Events of the Day
Friday, August 6, 1999

COMMENCEMENT MASS

8:30 a.m.
Degree Candidates and Faculty assemble for the Academic Procession to the Basilica of the Sacred Heart: second floor hallway of the Main Building.

8:45 a.m.
Procession begins. (Please note: If the weather is inclement, the procession will be canceled. Proceed directly to the Basilica.)

9:00 a.m.
Concelebrated Commencement Mass: the Basilica of the Sacred Heart

Principal Celebrant and Homilist
Rev. James K. Flanigan, C.S.C.
Associate Professor
Department of Art, Art History and Design

Concelebrants
Priests who will be receiving degrees, priest members of the faculty, and priest members of the Congregation of the Holy Cross

COMMENCEMENT EXERCISES
CONFERRAL OF DEGREES

10:25 a.m.
Degree Candidates and Faculty assemble in the North Dome of the Joyce Center.

10:50 a.m.
Academic Procession begins.

11:00 a.m.
Conferring of Degrees Ceremony in the Joyce Center Concourse

Presiding Officer
Jeffrey C. Kantor, Ph.D.
Vice President and Associate Provost

Commencement Address
David K. O'Connor, Ph.D
Associate Professor
Department of Philosophy

(Guests are requested to be seated in the Concourse of the Joyce Center by 10:50 a.m.)

Reception immediately following the ceremony for graduates and guests: Joyce Center – South Dome.
154th

COMMENCEMENT

MASS

FRIDAY, AUGUST 6, 1999
9 A.M. EST

FEAST OF THE TRANSFIGURATION
OF THE LORD

BASILICA OF THE SACRED HEART

UNIVERSITY OF NOTRE DAME

NOTRE DAME, INDIANA

Principal Celebrant and Homilist
Rev. James F. Flanagan, C.S.C.

Organist
Mr. Andrew McShane

Cantor
Sr. Jill Maria Murdy, O.S.B.

The Quintessence Brass
OPENING RITES

ACADEMIC PROCESSION

Trumpet Voluntary

OPENING HYMN

To Jesus Christ, Our Sovereign King

1. To Jesus Christ, our sovereign King, Who
2. Your reign extend, O King benign, To
3. To you, and to your church, great King, We

is the world's salvation, All praise and homage
every land and nation; For in your kingdom,
pledge our heart's obligation; Until before your

Lord divine, Alone we find salvation.

Christ Jesus, Victor! Christ Jesus, Ruler!

Christ Jesus, Lord and Redeemer!

PENITENTIAL RITE

GLORIA

Glory to God in the highest, and peace to his people on earth.

Lord God, heavenly King, almighty God and Father, we

worship you, we give you thanks, we praise you for your glory.
OPENING PRAYER

LITURGY OF THE WORD

READING I
Daniel 7:9-10, 13-14

RESPONSORIAL PSALM
Psalm 97:1-2, 5-6, 9

The Lord is king, the Lord most high over all the earth.

READING II
2 Peter 1:16-19

GOSPEL ACCLAMATION

Al-le-lu-ia, al-le-lu-ia, al-le-lu-ia.

GOSPEL
Matthew 17:1-9
For those wearing academic garb, it is customary for men, but not for women, to have their caps removed during the Gospel and Homily.

HOMILY
Rev. James F. Flanigan, C.S.C.

GENERAL INTERCESSIONS
PREPARATION OF THE GIFTS

Ave Verum Corpus ................................................. W. A. Mozart

Eucharistic Prayer

For those wearing academic garb, it is customary for men, but not for women, to have their caps removed during the Eucharistic Prayer. The caps may be replaced at the end of Communion.

PRAYER OVER THE GIFTS

SANCTUS

Holy, holy, holy Lord, God of power and might, heaven and earth are full of your glory. Hosanna in the highest, hosanna in the highest.

Blest is he who comes in the name of the Lord. Hosanna in the highest, hosanna in the highest.

MEMORIAL ACCLAMATION

Christ has died, Christ is risen, Christ will come again.
GREAT AMEN

Communion Rite

LORD'S PRAYER

SIGN OF PEACE + AGNUS DEI

COMMUNION ANTIPHON

PRAYER AFTER COMMUNION
Closing Rites

FINAL BLESSING

ALMA MATER

Notre Dame, Our Mother  O'Donnell/Casasanta

Proudly in the heavens gleams thy gold and blue.

Glorify's mantle cloaks thee, golden is thy fame,

And our hearts for ever praise thee, Notre Dame.

And our hearts for ever love thee, Notre Dame.

CONCLUDING HYMN

Now Thank We All Our God  Nun danket

1. Now thank we all our God With hearts and hands and voices,
2. O may this bounteous God Through all our life be near us,
3. All praise and thanks to God The Father now be given,

Who wondrous things has done, in whom the world rejoices;
With ever joyful hearts And blessed peace to cheer us:
The Son, and him who reigns With them in highest heaven,

Who, from our mother's arms has blessed us on our way
And keep us in his grace, And guide us when perplexed,
The One eternal God, Whom heav'n and earth adore;

With countless gifts of love, and still is ours today.
And free us from all ills, In this world and the next.
For thus it was, is now, And shall be ever more.

Acknowledgments

Gloria by Carroll T. Andrews, Psalm 97 by Michel Guimont, Santeux, Memorial Acclamation, Great Amen (from the Community Mass) by Richard Proulx, Lamb of God by David Lisle, Gift of Finer Wheat, music by Robert Renz, text by Omer Westendorf. Printed with permission of GIA Publications, Inc. 740 N. Mason Ave., Chicago, IL, under license no. 1159. All rights reserved. Used with permission.

