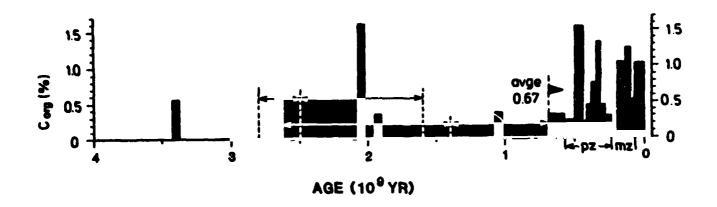
## R.M. Garrels: CARBON AND SULFUR CYCLING THROUGH GEOLOGIC TIME

Mathematical models of the coupled global systems of sedimentary reservoirs and fluxes can be used to infer variations in reservoir sizes and rates of sedimentation over periods of hundreds of millions of years. Perhaps most interesting is the coupled sulfide/sulfate-carbon/carbonate system that controls global oxygen and carbon dioxide production and consumption.

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ORIGINAL PROFITE !

## ORGANIC CARBON CONTENT OF SHALES AND SLATES AS A FUNCTION OF AGE (AFTER SCHIDLOWSKI, 1982)



Robert Garrels

Figure I-ii Carbon isotope fractionation ranges (left) and carbon content (right) in organic matter found in shales and slates. pr=Paleozoic Era, mr=Mesozoic Era. The stretch of time left of pr is the prePhanerozoic.