

# WALLACE CLEMENT SABINE AWARD OF THE ACOUSTICAL SOCIETY OF AMERICA



Gary W. Siebein

2020

The Wallace Clement Sabine Award is presented to an individual of any nationality who has furthered the knowledge of architectural acoustics, as evidenced by contributions to professional journals and periodicals or by other accomplishments in the field of architectural acoustics.

## PREVIOUS RECIPIENTS

Vern O. Knudsen	1957	A. Harold Marshall	1995
Floyd R. Watson	1959	Russell Johnson	1997
Leo L. Beranek	1961	Alfred C. C. Warnock	2002
Erwin Meyer	1964	William J. Cavanaugh	2006
Hale J. Sabine	1968	John S. Bradley	2008
Lothar W. Cremer	1974	J. Christopher Jaffe	2011
Cyril M. Harris	1979	Ning Xiang	2014
Thomas D. Northwood	1982	David Griesinger	2017
Richard V. Waterhouse	1990	Michael Vorländer	2018

## SILVER MEDAL IN ARCHITECTURAL ACOUSTICS

The Silver Medal is presented to individuals, without age limitation, for contributions to the advancement of science, engineering, or human welfare through the application of acoustic principles, or through research accomplishment in acoustics.

## PREVIOUS RECIPIENT

Theodore J. Schultz      1976



## ENCOMIUM FOR GARY WALTER SIEBEIN

*. . . for internationally recognized original and enduring contributions to the measurement, education, and practice of architectural acoustics.*

### **ACOSTICS VIRTUALLY EVERYWHERE • 9 DECEMBER 2020**

Gary Siebein's contributions to the field of architectural acoustics have spanned over four decades advancing, disseminating, and implementing architectural acoustics knowledge as an educator, researcher, and practitioner. He has contributed core room acoustics measurement techniques funded by the National Science Foundation (NSF) and has educated a generation of architect acousticians who are now in practice, teaching in the academy, and holding senior levels in academic administration in the US and abroad. His scholarly contributions include significant articles, papers, seminars, and book chapters and the education of thousands of undergraduate, graduate students and dozens of Master and Doctoral students specializing in acoustics. Professor Siebein has also implemented both precedent and emerging acoustical knowledge as the principal of the nationally recognized firm Siebein Acoustic, a consulting practice with projects that span from large-scale community soundscapes to detailed noise control solutions in highly technical spaces. His continuing service to the ASA and profession extends to collaboration on the refinement and development of national and international acoustics standards. As an architect acoustician, Gary's commitment and achievements in advancing acoustics through practice, research and education are outstanding and inspiring.

Gary was born in Brooklyn, New York to Walter and Peggy Siebein and lived in New York and Connecticut during his childhood. After completing his Bachelor of Science in the Building Sciences and a professional Bachelor of Architecture degree cum laude at Rensselaer Polytechnic Institute (RPI), Gary worked in architecture firms during the day as an Intern Architect and in the evenings at a local theater. He was initiated into I.A.T.S.E., the theatrical stage employee union and worked his way through college and his architectural internship. It was at the American Shakespeare Theater in Stratford, Connecticut that he was introduced to architectural acoustics while working as a stage hand. This theater was renowned for having a great acoustic environment – but why? This question intrigued Gary and he set off to learn as much as he could about acoustics.

Gary's quest for acoustics knowledge led him to Professor Harry Rodman at RPI and subsequently 1,100 miles south to the University of Florida (UF) to study with Bertram (Bert) Y. Kinzey Jr.. Bert was teaching courses in Architectural Acoustics at UF and he and Gary's relationship flourished leading to a lifelong friendship, mentorship, and partnership. Gary received his Master's degree and concentrated on research involving how the impulse response could be a measurement and diagnostic tool in both buildings and scale models and how the relationship between the two scales could allow acoustics to be accurately studied at smaller scales. His research was highlighted by being awarded a Schultz Grant by the Robert Bradford Newman Award Fund for a video demonstrating the deconstruction of an impulse response as tool to measure and evaluate sound reflecting from room surfaces as well as research awards from noted architectural journals. As Gary completed his Master's degree, Bert was preparing to retire and worked with Gary to transition into leading the Environmental Technology program and eventually the Architectural Acoustics graduate study program as an Assistant Professor at the University of Florida in 1981.

As a new faculty member, Gary's teaching and research agenda formed around natural, passive, and then lastly active (energy consuming) responses to achieve comfort in architectural spaces. He taught architecture design studios, environmental technologies courses, graduate seminar courses, soundscape labs, and doctoral core courses in the Ph.D. program including his long-time favorite the Philosophy of Inquiry. He served as mentor, thesis, and dissertation chair or committee member for dozens of masters and doctoral students and taught thousands of undergraduate students. He initiated cutting-edge research modeling acoustical phenomenon in physical scale models of performing arts and other spaces by scaling the wavelengths of sound with newly emerging state-of-the-art, super high-speed digital sampling equipment. He and his students, designed, constructed, and tested many theaters and performance spaces to evaluate the relationships between geometry and measurements and the relationship of scale models to buildings. During the late 1980's, Gary led the Master of Science in Acoustics Program at the University

of Florida until he retired in 2015. His program gained the attention of some of the most renowned and well-respected acoustical consultants at the time and received substantial grants from the NSF for collaborating on new measurement systems in architectural spaces. Gary was commissioned by these firms and agencies over the years to construct and conduct acoustical measurements in scale models as part of the design process that would compare modeled and actual measurements in world-class performing spaces including the Esplanade in Singapore and the Escondido Civic Center. In 1987 and again 1994, the body of work by Gary and his students in the acoustics program was awarded the Progressive Architecture Research Award that “recognizes risk-taking practitioners and seeks to promote progress in the field of architecture” – one of the most competitive and coveted national/international awards in the field of architecture at that time.

Gary’s first project as an independent acoustical consultant was an intriguing story of an otherworldly project with Phil Hawes, the Architect for the landmark Biosphere II. Hawes had read an article in Progressive Architecture about one of Gary’s research projects in acoustical modeling sponsored by NSF. Gary was asked if he would be interested in working on the Biosphere II, an enclosed ecosystem to support life on Mars. This serendipitous interaction launched Gary’s career as an internationally renowned acoustical consultant, and this single high profile project expanded into over 2,200 projects in locations globally during his career as an acoustical consultant – still no work on Mars, yet.

Gary has a continued and outstanding record of service to the ASA through a continuity of engagement in meetings, publishing at the forefront of evolving issues in room acoustics, measurement, noise control, serving to improve national and international acoustical standards, publishing book chapters on acoustics, and conducting seminars across the disciplines of acoustics, soundscapes, and architecture. Beyond that, he has a deep and consistent commitment to his family, those closest to him, and the broader community. In addition to Fellowship in the ASA, Gary is a member of the College of Fellows of the American Institute of Architects who honor those they refer to as ‘citizen architects’ – people who have a lifelong record of contributing to their profession and communities, helping their colleagues, and giving back with knowledge, kindness, and humanity. In that regard, Gary could be considered a ‘citizen acoustician’. A lifelong learner and hands-on builder, Gary is constantly involved in helping his family with his wife Rita by his side. Gary’s life and achievements have emerged from a deep-rooted core faith in family togetherness.

Congratulations to Gary Siebein for this well deserved award.

MARTIN GOLD  
KEELY SIEBEIN