

Dessler, Jimenez, Klein, and Nenes Receive 2012 Atmospheric Sciences Ascent Awards

Andrew E. Dessler, Jose L. Jimenez, Stephen A. Klein, and Athanasios Nenes received 2012 Atmospheric Sciences Ascent Awards at the 2012 AGU Fall Meeting, held 3–7 December in San Francisco, Calif. The award recognizes “research contributions by exceptional mid-career scientists in the fields of atmospheric and climate sciences.”

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Citation for Andrew E. Dessler

The Atmospheric Sciences section of AGU awards one of the four Ascent Awards to Professor Andrew E. Dessler of the Department of Atmospheric Sciences at Texas A&M University for fundamental contributions to the understanding of stratospheric-tropospheric exchange processes and the physics of ozone depletion and for attempts to unravel water vapor and cloud feedbacks in the climate system. In addition, he is commended for his ceaseless work in communicating the science of climate change to the public.

His letters of recommendation speak to his work and “path breaking” and imparting of a “major impact on science and on dissemination.” His work on climate feedbacks is described as “pioneering,” and his accomplishments “have enhanced our understanding and assessment of the intricate play among water vapor, clouds, and surface temperature increase in the Earth’s atmosphere.”

Andrew E. Dessler is well worthy of an Ascent Award and personifies exceptional scientific accomplishments in a field of difficult but important science.

—PETER J. WEBSTER, Georgia Institute of Technology, Atlanta



Andrew E. Dessler

Response

I’d like to thank the Atmospheric Sciences Section Award Committee for this recognition.

I’d like to say that I’m humbled to join the illustrious group of former winners, but because this is the first time the award has been given, I leave that platitude for next year’s winners. Most of all, I’d like to acknowledge the entire climate science community. Over the last several decades, thousands of us have devoted our professional lives to studying climate, and the community has done a remarkable job of working out the physics of the problem. Ignored by many, demonized by some, I believe that future generations will look back and say, “They nailed it.” It has been an honor to work with all of you on this problem.

—ANDREW E. DESSLER, Department of Atmospheric Sciences, Texas A&M University, College Station

Citation for Jose L. Jimenez

The Atmospheric Sciences section of AGU awards one of the four Ascent Awards to Professor Jose-Luis Jimenez of the Department of Chemistry and Biochemistry at the University of Colorado Boulder. The award is made for the development and utilization of innovative measurement technology to address critical aspects relating to the sources, transformations, and environmental fates of fine atmospheric particles.

The letters of nomination note the prolific and highly cited publication record of Professor Jimenez and his group that is almost unprecedented for a mid-career scientist. It was also highlighted that he has played a leading role in a large number of field experiments. Perhaps Professor Jimenez’s career can be summarized best by the following statement from his nomination letter: “Professor Jimenez is without question a brilliant and productive atmospheric scientist, a wonderful mentor, and a leader in his field.”

Professor Jimenez is well worthy of an Ascent Award through thoughtful and important research that has been disseminated broadly in the literature and is having a major impact on the atmospheric sciences.

—PETER J. WEBSTER, Georgia Institute of Technology, Atlanta



Jose L. Jimenez

Response

I am honored and humbled to receive the 2012 Ascent Award from AGU. Not so long ago, I remember being amazed by the energy, excitement, and rigor that I witnessed at my first AGU Fall Meeting in 1999. I have been lucky to participate in a period of rapid learning about the composition and sources of aerosols at a time when science is increasingly collaborative. There is still much to be learned in this and related fields to have confidence in our predictions of climate forcing and air quality, and I look forward to many more collaborations and AGU Fall Meetings during the second half of my career.

There are many people I would like to thank. I have had excellent mentors during my career, but I owe special thanks to Doug Worsnop for his unrelenting support and for being a truly inspiring role model, always ready to answer any question or be challenged into an interesting discussion. The many talented members of my research group, past and present, have made research invigorating and taught me how to be a better mentor. The Aerodyne mass spectrometer communities have been an example of cooperation and a constant source of interesting ideas and discussions. I have been fortunate to collaborate widely across our community, including several intense field studies, and I am grateful to the many researchers I have worked with in the process. And, of course, none of this would have been possible without the support and encouragement of my wife, Yumi; my family; and my good friends. I dedicate this award to them.

