

THE INfluence Line

The Department of Civil, Architectural and Environmental Engineering

No. 13

2009

1958-2008: Sidney Guralnick's Fifty Years at IIT

Since his arrival to IIT's campus in 1958, Dr. Sidney A. Guralnick has witnessed many changes in the campus and the surrounding community. He has seen the addition of campus buildings such as the Galvin Library f/k/a Crerar Library and Herman Union Building Hall in 1962, and the McCormick Tribune Campus Center in 2003. He has witnessed many generations of change in students, faculty, staff and university presidents.

Although Dr. Guralnick is best known for his role as professor of structural engineering, he has also served IIT in the roles of Chair of Faculty Senate, Dean of Graduate School and Coordinator of Research, Executive Vice President, IIT's first Provost, and a member of the Board of Trustees. He was appointed Perlstein Distinguished Professor of Engineering in 1982 and subsequently, Perlstein Distinguished Professor of Engineering-Emeritus after his retirement.

Dr. Guralnick is often sought out by

Flashback from 1958 – The Beginning

4 PROFESSORS ARE ADDED TO IIT FACULTY

Pay-Per-View - Chicago Tribune - ProQuest Archiver - Aug 31, 1958

... John W. Emerson, assistant professor, institute of design, Dr. Sidney Guralnick, assistant professor, civil engineering, and Dr. Isadore Hauser, ...

the media for his expertise on structural disasters such as the porch collapses in 2001, falling debris at Wrigley Field in 2004, and the Minneapolis Bridge Collapse in 2006.

In the Fall 2004 *IIT Magazine*, they wrote "When rock stars reach immortality, their fellow musicians honor them with tribute albums. When structural engineers reach immortality, their colleagues present them with a volume of research papers celebrating the breadth of their research." On Dr. Guralnick's 70th birthday, he was honored by his colleagues and former students with a publication, *Engineering Science of Structures*, that contained papers written on topics related to his research to celebrate the accomplishments he made in structural engineering.

His honors include:

- ASCE Collingwood Prize for Research, 1961
- Fellow of the American Concrete Institute, 1965
- Fellow of the American Society of Civil Engineers, 1983
- Trustee of the Structural Engineers Association of Illinois, 1987-1993
- President of the Structural Engineers Association of Illinois, 1990
- Structural Engineers Association of Illinois John Parmer Award, 1993
- ASCE Civil Engineer of the Year Award, 1997
- ASCE Lifetime Achievement Award, 1997



Introducing Dr. Mehdi Modares

Hello, I would like to take this opportunity to introduce myself to all of you. I am Mehdi Modares, a new faculty member in Structural Engineering. I came from Tuft University in Boston, Massachusetts where I served as a faculty member.

I received my Ph.D. in Structural Engineering from Case Western Reserve University where I also did my postdoctoral fellowship.

My research expertise includes reliability of infrastructures, struc-

tural dynamics, structural health monitoring, computational mechanics, and interval methods for treating uncertainty in finite element models.

I joined IIT in fall 2008 where I have taught courses in structural analysis, solid mechanics, and introductory and advanced finite element methods. I am also involved in a multidisciplinary research in safety and reliability of infrastructures.

During my time at IIT, I have enjoyed working with students, staff, and other faculty members. I am looking forward to hearing from you with any specific or general questions.

Sincerely,

Mehdi Modares
mmodares@iit.edu
312-567-5714



CAEE International Relations



Drs. Mohammadi and Moschandreas (3rd and 4th from left) with Mexican Professors from UNAL in November 2008

Drs. Mohammadi and Moschandreas along with Rafael Alvarado from the office of VP for international affairs visited two major technical universities in Monterrey, Mexico in November 2008. CAEE has already been cooperating in exchanging students with Monterrey Tech (Instituto Tecnológico y de Estudios Superiores de Monterrey) and the Autonomous University of Nuevo León (Universidad Autónoma de Nuevo León, UANL) in structural engineering. This visit was to further strengthen the ties between IIT and these sister institutions in

Mexico in research and education in areas related to construction engineering and management and in environmental engineering (see related photo).

Drs. Mohammadi and Guralnick and graduate student Ali Moshiri conducted a fatigue investigation study on a bridge in Cajamarca, Colombia. This work is part of a cooperative research in fatigue, bridge and structural engineering with Pontificia Universidad Javeriana in Bogotá, Columbia. CAEE Department has started cooperation with Javeriana; and the first

student from Javeriana started her graduate education at IIT in Fall 2008.

