



# Engineering News

November/December/January, 2010-11

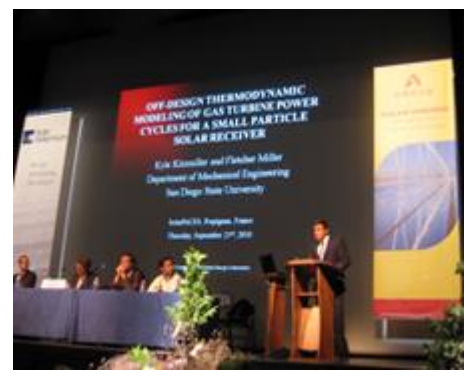
### In this edition

- ◆ *Dr. Fletcher Miller Represents SDSU at SolarPACES 2010 Conference*
- ◆ *Donovan Geiger Awarded Presidential Staff Excellence Award*
- ◆ *Cubic Corporation Makes \$100,000 Gift to the College*
- ◆ *Dr. Luciano Demasi Earns Best Paper Award*
- ◆ *Dr. Joe Katz Publishes Text on Introductory Fluid Mechanics*
- ◆ *Stig Johansson Received AIAA Award*
- ◆ *Associate Dean German Travels the Globe*
- ◆ *Tracking the Dean - Highlights of the Dean's Calendar*
- ◆ *Research Corner - Projects Submitted & Awards Granted*

### Reminders

**Wed. Feb. 9 at 10 am** is the next ALL-Staff Meeting in the Dean's Conference Room.  
**Thurs. Feb. 10 at 11 am** is the next ALL-faculty Meeting, location is still TBD.

## Dr. Fletcher Miller Represents SDSU at SolarPACES 2010 Conference



Mechanical Engineering's Dr. Fletcher Miller and graduate student Kyle Kitzmiller were invited to travel to Perpignan, France in September to the SolarPACES 2010 conference, to present their research on the thermodynamics of solar-coupled gas turbines. They are working on powering a jet engine using the heat of the sun.

SDSU was well-represented at the conference. Steve Ruther, a Mechanical Engineering graduate and current JDP student, also submitted a paper that was accepted at the conference. He was unable to attend, but his work was presented in poster form. Dr. Miller was co-author on an additional paper. Although there were many U.S. companies present, SDSU and Cornell University were the only two U.S. schools to attend the conference. [Read More](#)

## Donovan Geiger Receives Presidential Staff Excellence Award



Donovan Geiger, Coordinator in the Engineering Student Affairs Office, was awarded the prestigious Presidential Staff Excellence Award, in the category of Service to the Community, by President Weber at the Staff Awards ceremony in October. This is the second year for the Presidential Staff Excellence Awards, which are designed to recognize exceptional contributions by university staff.

Donovan's deep commitment to community service and volunteerism were recognized by this award. He is presently the elected Vice President of the Tierrasanta Community Council, representing over 35,000 residents to local, state, and federal officials. He is also the Vice Chair of the non-profit Tierrasanta Planning Group which evaluates commercial development, infrastructure improvements, and code-compliance issues in the community. [Read More](#)

## Cubic Corporation Makes \$100,000 Gift to the College



The College of Engineering is pleased to announce a gift of \$100,000 from the Cubic Corporation to the Communication Systems and Signal Processing Institute, directed by Dr. Madhu Gupta, Professor of Electrical and Computer Engineering and RF Communications Systems Industry Chair. Cubic has been a primary and critical supporter of the Institute since 1996. "We are pleased by Cubic's continued support of the Communications Systems and Signal Processing Institute's activities. This gift will continue to fund graduate student and faculty research in areas important to the local technical community as well as the overall national economy and security," said Dr. Gupta. [Read More](#)

## Dr. Luciano Demasi Earns Best Paper Award

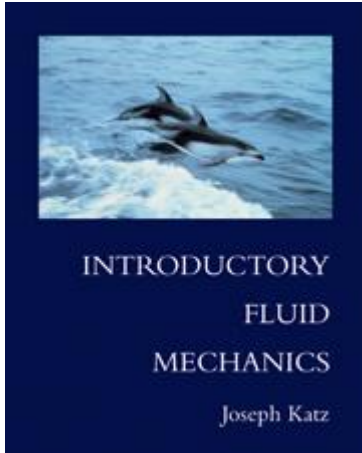


Congratulations to Aerospace Engineering's Dr. Luciano Demasi who recently was awarded **Best Paper Published in 2008** by the International Editorial Board of the *Journal of Composite Structures*. The award is given annually to the paper judged by the journal's editorial board to have made the most significant contribution to composite structures in a particular year.

