

# Retraction to: A mathematical model to characterize the degree of coalification based on the low-angle region of the X-ray diffractogram

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IOS Press has retracted the following publication from its online content:

[*Journal of X-ray Science and Technology*, vol. 26, no. 1, pp. 71-81, 2018. DOI: 10.3233/XST-17277]

The authors submitted a letter to the Editor-in-Chief of the *Journal of X-ray Science and Technology* requesting the retraction of “A mathematical model to characterize the degree of coalification based on the low-angle region of the X-ray diffractogram.” The authors state that:

“We have recently found that due to the difference of test voltage, current, and other test parameters, many XRD patterns of one coal sample can be obtained by different X-ray diffractometers or by the same instrument in different time periods. These XRD patterns have similar shape and FWHM, but their relative height varies greatly. The random errors in this system are unavoidable and have a fatal impact on the calculation model we previously proposed, resulting in an unreliable degree of coalification. On the other hand, our proposal to correct the coalification degree with porosity in the paper has also been proved to be effective only for low-medium-maturity coals, which further deteriorates the prediction accuracy. Therefore, it is questionable to characterize the degree of coalification by XRD technology alone. We apologize to our readers for the insufficient consideration in the previous study, and formally retract this paper, so as not to mislead the global coal research efforts.”