Rice University
Seventy-Third Commencement
9:30 a.m.
Saturday, May 10, 1986
Academic Quadrangle
Commencement Program

President George Rupp, presiding

Rice University Marshals

- Linda Driskill
- Chief Marshal
- Joe D. Austin
- R. E. Smalley
- Marshal Emeritus
- Linda Dressel
- Michael Pearlman
- Howard Clark
- James G. Disch
- Terrance A. Doody
- E. T. Papoutsakis

Members of the Honor Council are assisting.

The audience is requested to remain in place until after the recessional at the conclusion of the program.

Fanfare

The audience is requested to rise and remain standing.

Laying of the wreath on the tomb of William Marsh Rice

Wreath Bearer:

- R. E. Smalley, Marshal Emeritus
- Tom Perrault, Student Association Representative
- Stephen Baker, Faculty Council Representative
- Walter McReynolds, Alumni Association Representative
- Cary Robb Jensen, Graduate Student Association Representative

Academic Procession

Welcome and Introductions

The audience will please be seated.

Invocation

The Reverend John D. Worrell, The Episcopal Church’s Chaplain to Rice University.

The audience will rise for the invocation and remain standing during the singing.

Hymn

Lord of All Being, Throned Afar

1. Lord of all being; throned afar,
   Thy glory flames from sun and star,
   Centre and soul of every sphere,
   Yet to each loving heart how near!

2. Our midnight is Thy smile withdrawn;
   Our noontide is Thy gracious dawn;
   Our rainbow arch, Thy mercy’s sign;
   All, save the clouds of sin, are Thine.

Presentation of Advanced Degree Candidates and Conferring of Advanced Degrees

Reading the names of the candidates for graduate and professional degrees is Mark A. Kulstad.

Graduate Degrees

- Doctor of Philosophy
- Master of Arts
- Master of Science
- Master of Accounting
- Master of Business and Public Management
- Master of Business Administration
- Master in Applied Mathematical Sciences
- Master of Architecture
- Master of Architecture in Urban Design
- Master of Arts in Teaching
- Master of Computer Science
- Master of the various branches of Engineering
- Master of Music

John L. Margrave
Vice President for Advanced Studies and Research
Presentation of Baccalaureate Degree Candidates and
Conferring of Baccalaureate Degrees

Bachelor of Architecture
Bachelor of Fine Arts
Bachelor of Music
Bachelor of Arts
Bachelor of Science in the
various branches of Engineering

Special Awards

George R. Brown Awards for
Teaching
Nicholas Salgo Distinguished
Teacher Award
Phi Beta Kappa Award
for Teaching
Student Association Mentor
Recognition Award
Hugh Scott Cameron
Service Award
Distinguished Alumnus Award

President's Remarks

Hymn

America

1. My country 'tis of thee,
   Sweet land of liberty,
   Of thee I sing:
   Land where my fathers died,
   Land of the pilgrims' pride,
   From every mountain side,
   Let freedom ring.

2. My native country, thee,
   Land of the noble free,
   Thy name I love:
   I love thy rocks and rills,
   Thy woods and templed hills;
   My heart with rapture thrills,
   Like that above.

3. Let music swell the breeze,
   And ring from all the trees,
   Sweet freedom's song:
   Let mortal tongues awake;
   Let all that breathe partake;
   Let rocks their silence break,
   Thy sound prolong.

4. Our fathers' God, to Thee,
   Author of liberty,
   To Thee we sing:
   Long may our land be bright
   With freedom's holy light;
   Protect us by Thy might,
   Great God, our King.

Benediction

Recessional

The audience will remain seated until the music has concluded.
Doctor of Philosophy

Director: Dae Mann Kim.

Director: W. Edward Billups.

Director: Robert H. Dix.

Director: Ronald J. Parry.

Director: Kyriacos Zygiourakis.

Director: Larry V. McIntire.

Director: Angelo Miele.

Director: Robert L. Patterson.

Director: Robert J. Harvey.

Director: Philip B. Bedient.

Director: Ronald J. Parry.

Director: Niels C. Nielsen, Jr.

Director: Philip R. Brooks.

Director: John E. Dennis, Jr.

Director: Thomas W. Parks.

Director: Philip B. Bedient.

Director: Jane Chance.

Director: Thomas A. Rabson.
Bruce Fariel Cooper. B.A. (Kent State University) 1980.
Director: Frederick B. Rudolph.

Thomas Joseph Daly. B.S. (Hofstra University) 1980.
Dissertation in Biochemistry: "Examination of Subunit Interactions in the Lactose Repressor by Physical and Chemical Methods."
Director: Kathleen S. Matthews.

Thomas Frederick Egan. B.S. (University of Texas, El Paso) 1979; M.A. (University of Texas, El Paso) 1980.
Dissertation in Chemical Engineering: "Transport of Methanol and Formaldehyde in Methylococcus L3 and Methylotrophic Strain T15."
Director: Eleftherios T. Papoutsakis.

Director: Joseph W. Chamberlain.

Dissertation in Physics: "The Frequency-Dependence of the NMR Longitudinal Relaxation Rate, T1−1, of Water in Cysts of the Brine Shrimp (Artemia)."
Director: Harold E. Rorschach, Jr.

Dissertation in Psychology: "Can Realistic Job Descriptive Information and Practice Enable Naive Raters to Provide Position Analysis Questionnaire (PAQ) Ratings Comparable to Those of Experts?"
Director: Robert J. Harvey.

Dissertation in Electrical and Computer Engineering: "Volume Conducted Currents and Potentials from Excitable Cells of Cylindrical Geometry."
Director: John W. Clark.

Dissertation in Chemical Engineering: "Liquid Crystal to Microemulsion Transitions in Anionic Surfactant-Oil-Brine Systems."
Director: Clarence A. Miller.

Dissertation in Physics: "Disordered Magnetism in Dilute Magnetic Alloys Studied by Muon Spin Relaxation."
Director: Stanley A. Dodds.

Director: Ronald F. Stebbings.

Ruth Gonzalez. B.S. (University of Texas) 1975; M.A. (University of Texas) 1979.
Dissertation in Mathematical Sciences: "Domain Decomposition for Two-Dimensional Elliptic Operators on Vector and Parallel Machines."
Director: Mary F. Wheeler.

Guillermo De Jesus Hahn Jacobo. Ingeriero Civil (University Autonoma Santa Domingo) 1978; M.S. (Rice) 1984.
Director: Anestis S. Veletsos.

Dissertation in Physics: Disordered Magnetism in Dilute Magnetic Alloys Studied by Muon Spin Relaxation."
Director: Robert F. Curl.

Dissertation in Chemical Engineering: "An Improved Hard Sphere Expansion Conformal Solution Theory to Predict Vapor Liquid Equilibria."
Director: Thomas W. Leland, Jr.

Enamul Haque. B.S. (Bangladesh University of Engineering and Technology) 1979; M.S. (Bangladesh University of Engineering and Technology) 1982.
Director: Constantine D. Armeniades.

Michael Thomas Heideman. B.S. (Stanford University) 1978; M.S. (Stanford University) 1980.
Dissertation in Electrical and Computer Engineering: "Applications of Multiplicative Complexity Theory to Convolution and the Discrete Fourier Transform."
Director: C. Sidney Burrus.

Dissertation in Physics: "A Quasielastic Neutron Scattering Study of Water Diffusion in Frog Muscle."
Director: Harold E. Rorschach, Jr.

Dissertation in Religious Studies: "A Theological Analysis of the Role of Western Values and American Foreign Policy in the Movement for Universal Human Rights."
Director: James Sellers.


Dissertation in Biochemistry: "Kinetics and Thermodynamics of Ligand Binding to Sperm Whale Myoglobin."
Director: John S. Olson.

Director: William W. Symes.