CAEE students have also entered into an agreement with Politecnico di Milano in Italy for research cooperation in architectural and structural engineering. The first graduate student from that school, Edoarda Corradi Dell Acqua, started her graduate studies in architectural engineering in Fall 2008. The faculty involved includes Professor Claudio Chesi from Politecnico di Milano and Professors Ralph Muehleisen and Jamshid Mohammadi from IIT.

CAEE Faculty Spotlight

Dr. David Arditi served as Visiting Professor in the summer of 2008 at Istanbul Technical University in Turkey. He published a total of eight research papers with his students in refereed journals and proceedings in 2008. He delivered the keynote lecture at the Eighth International Conference on Advances in Civil Engineering that took place in Famagusta, Northern Cyprus on September 15-17. He was an invited delegate at the International Workshop of Performance-Based Infrastructure Asset Management that took place

in Istanbul, Turkey on July 7-9. He served as a member of the Scientific Committee for the Fifth International Conference on Innovation in Architecture, Engineering and Construction that took place in Antalya, Turkey on June 23-25. He continues to serve on the Editorial Board of seven journals. He is also serving on the Construction Management Committee of ASCE and on the Board of Directors of the Chicago Chapter of CMAA.

Dr. Sidney A. Guralnick and Dr. Lukito Gunawan collaborated on a paper

that was published by the ASCE Practice periodical on Structural Design and Construction in February, 2009.

Dr. Demetrios Moschandreas published seven peer reviewed papers (two in press) including one in the *Encyclopedia of Exposure Sciences* entitled: Assessment of Population-Level Exposure Models. Dr. Moschandreas began his three year term as one of two trustees of the International Society of Indoor Air Quality & Climate.

Alumni Spotlight

Richard Bergstrom (CE '42, M.S. '52) 1921-2008 was posthumously awarded the Lifetime Achievement Award by IIT's Alumni Association.

Mr. Bergstrom's career accomplishments included Commander of Seabee Company in the US Navy Civil Engineering Corps and Engineer and Partner at Sargent & Lundy. He was Licensed as a structural engineer in 17 states and authored numerous technical papers. He helped design the boiling water

reactor at Argon Laboratory, the first boiling water reactor in the world to produce power for commercial operating electrical systems.

Bergstrom's Honors and Affiliations: Purple Heart Medal; American Society of Construction Engineers, council member; American Nuclear Society; American Institute of Steel Engineers; Western Society of Engineers.

ASCE Student Organization Activities

ASCE Great Lakes Regional Conference Competition 2009



Bridge Team (above)
Mike Krueger (Captain), Mike Hartwig (Co-Captain), Alex Ong, Sasha Bajzek, Krzysztof Slomiany, Sarah Guan, Yao Xiao, Ying Xiao, Chris Ragsdale, Stan Johnson (Alumni Shop Technician), Mark Hartwig (Mechanic)

11 Teams and over 200 engineering students participated from around the Mid-West in the 2009 ASCE steel bridge competition hosted by Notre Dame University. IIT's chapter competed April 3-4th with great success.

The students of IPRO 326 (F08) were charged with the task of designing the bridge for the competition and produce the fabrication drawings for the ASCE to use for production in the spring. Over only a six week period the team, which comprised of over 10 members including Civil and Architectural engineering undergraduates, fabricated over sixty pieces for a bridge that weighed in at

240 lbs and spanned approximately 19 feet long. The competition was comprised of 5 different categories including speed of assembly, lightness, deflection in the vertical and horizontal directions with a vertical load of 2500 lbs, efficiency, economy and display.

IIT's exceeded expectations in every category by placing 3rd in the speed of assembly, 2nd in lightness, 2nd in efficiency, and 2nd in vertical displacement with only .5 inch deflection after 2500 lbs of load.

The team qualified for the national competition, placing third overall by a narrow margin with the 2nd

place finisher being the University of Illinois in Urbana-Champaign and the first place team, the University of Wisconsin - Madison. The national competition will be held on May 22nd -23rd at the University of Las Vegas, Nevada and the team hopes to gain some ground on its competitors by reducing its assembly speed time and by learning and documenting as much as they can for the next years' competition.