154th

COMMENCEMENT

EXERCISES

Friday, August 6, 1999
11 A.M. EST

Joyce Center – Concourse
University of Notre Dame
Notre Dame, Indiana

The Graduate School
The Law School
The College of Arts and Letters
The College of Science
The College of Engineering
The Graduate and Undergraduate Divisions of the College of Business Administration
The School of Architecture
Processional
by Harold L. Pace, Ph.D.
University Registrar

America the Beautiful
Ensemble and Audience
—Bates-Ward

*O beautiful for spacious skies,*
*For amber waves of grain*
*For purple mountain majesties*
*Above the fruited plain.*
*America! America!*
*God shed his grace on thee,*
*And crown thy good with brotherhood*
*from sea to shining sea.*

Convening of the Convocation
by Jeffrey C. Kantor, Ph.D.
Vice President and Associate Provost

Presentation of Candidates for Degrees
The *Philosophiae Doctor* degree
by James L. Merz, Ph.D.
Vice President for Graduate Studies and Research

The Master degree
by James L. Merz, Ph.D.
Vice President for Graduate Studies and Research

The Master of Science in Administration degree
by Carolyn Y. Woo, Ph.D.
Dean of the College of Business Administration

The Bachelor degree in the College of Arts and Letters
by Christopher B. Fox, Ph.D.
Acting Dean of the College of Arts and Letters

The Bachelor degree in the College of Science
by Kathie E. Newman, Ph.D.
Associate Dean of the College of Science

The Bachelor degree in the College of Engineering
by James I. Taylor, Ph.D.
Professor of Civil Engineering and Geological Sciences
The Bachelor degree in the College of Business Administration
by Carolyn Y. Woo, Ph.D.
Dean of the College of Business Administration

Commencement Address*
by David K. O'Connor, Ph.D.
Associate Professor
Department of Philosophy

Closing of the Convocation
by Jeffrey C. Kantor, Ph.D.
Vice President and Associate Provost

Notre Dame, Our Mother* — (Alma Mater)
Ensemble and Audience
— O'Donnell-Casasanta

Notre Dame, Our Mother, tender, strong and true
Proudly in the heavens gleams thy gold and blue.
Glory's mantle cloaks thee, golden is thy fame
And our hearts forever praise thee, Notre Dame;
And our hearts forever love thee, Notre Dame.

Recessional of the Platform Party and Graduates

*It is customary for men, although not for women wearing academic garb, to have their caps removed during the Commencement Address and the singing of the Alma Mater.
Doctoral Degrees

THE DEGREE OF PHILOSOPHIAE DOCTOR ON:

Brian Michael Allen, Thurmont, Maryland
Major Subject: Mathematics
Dissertation: Linear Systems Analysis and Decoding of Convolutional Codes
Director: Dr. Joachim J. Rosenthal

Mike Randal Beggs, Fort Worth, Texas
Major Subject: Theology
Dissertation: From Kingdom to Ethnos: The Transformation of a Metaphor in Eusebius's Historia Ecclesiastica
Co-Directors: Dr. Harold W. Attridge and Dr. Gregory E. Sterling

Thomas Julius Bollenbach, Kitchener, Ontario, Canada
Major Subject: Biochemistry
Dissertation: Catalytic Mechanism and Allosteric Activation of Yeast Pyruvate Kinase
Director: Dr. Thomas L. Nowak

Bidisha Bose-Basu, Calcutta, India
Major Subject: Biochemistry
Dissertation: Spin-Coupling Constants Involving 13C in Carbohydrates: New Conformational Probes of Oligosaccharide and Oligodeoxyribonucleotide Structure and Conformation
Director: Dr. Anthony S. Serianni

Gordon Bruce Brumwell, Westchester, Illinois
Major Subject: Biological Sciences
Dissertation: An Examination of Neurogenesis in the Planula of the Cnidarian Pennaria Tiarella and Pre- and Post-Hatching Stages of the Cnidarian Hydra Vulgaris Using the Neuropeptide ARG-PHE-AMIDE (RFamide) and the Antigen JD1 as Markers
Director: Dr. Frederick W. Goetz, Jr.

Jennifer Elaine Carter, Cincinnati, Ohio
Major Subject: Psychology
Dissertation: Explaining Sport Performance: Effects of Ability Versus Effort Attributions for Success and Failure
Director: Dr. Anita E. Kelly

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Jay Riley Case, South Bend, Indiana
Major Subject: History
Director: Dr. George M. Marsden

Margaret Anne Coffman, El Toro, California
Major Subject: Biological Sciences
Dissertation: Characterization of Trout Ovulatory Proteins, a Family of Ovarian- and Ovulation-Specific Proteins in the Brook Trout (Salvelinus fontinalis).
Director: Dr. Frederick W. Goetz, Jr.

