

NORTHWESTERN UNIVERSITY  
ROBERT R. McCORMICK SCHOOL OF ENGINEERING AND APPLIED SCIENCE  
MINUTES OF THE FACULTY

June 6, 2005

1. Approval of Minutes

The meeting was called to order by Dean Julio M. Ottino at 1:30 p.m. The Minutes of the March 14, 2005, meeting were approved, as amended.

2. Announcements

Faculty appointments and honors in the several departments were announced by the department chairman or representative as follows:

Mechanical Engineering

Walter B. Herbst received the Business Week Gold Medal and the Industrial Design Excellence Award for the Embrace Heart Stabilizer, and the Business Week Silver Medal and the Industrial Design Excellence Award for the iRobot Roomba Discovery.

Computer Science

Donald Norman received The Franklin V. Taylor Award from the American Psychological Association for outstanding contributions to the field of Applied Experimental and Engineering Psychology.

Kenneth D. Forbus has been appointed as the Conference Chair of the National Conference on Artificial Intelligence for 2006 to help organize the celebration of the 50<sup>th</sup> anniversary of the founding of Artificial Intelligence.

Industrial Engineering and Management Sciences

Mark S. Daskin received the Fred C. Crane award for distinguished service from the Institute of Industrial Engineers (IIE).

Wallace J. Hopp received the Award for Technical Innovation from IIE. He has also been invited to give the keynote address at graduation at INSEAD, which is the most prestigious management school outside of the U.S.

Two of our Ph.D. graduates received Pritzker Dissertation Awards from IIE. Larry Snyder received the first place award; his advisor was Mark Daskin. Hong Wan received the third place award; her advisors were Barry Nelson and Bruce Ankenman.

Engineering Sciences and Applied Mathematics

Stephen H. Davis has joined the Editorial Board of the Cambridge Monographs in Applied and Computational Mathematics.

Moshe Matalon was elected to serve on the Science Advisory Board of the Israel-U.S. Bi-National Science Foundation.

Hermann Riecke has been awarded a Humboldt Research Award.

#### Electrical and Computer Engineering

Allen Taflove was selected by the NU Associated Student Government for the 2004-05 Faculty/Administrator Award.

Mary R. Phillips was selected by the ECE Awards Committee as ECE Best Teacher for 2004-05.

#### Materials Science and Engineering

Robert P. H. Chang has won the National Science Foundation Director's Award for Distinguished Teaching Scholars. The award recognizes and rewards individuals who have contributed significantly to the scholarship of their discipline and to the education of students in science, technology, engineering, or mathematics, and exemplify the ability to integrate their research and educational activities.

Mark C. Hersam has won the 2005 Office of Naval Research Young Investigator Award and the 2005 Army Research Office Young Investigator Award.

Gregory B. Olson has been chosen as the ASM International 2006 Edward DeMille Campbell Memorial Lecturer. The lecture will be given at the 2006 ASM annual meeting in Cincinnati. He is also the Chief Scientific Officer of QuesTek Innovations LLC which has been listed among Fortune's breakout companies of the year.

#### Civil and Environmental Engineering

Zdenek P. Bazant received the von Karman Medal from the ASCE in June 2005 "for extensive and substantive contributions to the understanding and solution of a multitude of problems of engineering mechanics involving structural stability, behavior of concrete, and uncertainty and scale effects in materials and structures." Among our faculty, John Dundurs received this medal in 1990 and Ted B. Belytschko in 1999..

Charles H. Dowding gave the George Sowers State of the Art Lecture at the Georgia Institute of Technology on May 17, 2005.

Richard Garza received the Clarence ver Steeg Staff Award which was named for the Northwestern University Professor Emeritus in History and Dean of The Graduate School from 1975 to 1986. The award recognizes one outstanding non-faculty staff person each year for exemplary service in support of graduate students.

Jorj Osterberg, Professor Emeritus, received the Martin Kapp Award for his inventions of the Osterberg Piston Sampler and O-cell for determining the bearing capacity of deep foundations in-situ.

Joseph L. Schofer was among several McCormick faculty who were selected for the 2004-05 Faculty/Staff Honor Roll.

### Chemical and Biological Engineering

Wesley R. Burghardt will begin his term as Chair of ChBE on September 1, 2005.

