

Karst Carbon Sequestration for Carbon Emission Reduction

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In this essay, we make a review of recent advances and challenges in the subject: Karst Carbon Sequestration, which is a brand new way to reduce carbon emission. The karst process is an important composition of global carbon cycle because it can take-up carbon dioxide from atmosphere. According to statistics, Karst carbon sequestration can absorb over 600 million tons of carbon dioxide per year which takes over 33% percent of the world's carbon dioxide. However, this subject has not been taken seriously in China, a big country which is covered by large area of Karst. Hence we write this review aiming at arousing the attention of the public to Karst Carbon Sequestration for carbon emission reduction.

On this subject, scientists from the Institute of Karst Geology in Guilin made a lot of researches and achieved considerable new scientific progresses. They investigated all relative factors of karst carbon sink and carried out some special researches on the sources of karst carbon sink, as well as developed a method to calculate the atmospheric CO₂ sink in karst progresses of China. Until now, 29 karst carbon sink monitoring stations in China and 3 stations in other countries have been established, which are playing a significant role in this field. However, it is still "confronted with many challenges", such as the structure instability, which causes the collapse of the ground, the erosion of underground water, and so on. Combined with collected data, we figure out how the karst carbon sink works and how it impacts our daily life via reducing carbon emission.

In conclusion, Karst Carbon Sequestration takes a crucial part of carbon cycle, which has great potential to reduce carbon emission. However, it has not enjoyed its due attentions. What's more, there are still many challenges which require more dedicated researches and studies. As middle school students, we should pay high attentions to this promising subject and spare no effort to study advanced science to make a better world of our motherland.