



2019 Annual General Membership Meeting Guest Speaker Presentation Summaries

- Title:** *Overview of Federal, State, and Local Efforts to Reduce Heat Islands in the U.S.*
Presenter: Victoria Ludwig, National Program Manager, U.S. EPA Heat Island Reduction Program
- Summary:** This presentation will provide an overview of the U.S. EPA's Heat Island Reduction Program and its current and future activities. It will also highlight recent trends in the U.S. to reduce the urban heat island effect at the local level, including why and how local governments are working to cool their communities.
- Title:** *California Building Energy Efficiency Standards (Title 24, Part 6)*
Presenter: Payam Bozorgchami, Senior Engineer, California Energy Commission
- Summary:** This presentation will provide an overview of the California Energy Commission's process for updating the State of California's Building Energy Efficiency Standards (Title 24, Part 6), and will include a brief update on the 2019 and 2022 Title 24, Part 6 Standards.
- Title:** *Cooling Cities to Save Lives: Urban Heat Mitigation Through Application of Reflective Products*
Presenter: Dr. Laurence Kalkstein, President, Applied Climatologists, Inc.
- Summary:** Over the past several years, we have engaged in a multipronged approach to determine how reflective roofs, other reflective products, and added urban tree vegetation can help cool major cities in the U.S. Our work has been sponsored through an interdisciplinary consortium, the Los Angeles Urban Cooling Collaborative (LAUCC), and also through the 3M Corporation, which manufactures reflective roofing and window film products. The goal is to quantify how the widespread use of such products can alter the meteorology of three major urban areas: Los Angeles, Chicago, and Boston. An additional goal is to determine how many lives can be saved during excessive heat events if these products, plus the addition of more tree planting, are used in widespread fashion.
- Title:** *Evolutions in Cool Roofing – Challenges, Opportunities and Perspectives*
Presenter: Dr. Frank Klink, Senior Laboratory Manager, 3M Industrial Mineral Products Division
- Summary:** With the growing awareness of the linkage between human health and extreme heat events – especially in more temperate cities – the motivation for cool roofing has evolved beyond energy savings and peak electrical demand reduction. Further, as cities challenged with substantial heat islands are confronted with a changing climate, roofing surfaces (given their urban footprint) offer an opportunity to mitigate urban heat island and improve air quality. While certainly an expansion in the value of roofing, these new requirements have also presented technical and material science challenges. This presentation will discuss those challenges and the strategies that have been employed in economically and efficiently addressing them. Beyond that, advancements in materials show promise to further enable enhancements to the sustainability and performance of roofing solutions. Lastly, the presenter will briefly share thoughts on the unique, vital, and evolving role of the CRRC, as the methods body disseminating information and maintaining the database for the radiative properties of roofing products, has in our changing climate.