



**American Association
for Wind Engineering**

THE WIND ENGINEER

NEWSLETTER OF AMERICAN ASSOCIATION FOR WIND ENGINEERING

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**MICHAEL "MIKE" GAUS
1928-2012**

A BRILLIANT MENTOR AND TRUE FRIEND

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I first came to know Dr. Gaus as a newly arrived graduate student from China in 1997. Knowing very little about the U.S., I met with this Santa look-alike professor who was always dressed in striped short sleeve shirt. His big smile made you feel welcome and comfortable. For the next four years, I worked as his teaching assistant and then research assistant, given maximum freedom to pursue research I was interested in. Finally, we set my dissertation topic on reliability modeling of residential structures subject to extreme wind loadings thanks to his passion in wind engineering and my background in economic analysis. Only later had I learned that we were in direct competition with FEMA's multimillion dollar HAZUS program with awfully similar methodologies. What I also didn't know was that a foundation was laid at that time for my future

career in academia. Occasionally, he would assign me to off-topic tasks such as bookkeeping for the AAWE membership and developing animation for his clients litigating injury cases. As his student, I never worried about funding and actually had few ideas on where it came from.

In the summer of 2001 after successfully defending my dissertation, I was faced with the reality of unemployment. Being young and single, I really didn't need much to survive and feverishly sent our resumes to perspective employers every day. At the same time, Dr. Gaus had decided to retire to a warmer place and needed to sell his house in Buffalo. Naturally, I was offered a job as handyman. Every weekday, I would drive to his residence and spent several hours making minor fixes. During that period, I was able to develop a closer personal relationship with him and his wife Dolly. Lunch was always at a restaurant as they did little cooking at home. The pay was quite generous, sufficient for covering my living expenses before I finally landed a job with a construction company and moved to New York City one week after September 11.



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Feeling a natural attachment to him, I would call or email him quite frequently. Since then, he and Dolly had relocated to Williamsburg and were excited to see my girlfriend (future wife) and me when we visited them one summer. We stayed at their house, listened to their stories, and toured several local attractions. In 2004, I planned a career move and started applying for several faculty positions. He not only made strong recommendations when these schools called but also discussed my case with his long-time friend Dr. Kishor Mehta who was a civil engineering professor and the director of the Wind Research Center at Texas Tech University. I immediately received a warm welcome from him when I showed up on campus.

As a young assistant professor, I often sought advice from Dr. Gaus on a range of issues such as how to get funding. Equally important, he was the one I could share my frustrations and draw encouragement when needed. He was the most optimistic person I had ever met. After I became a little more successful, some inquiries would pop up during our conversations: Have they made you a full professor? Have they made you a department chair? He seemed to have more confidence in me than I had for myself. One summer, he loaned his apartment in Seattle to us for more than a week so we had time to visit a number of national parks nearby. A few years later when I was visiting the NSF, he and Dolly drove several hours to have dinner with me. Despite having worked at the NSF for the most of his career, he was so unfamiliar with recent development in Arlington area and, after fruitless searching, we ended up coming back to the restaurant at my hotel where we left an hour ago!

In recent years, I learned that both of them had health problems. Even deadly diseases like cancer couldn't overshadow his optimism and true appreciation for life. One day, he told me that he was going through chemo therapy but on the positive side managed to lose some weight which he long wanted to do. To him, there was always

a silver lining in every cloud. Later when his cancer reoccurred, he boasted about being treated at a world-class medical center. He remembered to send Christmas gifts to my family every year, including dried dates, sweater, and bird watching kit for my daughter. One of the most enjoyable traditions was to read their holiday greetings.

When I called him one day in the fall of 2011, he talked with a mumbling voice due to the surgery to his tongue. After a few minutes, he said he would call me back but never did. Then I became really worried when receiving a card on December 16 from Dolly saying Dr. Gaus was gravely ill. Suspecting something bad would happen to him, I packed up and hopped onto a plane to Seattle next day. When I walked into his apartment, I could barely hold up my tears. Years of struggle with cancer had shrunk a solid-built person into a fragile old man with white semi-wild beard. But his mind was still sharp and he was able to write his sentences on a notepad. It was my first time since meeting him 14 years ago to see that he was about to give up. My life was coming to an end, he wrote.