Sandra Dean Collins, South Bend, Indiana
Major Subject: Psychology
Dissertation: The Role of Values in the Functions of Stereotypes and Prejudice
Director: Dr. Jeanne D. Day

Basil Sebastian Davis, Nagercoil, India
Major Subject: Theology
Dissertation: Curse and Blessing: The Argument of Galatians 3:1-14
Co-Directors: Dr. Harold W. Attridge and Dr. Gregory E. Sterling

Kevin Jonathan Fleming, Longmeadow, Massachusetts
Major Subject: Psychology
Dissertation: Assessing Course Understanding in a First-Person Psychology Course: A Construct Validation Study of the Ordered Tree Technique
Director: Dr. George S. Howard

Sabina B. Gesell, Cambridge, Massachusetts
Major Subject: Psychology
Dissertation: The Roles of Personality and Cognitive Processing in Secret Keeping
Director: Dr. Anita E. Kelly

Romi Ghose, Houston, Texas
Major Subject: Biochemistry
Dissertation: Protein Kinases and the Regulation of Transcription by RNA Polymcrase III
Director: Dr. Paul W. Huber

Marcie Christine Gocke-Morey, St. Louis, Missouri
Major Subject: Psychology
Dissertation: Children and Marital Conflict: Exploring the Distinction Between Constructive and Destructive Marital Conflict Behaviors
Director: Dr. E. Mark Cummings

Stanislav Gordyev, Moscow, Russia
Major Subject: Aerospace Engineering
Dissertation: Investigation of Coherent Structure in the Similarity Region of the Planar Turbulent Jet Using Pod and Wavelet Analysis
Director: Dr. Flint O. Thomas

Laura Garmany Holt, Greenwich, Connecticut
Major Subject: Theology
Dissertation: Tolle Scriba: Augustine at Cassiciacum
Director: Dr. John C. Cavodini

Thomas Jensen, Fredensborg, Denmark
Major Subject: Biological Sciences
Dissertation: Expression and Physiological Function of the Neurotrophins BDNF, NT-3 and Their Receptors TrkA, TrkC and P75(NTR) in the Hen Ovarian Follicle.
Director: Dr. Alan L. Johnson

Elizabeth Jiménez-Zamora, Milwaukee, Wisconsin
Major Subject: Economics
Director: Dr. Charles Craypo

Lezlie Susan Knox, Madison, Wisconsin
Major Subject: Medieval Studies
Dissertation: The True Daughters of Francis and Clare: The Formation of the Order of Saint Clare in Late Medieval Italy
Director: Dr. John H. Van Engen

Andrew William Lamb, South Bend, Indiana
Major Subject: Philosophy
Dissertation: Situated Science: A Phenomenological Defense of Philosophy as Rigorous Science
Co-Directors: Dr. Karl Ameriks and Dr. Stephen H. Watson

Laurentiu Lazarovici, Constanța, Romania
Major Subject: Mathematics
Dissertation: Elliptic Sectors in Surface Theory and the Carathéodory-Loewner Conjectures
Director: Dr. Brian B. Smyth

Michael James Letterney, Santa Paula, California
Major Subject: Philosophy
Dissertation: Georges Cuvier, Transcendental Naturalist: A Study of Teleological Explanation in Biology
Director: Dr. Phillip R. Sloan
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<thead>
<tr>
<th>Name</th>
<th>Affiliation</th>
<th>Subject</th>
<th>Dissertation</th>
<th>Director</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xinyu Li</td>
<td>Sichuan Province, People's Republic of China</td>
<td>Mechanical Engineering</td>
<td>Dissertation: Microsphere Impacts with Surfaces</td>
<td>Dr. Patrick F. Dunn</td>
</tr>
<tr>
<td>Maxim Alexander Makeev</td>
<td>Moscow, Russia</td>
<td>Physics</td>
<td>Dissertation: Morphologies of Ion Sputtered Surfaces</td>
<td>Dr. Albert-László Barabási</td>
</tr>
<tr>
<td>Pedro Marronetti</td>
<td>Buenos Aires, Argentina</td>
<td>Physics</td>
<td>Dissertation: Close Binary Neutron-Star Systems</td>
<td>Dr. Grant J. Mathews and Dr. James R. Wilson</td>
</tr>
<tr>
<td>Peter C. Meellaneder</td>
<td>South Bend, Indiana</td>
<td>Government and International Studies</td>
<td>Dissertation: &quot;Home is the Sailor&quot;: Towards a Theory of Immigration</td>
<td>Dr. Edward A. Goerner</td>
</tr>
<tr>
<td>Leanne Marie Miller</td>
<td>Spring Grove, Pennsylvania</td>
<td>Chemistry</td>
<td>Dissertation: Multiresonant Excitations Probed with Transient Optical Gratings</td>
<td>Dr. James S. Keller</td>
</tr>
<tr>
<td>Luis Arturo Montes</td>
<td>San Diego, California</td>
<td>Physics</td>
<td>Dissertation: Electron Paramagnetic Studies of Diluted Magnetic Semiconductor Nanostructures</td>
<td>Dr. Jacek K. Furdyna</td>
</tr>
<tr>
<td>Catherine M. Murphy</td>
<td>Santa Clara, California</td>
<td>Theology</td>
<td>Dissertation: The Disposition of Wealth in the Literature and Practice of the Qumran Community and its Relevance for the Study of the New Testament</td>
<td>Co-Directors: Dr. Harold W. Attridge and Dr. James C. VanderKam</td>
</tr>
<tr>
<td>Amy René Noc</td>
<td>San Diego, California</td>
<td>Biological Sciences</td>
<td>Dissertation: Partial Characterization of the Protein Maebgl and its Use as a Marker for Organelle Biogenesis in the Malaria Parasite</td>
<td>Dr. John H. Adams</td>
</tr>
<tr>
<td>Frank Channa Peiris</td>
<td>Notre Dame, Indiana</td>
<td>Physics</td>
<td>Dissertation: Measurement and Applications of Dispersion in Epitaxial II-VI Semiconductor Thin Films and Multilayers</td>
<td>Dr. Jacek K. Furdyna</td>
</tr>
<tr>
<td>Kerry Ann Rockquemore</td>
<td>Jackson, Michigan</td>
<td>Sociology</td>
<td>Dissertation: Race and Identity: Exploring the Biracial Experience</td>
<td>Dr. Andrew J. Weigert</td>
</tr>
<tr>
<td>Jose Felix Rodriguez</td>
<td>Caracas, Venezuela</td>
<td>Mechanical Engineering</td>
<td>Dissertation: Modeling the Mechanical Behavior of Fused Deposition Acrylonitrile-Butadiene-Styrene Polymer Components</td>
<td>Dr. James P. Thomas</td>
</tr>
<tr>
<td>James Joseph Sanchez</td>
<td>Tuscon, Arizona</td>
<td>Psychology</td>
<td>Dissertation: An Examination of the Effects of Hardiness, Stress-Appraisal and Coping on College Student Health</td>
<td>Dr. Thomas V. Merluzzi</td>
</tr>
</tbody>
</table>
Alesha Diann Seroczynski, Dallas, Texas
Major Subject: Psychology
Dissertation: Developmental Trends in the Co-Occurrence of Behavior Problems and Depression: A Four Year Longitudinal Study
Director: Dr. David A. Cole

