenneth Alan Borig

   New Total - 135

6. Bachelor of Science in Engineering Degrees (Evening College)

   Delete:  
   - Leo Adam Kane

   New Total - 115
7. Master of Science Degrees (Evening College)  
Delete: Norig Garo Asbed  
Edward Victor Rivard  
New Total - 104

8. Master of Education Degrees (Evening College)  
New Total - 136

9. Master of Public Health Degrees (School of Hygiene and Public Health)  
Add: Georgia Lee Brown, of Baltimore, Md., B.S. Tuskegee University, 1965; M.S. University of Maryland, 1968.  
Delete: Devdass Dattatraya Karmarkar  
James Michael Lynch  
New Total - 103

10. Doctor of Public Health Degrees (School of Hygiene and Public Health)  
Delete: Syed Aqa Zafir  
New Total - 4

11. Master of Arts (Arts and Sciences)  
Add: Mary Florence Reynolds, of Baltimore, Md., A.B. College of Notre Dame of Maryland, 1946; M.A. The Johns Hopkins University, 1962 (Writing Seminars). History.  
New Total - 180

12. Master of Arts (School of Advanced International Studies)  
Delete: Brian Ellis Anderson  
Bruce Baker  
Jeffrey William Barrett  
Philip Peters Bolton  
Gloria Elaine Bozeman  
David Alan Brucato  
Richard Leonard Collins  
Roger Barry Cooper  
William Huntington Copenhaver  
Michael Goeffrey Crosthwaite  
Lawrence M. Hannah  
Philip Samuel Jessup  
Peter Roff Johansson  
Kenneth Raymond Johnston  
Jeffrey A. Katz  
Hans Albert Keller  
G. Alfred Kennedy  
Robert McDowell Lloyd  
Carla N. Lofberg  
James Megellas  
Ronald Everett Myers  
Arturo Milton Ottolenghi  
Douglas K. Ramsey  
Cristobal David Senior  
Martin Frederick Smith  
Brian Eliot Sullam  
John Michael Willingham  
Rinze Dirk Andries Zylstra  
New Total - 103

13. Doctor of Philosophy (School of Advanced International Studies)  
Add: James A. Nathan, of Highland Park, Ill., B.A. Indiana University, 1964; M.A. The Johns Hopkins University School of Advanced International Studies, 196