—JOSE L. JIMENEZ, University of Colorado Boulder

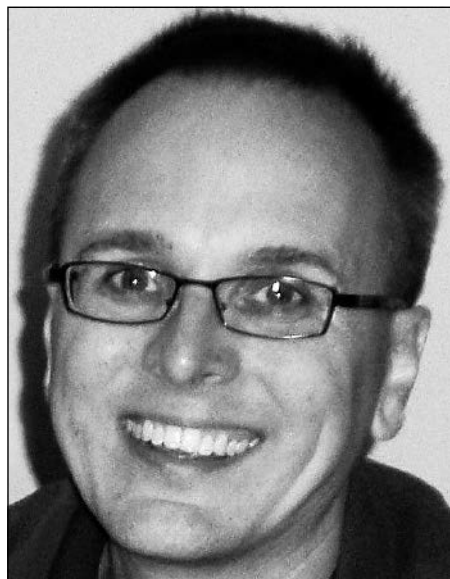
Citation for Stephen A. Klein

The Atmospheric Sciences section of AGU awards one of the four Ascent Awards to Dr. Stephen Klein of the Lawrence Livermore National Laboratory. The award is made for the substantial contributions Dr. Klein has made toward understanding some of the field's most important problems, the interaction of clouds and climate through (as noted in his nomination) "the careful analysis of observations, the insightful use of models of varying complexity and his ability to synthesize diverse strands of knowledge."

He has worked on a broad range of problems, from microphysical processes in mixed-phase Arctic clouds to the role of clouds in ocean-atmosphere interactions. He is described as working "at the important intersection of cloud observations, analysis, and climate model development." His work is summarized as "doing it all, in a challenging field, successfully bridging across areas of research...in a way no one else in the U.S. can match." His nominators point toward the enormous influence he has had on advancing the study of clouds and climate, and he is described as "pioneering contributions in every facet of our field, from the development of new ideas, to the building of tools, to the creation of important organizational structures."

Dr. Klein's Ascent Award is well deserved and results from his thoughtful and important research into the critical problems associated with the interaction of clouds and climate.

—PETER J. WEBSTER, Georgia Institute of Technology, Atlanta



Stephen A. Klein

Response

I am honored to receive this recognition. I wish to thank all those who have helped me in my career, including those from where I received my education as well as those I have encountered at the different positions I have held. I have been very fortunate in interacting with many great people.

—STEPHEN A. KLEIN, Lawrence Livermore National Laboratory, Livermore, Calif.

Citation for Athanasios Nenes

The Atmospheric Sciences section of AGU awards one of the four Ascent Awards to Professor Athanasios Nenes, of the School of Earth and Atmospheric Sciences and School of Chemical and Biomolecular Engineering of the Georgia Institute of Technology, for the creation of thermodynamical models for tropospheric aerosols and the development of physically based aerosol-cloud parameterizations. In addition, he is recognized for the design of instrumentation and techniques to characterize the hygroscopicity and activation of cloud condensation nuclei (CCN) and also for contributions to the understanding of the role of aerosols in climate and air quality.

His nomination letters speak of the enormous contribution he has made over a wide range of fields. For example, "each of these contributions [referring to the Nenes' instrumentation development] has reshaped the landscape of how one measures and interprets CCN data.... I know of no other individual who is equally adept across theory, instrument development, and laboratory and field measurement." Another nominator notes, "the amazing thing about Thanos is that he has served as a one-stop-shop, end-to-end source of information into aerosol processes and cloud-aerosol interactions, from the laboratory to the field to theory to parameterizations" and "his scholarly work...both experimental and theoretical, is without peer at any age."

Professor Nenes is abundantly qualified to receive an Ascent Award through his major contributions to many areas of aerosol research.

—PETER J. WEBSTER, Georgia Institute of Technology, Atlanta

Response

It is a rare privilege and a deeply fulfilling experience to pursue science while helping shape future generations of scientists and engineers. To be awarded on top of it is humbling to say the least. I am deeply grateful to my nominator and supporters and thank the AGU Atmospheric Sciences Section Awards



Athanasios Nenes

Committee for this honor. What makes the Ascent Award even more special is its strong vote of confidence for the future, which is both energizing and inspiring.

I have many people to thank: first and foremost, my wife, Luz. Her love, patience, understanding, and continuous support are a source of inspiration that has only strengthened since the birth of our two lovely children, Hector Angelos and Esperanza Dafni. I also thank the Georgia Institute of Technology and my chairs, Glenn Cass, Judith Curry, Ronald Rousseau, and William Chameides, for providing the opportunity to start a research program and doing everything possible to help it flourish. I thank my colleagues Mike Bergin, L. Greg Huey, and Rodney Weber for generously sharing their expertise and resources all these years. My deepest gratitude goes to present and past members of my research group; your inexhaustible enthusiasm, motivation, creativity, and hard work have accomplished more than I could have ever imagined.

I am forever grateful to my Ph.D. advisor John Seinfeld, Spyros Pandis, Richard Flagan, and my M.Sc. advisor Christodoulos Pilinis. They introduced me to aerosol science, shaped me as a scientist, and provided continuous guidance, support, friendship, and opportunity for collaboration. I am also grateful to Greg Roberts for an amazing collaboration on CCN instrumentation and to Greg Kok, of Droplet Measurement Technologies, for enabling its commercial success.

Finally, I dedicate this award to my parents, Theodosio and Maria. By example, they taught me to aim high, work hard for it, and never give up trying.

—ATHANASIOS NENES, Georgia Institute of Technology, Atlanta