Timothy L. Smith, Memphis, Tennessee
Major Subject: Medieval Studies
Dissertation: Thomas Aquinas' Trinitarian Theology: A Study in Theological Method
Director: Dr. Ralph M. McInerny

Joseph Arthur Stevano, Oakville, Ontario, Canada
Major Subject: Economics
Director: Dr. Lawrence C. Marsh

Ruth A. Truglio, Hopewell, New Jersey
Major Subject: Psychology
Dissertation: The Relation Between Depressive Symptoms and Conduct Problems in Children and Adolescents: A Multitrait-Multimethod Multigroup Longitudinal Analysis
Director: Dr. David A. Cole

Rev. Leslie William Walck, Colfax, Wisconsin
Major Subject: Theology
Dissertation: The Son of Man in Matthew and the Similitudes of Enoch
Director: Dr. James C. VanderKam

Kimberly Anne Wallace, Tryon, North Carolina
Major Subject: Psychology
Dissertation: A Theoretical Examination of Protective Factors in Later Life
Director: Dr. Cindy Bergeman

Yili Xu, Beijing, People's Republic of China
Major Subject: Sociology
Dissertation: A Study of Abortion Attitudes as Components of an Attitudinal System, Non-Structurally Supplied Attitudes, and Latent Variables
Director: Dr. Michael R. Welch

Laura Loeffler Ziebarth, St. Joseph, Michigan
Major Subject: Psychology
Dissertation: Gender Differences in the Certainty and Differentiation of Possible Self Images and Relationships Between Possible Self Development and Identity Development
Director: Dr. Jeanne D. Day

THE DEGREE OF LEGUM MAGISTER ON:

Roberto Neves Pedrosa De Cillo, São Paulo, Brazil
Olaf Schick, Cum Laude, Stuttgart, Germany
Master Degrees

THE DEGREE OF MASTER OF FINE ARTS ON:

Kevin Johnson, Westchester, California
Major Subject: English
Thesis: Living With Jazz
Director: Prof. Valerie Sayers

THE DEGREE OF MASTER OF MEDIEVAL STUDIES ON:

Amy Marie Christman, Goshen, Ohio
Kelly Suzanne Gritten, Fairview Heights, Illinois
Bonnie Chih-Mei Mak, Vancouver, British Columbia, Canada

THE DEGREE OF MASTER OF MUSIC ON:

Joshua Paul Foster, Enon Valley, Pennsylvania

THE DEGREE OF MASTER OF ARTS ON:

Awal Abdulai, Bimbilla, Ghana
Major Subject: Peace Studies

Khalid O. Awad, West Bank, Palestine
Major Subject: Peace Studies

James P. Brobst, San Antonio, Texas
Major Subject: Theology

Anna Buša, Riga, Latvia
Major Subject: Peace Studies

Germán Gabriel Cueva, Monterrey, Mexico
Major Subject: Economics

Shiva Hari Dahal, Bhaktapur, Nepal
Major Subject: Peace Studies

Thomas Esper, Austin, Texas
Major Subject: Theology

Brian Randall Gates, South Bend, Indiana
Major Subject: Theology

Sofie Gelashvili, Tbilisi, Georgia
Major Subject: Peace Studies

Rainer Bror Mikael Hindsberg, Helsinki, Finland
Major Subject: Peace Studies
Theresa Lynn Jaeger, Lake Forest, California
   Major Subject: Theology

Patricia White Kerwin, Houston, Texas
   Major Subject: Theology

Reham H. Lashin, Cairo, Egypt
   Major Subject: Peace Studies
   Director: Dr. George A. Lopez

Wendy Suzanne Lehman, Kidron, Ohio
   Major Subject: Peace Studies

Mary Jane Lopez, Riverside, California
   Major Subject: Economics

Elena V. Malofeeva, Cheboksary, Russia
   Major Subject: Psychology
   Thesis: Development of Similarity Reasoning in Head Start Children
   Director: Dr. Jeanne D. Day