Mind Miller. B.S.N. (Southern Missionary College) 1973;
M.S. (University of Florida) 1976; M.A. (University of New Mexico) 1980.
Dissertation in Anthropology: "'I Want My Story Told': An Anthropological Analysis of Malpractice Plaintiffs' Discourse."
Director: Stephen A. Tyler.

John Anthony Moreta. B.A. (University of Santa Clara) 1973;
Dissertation in History: "William Pitt Ballinger: Public Servant, Private Pragmatist."
Director: Sanford W. Higginbotham.

Charles Joseph Naudet. B.S. (University of Kansas) 1979;
M.A. (Rice) 1983.
Dissertation in Physics: "A Study of Large Transverse Energy Events in \( \pi \pi \) and PP Interactions at \( P(\text{lab}) \approx 200 \text{ GeV/c} \) and Evidence for Higher-Twist Effects."
Director: Hannu E. Miettinen.

Dissertation in Mathematical Sciences: "Linear and Nonlinear Deconvolution Problems."
Director: William W. Symes.

Deborah Ann Pearson. B.A. (Wesleyan University) 1979;
Dissertation in Psychology: "Rapid Reorientation of Attention in Children with and without Attention Deficits."
Director: David M. Lane.

Director: Stephen Subtelny.

Dissertation in Psychology: "Assessing a Multi-Phase Approach to Personnel Selection: An Examination of the Interrelationships Among Four Phases of a Selection System."
Director: Robert L. Dipboye.

Kirk Herbert Raney. B.S. (University of Tulsa) 1981; M.S. (Rice) 1983.
Director: Clarence A. Miller.

Byung Geon Rhee. B.S. (Seoul National University) 1979;
M.S. (Seoul National University) 1981.
Dissertation in Chemical Engineering: "Effects of Shear Stress on Platelet-Polymorphonuclear Leukocyte Interactions."
Director: Larry V. McIntire.

Director: W. Edward Billups.

Sharon Yoder Roth. B.S. (North Texas State University) 1980.
Dissertation in Biochemistry: "Induction and Shut Off of Dihydrofolate Reductase Gene Expression During Productive Infection by Adenovirus Type 2."
Director: Susan M. Berget.

Alice Rubacha. B.S. (Purdue University) 1980.
Dissertation in Biochemistry: "The Organization and Sequence of the 58 Ribosomal Genes of the Dipteran Fly Calliphora erythrocephala and the Isolation of Genes Specifically Transcribed During Oogenesis in the Dipteran Fly Calliphora erythrocephala."
Director: Kathleen M. Beckingham.

David James Scheibner. B.S. (New Mexico State University) 1979; M.S. (Rice) 1982.
Dissertation in Electrical and Computer Engineering: "The Discrete Radon Transform with Applications to Time Domain Beamforming."
Director: Thomas W. Parks.

David Robert Schwartz. B.A. (University of Denver) 1980;
Director: William C. Howell.

Sarah Anne Shehab. B.S. (University of Edinburgh) 1981.
Dissertation in Chemical Engineering: "An Investigation of Enzyme-Assisted Vitrectomy."
Director: Constantine D. Armeniades.

Donna Rae Streng. B.S. (University of Wisconsin) 1975;
Dissertation in Biology: "Patterns of Seedfall and Seedling Establishment in an East Texas River Floodplain Forest: The Contribution of Seedling Dynamics to Species Coexistence."
Director: Paul A. Harcombe.

M.S. (National Taiwan University) 1979.
Dissertation in Civil Engineering: "Studies of Dynamic Response of Liquid Storage Tanks."
Director: Anestis S. Veletzos.
Director: Monroe K. Spears.

David Allan Treder. B.S. (East Tennessee University) 1968; M.A. (Rice) 1978. 
Director: Ira D. Gruber.

Director: James B. Walker.

Director: Klaus H.M. Weissenberger.

Director: John F. Andrews.

Director: Bryan W. Brown.

Peggy Annette Whitson. B.S. (Iowa Wesleyan College) 1981. 
Director: Kathleen S. Matthews.

Gabriel Wolf. B.S. (Technion Israel Institute of Technology) 1971; M.S. (Technion Israel Institute of Technology) 1975. 
Director: J. Robert Jump.

Lan-sun Zheng. B.S. (Xiamen University) 1982. 
Dissertation in Chemistry: “Photodissociation and Photodetachment Studies of Transition Metal Cluster Ions.” 
Director: Richard E. Smalley.

Director: F. Barry Dunning.
Master of Arts

Mehdi Abedi, Anthropology
Loy A. Anderson, Psychology
Jenny Caroline Baird, Art and Art History
David Warren Ball, Chemistry
Charles August Banker, III, History
Matthew David Bray, Mathematical Sciences
Brenda Jo Bright, Anthropology
John Oliver Brooks, III, Psychology
Lauren Shelley Brown, Geology and Geophysics
Sou-Chan Chang, Chemistry
Shiah-Jauh Chen, Geology and Geophysics
Chaitanya Eknath Chitnis, Religious Studies
John C. Collier, Religious Studies
Elizabeth Arlene Coscio, Spanish
Gary Wayne Crosland, German
Clifford Brent Dane, Chemistry
Thomas Allen Douglas, Chemistry
Lorinda Elizabeth Driskill, Geology and Geophysics
Edwin Rembert DuBose, Jr., Religious Studies
Vasumathi Krishnaswamy Duvvury, Anthropology
Charles T. Eagle, III, English
Mary Elizabeth Eudy, Chemistry
Victor Hugo Feske, III, History
Laurie Adams Frost, English
Magda Leticia Garcia, Psychology
George Phillip Hansen, Chemistry
Jody Mary Hawk, Geology and Geophysics
Janice L. Hewitt, History
Kathryn J. Hitchcox, English
Stephen Carl Hofmann, Chemistry
Christopher Wells Holmes, Psychology
Norio Honjo, Geology and Geophysics
Li-mei Huang, Chemistry
Mark Stephen Ishimatsu, Political Science
Dean Gregory Jensen, Psychology
John Allen Jones, Philosophy
Ellen Sue Kline, Chemistry
Svetlana Kloss, German
Craig Barton Lagrone, Chemistry
Susan Ann Lagrone, Chemistry
Larry L. Langford, English
Daniel Wayne Lee, Chemistry
Jacques Passerat Lord, Geology and Geophysics
Susana Rebeca Lozada-Larsen, Psychology
James Gregory Lynn, Physics
Michelle Coleen Lynskey, Psychology
Therese Marie Macan, Psychology
Robson Mafoti, Chemistry
Martin Richard Marcin, Physics
Hector Jairo Martinez Romero, Mathematical Sciences
Bridget Ann McCartney, Chemistry
Richard McLean, Religious Studies
Juan Camilo Meza, Mathematical Sciences
Mindi Miller, Anthropology
Steffi Ann Minnis, Geology and Geophysics
Andrew Stephen Mirkin, Geology and Geophysics
Robert Michael Moss, Physics
Susan Murphy, Spanish
Rainer Ingo Mutke, German
Nathan Thomas Norem, Chemistry
Julia Ann Olkin, Mathematical Sciences
Bryan John Ortmann, Chemistry
Susan Libby Parker, Psychology
Vicki Lynn Paski-Nasser, English
Charles D. Poe, Political Science
Steven B. Rabin, Chemistry
Buena Chambers Robison, Biology
Wayne Allen Rodin, Chemistry
Pamela Renee Rothstein, Psychology
Lucrezia Rotolo, French
Ayako Saitou, Spanish
Comila Shahani, Psychology
Lauren Elizabeth Sinnott, Art and Art History
James Hunter Spence, Chemistry
Byung-Hoon Suh, Political Science
Charles Chappell Temple, Religious Studies
Gregory Scott Thielemann, Political Science
Shaheen Razak Tonse, Physics
Maria F. Turney, English
Julie E. Warnement, English
Donna Elizabeth Weidemann, Geology and Geophysics
Wen-Bin Yan, Chemistry