Dr. Gaus started as a mentor to me, advising on my research, correcting my writings, and lecturing in classes. Later, he became a good friend, offering comfort in the time of difficulties, sharing his wisdom, and lending a helping hand whenever it's needed. Above all, I viewed him as a role model with unlimited compassion and optimism. When receiving a service award on his behalf at 2005 AAWE conference in Baton Rouge, I remarked that Dr. Gaus, apart from his contribution to wind engineering community, was a true gentleman. He devoted himself to the right causes and trusted others to do the same. Along the way, he had made a lot of friends and positively influenced people around him. Instead of mourning his passing, I will cherish the opportunity to know and work with him over the years and always remind myself that I am standing on the shoulders of giants like him.

TRIBUTE TO MICHAEL P. GAUS

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Mike Gaus, as he was fondly known, left a huge legacy to Wind Engineering. As early as the 1960s he had recognized the importance of research related to windstorm hazard and what we now call 'Wind Engineering'. Three items converged in May of 1970: (i) a large tornado occurrence in Lubbock, Texas, (ii) three youngsters, McDonald, Mehta and Minor willing to document damage, and (iii) encouragement by Mike Gaus to pursue research in wind hazard and wind engineering. Needless to say that Mike gave Texas Tech a start. He was encouraging us to pursue research in damage documentation, field studies and all aspects of wind engineering. I remember going with him to see Jack Cermak at Colorado State University where he pushed us toward setting up an organization for wind engineering. During 1970s it was called a Committee on Wind Research which involved individuals like Bob Scanlan, Anatol Roshko, Dick Marshall, Art Chiu and others. After a few years the Committee morphed in to Wind Engineering Research Council in 1980s and then in to American Association for Wind Engineering in 1990s. All through those years Mike supported the organization actively by keeping track of the accounts, setting up the first web

site, keeping up with the web site and nudging all of us to be as active as we can to pursue and promote wind engineering research. He was patient, but candid in his criticism of legislative process that did not promote wind hazard mitigation legislation. He did not lose his touch for speaking his mind till the last day of his life.

From a personal point of view he mentored me from the beginning. He was the most encouraging person in my professional life. He would turn down funding for my proposal not with criticism but with encouraging words on how it can be done better. Along with me he mentored many young investigators in wind and earthquake engineering during his life. I feel that I benefited immensely from his mentoring and allowed me to contribute to the field of wind engineering.

All of us in AAWE owe a great debt to Mike for his guidance and continued efforts on behalf of the Organization. His mentoring of young investigators and encouragement of continued operation of AAWE is the legacy he has left for us. It is our duty and obligation to continue his legacy in this crucial time when windstorms are causing fatalities and a large amount of property losses. The society is looking at us for resilient and sustainable built environment. If we succeed in making our society more resilient to wind disasters Mike will smile from above.

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MIKE GAUS MEMORIES

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Mike was such a passionate supporter of AAWE that it is fitting that our Distinguished Service Award has been renamed the Michael Gaus Distinguished Service Award in his honor. His leadership in wind engineering stretches back to the 1960s. My interactions were fairly limited to the last six years or so, where his advice on AAWE's history and goals was invaluable. He started our first website and he was key to upgrading it in 2008. He kept a close eye on the AAWE investments and long-term financial status. He tirelessly helped me with topics for the Newsletter and, in fact, was an editor well before I knew him. In his last few years he communicated with me privately about his struggle with cancer, but he never ceased to push for the growth and quality of our professional society. I will miss his counsel and good humour.



A 1994 AAWE Board meeting with Mike Gaus on the right.