The team would like to thank ASCE and the CAEE department for their support through this exciting project.

ASCE-IIT Spring Banquet 2009



The IIT Student Chapter of ASCE held its annual banquet on April 17, 2009 at Reza's Restaurant. More than sixty attendees packed the banquet hall to a comfortable closeness, and

mingled amiably for the cocktail hour. The venue offered a delicious assortment of appetizers and entrees, served family style.

After dinner, the Concrete Canoe Team and Steel Bridge Team each gave brief presentations on their respective competitions at Notre Dame, and were presented with a Golden Certificate of Recognition.



Each year, the student organization also uses the banquet as a chance to recognize individual CAEE faculty members for their outstanding contributions.

Overall, the event was very successful and a good time was had by all.

Student Spotlight

Sasha Bajzek - ASCE-IL Section Structural Group Scholarship
Adam Nizich - Illinois Ready-Mix Concrete Association Scholarship
Mary Sisay - IDOT Civil Engineering Scholarship
Kathryn Weissman - IDOT Civil Engineering Scholarship
Kathryn Weissman - Central States WEA Academic Excellence Award
Kathryn Weissman - IIT Leadership Academy Scholarship

Kathryn Weissman - ASCE-IL Section Urban Planning & Development Group Scholarship

Clinton E. Stryker Distinguished Service Award Winners:
Kaitlyn Conley, Angela Ng, Kathryn Weissman, Erika Wenzler

IIT Outstanding First Year Student: Angela Ng

SUMMER 2009

MASTER OF SCIENCE

Civil Engineering
 Ms. Wenyu Cai
Environmental Engineering
 Ms. Marina Arnaldos Orts

MASTER OF ENGINEERING

Transportation Engineering
 Ms. Libertad Machordom

DOCTOR OF PHILOSOPHY

Environmental Engineering
 Ms. Perin Cengiz

SPRING 2009

BACHELOR OF SCIENCE

Architectural Engineering
 Mr. Fabian S. Aguilar
 Mr. Curtis W Aubry
 Mr. Graham Balkany
 Mr. Shawn R Block
 Mr. Kyle M Cantone
 Ms. Anna K. Dlugosz
 Mr. Carl R Hart
 Mr. Rostislav T. Kucher
 Mr. Anton Llakmani
 Mr. Brandon K. Macklin
 Mr. Luke Andrew McGuire
 Ms. Kaye L Palomo
 Mr. Saagar Mahendra Patel
 Mr. Ronald Ramey
 Mr. Anthony R Saracino
 Mr. Daniel Sochor
 Ms. Jaimi A Stroot
 Mr. Jeremy Isaac Williams

Civil Engineering

Ms. Corina O. Abrudan
 Mr. Christopher K Adams.
 Mr. Fabian S. Aguilar
 Ms. Carmen X. Aguilar-Wedge
 Mr. Kwong H. Cheung
 Ms. Kaitlyn Marie Conley
 Mr. Brian T. Crowley
 Ms. Nicole M Dennis
 Mr. Carl A Ekstrand
 Mr. Ryan Freund
 Mr. Joseph C. Jurasits
 Mr. Karolis Kozys
 Ms. Nicolle T Mallinger
 Mr. Lucian Muresan
 Mr. Benjamin Ryan O'Neil
 Mr. Saagar Mahendra Patel
 Mr. Malarvannan Rathakrishnan
 Ms. Mary Sisay
 Mr. Trent E Steffen
 Ms. Meredith A Stella
 Mr. Miguel A Urdiales
 Mr. Andrew J Witek
 Ms. Helen Yeung

Engineering Management

Ms. Allison R Bagby

MASTER OF SCIENCE

Civil Engineering
 Mr. Kallinikos Kechagias
 Mr. Ignacio Olabarri

Environmental Engineering

Ms. Anna Escuer Costa
 Mr. Yanming Zhang

MASTER OF ENGINEERING

Architectural Engineering
 Mrs. Navisa Jain
 Mr. Ivan Mestre Rodriguez
Construction Eng and Mgmt
 Mr. Mohammad Alcheikh Ali
 Mr. Cristian Algar Triginer
 Mr. Yonathan Benarroch
 Mr. Jose Vicente Garcia-Escribano Hernandez
 Mr. Emiliano M. Giana
 Mr. Dwight Kenneth Kirkland
 Mr. Pintu Mansukhbhai Santoki