Master of Science

Yukihoko Adachi, Chemical Engineering
Bassam Abbas Bamieh, Electrical and Computer Engineering
Charles David Callahan, II, Computer Science
Janardhan Davalath, Mechanical Engineering
Sergio Eduardo Firpo, Mechanical Engineering
Olina Ghosh, Chemical Engineering
Alfred Joseph Griffin, Jr., Materials Science
Keri Wilkes Hicks, Electrical and Computer Engineering
Robert Vincent Hilmer, Space Physics and Astronomy
Douglas Llewellyn Jones, Electrical and Computer Engineering
Anand R. Kumar, Electrical and Computer Engineering
Kurt Liffman, Space Physics and Astronomy
Kathryn Marie Sullivan Oujesky, Mechanical Engineering
Trung Tat Pham, Electrical and Computer Engineering
Randall Lee Rasmusson, Electrical and Computer Engineering
Jean-Francois Pascal Reat, Mechanical Engineering
Douglas Wayne Riedel, Civil Engineering
Sonbol F. Sepahban, Chemical Engineering
Scott Warren Shaw, Electrical and Computer Engineering
Eileen Katherine Stansbery, Space Physics and Astronomy
Kung Chris Wu, Mechanical Engineering
Qidao Zhang, Mechanical Engineering
Master of Accounting

Parashar S. Janodia
Emel Kahya

Patrick St. Aubyn Lyn
Anthony Micheal Sanders
Natalie Debra Scheinholtz
John Kim Yambao

Master of Business Administration

Anurag Bhatnagar
Claude L. Bohannon
Sandra Lee Brunow
Michael Hughes Bullington
Judith Elaine Bump
Troy Allen Carr
Frank Clayton Chambers
P. Alex Chauche
Carol Lynn Deffry
Anne Daughety Dethrow
Dennis Daniel Dolego
Frank Wolfgang Fischer
Barbara Teter Foelsch
Brian Lee Hocker
Michael Carle Hopwood
Parashar S. Janodia
Stephen Michael Johnson

Emel Kahya
Bharat Khosla
Donald Louis Kronenberger, Jr.
Una Yuen-Lam Kwok
Laurence Henry Langholz
Constance Smith Lash
Patrick St. Aubyn Lyn
James Henry MacQueen
Achilles O. Macris
Richard Dykes Matteson
William Henry McMorris, III
Pamela Ann Mechenbier
Quentin Lee Mimms
John Charles Norjen, Jr.
Tanuj Philip
Elizabeth Christine Platte
Monty Ward Polzin

James Scott Pompy
Manuel Reyes Zum Brook
Jonathan Robert Richardson
James Marion Robertson
Julia Elaine Robinson
James Alfred Rutherford, Jr.
Anthony Micheal Sanders
Paul J. Sanford
Natalie Debra Scheinholtz
William Henry Sias
William Kirkland Symmes
Mary Evelyn Syptak
Andrew Ing Lin Tang
Grace Yuan-Mei Toh
Kevin Charles Uebelein
Caroline Eberhard Williams
David Allen Worth

Master of Business and Public Management

Jocelyn Sherry Lynn Groth

Stewart Goodwin Masterson, Jr.
Pierre Schlumberger Melcher

John Kim Yambo

Master in Applied Mathematical Sciences

Jodi E. Asbell

Nancy Taylor Ginsburg
Patrick Allen Tibbits

David Lynn Whitley

Master of Architecture

Howell Elliott Adams, III
Catherine Grace Alberte
Franklin Gregory Belt
Kevin Jay Cooley
Cynthia Lynn Hannasch
Janet Snouse Henderson

David Hinojosa
Heide Morrow Lee
Scott Allan Martosolf
Mary McAuliffe
Kimran Mouzoon

John Mark Neary
Allen David Nelson
Eduardo Robles
Sam Seymour
Joslin Grae Stewart
Paula Gail Willson

Master of Architecture in Urban Design

Benito Alberto Eduardo Castañeda

Master of Arts in Teaching

William Nelms Collins

Carole Ann Lockhart

Master of Computer Science

Alice Tsu-Ai Yang Lee

Venkateshmurthy Srinath

Master of Chemical Engineering

David J. Clark
Susan Therese Erie
Todd Riley Griffith

Philip Macon Layton
Ralph Yieh-min Liu
John Gregory Maresh

John Winborn Swank
Keith David Vassallo
Leah Beth Wyckoff
Master of Civil Engineering
John A. Bologna
Mohammad Sawaf Duwaji
Mahmoud Fustok
Mary Katherine Knight
Massood Mofid
Onachukwu Bridget Okoli
Ranganadha Vegesna Raju
Tsauchyun Yeh

Master of Electrical Engineering
Alirio Cala Vecino
Thomas Edward Cassidy, III
Christopher Alexander Counts
Sheryl Marie Crowley
Robert Earl Davenport
Mark Alan Fowler
Robin Gail Gifford
Eduardo Guerra
Edmund C. Hack
Rajesh Vijaylal Kothari
Wen-Pin Lin
Pi-Ju Christina Liu
Mark Roy Moller
Andrew Peter Ng
Lisa Dean Noble
Geoffrey Charles Orsak
Markus Rude
Behnam Saeid
Jonathan Howard Spindel
Franz Jude Weller

Master of Materials Science
Michael Scott Nixon

Master of Mechanical Engineering
Gregg Allen Edeen
Sheryl Lynn Hopkins
Walter J. Lueke
Michelle Annette Rucker
Brent Alan Sims
Peter Albert Taylor

Master of Music
Pamela Markus Ben
Ernest Calvin Church
Francoise Nettie Coulton
Claire DeStefano Frazier
Jay Michael Johnson
Karen Jay Johnson
Alan John Juza
Anne-Marie Elizabeth LaMotta
Claribel Rebecca Luck
Andrea Louise Maurer
Joanna McCarty
Edna Elizabeth McKenna
Carolyn M. McShan
Thomas Glen Merrill
Franklin Turner Murry
Deborah Susan Norton
Jim Scott Pedigo
Charles Gregory Shiner
Wendy Taccogna Talio
Sandra Lyn Toensing
Ruth Shelly Unger
Mary Monica Vaughan
Mary Helen Waldo
Carey Wingert
Rosina Maria Zoppi
Bachelor of Architecture
Karen Ann Cook
William Richard Farris
Marjory Yewer Harnischfeger
Jane Claire Harrison
Michael David Hootman
Alexander Karmeinsky
Guy Castelain Perry
Ann Krista Rosenwinkel
Cindy Renee Rounsaville
Paolo Sant’Ambrogio
Catherine Ann Mary Spellman
Kirk Stephen Tames
Gary W. Tschirhart
Mark Allison Yoes

Bachelor of Fine Arts
Eustacia Leigh Marsales
Viviana Ester Guzman
Arnita Renee Hodge
Christopher John Jepperson
Joanna McCarthy
Deborah Susan Norton
Jim Scott Pedigo
Laura Marie Rosky
Denise Marie Starkey
Bernard Lee Stephan
Carey Wingert

Bachelor of Music
Viviana Esteban Guzman
Arnita Renee Hodge
Christopher John Jepperson
Joanna McCarthy
Deborah Susan Norton
Jim Scott Pedigo
Laura Marie Rosky
Denise Marie Starkey
Bernard Lee Stephan
Carey Wingert

