

## CITADEL SCHOOL OF ENGINEERING MISSION STATEMENT

*To provide nationally recognized, student-centered programs of study in civil and electrical engineering that prepare its graduates to assume principled leadership roles in their profession and their community*

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## DEAN'S MESSAGE

As I have been visiting alumni chapters, I have often been asked: what is my vision for The Citadel School of Engineering? My vision is simple: **To Make a Good School of Engineering Great!** To achieve this goal, we must have five components in place.



The first of these components is that the School of Engineering *must remain student-centered*. Serving students has been, historically, The Citadel's fundamental foundation, and we must never drift away from this mission. Student learning and student achievement must always come first. There can be no compromise on this one point.

The second component is that we *must become assessment-driven*. To paraphrase the Serenity Prayer: we must change that which is not working; we must leave alone those things that are working; and — the tough part — we must be able to *distinguish between the two*. This, in itself, is a significant task, where assessment plays a critical and dominant role. Improvement will never come from leaving the program in the *status quo*.

The third component is that the faculty members of the School of Engineering must not only remain technically competent; they *must also become competent in*

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## Homecoming 2004 Save the Date

Last year's homecoming festivities were by all measures a great success. By popular demand, we will be repeating at least the barbecue behind Grimsley Hall. Please mark 6 November in your calendar to attend a repeat of last year. We will be sending out detail information around 1 September as well as publishing this information on The Citadel School of Engineering Website.



By the way if you did not get a copy of the CD Sites and Sounds of Homecoming 2003, just drop me an email message at [dennis.fallon@citadel.edu](mailto:dennis.fallon@citadel.edu) or call 843-953-5083 to request copy.

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## Engineering Website On-Line

The Citadel School of Engineering (CSOE) website became active on May 1. You can reach the site by going through the Citadel home page, <http://www.citadel.edu>, and clicking on Academics or by going directly to <http://engineering.citadel.edu>. The website has several special features to inform alumni of CSOE activities and services. On the home page, one will find a series of brief news items from the School. The Alumni page features additional items that may be of interest to the alumni. Finally, a page that is now under construction will soon serve as a link between the alumni and possible employment opportunities. In addition, on the page for prospective students, there is a form that one can fill out to request that information be sent to students who may be considering studying engineering at The Citadel.



## Faculty Members in the School of Engineering Receive Honors

**Dr. Thomas A. Jerse of the Electrical and Computer Engineering Department** was elected to be a Distinguished Lecturer for the Electromagnetic Compatibility (EMC) Society of IEEE. This is a two-year appointment through which he provides lectures to various chapters of the Society throughout North America. Last March, Dr. Jerse traveled to give lectures on “The Implications of Symmetry on Common-Mode Emissions,” his particular area of research, in Ottawa and Montreal, Canada



**Dr. William J. Davis of the Civil and Environmental Engineering Department** was one of six Citadel faculty recipients of the Krause Faculty Achievement Award at The Citadel. Dr. Davis received this award for his outstanding contribution to teaching, scholarly activity, and service to the College. Noted in his nomination was his leadership in establishing successful Engineering Week Activities, advising the Civil Engineering ASCE Student Chapter, and being the Editor of the Department’s Outstanding Alumni Newsletter.

**Dr. Timothy W. Mays of the Civil and Environmental Engineering Department** was selected as this year’s recipient of the American Society of Civil Engineers (ASCE) Zone II 2004 ExcEEd (Excellence in Engineering Education) New Faculty Excellence in Teaching Award. This award will be presented to him at the 2004 National ASCE Meeting. This award is a testament to Dr. Mays’ outstanding contributions to his students, The Citadel, and his profession as an engineering educator.

## Tau Beta Pi South Carolina Gamma

On April 18, 2004 Tau Beta Pi SC Gamma initiated sixteen new members. To qualify for membership, a senior must be in the top fifth of his or her class, and a junior must be in the top eighth of his of her class. Congratulations to all the inductees, listed below. Trevor Krawcyk, an Electrical Engineering Major in the College of Graduate and Professional Studies, received the Tau Beta Pi medal for the highest Grade Point Average.