Sarah Michelle Mathis, Berkeley, California
   Major Subject: Peace Studies

Catherine Evelyn McNulty, Annandale, Virginia
   Major Subject: Theology

Allen Morris, London, United Kingdom
   Major Subject: Theology

Jill Maria Murdy, O.S.B., Richmond, North Dakota
   Major Subject: Theology

Tuve Cecilia Norlen, St. Anna, Sweden
   Major Subject: Peace Studies

David Gerardo Ortiz Canseco, Mexico D.F., Mexico
   Major Subject: Peace Studies

Binnur Özekciceci, Gaziantep, Turkey
   Major Subject: Peace Studies

David Richard Parker, Muskegon, Michigan
   Major Subject: Psychology
   Thesis: A Dynamic Measure of Interactional Synchrony
   Director: Dr. Steven M. Baker

Ginger Stone Plotter, Bridgman, Michigan
   Major Subject: English

Adriana Quiñones, Bogota, Columbia
   Major Subject: Peace Studies

Joan A. Reardon, Daytona Beach, Florida
   Major Subject: Theology

Joseph G. Ring, Charleston, Illinois
   Major Subject: Theology

Susan Marie Scoby, C.S.S.F., Chicago, Illinois
   Major Subject: Theology

Ashley Elizabeth Shannon, Worcester, Massachusetts
   Major Subject: English
   Thesis: Burko-ing up the Wrong Tree: Gender, Class and Colonialism in Maria Edgeworth's Irish Novels
   Director: Dr. James H. Walton

John M. Shields, Park Forest, Illinois
   Major Subject: Theology

Martine Kaswahile SongaSonga Nono, Boortmeerbeek, Belgium
   Major Subject: Peace Studies

Jennifer A. Stewart, Little Rock, Arkansas
   Major Subject: Peace Studies

Lawrence R. Tensi, Cincinnati, Ohio
   Major Subject: Theology

Cong Dan Thai, Cantho City, Vietnam
   Major Subject: Peace Studies

Tracy Sayuki Tiemeier, Libertyville, Illinois
   Major Subject: Peace Studies

Kevin Christian Walsh, West Nyack, New York
   Major Subject: Theology

Xiao-Qing Wang, Hebei, People's Republic of China
   Major Subject: Sociology
   Thesis: Family Structure and Asian and Asian-American Students' Mathematics Achievement
   Director: Dr. Richard A. Williams

Edna Ruth Yahil, East Setauket, New York
   Major Subject: History

Glenn Anthony Young, Kansas City, Missouri
   Major Subject: Theology

Kamar Yousuf, Hargeisa, Somalia
   Major Subject: Peace Studies
Fang Zhang, Beijing, People's Republic of China
Major Subject: Peace Studies

THE DEGREE OF MASTER OF SCIENCE ON:

Brian A. Di Paolo, Mishawaka, Indiana
Major Subject: Chemistry
Thesis: Toward the Synthesis of Bis-Aryl Ethynyl Oligomers and their Application in Materials Chemistry
Director: Dr. Olaf G. Wiest

Hans Georg Freiermuth, Neustadt, Germany
Major Subject: Mathematics

Erica Elizabeth Jasper, Kalamazoo, Michigan
Major Subject: Physics

Laurentiu Lazarovici, Constanta, Romania
Major Subject: Mathematics

Julie Peller, Merrillville, Indiana
Major Subject: Chemistry
Thesis: Radiolytic and Sonolytic Degradation of 2,4-D
Co-Directors: Dr. Prashant V. Kamat and Dr. Olaf G. Wiest

Rajyashree Ray, Calcutta, India
Major Subject: Biochemistry
Thesis: Characterization of Mutations in the Activation Peptide of Human Plasminogen
Director: Dr. Francis J. Castellino

THE DEGREE OF MASTER OF SCIENCE IN CHEMICAL ENGINEERING ON:

Pavlo Volodymyrovich Takhistov, Kiev, Ukraine
Thesis: Experimental Study of Electro-Hydrodynamic Phenomena
Director: Dr. Hsueh-Chia Chang

THE DEGREE OF MASTER OF SCIENCE IN COMPUTER SCIENCE AND ENGINEERING ON:

Tao Zhou, Sichaun, People's Republic of China
Thesis: A Probabilistic Metric for Real-Time Embedded System
Director: Dr. Xiaobo (Sharon) Hu

THE DEGREE OF MASTER OF SCIENCE IN ELECTRICAL ENGINEERING ON:

Lu Cheng, Shenyang, People's Republic of China
Thesis: Timing Based Mutual Exclusion in Networked Control Systems
Director: Dr. Michael D. Lemmon

Xiaohui Wang, Notre Dame, Indiana

THE DEGREE OF MASTER OF SCIENCE IN ENVIRONMENTAL ENGINEERING ON:

Meredith Lisa Mosos, Norwell, Massachusetts
Thesis: Consideration of Alginate as a Material for the Filtration of Colloids
Director: Dr. Philip R. Johnson

Shelley Renee Trujillo, Los Alamos, New Mexico
Thesis: Sequencing Batch Reactor Operation of Constructed Wetlands
Director: Dr. Lloyd H. Ketchum, Jr.

