

CHARBEL FARHAT

Vivian Church Hoff Professor of Aircraft Structures

James and Anna Marie Spilker Chair of the Department of Aeronautics and Astronautics

Professor, Mechanical Engineering and Institute for Computational and Mathematical Engineering

William F. Durand Building, Room 257, Stanford University, Stanford, CA 94305-4035

Telephone : (650) 723-3840 FAX: (650) 725-3525 e-mail: cfarhat@stanford.edu

BIOSKETCH

Charbel Farhat is the Vivian Church Hoff Professor of Aircraft Structures in the School of Engineering and the inaugural James and Anna Marie Spilker Chair of the Department of Aeronautics and Astronautics, at Stanford University. He is also Professor of Mechanical Engineering, Professor in the Institute for Computational and Mathematical Engineering, and Director of the Stanford-King Abdulaziz City for Science and Technology Center of Excellence for Aeronautics and Astronautics. He currently serves on the Space Technology Industry-Government-University Roundtable. From 2007 to 2018, he served as the Director of the Army High Performance Computing Research Center at Stanford University; and from 2015 to 2019, on the United States Air Force Scientific Advisory Board (SAB). He has also served on the technical assessment boards of several national research councils and foundations, and on the United States Bureau of Industry and Security's Emerging Technology and Research Advisory Committee (ETRAC) at the United States Department of Commerce. He was designated by the US Navy recruiters as a Primary Key-Influencer and flew with the Blue Angels during Fleet Week 2014.

He holds a Ph.D. in Civil Engineering from the University of California at Berkeley. He is a Member of the National Academy of Engineering, a Member of the Royal Academy of Engineering (UK), a Member of the Lebanese Academy of Sciences, a recipient of a Docteur Honoris Causa from Ecole Normale Supérieure Paris-Saclay, a recipient of a Docteur Honoris Causa from Ecole Centrale de Nantes, a recipient of a Docteur Honoris Causa from Ecole Nationale Supérieure d'Arts et Métiers, a designated ISI Highly Cited Author in Engineering by the Institute for Science Information (ISI) Web of Knowledge, and a Fellow of six professional societies: the Society of Industrial and Applied Mathematics (SIAM); the American Society of Mechanical Engineers (ASME); the International Association of Computational Mechanics (IACM); the World Innovation Foundation (WIF); the United States Association of Computational Mechanics (USACM); and the American Institute of Aeronautics and Astronautics (AIAA). He was knighted by the Prime Minister of France in the Order of Academic Palms and awarded the Medal of Chevalier dans l'Ordre des Palmes Académiques. He is the recipient of several other professional and academic distinctions including the Lifetime Achievement Award from the ASME's Computers & Information in Engineering Division; the Spirit of St Louis Medal from the ASME's Aerospace Division; the AIAA Ashley Award for Aeroelasticity and the Structures, Structural Dynamics and Materials Award from the AIAA; the John von Neumann Medal, the Computational and Applied Sciences Award, and the R. H. Gallagher Special Achievement Award from the USACM; the Grand Prize from the Japan Society for Computational Engineering and Science (JSCES); the Gauss-Newton Medal, the IACM Award, the Computational Mechanics Award, and the Computational Mechanics Award for Young Investigators from the IACM; the Gordon Bell Prize and the Sidney Fernbach Award from the Institute of Electrical and Electronics Engineers (IEEE) Computer Society; the Engineer of the Year Award from the AIAA Rocky Mountain Section; the Modeling and Simulation Award from the Department of Defense; the IBM Sup'Prize Achievement Award; the Arch T. Colwell Merit Award from the Society of Automotive Engineers (SAE); the CRAY Research Award; a TRW fellowship; the United States Presidential Young Investigator Award from the National Science Foundation and the White House; the PACER Award from the Control Data Corporation; and several best paper awards from numerous international conferences.

Professor Farhat is also Editor-in-Chief of the International Journal for Numerical Methods in Engineering, Editor of the International Journal for Numerical Methods in Fluids, and a member of the editorial boards of eight other international scientific journals. He has been an AGARD lecturer on aeroelasticity and computational mechanics at several distinguished European institutions, and a plenary or keynote speaker

at numerous national and international scientific meetings. He is the author of over 650 refereed journal publications on fluid-structure interaction; computational fluid dynamics on moving grids; computational structural mechanics; computational acoustics; supercomputing; parallel processing; model order reduction; and physics-based machine learning. His research program has been and/or is currently funded by several government and private agencies including the National Science Foundation; the Binational Science Foundation; the Air Force Office of Scientific Research; the Office of Naval Research; the US Army Research Laboratory; the Defense Advanced Research Projects Agency; the NASA Ames Research Center; the NASA Jet Propulsion Laboratory; the NASA Langley Research Center; the NASA Lewis Research Center; the Department of Energy; the Sandia National Laboratories; the Boeing Company; the Control Data Corporation; the FMC Corporation; the Ford Motor Company; High Performance Technologies; the Lockheed-Martin Corporation; Systems Technology Incorporated; TechnoSoft, Inc.; the TRW Research Foundation; the King Abdullah University of Science and Technology; the King Abdulaziz City for Science and Technology; Aerospatiale; Framatome; the Michelin Group; the Toyota Motor Corporation; and Volkswagen AG.