Bachelor of Arts
Antonio Gazinga Brinkley
Scot Ashlee Brooks
Lara Annette Bruer
Mark Alan Brumback
Susanne Brunckhorst
Robin Beth Buchanan
Josef Franz Buenker
Mark Allen Burgess
John Arthur Burns
Todd Leror Burstein
Ivey Louise Burton
Terrance Joseph Butler
Laura Diane Campbell
Jerry Edward Capps
Katherine Michelle Casart
Robert Randolph Casey, III
Terrence Dandra Cashaw
Phyllis Clara Chang
Norman Wood Charlton, III
Gary Walter Chiles
Raymond Lee Chilton, III
Hsiao Yang Chin
Marguerite Laic Wah Ching
Melissa Hope Clark
Michael Henry Clark
Gail Ann Clayton
Donald Ray Cole
John Breen Coleman, III
Kenneth Forrester Colina
Lawrence Ashley Collins
Theresa Lynn Colosi
Jon Fields Cooksey
Kathleen Madeline Coterill
Theresa Angela Coughlin
Kevin James Coupe
Almonte Lane Covington
Melissa Jane Cox
Erik Templeton Crank
Roy Lynn Crawford, Jr.
Jacqueline Cretin
Alfred Thomas Crumpton, III
Sandra Silvia Cuzzi
Elvis Clark Davis, III
David Lawrence Dean
Paul Jose de Figueiredo
John Mark Delaney
Katherine Ann Delaune
John Emory Dennis
Albert Joseph Derbes, IV
Andrew Emory Dessler
Michelle Dokter
Cynthia Gail Dooley
Diana Marie Dowell
Pamela Lea Drake
Sarah Huntington Duck
Robert Alfred Dunlap
Korinda Louise Eberhack
Robert Andrew Edward
John Paul Einck
Lucas Thomas Elliott
Robert Joseph Ellison
Winston Lachlan Elting
Patricia Anne Faber
Michael David Fabiano
Carmen Bernita Falls
Gisela Maria Faus
Leticia Guadalupe Fernandez
Caroline Anne Field
Bachelor of Science in Chemical Engineering

Theodore George Baroody
Christine Lynn Brister
Robert Robson Buntin, Jr.
David Charles Dankworth
Clifford Ellery Dorman
Linda Jeanne Dufficy
Robert Allen Ettinger
Ross Spencer Garsson
Allen David Hood, Jr.
John Joseph Knoblaugh, III
Donald Hanmei Ku
Daniel R. Lasko
Anna Marie Lato
Susan Elaine Long
Kelley Sue Megilligan
Dan Earl Midgett, II
Giao Quynh Nguyen
Lauren Lynn Potre
Uday Narendra Sheth
Benée Sylverlyn Wise

Bachelor of Science in Civil Engineering

Ann Margaret Bauser
Christopher Peter Caddell
Margaret Karen Schroeder
Khaled Suhayl Shoaibi
Don Jon Smith
Sudhir Sripadan
Bachelor of Science in Electrical Engineering

- Kathleen Marie Anderson
- Judge Kennedy Arora
- Thomas Jay Avery
- Stephen Heinrich Baker
- Cynthia Marie Barbour
- John Christopher Bell
- Charles Anthony Bier
- Mark Allen Boyles
- Eric Joseph Brauner
- Ingrid Kristina Brennan
- Matthew Harmon Brown
- Richter Darryl Burke
- Joseph Richard Burwell
- David Alberto Cantú
- Stephen Paul Carl
- John Bruce Carter
- Frederick Francis Castrow, III
- Igor Matthew Cherches
- Richard Alan Cheville
- Pei-How Chin
- Sung Kwon Choi
- David Whitney Clemmer
- Warren Knowlton Clyborne
- David Edward Conry
- Robert Russell Covington
- George Barnett Creel
- Christine Klander Cummings
- Scott Christopher Elder
- Robert Joseph Ellison
- Eric Lee Evans
- Alan Joseph Eynon
- Sean Emile Fee
- William Stuart Flory
- Mark Alan Fowler
- Steve Lewis Fowler
- Marcos Frid
- David Scott Gregory
- Robert Ray Harned
- Robert Alexander Hawthorne, III
- John Carl Henderson
- Walter Lee Holcombe
- Brett Randel Holt
- Susan Elizabeth Hoover
- William Herndon Jenkins, III
- Rebecca Kay Jones
- Aaron William Joseph
- Thomas James Jung, Jr.
- Peter John Kelerher
- William Dwight Koops
- Hope Waggener Korin
- John Patrick Lane
- Kevin Michael Manweiler
- Kurt Allan Manweiler
- Seyed Mahmoud Marefat-Djahromi
- Franklin Stark Markle, III
- Philip Andrew Matorin
- Derek Mark Mauzy
- Michael Charles McHenry
- John Wesley Miles, III
- Lloyd Bruce Miller
- Chetan Ram Murthy
- Barry Wayne Nicholson
- Arthur Niño
- Manuel Novoa
- John Walter Pace
- William Blake Page
- Alan Joseph Painter
- Robert Andrew Plant
- Robert Thomas Perez
- Kris Andrew Rayner
- William Olan Reese
- Steven Wayne Reeves
- Christopher George Regier
- Richard Michael Rozic
- David Michael Rust
- Gregory James Sajdak
- Susan Elizabeth Sheridan
- Terrence Raymond Smigla
- Sharon Spielman
- Michael Earl Stewart
- Susan Elaine Swank
- Steven Roy Tanaka
- Wilson Brent Tarver
- David Darrell Vaughn
- Brian Emil Waldecker
- Joseph Adair Watters, Jr.
- Robert Mason Weikle, II
- Stuart Allen Werbner
- William Hugh White
- Shannon Gallagher Williams
- Steven Harmon Wilson
- John Weakley Wissinger

Bachelor of Science in Materials Science

- Brian Mark Bunting
- Ayn Renée Lynch
- Martha Kennedy Small
- Terry Howard Hildebrandt
- Douglas Hunter Porterfield
- Paul William Stolar

Bachelor of Science in Mechanical Engineering

- Theodore Adolphus Adams, III
- Karen Phyllis Ashby
- Stephen Gregory Bené
- Jean Pierre Boyea
- William Lloyd Burge
- Philip Brooke Chase
- Barbara Ann Conte
- Karla Jeanne Fulton
- Howard Ross Gerwin
- Daniel Edward Groneck
- Imran Iqbal
- Paul Andrew James
- Curt Robert Jung
- Robert Joseph Koudelka
- Jeffrey Charles Matthews
- William Michael McManus
- Rita Mendez
- Daniel Raul Millman
- Jonathan Charles Owen
- Thomas Alan Pellette
- Henry Michael Prost
- Steven Andrew Supron
- Hisham Sameer-Khadri Syed
- John Charles Tawney
- Windsor Pipes Thomas, III
- David Alexander Trevas
- Crystal Dawn Walker
- Margot Lancaster Wasz
- Daniel H. Webb
- David Randolph Wiley
- Brian Carroll Wilson
- Scott Lindsay Wolf
- Daniel Lloyd Yates
honors, prizes and awards

the george r. brown prize for excellence in teaching
j. dennis huston

the george r. brown awards for superior teaching
susan l. clark
james p. hannon
thomas l. haskell
don h. johnson
deborah h. nelson
stephen a. zeff

the nikolas salgo distinguished teacher award
robert b. jones

the phi beta kappa award for teaching
larry temkin

the student association mentor recognition award
franz r. brotzen

the rice university science award
in memory of dean hugh scott cameron
franklin scott biddy
barry wayne nicholson
ronald martin segal

the distinguished alumnus award
marshall d. gates, jr., class of 1936
john m. mcginty, class of 1957
larry mcmurtry, class of 1960
karl woodring, class of 1940