THE DEGREE OF MASTER OF SCIENCE IN GEOLOGICAL SCIENCES ON:

David Allen Fowle, London, Ontario, Canada
Thesis: Competitive Adsorption of Metal Cations Onto Two Gram Positive Bacteria: Testing the Chemical Equilibrium Model
Director: Dr. Jeremy B. Fein

THE DEGREE OF MASTER OF SCIENCE IN MECHANICAL ENGINEERING ON:

Jing-Fang Wang, Taipei, Taiwan
Thesis: Automatic Differentiation in Multiobjective Collaborative Optimization
Director: Dr. John E. Renaud

Lesley G. Weiss, Evansville, Indiana
Thesis: An Experimental Investigation of Some Three-Dimensional Effects of Stationary and Oscillating Circular Cylinders
Director: Dr. Albin A. Szewczyk
In the College of Business Administration

THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION ON:

Monty E. James, Vista, California

THE DEGREE OF MASTER OF SCIENCE IN ADMINISTRATION ON:

Barbara Leigh Dodson, Granger, Indiana
Brian Jay Egendoerfer, Magna Cum Laude, South Bend, Indiana
Deborah Hammond, Indianapolis, Indiana
William D. Jordan, Summa Cum Laude, Stevens Point, Wisconsin
Matthew Kowalski, Magna Cum Laude, Marvin, South Dakota
Mary Veronica Martin, Cum Laude, South Bend, Indiana
Randal Eric Possinger, Summa Cum Laude, Spring Lake, Michigan
Mark A. Price, Warsaw, Indiana
Edward A. Trifone, Niles, Michigan
Nancy J. Rut-Zyrkowski, Cum Laude, Myersville, Maryland
College of Arts and Letters

THE DEGREE OF BACHELOR OF ARTS ON:

Nicholas Athanasios Angelis, Silver Spring, Maryland
Brendan Edward Barry, Framingham, Massachusetts
Nino Michael Berticelli, Granger, Indiana
Amy Annette Blaska, Atlanta, Georgia
Kristen Elizabeth Brce, Medford, New Jersey
Rebecca Lee Burick, The Woodlands, Texas
Danny C. Checchia, South Bend, Indiana
Melia N. Cricchio, Bethpage, New York
Timothy James Christ, Mokena, Illinois
Willie Calvin Clark, Bradenton, Florida
Christopher F. Flanagan, Branford, Connecticut
Iain Daniel Gould, Vista, California
Elizabeth Susan Grandin, Magna Cum Laude, West Palm Beach, Florida
Benny C. Guilbeaux, Opelousas, Louisiana
Bernard Timothy Hessley, Warren, Pennsylvania
Joseph William Kisko, Tega Cay, South Carolina
Courtney Lee King, South Bend, Indiana
Katherine Elizabeth Kneepkens, Wauwatosa, Wisconsin
Kevin Michael Kopka, Hollywood, Florida
Omar S. Lucero, Berino, New Mexico
Arturo Mancha, Eagle Pass, Texas
Bridget Louise McCarthy, Magna Cum Laude, Indianapolis, Indiana
Daniel Michael McGrath, Batavia, Illinois
Christopher Thomas Moore, South Bend, Indiana
William George Mulcahy, Chicago, Illinois
K. Maxwell Murphy, Riverhead, New York
Eileen Sandra Pruitt, Buchanan, Michigan
Sabriya Rice, Columbia, South Carolina
Andrew Peter Sandler, South Bend, Indiana
Phillip Nathaniel Sapirstein, Magna Cum Laude, South Bend, Indiana
Tara Juliene Scott, Macon, Illinois
Nebeshe Shogno, Walpole Island, Ontario, Canada
Brianna Joy Smith, Palm Bay, Florida
Stephen Ward Taylor, Rockville Centre, New York
College of Science

THE DEGREE OF BACHELOR OF SCIENCE ON:

Ellen Bridget Carter, Raleigh, North Carolina
Megan Elizabeth Collins, Southport, Connecticut
Catherine Anne O'Brien, Rockaway, New Jersey
Gregory Pio Yatarola, Cum Laude, Dolgeville, New York

College of Engineering

THE DEGREE OF BACHELOR OF SCIENCE IN COMPUTER SCIENCE ON:

Richard L. Shoesmith, Mishawaka, Indiana

THE DEGREE OF BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING ON:

Jason James Jankowiak, Buffalo, New York

College of Business Administration

THE DEGREE OF BACHELOR OF BUSINESS ADMINISTRATION ON:

Reginald Arthur Brooks, Tulsa, Oklahoma
Kelly Tricia Canavan, Duluth, Georgia
Emily E. Cox, South Bend, Indiana
Nicole Reed Hudson, Cum Laude, Jasper, Indiana
Kelly Ann Martin, Hutchinson, Kansas
Erin Elizabeth McGinty, Laguna Niguel, California
Kevin Matthew Melchior, Vincennes, Indiana
Erin Anne Rankin, Jupiter, Florida
John F. Roach, Pasco, Washington
Jennifer Ruth Ryan, Chicago, Illinois
Carl Christopher Schwab, Mission Viejo, California
Carolyn Melissa Stringer, Key Biscayne, Florida
Jeremy Shane Thompson, Kokomo, Indiana
Samuel Clayton Williams, Taylor, Michigan

School of Architecture

THE DEGREE OF BACHELOR OF ARCHITECTURE ON:

Danjuma O.C. Gaskin, Chicago, Illinois
Honor Societies

IN THE COLLEGE OF ARTS AND LETTERS, THE FOLLOWING WERE ELECTED TO MEMBERSHIP IN THE GERMAN LANGUAGE HONOR SOCIETY OF DELTA PHI ALPHA:

Bridget Louise McCarthy

Awards and Prizes

National Awards

Association of Black Sociologists, Annual Graduate Student Paper Competition, First Place

Kerry Ann Rockquemore, Jackson, Michigan

Behavioral and Social Sciences Pre-Dissertation Award, Gerontological Society of America