From the bottom left in a clockwise direction:

Art Chiu, Jack Cermak, Bogusz Bienkiewicz, Partha Sarkar, Tom Smith, Dale Perry, Joseph Golden, Ahsan Kareem, Mike Gaus, Joe Minor



OBITUARY FOR MICHAEL "MIKE" GAUS,

1928-2012

[SUNY WEBSITE -
JANUARY 12, 2012](#)

It is with great sadness that we report the passing of our dear colleague and friend Michael "Mike" Gaus, a well known advocate of earthquake engineering. He passed away on January 3, 2012 in Seattle.

Born December 2, 1928 in Chicago Illinois, Mike received a Bachelor of Science degree from the University of Illinois at Urbana-Champaign in 1954. While pursuing his Ph.D., also at the University of Illinois at Urbana-Champaign, he worked at Skidmore Owings & Merrill, where he assisted in the design of the Air Force Academy dining hall, one of the first projects to use a digital computer (the ILLIAC) for structural design. After receiving his Ph.D. in 1959, he became an assistant professor at Pennsylvania State University at State College in the Department of Engineering Mechanics. He then worked for the summer of 1961 at Boeing, where he developed a love of Seattle.

Mike then worked for nearly 30 years at the National Science Foundation. As a Program Director in the Engineering Mechanics Program (1961-1970) and the Earthquake Engineering & Natural Hazards Program (1963-1971), Mike supported the establishment and operation of the Wind Engineering Research Council (WERC), which began at Northwestern University in 1966. Under the NSF grants, WERC fulfilled a valuable function in promoting technology

transfer of new wind engineering knowledge developed through research programs. WERC became the American Association for Wind Engineering in 1995.

Also during this time, Mike was instrumental in creating the Council on Tall Buildings and Urban Habitat, which was founded in 1969 by Lynn S. Beedle at Lehigh University through funding from NSF. The Council began as a collaboration between ASCE and the International Association for Bridge and Structural Engineering (IABSE), and was an international effort to evaluate and coordinate significant tall building research. It grew from its engineering orientation to include architecture, planning, construction, natural hazards, economics, and other social sciences in its goal to teach others throughout the world how to best design tall buildings. The organization continues today with headquarters at the Illinois Institute of Technology in Chicago.

While Program Director of the Natural Hazards Research, Applied Science and Research Applications Directorate (1978-1982) and later as Program Director, Structural Mechanics Program (1982-1985), Mike began to promote the idea of a national earthquake engineering research center. He took the lead in championing the "Center Approach" in earthquake engineering research, and gained NSF approval to open a national competition to create what became the National Center for Earthquake Engineering Research (NCEER). Established in 1986, NCEER, headquartered at the State University of New York at Buffalo (SUNY Buffalo), comprised a consortium of researchers and industry partners from numerous disciplines and institutions throughout the United States who joined together to mitigate the damage and destruction caused by earthquakes. A decade later, two more earthquake engineering centers were formed, the Pacific Earthquake Engineering and Research Center at the University of California, Berkeley, and the Mid-America Earthquake Center at the University of Illinois at Urbana-Champaign.

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One notable achievement of the Centers that Mike was most proud of was the inclusion of social science research and perspectives into traditional engineering solutions.

After a sabbatical year in 1989, he left NSF and began a second career as a Research Professor in the Department of Civil, Structural and Environmental Engineering at the University at Buffalo. From 1990-2000, he continued to mentor graduate students while conducting research and teaching in construction management and use of new technologies such as computer-aided design and GIS in mitigation of natural hazards. He trained and mentored generations of students and faculty, who are now leading professionals in many universities and industry both in the U.S. and throughout the world. His many students remember him fondly as a talented and thoughtful teacher.

A TRIBUTE TO MICHAEL P GAUS

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Earlier this year, I was very saddened to learn that Mike Gaus had passed away. I knew he was having some medical issues lately, but did not realize the gravity of the medical bout he was enduring! Despite all these health concerns, he was still giving his advice related to AAWE matters. We have been getting his family Christmas news letter/card for years and this year it did not come and I thought that he may be slow in putting it together.