Dr. Demasi's paper, " $\infty^3$  Hierarchy plate theories for thick and thin composite plates: The generalized unified formulation" was published in July 2008 in the *Journal of Composite*

Structures and focuses on a general model that unifies the available theories for composite structures. [Read More](#)

## Dr. Joe Katz Publishes Text on Introductory Fluid Mechanics



Dr. Joe Katz Professor of Aerospace Engineering has authored a textbook entitled *Introductory Fluid Mechanics*, that was published in August 2010 by the Cambridge University Press.

The textbook familiarizes students with the basic elements of fluid mechanics so they will know the terminology of the discipline and the expected results. The text also serves as a long-term reference for students who go on to study the subject in greater depth.

The textbook is different than others on fluid mechanics because it is shorter and has been simplified so it's more logical and easier for students to understand. Dr. Katz originally started teaching Introductory Fluid Mechanics about five years ago because he knew it was course students often struggled with. "I tried to make it easier to learn and also to teach," said Dr. Katz. [Read More](#)

## Stig Johansson Received AIAA Award



Stig Johansson, retired Aerospace Engineering technician, has received the **Outstanding Contribution to Aerospace Education Award** from the San Diego section of AIAA.

The award is given annually to any individual or company that makes a significant contribution to the advancement of aerospace education. SDSU faculty members have received this award in the past, but Mr. Johansson is the first technician to receive it.

Johansson attended the AIAA awards banquet in May. There he met with some past students who are now on of the AIAA nomination committee. During his time at SDSU, Johansson worked with students on their senior projects as they researched and built aerodynamic models and tested them in the lab's wind tunnels. [Read More](#)

## Associate Dean German Travels the Globe



Dr. Rand German, Associate Dean, says he's "travelled out." That's because in 2010 he travelled extensively, in some months averaging a trip a week! He receives invitations from all corners of the world to speak and to consult – often many more than he could possibly accommodate. In the Spring 2010 semester he represented SDSU in Egypt on an NSF grant to collaborate on a project in Cairo, was awarded Honorary Membership in the Korean Powder Metallurgy Institute in Korea, and had a Chinese company pay for him to travel to and give a seminar in China. During the Fall semester he travelled to Florence, Italy to give a talk at an International Congress, to South Africa to lecture on sintering and witness sintering of diamond, and to the Galapagos Islands in Ecuador for a personal vacation. [Read More](#)

## Tracking the Dean - Highlights of the Dean's Calendar

Date	Event
1/24	Dean Hayhurst will meet with Irwin Zhan and Dean's Advisory Board Members
1/24	Dean Hayhurst will have lunch with CSU Trustee Carol Chandler
1/25	Dean Hayhurst will attend a meeting on developing SDSU's Congressional Strategy
1/26	Dean Hayhurst will meet with Barbara Abelin, Vice President of Human Relation at Cubic Corporation
1/26	Dean Hayhurst will participate in the CONNECT Board meeting
1/27	Dean Hayhurst will have breakfast with President Weber and Bob Slapin, Executive Director of San Diego Software Council
2/2	Dean Hayhurst will have lunch with CSU Trustee Debra Farar
2/4	Dean Hayhurst attend the CSU Engineering Dean's Meeting at Cal State San Jose
2/11	Dean Hayhurst will address the departing Korean Students
2/22	Dean Hayhurst will have lunch with CSU Trustee Lou Monville

