

Light-Inspired Solutions

LightWorks Inaugural Lecture Series

Featuring Dr. Michael A. Tamor November 19, 2012



Dr. Michael A. Tamor

Executive Technical Leader, Energy Systems & Sustainability
Ford Research and Advanced Engineering, Ford Motor Company

Mike Tamor has served as Executive Technical Leader for Hybrid Vehicle and Fuel Cell Research at Ford since 2005, focusing on global electrification, renewable fuel, and energy systems research. He leads Ford's research on hybrid-electric vehicle and electric vehicle propulsion technologies. Tamor is a Fellow of the American Physical Society, has published over 60 referred journal articles, authored chapters in four books, and holds 25 patents. He obtained a BS in Physics from UCLA and a PhD in Physics from the University of Illinois at Urbana-Champaign.

Join us November 19 for up to 3 opportunities to engage with Dr. Michael A. Tamor

Global Vehicle Usage Studies: Who Can Really Use an Electric Car?

Monday, November 19 from 9:00 to 10:00 am Old Main, Carson Ballroom, Tempe campus

This **Seminar** will cover the attractions of electric vehicles - zero-emissions, efficiency and silence - are offset by limited range and long 'refueling' time. Analysis of day-to-day variations of vehicle usage leads us to a number of conclusions. Most significant is that limited EV range results in a level of inconvenience likely to be unacceptable to the vast majority of vehicle owners and if willing to accept the inconvenience, battery costs must be unrealistically low to achieve an economic return. Moreover, these findings appear to be somewhat universal, such that a 'scalable city' hypothesis may prove to be a powerful predictor of the evolution of transportation in the large cities of the developing world.

Envisioning a SustainableTransportation Future in 2050

Monday, November 19 from 10:15 am to 12:00 pm Old Main, Carson Ballroom, Tempe campus

Join us for a **workshop**-style discussion where we will transport ourselves into the future. It is now 2050 and we have arrived at sustainable transportation in Arizona and we will be creating and telling stories of what the world around us looks like and how we got there. Come prepared to actively engage in the conversation.

Sustainable Personal Transportation: The re-electrification of the automobile

Monday, November 19 from 6:00 to 7:30 pm 6:00 pm reception | 6:30 to 7:30 pm lecture SkySong, Convergence Room 150 (free parking)

This **lecture** will address the question...
Will personal automobiles have a place in a sustainable transportation future? Our public dialog often accepts as facts that automobiles are far less efficient than other transportation modes, that electric driving will reduce greenhouse gas emissions, that customers are ready to accept the compromises of a fully electric vehicle, and that plug-in vehicles will somehow accelerate the introduction of clean electric generation. This presentation combines the physics of energy storage, publicly-available data and studies of real-world vehicle usage to challenge these conceptions and provoke a more thoughtful conversation about our energy future.

Questions: (480) 965-9572 Rebecca.Davis@asu.edu