Environmental Engineering

Mr. Carlos Esteban
 Mr. Luis Gast
 Ms. Amy Kathleen Ruta
 Mr. Yuthana Tanwongwan

Structural Engineering

Mr. Alexander K. Babel
 Mr. Joji Cherian Alice
 Mr. Aamer Haque
 Mr. Peter Raju Palaparathi
 Mr. Pau Francesc Salmeron Ros
 Mr. Matthew David Santeford
 Ms. Sravanthi Shakker

DOCTOR OF PHILOSOPHY

Civil Engineering

Mr. Charles Joseph Carter
 Mr. Jorge Humberto Chávez Gómez

Environmental Engineering

Mr. Yi Meng
 Mr. Yu-Min Su

FALL 2008

BACHELOR OF SCIENCE

Architectural Engineering
 Ms. Sarah B. Althoff
 Mrs. Qudsia H Khan

Civil Engineering

Ms. Elizabeth Ann Laschiazza
 Ms. Irina Y. Magdel
 Mr. Eric L Rogers
 Mr. Bogdan Rus
 Ms. Diyana Russeva
 Mr. Yousef M Zaatar

MASTER OF SCIENCE

Civil Engineering

Mr. Benjamin James Jados
 Ms. Ahim Kim
 Mr. Ming Li
 Mr. Wei Tong

Environmental Engineering

Mr. Feng Huang
 Ms. Shihui Luo

MASTER OF ENGINEERING

Architectural Engineering

Mr. Yao Yu

Construction Eng and Mgmt

Mr. Mohan Krishna Akella
 Mr. Amit Mohanlal Bogawat
 Mr. Saurabh Dewan
 Mr. Sudarshan Dharani
 Mr. Shaozhuo Dong
 Mr. Chakrapani Duggirala
 Ms. Kiet Tuan Le

Mr. Venkataharitasa Mamidanna
 Mr. Daniel E. Netherton
 Mr. Jung-Soon Park
 Mr. Sunil Hiralal Prajapati
 Mr. Anantha Puttaswamy
 Ms. Sushma Rani
 Ms. Shafaq A Shams
 Mr. Chandra Shekhar Singh
 Mr. Sean Michael Washatka
 Mr. Saurabhkumar Prasad Yadav

Environmental Engineering

Mr. Raja Shankar Kaliappan
 Mrs. Misha Chandra Kodyath
 Mrs. Dhara Yagnesh Trivedi
 Mr. Kefeng Zhu

Structural Engineering

Ms. Azila Abdul Aziz
 Mr. Nezar Abraham
 Mr. Ivan Bajkovec
 Mr. Jorge E. Cobo
 Ms. Zelina Laube
 Ms. Purva Mujumdar
 Mr. Vikram Raina
 Mr. Matthew Robert Rosecrans

Transportation Engineering

Mr. Manmith R Kunduru
 Ms. Yinghong Zhang

DOCTOR OF PHILOSOPHY

Environmental Engineering
 Mr. Chakkrid Sattayatewa

SUMMER 2008

BACHELOR OF SCIENCE

Architectural Engineering
 Ms. Amy Nicole Sissala

Civil Engineering

Mr. Chun Pong Chung
 Mr. Thales J Ramier
 Mr. Piotr Sawulski

Engineering Management

Mr. Randy Struzik

MASTER OF SCIENCE

Civil Engineering

Ms. Gulsah Balci
 Mr. Praveen Kaini
 Mr. Sunil Kumar Madanu

MASTER OF ENGINEERING

Architectural Engineering

Mrs. Sahar Mohamed Gazy
 Ms. Hallie C. Kowal
 Ms. Qing Zhang

Construction Eng and Mgmt

Mr. Kristopher Vallan Hernandez
 Mr. Salvador Herrandiz Espuny
 Mr. Rossen E. Marinov
 Mr. Pratik Chandrakant Patel
 Ms. Denise P. Peters

Environmental Engineering

Mr. Brian Michael Levy

Structural Engineering

Mr. Mark Mohan

Transportation Engineering

Mr. Ketankumar Patel
 Mr. Rathin Krishnakumar Shah
 Mr. Chi Hang Jonathan Tam