student prizes and awards to degree recipients

1986 henry adams certificate
  carolyn ovaitt

1986 henry adams medal
  mark a. burgess

the alpha rho chi medal
  paul e. harney

the edward b. arrants medal
  kirk w. von spaeth

rosemary watkins barrick fellowship
  mark a. burgess

ralph budd award
  michael t. heideman

the clyde ferguson bull traveling fellowship
  melissa fox

chillman prize
  karl b. jensen

rice engineering alumni award
  paul a. james, outstanding senior engineering student

the featherlite grant in architecture
  mark a. burgess

john w. garner award in humanities and social sciences
  mary e. walker

the leroy caleb gibbons award in geology
  jody m. hawk
donna e. weidemann

the graduate student association service award
  richard g. covington

the g.l. hermanance award in physical education
  kevin j. coupe

the jill pitman jones award in physical education
  andrea d. neighbours

the captain charles septicus longcope award in history
  victor h. feske

the marshall scholarship
  charles a. bier

the mellon fellows in the humanities
  elizabeth brent
  harold c. hoefler

the mavis c. pitman memorial prize in art
  karl b. jensen

the j. stanley mcDonald award in art
  marc a. mccollum

the h. russell pitman award in managerial studies
  glenda m. zarbock

phi delta phi andre bourgeois award
  alice h. lippincott

the bob quinn award for outstanding male athlete
  michael a. lee

the z.w. salsburg memorial award in chemistry
  john a. burns
  paul f. fortes

the christine croneis sayres art award
  karen a. cook
eustacia marsales
  patricia a. ownby

the sigma xi research award
  jeffrey l. hall

silver medal of the royal society for the encouragement of arts, manufacturers, and commerce
  jon d. hanson

the weber-durkheim award for excellence in sociology
  michael b. mckinney

wall street journal student achievement award
  r. scott patterson

james s. waters creativity award
  matthew h. brown
  wendell h. morris

william ward watkin travelling fellowship in architecture
  karl b. jensen

thomas j. watson fellowship
  jon d. hanson
  vincent w. uber

harry b. weiser scholarships in chemistry
  david w. ball
  howard s. carman
  bridget a. mccortney

h.a. wilson award in physics
  charles j. naudet

17
Brown Engineering Merit Awards

Members of the Senior Class

<table>
<thead>
<tr>
<th>Name</th>
<th>Honors</th>
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<tbody>
<tr>
<td>Ann Margaret Bauser</td>
<td>John Carl Henderson</td>
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<tr>
<td>Stephen Gregory Bené</td>
<td>Terry Howard Hildebrandt</td>
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<td>Charles Anthony Bier</td>
<td>Luke Morrison Hopkins</td>
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<td>John Bruce Carter</td>
<td>Paul Andrew James</td>
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<td>Gail Ann Clayton</td>
<td>John Joseph Knoblauh</td>
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<td>Christine Michelle Cummings</td>
<td>Kelley Sue Megilligan</td>
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<td>David Charles Dankworth</td>
<td>Patricia Oanh Nghiem</td>
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<td>Marcos Frid</td>
<td>Christopher George Regier</td>
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<tr>
<td>Uday Narendra Sheth</td>
<td>Terry Raymond Smigla</td>
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<tr>
<td>Sudhir Sripadan</td>
<td>Michael Earl Stewart</td>
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<tr>
<td>Thomas C. Willett</td>
<td>Robert Mason Weikle</td>
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<td>Anne Marie Wierzbicki</td>
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Honorary Societies

Chi Epislon

<table>
<thead>
<tr>
<th>Name</th>
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<tbody>
<tr>
<td>Ann Margaret Bauser</td>
<td>Sudhir Sripadan</td>
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Eta Kappa Nu

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<tr>
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<tr>
<td>Judge Kennedy Arora</td>
<td>Alan Joseph Eynon</td>
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<tr>
<td>Cynthia Marie Barbour</td>
<td>Sean Emile Fee</td>
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<td>Charles Anthony Bier</td>
<td>Marcos Frid</td>
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<td>Joseph Richard Burwell</td>
<td>Robert Alexander Hawthorne, III</td>
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<td>John Bruce Carter</td>
<td>John Carl Henderson</td>
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<tr>
<td>Igor Matthew Cherches</td>
<td>Seyed Mahmoud Marefat-Djahromi</td>
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<td>Christine Klander Cummings</td>
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Omicron Delta Epislon

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<tr>
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<tr>
<td>Gail A. Clayton</td>
<td>Jon D. Hanson</td>
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<tr>
<td>Terrence M. Gee</td>
<td>John C. Henderson</td>
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<tr>
<td>Tracey J. Giddings</td>
<td>Oscar J. Mangini</td>
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<tr>
<td>Wade P. Guidry</td>
<td>Martin E. Menutis</td>
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Phi Beta Kappa

<table>
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<tr>
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<tbody>
<tr>
<td>Gregory Robert Abernathy</td>
<td>Jon Dean Hanson</td>
</tr>
<tr>
<td>Cynthia Marie Barbour</td>
<td>Robert A. Hawthorne</td>
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<tr>
<td>Scott Harris Bauman</td>
<td>John Carl Henderson</td>
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<td>Sheila Johnson Billingsley</td>
<td>Harold Carl Hoefer</td>
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<td>Suzanne Brunkhurst</td>
<td>Kristtina Lilla Holtzman</td>
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<td>John Arthur Burns</td>
<td>Catherine Curtis Houle</td>
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<tr>
<td>Laura Diane Campbell</td>
<td>Omer Aslam Iahbi</td>
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<tr>
<td>Hao Yang Chin</td>
<td>Vandana Jain</td>
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<tr>
<td>Gail Ann Clayton</td>
<td>Iln M. Kuperman</td>
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<tr>
<td>Kenneth Forrester Colina</td>
<td>Nancy Louisa Lamb</td>
</tr>
<tr>
<td>Christine Klander Cummings</td>
<td>John Christopher Lane</td>
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<tr>
<td>Michelle Daktor</td>
<td>Yong Taek Lee</td>
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<td>Sean Emile Fee</td>
<td>Alice H. Lippincott</td>
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<td>Judy Louise Flores</td>
<td>Linda Mann-Chien Lou</td>
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<td>Paul F. Fortes</td>
<td>Scott T. Macdonald</td>
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<td>Michael Charles Gemar</td>
<td>Andrew Frederick McDowell</td>
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<td>Tracey Jo Giddings</td>
<td>Michael B. McKinney</td>
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<td>George Leo Hampton</td>
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Phi Lambda Upsilon
Gregory Robert Abernathy
Theodore George Baroody
Brent Dean Bergen
Robert Robson Buntin, Jr.
John Arthur Burns
Todd Loric Burstain
Gary Walter Chiles
Hsiao Yang Chin
Sandra Silvia Cuzzi
David Charles Dankworth
Michael Daniel Fabiano
Ross Spencer Garsson

Todd Riley Griffin
Thong Hang
Allen David Hood, Jr.
Vandana Jain
Paula Danene Johnson
John Joseph Knoblaugh, III
Doandl Hanmei Ku
Craig Barton Lagrone
Daniel R. Lasko
Harrison Armistead Latimer
Yu-Mei Liu
Robson Mafoti
Cathy Shring-May Mao
Kelly Sue Megilligan
Dan E. Midgett, II
Laura Catherine Mifflin
Giao Guynh Nguyen
Tony Ai Chi Pham
Byung Geon Rhee
Genia Ellen Roosevelt
John Winborn Swank
Keith David Vassallo
Carman Patricia Wong

Pi Delta Phi
Celia D. Bolam
Melissa J. Cox
Catherine L. Harrington

Holly M. Knudson
Monica Roppel
Giulia L. Squatriti
Alice H. Lippincott
Carolyn E. Tullius

Sigma Delta Pi
Elizabeth A. Coscio
Sandra S. Cuzzi
Naomi J. Logan

Karina E. Murphy
Susan E. Murphy
Ayako Saiotou
Carmen P. Wong
Jade C. York

Sigma Xi
Gregory John Byrne
Stephen Thomas Noble
Abdallah Adel Abdul-Rahim
Yu Tang