I first met Mike during my graduate studies days at Colorado State as Jack Cermak, my advisor, had just received a major NSF multi-year grant related to wind effects which were administered by Mike who then headed the Hazards Group at NSF. He was a very kind person as he gave full attention to people around him irrespective of rank or age! As a student, I used to talk to him about my progress related to the project on wind effects and I started to get to know him.

After I started my career at the University of Houston we met frequently at wind related events and ASCE Annual Conventions, the precursor of Structures Congress. Mike always felt strongly about the value of full-scale monitoring and especially the wind characteristics and structural performance during landfalling hurricanes. At that time he felt that we should develop a deployable system that could capture some of the salient features of hurricanes and their effects on structures. He crafted a plan to involve people at the University of Puerto Rico as it was in the path of many hurricanes. He thought Puerto Rico would serve as a staging area to monitor hurricanes in the Caribbean where people from the mainland US could participate. Late Dick Marshall from NIST, myself and Mike spent time at Mayaguez hosted by late Prof. Leandro Rodriguez then chair of civil engineering at the University of Puerto Rico. We gave short courses and prepared a draft proposal which unfortunately did not materialize for a number of reasons. On personal side, we enjoyed our stay at the Mayaguez Hilton where we had dinners with Mike and Dick every evening on adjoining tables. My son Gibran then one year old would drop all the tableware from both tables and Mike would get up from his chair and pick them up and play with

Mike married Dorothy Shipley White on October 5, 1963. His daughter Linda was born in 1965, and his daughter Jennifer was born in 1966. In 1965, he designed and built the family home in Potomac, Maryland. With typical engineering aplomb, he sketched on a napkin a square flat-roofed house, and went on to build the same. Mike and Dorothy built a second house in Amherst, New York.

After retiring from UB in 2000, Mike and Dorothy moved to Williamsburg, Virginia to find a warmer climate. In December of 2010 Mike and Dorothy moved to Seattle to be closer to their daughter Jennifer, and to return to Seattle. In addition to his wife and daughters, Mike is survived by four grandchildren.

him and as soon Mike sat down, he would drop them again. Our mortality reflects in this sidebar story, as three of us then visiting PR, Dick, Gibran and Mike are sadly no longer with us. Unfortunately, neither is our host, Leonardo a friend of Mike, who passed away I believe last year.

Mike had a great vision for Wind Engineering and he has been responsible for mentoring/advising many of us for which we are very grateful. In 1984 he invited me to come to NSF for a short term visiting assignment to Direct the Hazards Program as he wanted someone close to wind area to lead it. I could not at that stage of my career accept such an assignment and then Nora Sabadell was kind enough to take the challenge.

He single handedly kept AAWE on lifeline at many occasions as it was almost at the verge of extinction due to lack of activities. He admirably served as the president of AAWE and played other key roles including contributions to the writing of a major AAWE report on the research needs of the wind community and running an NSF/AAWE workshop and preparing its report on the need for large scale wind testing facility!

The same can be said about his interest in keeping Americas Conference vibrant and made every effort to find funds to support the conferences. It would be very fitting in the future to have an award for students given at these conferences to recognize Mike and to keep his mission alive through recognition of outstanding young engineers in the field. He is also fondly remembered at the University of Buffalo where he served for many years as a faculty member after completing his tenure at NSF.

In closing, to me he was a great mentor, like a father, a confidant, an advisor and a friend, we will miss him, and may his soul rest in peace!

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FOND MEMORIES OF MIKE GAUS I KNEW

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In the beginning of January of this year, we received the sad news of passing away of our dear colleague and friend, Dr. Michael P. Gaus, in Seattle on January 3, 2012. When I received this news I was not prepared to hear it because I saw visibly healthy Mike Gaus in August 2008 at the First AAWE workshop at Vail, CO and I was receiving his e-mails on AAWE-related matters even as late as July 2011. So something went wrong lately that we didn't know of at that time - Mike's health had deteriorated quickly because of cancer. In a way it reflected the true character of Mike Gaus who always liked to work quietly behind the stage and contributed to his profession until his last breath. I knew Mike for almost 18 years and it was AAWE which brought us together in 1994. He invited me to continue serving as the secretary/treasurer for AAWE when he took over as its president for the next five years (1998-2002) after Ahsan Kareem's term as president (1994-1997). AAWE President's term used to be for 4-years in those days but I have no recollection why Mike served for one additional year. I guess it was his own doing when he steered the amendments in the AAWE By-laws that brought about the change in the president's term from 4-years to 2-years starting in 2003. I came to know Mike well through my interactions with him during his AAWE presidency which he served very passionately. We became good friends and I slowly developed respect for this father-like figure. I remember there was something in his voice and style of talking that was quite convincing and did the trick.