Kimberly Anne Wallace, Tryon, North Carolina

Bradley Fellowship

Michael James Letteney, Santa Paula, California
Timothy L. Smith, Memphis, Tennessee

Christian Scholarship Foundation Grant Recipient, 1995-96

Mike Randal Beggs, Fort Worth, Texas

CONICIT (Venezuelan Government Institution for Science and Technology Development) Fellowship

Jose Felix Rodriguez, Caracas, Venezuela

D.A.A.D. Grant

Timothy L. Smith, Memphis, Tennessee
Awards and Prizes

Flemish Community Fellowship (Belgium)
Andrew William Lamb, South Bend, Indiana

Franklin Fellowship, University of Georgia
Andrew William Lamb, South Bend, Indiana

Fulbright Grant for Graduate Study and Research Abroad
Lezlie Susan Knox, Madison, Wisconsin

Fulbright-Laspau Fellow
Elizabeth Jiménez-Zamora, Milwaukee, Wisconsin

General Electric Fund Graduate Fellowship in Physics, 1996-97
Erica Elizabeth Jasper, Kalamazoo, Michigan

Dolores Zohrab Liebmann Fellow
Kimberly Anne Wallace, Tryon, North Carolina

Midwest Regional Society of Biblical Literature Student Paper Award Winner, 1998
Mike Randal Beggs, Fort Worth, Texas

National Collegiate Athletic Association Post-Graduate Fellowship
Jennifer Elaine Carter, Cincinnati, Ohio

National Institute of Health Trainee
Marcie Christine Gocke-Morey, South Bend, Indiana
Amy René Noe, San Diego, California

North Central Sociological Association Annual Graduate Student Paper Competition, Winner
Kerry Ann Rockquemore, Jackson, Michigan

Scholar of the Cusanuswerk (Germany)
Hans Georg Freiernmuth, Neustadt, Germany
In the Graduate School

Clare Booth Luce Fellowship
Margaret Anne Coffman, El Toro, California

McGuire Fellow
Basil Sebastian Davis, Nagercoil, India
Joshua Paul Foster, Enon Valley, Pennsylvania
Kerry Ann Rockquemore, Jackson, Michigan

Project Latin America 2000
Germán Gabriel Cueva, Monterrey, Mexico

University Minority Fellow
Shelley Renee Trujillo, Los Alamos, New Mexico

University Presidential Fellow
Peter C. Meilaender, South Bend, Indiana
Kelly Suzanne Gritten, Fairview Heights, Illinois
Academic Attire

Ceremonial garments worn at academic functions take their meaning from the original centers of learning of the Western world in the Church of the Middle Ages. Caps, hoods and gowns of the early students and monks have been held through the centuries to be traditionally symbolic of the scholarly devotion so basic to education and to the deliberate and orderly evolution of knowledge.

The introduction of classical studies, the gradual rise of the great universities across Europe, and the ever-increasing awareness of the decisive role of education in the entire development of civilization influenced leaders among academicians in their desire for a singular identity. In the attempt to create this differentiation, educators fell upon the medieval system of classic heraldry, whereby the coat of arms, assorted ornamental trappings, and patterns of colorful design had been adopted to denote the distinctive character of designated chivalric orders. The function of "pedagogical heraldry" became, then, simply identification. As such, measures were taken to signify through distinctive markings on the academicians' attire the institution that had granted the degree, the field of learning in which the degree had been earned, and the level of the degree-bachelor, master or doctorate.

Of the three pieces of academic attire, the cap, the gown and the hood, it is the hood that offers the most abundant and most readily discernable information about its owner. The inner lining of the hood identifies the institution at which the individual earned the degree. Some schools have adopted two-color patterns and introduced chevrons and bars in various designs to set themselves apart from other institutions. The velvet trim bordering the hood indicates the major field of learning, or faculty, in which the degree has been earned. The list at the conclusion of this section will explain this relationship. A final feature of the hood concerns its length and width and distinguishes further between holders of bachelor's, master's, and doctor's degrees. The length of the hood for the bachelor's degree is three feet, closed at the bottom, and the velvet border is two inches. At Notre Dame, individuals receiving a bachelor's degree do not wear a hood. A master's degree holder has a hood three and one half feet in length with a three inch wide border, and is slit at the bottom. Those individuals with a doctorate degree wear a hood four feet in length, open at the bottom, with a five inch border.

The gown is usually black in color but some American universities, including Notre Dame, have adopted distinctive colors for their robes. Notre Dame doctorate degree robes are blue, reflecting one of its official colors.

The cut of the gown aids in differentiating between the three levels of degrees. The bachelor's gown is relatively simple and falls in straight lines from an elaborate yoke. It may be recognized most readily by the long, pointed sleeves. The master's gown is somewhat fuller and bears no adornment. The sleeves are oblong in shape and open at the wrist, with the rear part of the oblong square cut while the front edge has a cutaway arc. The doctor's gown is more elaborate with velvet panels down the front and around the neck of the garment. The sleeves are bellshaped at the end and have three bars of the same material as the front panels at the upper portion of the arm. It is cut rather full and may be ornamental in color. Notre Dame's doctoral gown has royal blue velvet front panels with the University's shield embroidered in gold. The royal blue sleeve chevrons are outlined in gold.