Olina Ghosh Raney
Kirk Herbert Raney
Robert C. Board
Hani E.B.M. Elias
Shahram Sarkani
Michael Donald Lee
Douglas Wayne Riedel
Thong Hao Huang
Surinder Narasimhan

Sigma Xi Sigma
Judge K. Arora
Michael H. Clark
James M. Kelsey

Gregory La Borde
Andrew McDowell
John Miles
Jeffrey J. Steele
Alan K. Thompson
Robert Weikle

Tau Beta Pi
William Emereic Aitken
Judge Kenneth Arora
Theodore George Baroody
Ann Margret Baurer
Stephen Gregory Bené
Charles Anthony Bier
John Bruce Carter
Igor Mathew Cherches
Christine Klander Cummings
David Charles Dankworth
Daniel Stephen Dessau
Sean Emile Fee
Marcos Frid

Roy Michael Haney
Matt Russell Hauser
Robert Alexander Hawthorne
John Carl Henderson
Terry Howard Hildebrandt
Luke Morrison Hopkins
Paul Andrew James
John Joseph Knoblaugh
Hope Waggner Korin
Donald Hanmei Ku
Danny Kwok
Seyed Marefat-Djahromi
Kelley Sue Megilligan
Dan Earl Midgett
John Wesley Miles
Chetan Ram Murthy
Patricia Oanh Nghiem
Terrence Raymond Smigla
Sudhir Sripradhan
Michael Earl Stewart
David Darrell Vaughn
Brian Emil Waldecker
Margot Lancaster Wasz
John Weakley Wissinger

Tau Sigma Delta
Mark A. Burgess
Paul E. Harney

Mark D. Johnson
Carlynn Ovaitt
Kirk W. von Spaeth
College Honors

Baker College

Service Award
Elizabeth M. Barton
Stephen P. Blackstock
Katherine E. Fletcher
Rachel L. Fulton
Daniel E. Groneck
Paul A. James
Margi L. Wald

Baker College Fellow - 1985
Arthur A. Rabeau
Tracey L. Winn

Minter Award
Paul A. James

Baker College Special Award
Carolyn A. Jacobsen
Scot A. Brooks

Fellows
Cynthia M. Barbour
Theodore G. Baroody
Ann M. Bauser
L. Annette Bruer
John A. Burns
Joseph R. Burwell
Michael H. Clark
Judy L. Flores

Philpott Award
Stephen P. Blackstock

Will Rice College

Fellows
Cynthia M. Barbour
Theodore G. Baroody
Ann M. Bauser
L. Annette Bruer
John A. Burns
Joseph R. Burwell
Michael H. Clark
Judy L. Flores

J.S. Fulton Service Award
David L. Dean
David A. Thompson

James A. Castañeda Award
Mary Ann Leonard

Worden Endowed Award
Mary Ann Leonard

James S. Fulton Prize
Trang vu thi Doan

Hanszen College

Fellows
Judge Kennedy Arora
Susan Elaine Balagna
Scott Harris Bauman
Scott Allen Kauffmann
Aniko Maria Kiraly
Sean Emile Fee
Stephen Glenn Findley

Wiess College

Wiess College Service Award
David E. Conry
Robert A. Ettinger
Anita M. Heil
Todd S. Ranheim
Richard W. Sheridan
Steven R. Tanaka

Senior Service Award
Robert Micahell Cradock
Kathleen Moses
Ronald M. Segal
David Randolph Wiley

Masters' Award for Special Service
Antonio G. Brinkley
Albert J. Derbes, IV

Henry C. and Olga K. Wiess Scholarship
Amy E. Stewart

Jones College

Olga Keith Wiess Award
Robert R. Casey III

Fitzbogen Award
Baxter D. Montgomery

Graham C. Stebbings Service Award
David C. Dankworth
Harrison A. Latimer
Roland X. Nghiem
Kris A. Raymer

J. Dennis Huston Award
Harrison A. Latimer

Masters' Award for Special Service
Antonio G. Brinkley
Albert J. Derbes, IV

Henry C. and Olga K. Wiess Scholarship
Amy E. Stewart

Master and President's Award
Joyce E. Ivy

Fellows
Tracey Anne Harrison
Richard Westcott Kenyon
Ilan Moshe Kuperman
Dan Earl Midgett
Patricia Oanh Nghiem
Nathaniel Hazen Smith
Susan Margaret Wilson

Baxter D. Montgomery

Harrison A. Latimer

Roland X. Nghiem

Kris A. Raymer

Joyce E. Ivy
Brown College

Senior Service Award
Melissa Anne Baldridge

Donald R. Baker Senior Scholarship
Gail Calyton

Franz and Frances Brotzen Senior Award
Deborah Jane Rouse

President's Award
Pamela Lea Drake

Lovett College

Service Award
Steven Harmon Wilson

Toni Paine Award
Daniel Raul Millman

Sports Award
Karen Phyllis Ashby
Richard Scott Patterson

Outstanding Senior
Stephen Gregory Bené
Mark Alan Finlayson
James Martin Kelsey
Robert Joseph Koudelka
Daniel Raul Millman
Sima Misra

Richardson College

Athenian Award
Robert Robson Buntin
Raymond Lee Chilton, III
Robert Joseph Ellison
Kevin Vernard Haynes
Franklin Stark Markle
Andrew Frederick McDowell
James Nicholas Mustacchia
Uday Narendra Sheth

J. Venn Leeds Award for Excellence in Scholarship
Hsiao Yang Chin

Master's Award for Outstanding Achievement
Robert Joseph Ellison

Graduating Fellows Award
Todd Leor Burstain
Hsiao Yang Chin
Marcos Frid
Robert Alexander Hawthorne, III
Mark Darin Johnson
Seyed Mahmoud Marefat
Djahromi
Andrew Frederick McDowell
Chetan Ram Murthy
Uday Narendra Sheth
Kirk Uwe Wolfgang von Spaeth

Military Appointments

Commissioned Second Lieutenant
U.S. Marine Corps
Stephen David McLaughlin
David Matthew Reitz

Commissioned Ensign
U.S. Navy
Brian Mark Bunting
Almonte Lance Covington
Clifford Ellery Dorman
Frederick Charles Fritsch
Christopher Scot Kohnhorst
*Alice Hope Lippincott
Windsor Pipes Thomas, III
Richard David Torres

*Designated Distinguished Military Graduate
Commencement at Rice

Rice Institute's first graduation exercises were held on Sunday and Monday, June 11 and 12, 1916. The Baccalaureate on Sunday included a sermon and the singing of Latin and English hymns. At Commencement, which followed on Monday, Dr. David Starr Jordan, chancellor emeritus of Stanford University, addressed the thirty-six candidates for degrees and their families on the subject “Is War Eternal?” That same June, President Woodrow Wilson, longtime friend and former Princeton colleague of Rice President Edgar Odell Lovett, was working for a negotiated settlement to hostilities in Europe. Ten months later, the United States officially entered World War I.

Since that first graduation the ceremonies have been held, at different times, in the main quadrangle, in the courtyard of the Chemistry laboratories, in the Rice gymnasium, and in local high schools and churches. In 1960, when the grounds in front of Lovett Hall were converted from a parking lot to lawns, Commencement was moved to the east lawn of Lovett Hall. This year the ceremony has been returned to the academic quadrangle where the first Commencement was held.

Adjustments to Commencement were made on occasions during both World Wars. In 1917 a special graduation exercise was held at Camp Fuston, near San Antonio, Texas, for the eleven graduates who had volunteered for military service and were then in training. Later, the Thirty-first Commencement, in June, 1945, was followed by a thirty-second in March, 1946, and a thirty-third in June, 1946.