## Research Corner - Projects Submitted & Awards Granted

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Research Corner - Projects Submitted & Awards Granted in October				
Name	Department	Title of Project	EA	Status
Dr. Thais Alves	CCEE	Promoting and Sustaining Learning in Architecture, Engineering and Construction (AEC) Projects	NSF	Submitted
Dr. Julio Valdes	CCEE	Collaborative Research: Integrated Experimental-Numerical Characterization of Granular Mixtures	NSF	Submitted
Dr. Mauro Pienosci	AE/EM	University of Pisa Italy Students at San Diego State University	University of Pisa Italy	Awarded
Dr. David Hayhurst, Ms. Theresa Garcia	DNS	STEP Partnership of San Diego	NSF Directorate for Education and Human Resources	Awarded
Dr. David Hayhurst, Ms. Theresa Garcia	DNS	MEP Scholarship	Northrop Grumman Corporation	Submitted
Dr. Asfaw Beyene	ME	Pacific Region CHP Application	University of California at Berkeley	Submitted
Dr. Lal Tummla, Dr. Sridhar Seshagiri	ECE	A Nationwide Consortium of Universities to Revitalize Electric Power Engineering Education by State-of-the-Art Laboratories	University of Minnesota	Submitted
Research Corner - Projects Submitted & Awards Granted in November				
Dr. Kenneth Walsh	CCEE	NEESR-CR: Full-scale Structural and Nonstructural Building Systems Performance During Earthquakes	UCSD	Awarded
Dr. David Hayhurst, Ms. Theresa Garcia	DNS	Student Organization Sponsorship: SWE, SHPE, NBSE, ASME, IEEE, AIAA, ACM & MEP	Northrop Grumman Corporation	Submitted
Dr. Asfaw Beyene	ME	Pacific Region Clean Energy Application Center	UC Berkeley	Awarded
Dr. Yusuf Ozturk	ECE	Modeling and Simulation of Tourist Visitation and Routing Plans	Kiran Analytics Inc.	Awarded
Dr. Luciano Demasi	AE/EM	Theory-invariant Multi-Fidelity Generalized Formulation for Advanced Analyses of Structures of Future Generation Subsonic Vehicles	NASA Dryden Flight Research Center	Submitted
Dr. Luciano Demasi, Dr. Antonio Palacios	AE/EM	Accurate Nonlinear Aeroelastic Predictions for Future Generation Subsonic Vehicles	Satchi Venkataraman/NASA	Submitted
Research Corner - Projects Submitted & Awards Granted in December				
Dr. Robert Dowell	CCEE	Simulation and Testing to Support Seismic Design of Anchorage	UCSD	Submitted
Dr. Fletcher Miller	ME	Sandia Solar Thermal Storage Budget	DOE Sandia National Laboratories	Awarded
Dr. Kee Moon	ME	Program for Visiting Students from Kyung Hee University: 2011 Winter School at San Diego State University	Kyung Hee University	Awarded
Dr. Eugene Olevsky	ME	Fabrication of Advanced Armor and Anti-armor Components by Spark-plasma Sintering	DOD AAR, Development and Engineering Ctr	Awarded
Dr. Sunil Kumar	ECE	Multimedia-based Integration of Cross-layer Techniques	DOD AFRL	Awarded
Dr. Gustaaf Jacobs	AE/EM	Collaborative proposal: Higher-Order Two Fluid Methods for Simulations of Particle-Laden Flow	NSF	Submitted
Dr. Mahasweta Sarkar	ECE	Nets Small: Towards a Dynamic, Self-Reconfiguring, Green Cellular Network	NSF	Submitted
Dr. David Hayhurst	DNS	MESA MSP Programs / Imperial Valley Site	University of California Office of the President	Awarded
Dr. Gordon Lee, Dr. Eric Frost, Mr. Barry Janov	ECE	Theoretical Analysis, Explanatory Studies and Technical Services	DOD SNWSC	Awarded
Dr. David Hayhurst, Ms. Donna Goyer	DNS	MESA Engineering Program	UCSD	Submitted
Dr. Satish Sharma	ECE	Wide Bandwidth, High Performance Cost Effective Antenna Elements	NextGen Aeronautics	Submitted

DOD AFRL= DOD Air Force Research Laboratory  
 NSF= National Science Foundation  
 DOD SNWSC= DOD Space and Navel Warfare Systems Command  
 DOD AAR = DOD Army Armament Research

[Click Here For Sizable Chart](#)

**Thanks to Kaitlin Andrews, Dean's Office Student Assistant and Public Relation major, and to Tyler Salata, Dean's Office Student Assistant and Management Information Systems major for their interviewing, writing and publication contributions to this newsletter.**

Please contact Cindi McClain at [cmclain@mail.sdsu.edu](mailto:cmclain@mail.sdsu.edu) or 4-6062 if you have a story or story idea to suggest for future editions.

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