

REAL-WORLD METEOROLOGY

A series of profiles celebrating a half-century of Certified Consulting Meteorologists



Who: Esmail Malek

What: Biometeorology

When: CCM since 2010

Where: Port Orange, Florida

Why: To meet or exceed the professional standard established by the AMS

How: After receiving his B.S. degree in agricultural engineering, Esmail earned his M.S. degree in irrigation science. A few years later he earned his Ph.D. in biometeorology, which relates life to weather. During his academic career, he researched the microclimate of the desert environment, including evaluation of energy and water balance components, harnessing of solar and wind energies, and study of

evapotranspiration in the semiarid desert located in border of Utah and Nevada.

Esmail developed a module for evaluation of cloudiness at the local scale. Since 1990, he has been involved in an innovative approach for application of saline wastewater from coal-fired power plants for production of agricultural crops such as alfalfa and wheat in central Utah. He was part of the team that evaluated the climatic impacts of construction of the proposed Jordanelle reservoir in northern Utah.

In His Own Words: “From my childhood, I was fascinated about weather and climate. While lying on the ground and watching the sky, I would wonder how clouds are formed and disappear, why they move in a specific direction in my location, and why some precipitate and some don’t. I would also ponder why minimum and maximum relative humidity occur around midafternoon and around sunrise, respectively. I wanted to know what the effect of weather is on people, animal, and crops, and many more weather-related questions.

“Because of these interests and desire to know about the weather and climate, I earned my Ph.D. in biometeorology. I have published three books (in foreign languages) on weather-related topics, around 44 scientific articles, and have been involved in many consulting projects. Being a CCM, and encouraging other colleagues to be one, has been an honor for me, and I’m sure that it will continue to be rewarding and beneficial as my career continues to develop.”

For more information on the Certified Consulting Meteorologist (CCM) Program, please visit the AMS Web site at www.ametsoc.org/amscert/index.html.