Bartosz A. Grzybowski and his research group received the “2004 cover of the year” award from Advanced Materials.

Vassily Hatzimanikatis has been selected to the Associated Student Government 2005 Faculty/Administrator Honor Roll.

Julio M. Ottino’s paper entitled “Mixing and Segregation of Granular Materials” has been cited 52 times since 2000 which places it among the top 1% within its field according to Essential Science indicators.

E. Terry Papoutsakis will received the Amgen Award in Biochemical Engineering at the Engineering Conferences International Biochemical Engineering XIV Meeting in British Columbia in July. He has also been elected as a Fellow of the American Society of Microbiology. Fellows are elected through a highly selective, annual, peer-reviewed process, based on their records of scientific achievement and original contributions that have advanced microbiology. Very few engineers have been elected as Fellows of the ASM.

John M. Torkelson’s ChBE Ph.D. student Chris Ellison received the 2005 Frank J. Padden Award for Excellence in Polymer Physics Research at the March 2005 American Physical Society Meeting. Chris was selected from among a group of more the 25 Ph.D. students nominated for the award, including nine finalists selected to present their work in the Padden Symposium held during the American Physical society national meeting.

### Biomedical Engineering

Robert A. Linsenmeier has been invited to give the opening plenary talk at the Third International University Programme on Ocular Ischemia in Arhus, Denmark, in September 2005.

Vadim Backman has been selected for the Faculty Honor Roll presented by the Northwestern University Associated Student Government (2005) and recently gave plenary talks at two separate international conferences: 1) Engineering Conferences International, Advances in Optics for Biotechnology, Medicine and Surgery; 2) Plenary talk at the Annual International Conference of the IEEE Engineering in Medicine and Biology Society.

Vadim Backman and Guillermo A. Ameer were each awarded a Wallace H. Coulter Foundation Early Career Award for Translational Research.

Phillip B. Messersmith was elected to the International Advisory Board of the 7<sup>th</sup> International Conference on Materials in Clinical Applications, Acireale, Italy, June 2006, and was the plenary speaker at Wound Healing Society Annual Meeting, Chicago, IL, May 20, 2005.

### 3. Approval of Degree Candidates

Stephen H. Carr, Associate Dean, moved that the students on the list provided with the Call be approved for the several degrees, including both undergraduate and graduate, subject to the completion of course work in progress. The motion was seconded and passed.

### 4. Report of the Curriculum Committee

Dean Carr reviewed the Spring Quarter Final Report of the Curriculum Committee (a copy of which accompanies these Minutes): He moved its approval, and the motion passed.

He reviewed the ABET time line which includes the visit October 16-18 and final decision in June 2006, summarized the class of 2009 as about 400 with an average SAT of 1430, and added that we offer an unparalleled education and are getting better at public relations.

### 5. Report on Graduate Studies and Research

Joseph T. Walsh, Associate Dean, reported that recruiting went well; all Murphy's have been used, but not all Cabell's. The Graduate School worked with us in recruiting, but it was an uneven process, including an 8% error rate. He said that F and A charges would be revenue neutral; in future years, the allocation will be increased, depending on research volume. Overhead is about 10% of our budget; centers are different.

## 6. Committee Reports

There were no committee reports.

## 7. New Business

Presentations were made by the Materials Science and Engineering Department and the Chemical and Biological Engineering Department.

## 8. Report from the Dean

The Dean began with a few words about the general problem of the budget. We aren't going to be floating in money, and we will have a more organized way to think about our budget. Even if the Provost gives us everything, we won't have the resources to be great. So, we need an idea so great as to bring in millions or we have to go out and do fund raising.. Two things need to happen: our entire board thinks it is a good idea; the President and Provost need to authorize.

In addition to knowing one another, we need to know about the rest of the University. And we have a group working on understanding the U.S. News and World Report ratings. We have lots of opportunities. Feinberg has space and money; we should be pounding on their door. Kellogg: We need to do things where we are coequal. Medill: Interested in journalism and science. I like our chances.

## 9. Adjournment

The meeting was adjourned at 3:00 p.m. upon a motion duly made, seconded and passed.

Respectfully submitted,

Charles W. N. Thompson, Secretary