The mortarboard or Oxford-type cap has been adopted throughout most universities in the United States, although Notre Dame's doctoral cap is a royal blue tam. Colored tassels are usually worn by holders of the bachelor's and master's degrees. These denote the field of learning. The list on the next page indicates the tassel colors. Gold tassels are reserved for those with doctorate degrees and governing officers of educational institutions.
Processional Banners
(Gonfalons)

The gonfalon, a banner that hangs from a crosspiece or frame, originated in the medieval republics of Italy as an ensign of state or office. Gonfalons have been adopted in many universities around the world as college or institutional insignias, and many use them to identify and lead colleges and schools within the university in academic procession.

The lower half of the gonfalon consists of a shield with a clear blue field and a cross of gold. This is part of the armorial seal designed by Pierre de Chaignon la Rose of Harvard in 1931. The heraldic colors (gold and blue) are symbolic of the Mother of God, to whom, Father Sorin first dedicated Notre Dame. At the shield’s base are two wavy lines (indicating the a Lacu, “of the Lake,” in the University’s official title), and above them to the left is a star, another emblem of the Virgin, Star of the Sea. The cross represents the Congregation of Holy Cross, which founded Notre Dame; an institution of learning is denoted by the open book. The phrase “Vita, Dulcedo, Spes,” taken from the ancient prayer to the Virgin, the Salve Regina, celebrates her as “life, sweetness, and hope.”

Faculty Colors

<table>
<thead>
<tr>
<th>Faculty</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRICULTURE</td>
<td>Maize</td>
</tr>
<tr>
<td>ARCHITECTURE</td>
<td>Blue Violet</td>
</tr>
<tr>
<td>ARTS, LETTERS, HUMANITIES</td>
<td>White</td>
</tr>
<tr>
<td>COMMERCE, ACCOUNTANCY, BUSINESS</td>
<td>Drab</td>
</tr>
<tr>
<td>DENTISTRY</td>
<td>Lilac</td>
</tr>
<tr>
<td>ECONOMICS</td>
<td>Copper</td>
</tr>
<tr>
<td>EDUCATION</td>
<td>Light Blue</td>
</tr>
<tr>
<td>ENGINEERING</td>
<td>Orange</td>
</tr>
<tr>
<td>FINE ARTS</td>
<td>Brown</td>
</tr>
<tr>
<td>FORESTRY</td>
<td>Russet</td>
</tr>
<tr>
<td>JOURNALISM</td>
<td>Crimson</td>
</tr>
<tr>
<td>LAW</td>
<td>Purple</td>
</tr>
<tr>
<td>LIBRARY SCIENCE</td>
<td>Lemon</td>
</tr>
<tr>
<td>MEDICINE</td>
<td>Green</td>
</tr>
<tr>
<td>MUSIC</td>
<td>Pink</td>
</tr>
<tr>
<td>NURSING</td>
<td>Apricot</td>
</tr>
<tr>
<td>OPTOMETRY</td>
<td>Sea Foam Green</td>
</tr>
<tr>
<td>ORATORY (SPEECH)</td>
<td>Silver Gray</td>
</tr>
<tr>
<td>PHARMACY</td>
<td>Olive Green</td>
</tr>
<tr>
<td>PHILOSOPHY</td>
<td>Dark Blue</td>
</tr>
<tr>
<td>PHYSICAL EDUCATION</td>
<td>Sage Green</td>
</tr>
<tr>
<td>PODIATRY-CHIROPODY</td>
<td>Nile Green</td>
</tr>
<tr>
<td>PUBLIC ADMINISTRATION, INCLUDING</td>
<td></td>
</tr>
<tr>
<td>FOREIGN SERVICE</td>
<td>Peacock Blue</td>
</tr>
<tr>
<td>PUBLIC HEALTH</td>
<td>Salmon Pink</td>
</tr>
<tr>
<td>SCIENCE</td>
<td>Golden Yellow</td>
</tr>
<tr>
<td>SOCIAL SCIENCE</td>
<td>Cream</td>
</tr>
<tr>
<td>SOCIAL WORK</td>
<td>Citron</td>
</tr>
<tr>
<td>THEOLOGY</td>
<td>Scarlet</td>
</tr>
<tr>
<td>VETERINARY SCIENCE</td>
<td>Gray</td>
</tr>
</tbody>
</table>

Old Gold and Royal Blue in Hood Denotes a Notre Dame Degree.

Gonfalons designed by Paul Wiether of Notre Dame Publications and Graphic Services, commissioned by Witra Church Goods, Chicago, and manufactured by Slabbinck of Brugge, Belgium.
Symbol of Office

THE UNIVERSITY MACE

The academic scepter, or mace, was one of the earliest distinctive signs of medieval university officials. The mace was originally a wooden staff carried by royal messengers. The early wooden staff on the university beadle, a subaltern official, evolved in the 14th century into an elaborate silver mace. It was carried by the beadle during processions and graduation ceremonies, and was displayed as a symbol to command order during classes. In the 15th century it became symbolic of academic dignity. An essential part of the mace was the staff or cylindrical rod (tibia), originally a tube of silver filled with wood or some other base materials. The staff, divided into several sections, was held together by a ring-shaped excrescence (nodus). The staff was crowned with a bell-shaped head (caput); at the base was a finial (membrum terminale).

The Notre Dame mace was designed and executed by Rev. Anthony Lauck, C.S.C., professor emeritus of art, art history and design. The bronze caput repeats the University seal found on the Presidential Medal, but brings the star outside the shield where its separate rendering emphasizes the patronage of the Virgin Mary. Its shaft is in walnut and the star and the finial, bear the University colors gold and blue.