The scientific life and times of Gordon E. Brown, Jr.

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Professor Gordon Brown of Stanford University is one of the most important Earth scientists in the last half century. As a master thinker and writer, his papers are read and cited by mineralogists, crystallographers, geochemists, biogeochemists, environmental scientists, surface and interface scientists, materials scientists, and applied chemists and physicists. With hundreds of published papers spread among dozens of geoscience, environmental, chemistry and physics journals, his citation count will soon surpass 30,000 at a rate of well over 2,000 citations per year, with six papers commanding well in excess of 400 citations each, and with his most cited work soon to exceed 1,000 citations. A personal h-index of over 90 puts an exclamation mark on his publishing career, not to mention a plethora of major awards and honors, tens of millions of dollars of research funding raised, over 80 graduate students and post-docs, and thousands of undergraduate students inspired by his passionate teaching in the classroom and the field.

Professor Brown attended the outstanding Millsaps College in Jackson, Mississippi, USA as an undergraduate in the early 1960's. This was followed by graduate work first at Penn State and then at Virginia Tech, under the legendary G.V. Gibbs. After a one-year post-doc at Stony Brook University, he took his first faculty position at Princeton University in 1971. Just two years later, he was recruited to take a professorship at Stanford University, and he has been there ever since.

Among many, many pioneering achievements, which include high temperature crystal chemistry, the structure and chemistry of geo-relevant amorphous materials and melts, computational molecular orbital theory of minerals, mineral/water interface science, molecular environmental science, and geomicrobiology, Gordon is perhaps best known for designing and conducting the first synchrotron-based geo-environmental X-ray absorption experiments ever at the Stanford Synchrotron Radiation Laboratory. For decades now, he has led the way towards the use of synchrotron radiation for interface and surface geochemistry of minerals. Many, many hundreds of scientists producing many thousands of publications have since followed using an ever-expanding arsenal of powerful synchrotron-based tools.