Bruce Bailey	JR	EE	Lucas Parobek	JR	EE
Raymond Foltz	JR	CE	Martin Roschmann	JR	EE
Thomas Olney	JR	EE	Brian Woodall	JR	CE
Kimball Anderson	SR	EE	Jason Hall	SR	EE
Jonathan Black	SR	CE	Trevor Krawcyk	SR	EE
Nikola Bokulic	SR	EE	Jeffrey Thomas	SR	EE
Edgar Damp	SR	EE	Richard Vien	SR	EE
Jared Fralix	SR	CE	William Zirkle	SR	EE

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## Electrical and Computer Engineering Department Design Symposium

On 19 April 2004, the Electrical and Computer Engineering Department conducted its annual Citadel Electrical Engineering Design Symposium. The following is a list of the senior design projects. Congratulations to all the seniors for a job well done.

**Electromotion AGV** by Nikola Bokulic, Matthew Durling, Jason Pittman, and Ivan Puhalo

**Magnetic Levitation** by Jeremy Jacobs, Guillermo Levia, Phil Lien, and William Zirkle

**Voice Activated Robot** by Tim Lawson, Kyle Bozarth, Michael Taylor, Justin Katko

**Remote Sensor Project- A Wireless Temperature Monitoring Solution**

by Glenn Baucom, Christopher Barker, and Kimball Anderson

**The Thinking Bishop (TTB) Design Project** by James Ackerman, Elsa Al-Tenaiji, Erhun Iyasere, and Todd Trago

**Remote Data Acquisition and Control Unit (ReDAC)** by Ed Damp, Trevor Krawcyk, Jeff Thomas, and Rick Vien

**The Happy Shower** by Ronald Piramide, Joseph Tokar, Jason Crosby, and Derek Hall

**Off The Deep End (OTDE):**

**The Pool Management**

**Solution** by Mark Merklein, Sandra Wright, and Paul Foster

**The Yellow Submarine** by Peter

Barrett, Dave Coisson, Joe Mosser, Phillip Spence, and John Thomas



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## Dean's Message

*Continued from page 1*

*pedagogy*. Pedagogy is the art and science of teaching and learning. Transforming themselves from excellent engineers into effective teachers of engineering represents a significant commitment on the part of the faculty at the School of Engineering since engineering faculty rarely receive any training in teaching during their graduate work.

The fourth task that we must accomplish is that we *must begin to develop communities* with the various School of Engineering constituents. These communities consist not only of our current students but also our alumni, prospective employers, and the local, regional, and national professional organizations. From these areas much of our support will come to help us reach our goals.

The final, but by no means the least urgent, component is that we *must seek financial support from our alumni* in achieving these goals. I recall as an Assistant Professor, almost 20 years ago, reading a magazine article about a large donation to a school of engineering in Texas. The reporter in the article asked the Dean, “Does money make a

great school?” The Dean’s response was that “money would never make a great school, but you cannot have one without it.” This is even truer today as we seek to keep up with technology and all the advances in engineering education in an environment of ever decreasing State financial support.

If you would like to help us achieve our goal, please let me know. Before concluding, I would like to thank all of you who have done so much

to date to help the School of Engineering. I assure you that **you are making a significant difference** of which we all can be proud.

If you are ever in the area, I would appreciate your dropping by so that I can show you what we are trying to accomplish at the School of Engineering.

Dennis



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## Message from The Citadel Foundation

Peter L. de Keratry, CFRE

**T**he new Citadel School of Engineering was founded on the success of the formerly independent departments of Civil and Environmental Engineering and Electrical and Computer Engineering. These two programs have been producing top-quality engineers for the Southeast, the nation and, in fact, countries around the globe for decades. By pooling the resources and faculty expertise of two departments under the direction of a single dean, the new School of Engineering allows The Citadel to build on the past success of these programs, enhance the quality of the educational experience, and increase the number of engineers graduating.



One of the greatest opportunities for improving the quality of the engineering programs at The Citadel is the introduction of the school-based fund development program. The Citadel Foundation has assigned me to work with Dean Dennis Fallon to raise funds for a variety of needs and priorities in the School of Engineering.

