Grand Junction Geological Society
April Meeting

Wednesday April 15th, 7:30pm
Saccomanno Lecture Hall (Wubben-Science Room 141)
Colorado Mesa University
Grand Junction, CO

Ocean Acidification and Coral Reefs – Geological Perspectives From a Coral Reef Ecologist

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Abstract: Large limestone reefs have come and gone throughout Earth history, but most were deposited because a few key reef species could produce large volumes of calcium carbonate that accumulated faster than it was removed. Ocean acidification is likely to affect not only the rates of $CaCO_3$ production on today's coral reefs but also dissolution rates. Several studies point to a threshold in reef development near the middle of this century, when atmospheric pCO_2 levels reach about double the concentrations of the preindustrial period. At this concentration, predicted net calcification rates suggest that modern day reefs will shift to a net dissolution state. This talk will present a summary of research on the role of ocean carbon chemistry in reef building, both present and past, with the goal to invite geological discussion from the audience on a topic that has so far been dominated by biological concerns.

Guests are welcome