Mike Gaus' encouragement, vision and mentorship provided the fuel for many of us to become successful in our endeavors. In many ways, he was a true educator and leader who worked for the benefit of the structural engineering community. Mike's vision and support as a NSF program director for nearly 30 years (1961-1988) led to the growth and prosperity of earthquake engineering and wind engineering research in the US. He was instrumental in creating the Council on Tall Buildings and Urban Habitat (founded in 1969). He took the lead in floating the concept of earthquake engineering research center at NSF that later facilitated the founding of the National Center for Earthquake Engineering Research (NCEER) at SUNY Buffalo and other similar national centers for earthquake engineering. It was Mike who supported the formation of the Wind Engineering Research Council (WERC) in 1966, which later became the American Association for Wind Engineering (AAWE) in 1995. Thus, AAWE would not be what it is today without Mike's efforts. Under his leadership AAWE became more progressive and modern as an organization. The AAWE's Website, long-term investment in Schwab, submission of proposals to NSF, etc., were his bright ideas. Some facts that I did not know about Mike before are - he was born in the "Wind City" Chicago, he was educated at University of Illinois, Urbana Champagne, his first job was at Skidmore Owings and Merrill and he went to Boeing for a short training. These initial years at these locations might have influenced Mike's interest in the mitigation of natural hazards such as wind and earthquake and tall buildings and his love for Seattle.

Mike was a wonderful person at heart and a man of integrity and vision. I will fondly remember him for rest of my life. We will miss Mike as a person, a friend and as a great leader of our community. Let us pledge that we continue his legacy by working together in our quest to reduce structural damage and fatalities from natural disasters particularly the one we are fond of vis-à-vis the Wind.

THOUGHTS ABOUT MIKE GAUS

BY CHARLES H THORNTON

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When I was asked to join the Board of ATC (Applied Technology Council) in the early 1990s, ATC was mostly focused on seismic issues. Arthur Chiu was on the board, but was the only one addressing the wind hazard. Also, the board of ATC was populated by SEAOC members who were mostly seismic people, as per the by-laws. About that time ATC, with help from FEMA, decided to focus on Multi-Hazard Mitigation and I was at BSSC and NIB starting the FEMA Multi-Hazard Mitigation Council. Even though Mike was never on the ATC Board he and Art Chiu tirelessly backed up all the efforts to move wind and earthquake mitigation forward as well as supporting all my efforts to spread ATC's focus to wind and flood hazards. He was a terrific guy in all respects.



**American Association
for Wind Engineering**

EDITOR'S NOTE

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As we are now well into 2012, please visit our website and renew your individual, student or corporate membership for 2012 -

www.aawe.org. The timely arrival of membership dues is essential to keeping AAWE in good financial shape. It assists in the management of Workshops and Conferences and contributes to student attendance to those events. Thank you.

I would also like to thank Reagan Reynolds at CPP for composing such a well-designed AAWE Newsletter for all of us to enjoy. This will be my last effort as the Newsletter Editor, as I am returning to Australia to live this summer. The next Editor of our Newsletter will be Dr. Hector Cruzado from the Polytechnic University of Puerto Rico. I would like to thank all those who have contributed articles over the last few years, and please continue to do so by sending items to Hector at hcruzado@pupr.edu.

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Objectives:

- The advancement of science and practice of wind engineering.
- The solution of national wind engineering problems through transfer of new knowledge into practice.

**American Association
for Wind Engineering**

Established in 1966

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