In just a few short months, more than \$2 million in gifts and pledges has been committed to the School. Examples of generous donors include Walt and Francis Kunze '49, who funded a gift annuity to benefit the Engineering Excellence Fund; the anonymous Citadel graduate who recently agreed to give \$250,000 over the next two years to upgrade the civil engineering lab equipment; and the gift of \$25,000 given in December to the Dean's discretionary fund. The Dean's Fund gives Colonel Fallon the maximum flexibility to address vital priorities and enhance the new School.

There are many opportunities for alumni, corporations, and friends to positively impact the quality of The Citadel Engineering education. If you, or a company you know, are interested in finding out how your gifts can benefit Engineering at The Citadel, please give me a call. I will be pleased to work with you to structure a gift that meets your individual needs and interests. Peter L. de Keratry, CFRE – 843-953-7550 or [peter.dekeratry@citadel.edu](mailto:peter.dekeratry@citadel.edu).

*Editor's note: Mr. Peter de Keratry is The Citadel Foundation liaison to and director of development for The Citadel School of Engineering.*

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## Civil Engineering Students Participate in 2004 Carolina Conference

A forty-student delegation from The Citadel CEE Department traveled to Clemson, SC to participate in the 2004 Carolinas Conference. Over 150 students attended from nine

participating schools. Citadel students participated in all nine of the competitions and placed an impressive third in the overall conference standings. Team accomplishments during the three-day competition included:



- **First place in the Quiz Bowl Competition.** A new competition for this year, the Quiz Bowl was a Jeopardy-style competition with Civil Engineering related topics.
- **First place in the Freshmore Challenge Competition.** The Freshmore Challenge was a competition which involved the design of a device capable of independently knocking over five toilet paper rolls placed behind five bricks without knocking over the bricks.
- **First place in the Technical Paper Competition.** Gentry Rust presented a paper on politics and engineering. He focused on Herbert Hoover and other great political engineers to show that appropriate discretion is required to maintain ethical values.
- **Third place overall in the Concrete Frisbee Competition, including a 1<sup>st</sup> place finish for accuracy.** The event involved the construction of a concrete frisbee to meet a number of criteria: its strength-to-weight ratio, aesthetics, distance flown, and accuracy.



- **Third place in the Geotechnical Design Competition, which involved the construction of a dam from materials “purchased” at the competition.** The goal of the competition was to construct a dam that allowed the least amount of total water flow, showed the least amount of deflection under an applied load, and was the most economical to construct.
- **Fifth place in the Environmental Design Competition.** This competition involved the cleaning of

air polluted by smoke from burning oil. Each team had to select materials from those provided that they thought would best clean the air while maintaining the highest level of flow possible.

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## Giving to the School of Engineering

Donors often ask how they might designate a gift to the School or to a specific department. It is the College's policy that any solicitation be conducted only by an authorized Citadel fund-raising organization. The Citadel is fortunate to have two fund-raising entities—The Citadel Foundation and the Brigadier Foundation. Of these, gifts restricted to the School of Engineering or to one of the engineering departments should be made through The Citadel Foundation.

Donors who wish to make their gift through the Foundation may use the form mailed during the annual fund drive and, in the appropriate blank, specify for the School of Engineering or to one of the departments and any purpose you prefer. To obtain a copy of the form, you may contact the Foundation at (843) 953-5297, write to them at 171 Moultrie Avenue, Charleston, SC 29409, or make your gift on line at <http://www.citadel.edu/tcf>. You may also send your contribution without the form; simply make note on the check or in an accompanying letter as to the purpose. Please make the check payable to The

Citadel Foundation. Peter de Keratry and his staff are ready to answer any questions you may have.

You are welcome to choose an area in which to restrict your gift. It may be that you wish to make a contribution to the School for an undesignated or general purpose, leaving it to the discretion of the Dean of the School of Engineering. Funding is always needed for student chapter activities, laboratory equipment, and computer technology. You may also choose to donate to a scholarship fund or one of the several endowments in either engineering department. Whatever you choose, your gift is welcomed and greatly appreciated.

*School of Engineering Alumni Newsletter is a periodic publication of the School of Engineering at The Citadel, 171 Moultrie Street Charleston, SC 29409.*

*Any comments, letters, alumni stories or suggestions are encouraged and should be sent to Dennis Fallon at [dennis.fallon@citadel.edu](mailto:dennis.fallon@citadel.edu)*

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