President Lovett (1907-46) deeply loved the graduation ceremonies and guided them with great personal attention. His appreciation of the classics and his pride in the fact that the Rice diplomas were individually earned and individually conferred were always reflected in his remarks to Rice graduates.

The Commencements headed by Presidents William V. Houston (1946-60), Acting President Carey Croneis (1960-61), and President Kenneth J. Pitzer (1961-68) took place against a background of a rapidly growing campus, faculty, and student enrollment. Through it all, however, the twin ceremonies, Baccalaureate and Commencement, were held. This was true also of the 1969-70 term under Acting President Frank E. Vandiver.

President Norman Hackerman, who came to Rice in 1970, revised the ceremonies. For his second Commencement, May 20, 1972, President Hackerman combined the Baccalaureate and Commencement into one exercise. The awarding of diplomas is the highlight of the ceremony.

Academic Costume

The resemblance of academic costumes to the robes of religious orders is no coincidence; the costume worn today has its origins in the Middle Ages, when universities were church institutions, and both teachers and scholars were clerics.

The colleges and universities of the United States adopted their own uniform code of academic dress in 1895, and while the code has been modified since, the costume still reflects a rich tradition of Western higher education. If one is familiar with the basic accoutrements, with what shape, color, and material can signify, then the academic procession and the Commencement exercise can have new meaning.

Three main garments compose the costume—cap, gown, and hood. In addition, a stole is worn by many at Rice to identify an affiliation with one of Rice's eight residential colleges.

The caps and gowns worn by graduates of U.S. colleges and universities vary only slightly from school to school, and from these a viewer can determine the highest level of academic degree that the wearer has taken, or, in the case of those receiving diplomas during Commencement today, the degree that the wearer will be receiving at this time. Undergraduates serving today as ushers and marshals' assistants are wearing bachelor's gowns of royal blue.

The mortarboard, or Oxford-type cap, is worn by most members of the academic procession. It is usually black. The tassel of the cap may also be black; or it may be a color indicating the discipline in which the degree was earned; or it may be gold metallic for doctors, governing officials of the university, and persons being specially honored during the program.

The gown, too, is usually black, though exceptions to this will be seen in the procession today. Harvard, for example, allows a crimson gown; Yale, a blue gown; and Princeton, a black gown appointed in orange.

The bachelor's gown is the simplest in design and has long, pointed sleeves. The master's gown, which is slightly more elaborate, has sleeves that are oblong and open at the wrist. The doctor's gown is, appropriately, the most elaborate—velvet trim runs down the front and around the neck, and three velvet bars decorate the bell-shaped sleeves.
The third costume component, the hood, is the most symbolic. The level of degree that has been earned is indicated by the hood’s length. A bachelor’s hood is three feet long; a master’s hood, three and a half feet long; and a doctor’s hood, four feet long. The width of the velvet trim on the hood corresponds similarly. The trim is two inches wide on the bachelor’s hood, three inches wide on the master’s hood, and a full five inches wide on the doctor’s hood.

The same velvet trim, by its color, identifies the academic field in which the degree has been earned. For each field there is a representative color, and among those visible in the procession today are Arts, Letters, and Humanities — white; Commerce, Accountancy, Business — drab; Economics — copper; Education — light blue; Engineering — orange; Fine Arts, Architecture — brown; Music — pink; Philosophy — dark blue; Physical Education — sage brown; and Science — golden yellow.

The hood is lined with colors, worn exposed, which identify the institution at which the wearer took his or her degree. In 1895 most schools adopted a chevron for their hoods, and, because of the limited number of colors selected, duplication of designs commonly occurred. The Rice hood is lined in blue and has a single gray chevron.

Academic Procession

Most Commencement exercises begin and end with an academic procession, and like the costume worn by those participating in it, the procession has its origins in church history. The academic procession is a descendant of the clerical procession.

The full procession is composed of three groups: the candidates to receive bachelor degrees, the candidates to receive graduate and professional degrees, and the Rice faculty and administration. It is formed in ranks of two, except where an individual is singled out for special recognition. The University marshals, who are distinguished by their blue and gray gowns and soft, Cambridge-style caps, are responsible for directing the procession from the assembling and seating of participants through the conclusion of the ceremony.

The undergraduate candidates for bachelor’s degrees assemble in the courtyards of their respective residential colleges. With a University marshal, a banner carrier, and the co-masters at their head, the candidates of each college proceed to the academic quadrangle. Junior students chosen as assistant marshals escort each college. Baker, the oldest residential college, leads the undergraduate procession from the south, followed in order by Will Rice, Hanszen, and Wiess. Jones leads Brown, Lovett, and Richardson colleges into the academic quadrangle from the north.

The candidates for advanced degrees assemble at the Rice Memorial Center. Once in order, this group moves into position in the north Library Arcade. Candidates for the Doctor of Philosophy Degree, the highest the University bestows, lead this procession.

When both the undergraduate and the advanced degree processions reach the academic quadrangle, a fanfare announces the beginning of the ceremony. The Marshal Emeritus leads four wreath bearers, representing the faculty, alumni, graduate students, and undergraduate students, to the tomb of the founder, William Marsh Rice. Veni Creator Spiritus is sung and the wreath is laid. Then the procession sweeps forward toward Lovett Hall, the undergraduates moving up the side aisles on the north and the south and the advanced degree candidates in the center walkway.

The faculty and administrative officers, having assembled in the south arcade of Fondren Library, follow the procession of advanced degree candidates toward the platform on the west side of Lovett Hall. The faculty are led by the Head Faculty Marshal. The President’s party, led by the Chief Marshal, includes the Deans and Administrative Officers of the University, members of the Board of Governors, distinguished guests, and the President. The last group to mount the platform is a procession of college co-masters, the director of graduate studies, and the marshals. The positioning of the University mace on the front of the stage by the Chief Marshal signals the conclusion of the academic procession.

Following the singing of America and the benediction, the lifting of the mace from its stand signals the beginning of the recessional. The degree recipients march out through the great sallyport arch; the faculty and administration return up the center walkway to the Fondren Library, concluding the Commencement ceremony.
Degrees

Rice’s first Bachelor of Arts, Bachelor of Science, and Master of Arts degrees were awarded in 1916 at the First Commencement. A year later Rice granted its first Master of Science degree, and two years later it granted its first Doctor of Philosophy degree.

Since these early years, programs have been established leading to the awarding of the first master’s degree in one of the engineering disciplines in 1927, the first Master of Architecture degree in 1928, the first Bachelor of Commerce degree in 1968, the first Bachelor of Fine Arts degree in 1975, the first Master of Accounting degree in 1975, and the first Master of Music and Master of Arts in Teaching degrees in 1978.

All Rice degrees have been awarded for work done in course. The Bachelor of Arts or Bachelor of Science degree normally requires four years. The Bachelor of Fine Arts degree requires a fifth year of studio training. The Bachelor of Architecture degree requires two years beyond the B.A., including one spent on preceptorship with an architectural firm.

Rice awards several professional master’s degrees which generally require a fifth year of concentrated training in specified field beyond the Bachelor of Arts or Bachelor of Science degree. These are normally terminal degrees. The Master of Arts degree and the Master of Science degree normally require two years and the presentation of a thesis.

The Doctor of Philosophy degree is awarded after successful completion of a program of advanced study and scholarly research extending through comprehensive written and/or oral examination and an original investigation, on an approved topic, which is presented as a written dissertation. As final evidence of preparation for the degree, the candidate must pass a public oral examination. Normally, three or more years are required to complete the graduate study leading to the doctoral degree. In many departments a student is eligible for a master’s degree without submitting a thesis once he or she has been admitted to candidacy for the Ph.D.

Ceremony

The program of Commencement activities appears on page 3 and 4 of this booklet. The candidate’s degrees are listed in the order in which the degrees will be conferred. Each graduate receives his or her diploma individually.

Rice diplomas are unusually large, measuring about 18” by 23”, and are printed on sheepskin. The text of the diploma is arranged line by line so that it assumes the general shape of an urn. Tradition holds that this is a Grecian urn, inasmuch as the Rice diploma was designed and composed by President Lovett, who was a classical scholar. Above the text, the academic seal of Rice University is embossed in gold.

Decisions regarding undergraduate honors are not made until the final semester of work is complete, so students being awarded degrees summa cum laude, magna cum laude, or cum laude actually learn of this at the same time the audience does.

In the event of inclement weather, the entire ceremony is moved to the gymnasium. At 7 a.m. on the morning of the commencement ceremony, the chief marshal makes a decision on the location of the ceremony based on the weather and then notifies the operator at the campus switchboard.

Portions of the famous hymn “Veni Creator Spiritus” (Come Creator Spirit) have been part of every Rice commencement. The hymn is being played as part of today’s processional. Two of the verses of this Latin hymn are translated below.

Hymn

Veni Creator Spiritus

1. Veni, Creator Spiritus,
   Mentes tuorum visita,
   Iple superna gratia
   Quae tu creasti, pectora.

2. Da gaudiorum praemia,
   Da gratiarum munera,
   Dissolve litis vincula,
   Adstringe pacis foedera. Amen.

1. Come, Creator Spirit,
   Visit the minds of your people,
   Fill with supernal grace
   The hearts which you have created.

2. Give us the rewards of joy,
   Give us the benefits of your favor,
   Break the chains of strife,
   Draw fast the bonds of peace. Amen.
Insignia

On the cornerstone of Lovett Hall and on the flag of the university are two shields — one of the State of Texas and one of the university. The shield of the university was designed by Pierre de Chaignon la Rose of Cambridge, Massachusetts, for the opening of Rice Institute in 1912. In the shield, la Rose combined the main elements of the arms of several families bearing the names of Rice or Houston.

La Rose decided to employ a double chevron and three birds as charges on the Rice shield. Because of its historical standing in academia, the owl, bird of Athena, was selected as the charge. The form that the owls take was borrowed from a small Greek coin dating to the fifth century before Christ. After settling on this design, la Rose integrated the shield into an academic seal.

The emblem of authority at the ceremony is the university mace, which is carried by the chief marshal. The mace is three feet four inches long, with a walnut staff and a golden owl atop it. Engraved on four sides of the cube on which the owl sits are the initials W R U and the academic seal of the university.

Each of the eight residential colleges and the Graduate Student Association has its own emblem, which is displayed on its banner and carried in the procession.

Residential Colleges

Baker

Masters, Roderick & Susan McIntosh
Members wear black stoles with a red border. The college crest is displayed on stoles worn by the masters, faculty associates, and winners of the Baker College Service Awards.

Will Rice

Master, Robert Haymes
Members wear rust stoles. The college crest is displayed on stoles worn by the master and Will Rice fellows.

Hanssen

Master, Richard Smith
Members wear black stoles with a light blue border. Hanssen fellows wear stoles which are solid light blue and display the college crest.

Lovett

Master, Robert Jump
Members wear blue stoles. The college crest is displayed on the stoles of the master, president, outstanding seniors, and winners of the Lovett College Service Award and Sports Award.

Wiess

Master, Joan Rea
Members wear gold stoles. The college crest is displayed on the stole worn by the master.

Jones

Master, Walter Isle
Members wear black stoles with a green border. The master and president wear stoles which have an additional green stripe down the center and display the college crest.

Brown

Master, Bernard Aresu
Members wear yellow stoles displaying the college crest. The master’s stole is bordered in red.

Richardson

Master, John W. Clark
Members wear white stoles displaying the college crest. Two gold stars appear on the left side of stoles worn by Richardson fellows.

Graduate Student Association

The insignia of the Graduate Student Association incorporates heraldic symbols associated with Rice University. The open book portrays the seven fields of graduate study in which the University awards advanced degrees.
The Academic Quadrangle

Today's commencement is witnessed by a group that includes many renowned persons. Some of these are in the audience; other witnesses are imaged in the buildings of the Academic Quadrangle. Behind the platform to the east is Lovett Hall, flanked by Sewall Hall on the right to the south and the Physics Building on the left to the north. The west half of the Academic Quadrangle includes the Fondren Library on the west, flanked by Anderson Hall on the north and Rayzor Hall on the south. Directly in front of you is the great sallyport arch with its band of stone carving. The female figure holding the little owl on the left (north) of the arch represents science, but was undoubtedly modeled after Athena and her owl. The quotation by Aristotle reads: *If we properly observe celestial phenomena we may demonstrate the laws which govern them.* On the other side another female figure represents the arts with a quotation from Plotinus reading: *Beauty, joy and worship are forever building, unbuilding, and rebuilding in each man's soul.*

The central tower of Lovett Hall dominates the building. The six arches form a porch at the level of the fourth floor of the central tower. Originally the office of the first president of Rice, Edgar Odell Lovett, was behind this portico.

To the right of the female figure representing the arts are three marble plaques with the heads of our first three distinguished witnesses. From left to right they are Homer, representing Letters, Isaac Newton representing Science, and Leonardo Da Vinci representing the Arts. The quotation on the last plaque, *The chief function of art is to make gentle the life of the world,* is by Dr. Lovett.

There are twelve great granite columns with carved limestone capitals along the west cloister of Lovett Hall, and while the platform may prevent you from seeing some of the famous men on these columns, you are invited to view them after the ceremony. Four of the capitals have been carved with the heads of four famous witnesses. Counting from right to left, capital No. 2 includes Thucydides, Michelangelo, Immanuel Kant and St. Paul; capital No. 5 includes Ferdinand de Lesseps, Louis Pasteur, Christopher Columbus and Thomas Jefferson; No. 8 Sophus Lie, William Kelvin, Dmitri Mendeleeff and Charles Darwin; and No. 11 Francis Galton, Heinrich Hertz, Pierre Curie and Samuel Langley.

The other eight capitals are also divided into two groups of four identical capitals. While there is nothing distinguished about these observers of commencement, they are amusing. One set of four shows a coed, a student trying to concentrate on his studies, and a football player. The other set shows Texas roadrunners who derive from a very undistinguished family, the cuckoo family.

Directly above the cloister columns are twelve two-story marble pilasters with intriguing capitals. These also are in sets of four; one has very handsome owls, another equally fine pelicans, and the third set the seal of Aesculapius, the symbol of medicine.

On the cloisters connecting Lovett Hall to the Physics Building and to Sewall Hall are several sets of five circular medallions which represent agriculture, geography, literature, meterology and sculpture.

Distinguished pairs of very wise eyes watch every action from the balcony over the main entrance of the Physics Building on your left. Close inspection of those two extremely fine owls will reveal the marks of the sculptor's mallet and chisel.

And finally, an even more important witness watches from the west, William Marsh Rice, whose statue and tomb are in the center of the academic quadrangle, bearing the Latin salutation “Salve aeternum aeternumque salve” (Hail forever and forever hail).

As the newly hooded graduates recess through the great sallyport arch, they will be reminded of their undergraduate days as they pass by the head of the ecstatic freshman (on the left) and the head of the all knowing sophomore (on the right) at the springpoint of the west sallyport arch. As they exit though the arch on the east the thoughtful junior and the resolute senior will extend their congratulations and bid every degree recipient the resounding salute: “Hail forever, and forever hail.”

*Commentary on the Quadrangle*  
by James C. Morehead, Jr.  
Professor Emeritus in Architecture

*Figures on the Sallyport Arch*  
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Sophomore  
Junior  
Senior
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