

COLUMBIA UNIVERSITY
IN THE CITY OF NEW YORK
DEPARTMENT OF EARTH & ENVIRONMENTAL SCIENCES
LAMONT DOHERTY EARTH OBSERVATORY

June 30, 2021

Dr. Isabelle Manighetti
Editor in Chief, JGR Solid Earth

Dear Dr. Manighetti,

As required, I am including this letter with my submission of a multi-authored paper, “*Ongoing alteration of mantle peridotite in the weathering horizon: Initial results from the Oman Drilling Project Multi-Borehole Observatory*”, explaining how its completion was delayed by the impacts of the COVID-19 disease.

If this paper is accepted, I am requesting that it be included in the Special Issue on Ophiolites and Oceanic Lithosphere. My understanding is that the paper will go through the JGR peer-review process, that it will be accepted or declined on the basis of that normal process, and – if accepted – that it will be incorporated into the Special Issue.

This paper has been delayed by the impacts of the COVID-19 disease in the following direct and indirect ways.

First and foremost, this is an overview of scientific results related to Oman Drilling Project Holes BA1A, BA1B, BA1C, BA1D, BA2A, BA3A and BA4A. As such, completing this paper required completion of analytical work by many investigators around the world. In turn, this work was delayed by the disease. As it is, the manuscript I am submitting contains references to several substantial papers that are still in preparation or in revision.

Just among the examples that I personally know about in detail, these delays were due in part to

- (1) the fact that I became very ill – perhaps from COVID-19 – upon my return from Oman in late January 2020 (it turned out that at least one attendee of our conference there had the disease),
- (2) postdoc Juan Carlos de Obeso contracted the disease and was unable to work for a few weeks,
- (3) postdoc Juan Carlos de Obeso was unable to access closed laboratory facilities at Lamont Doherty Earth Observatory for several months,
- (4) postdoc Juan Carlos de Obeso’s mother-in-law, who is ill with cancer, needed his and his wife’s help to move from France to Mexico during the pandemic, and then to convalesce in Mexico, and when Juan Carlos went to Mexico he became subject to various mandatory quarantine and travel restrictions,
- (5) as a result of factors 2 through 4, Dr. de Obeso was unable to complete his planned analyses of $^{87}\text{Sr}/^{86}\text{Sr}$ and d^{13}C , and their interpretation, crucial to this paper, and his companion paper, until November (he is still revising a related paper for submission),
- (6) our older daughter and her partner had to abandon plans and live with us while not working for several months,
- (7) our younger daughter had to leave Colorado College and live with us while completing her final year of coursework online,

(8) in the midst of 6 & 7, we had to unexpectedly extend our rental of a house in Boulder Colorado, and then move twice, first from Boulder to our rental property in Woods Hole (which fortunately was not occupied at the time), and then from Woods Hole to our house in New York (to make room for tenants in Woods Hole),

(9) as a result of 1-8, I did not complete a submittable draft of this paper before starting teaching in the fall semester, after which almost all my time through the end of December was occupied by teaching because

(9a) an unprecedented number of students enrolled in my courses on “Earth Resources & Sustainable Development” (an unprecedented total of 145 completed the courses), requiring that I double my time commitment for recitation sections, and

(9b) I had to set up a new home office and learn how to teach online because my course was 100% remote,

(10) and in addition to teaching, the delay in completing this paper caused its completion to compete for my time with other significant commitments I had made, which could not be postponed, including

(10a) participation in the Mars 2020 Rover Science Team, and

(10b) advising two startup companies and several larger companies on CO₂ removal from air and permanent storage via carbon mineralization.

(11) From May 2020 through March 2021, we made unprecedentedly frequent, distanced visits to my wife’s parents (divorced, two different homes) based on her concern about them, and

(12) we had to make special arrangements to accommodate our daughter over the winter holidays because she contracted COVID-19 en route from Colorado to New York.

Meanwhile, new postdoc James Leong was delayed

(13) in completing his dissertation, then

(14) delayed in renewing his visa (he is Filipino), and then

(15) delayed in starting his postdoc at Lamont (Columbia had

(15a) a hiring freeze, and once that was waived he still had to

(15b) complete a month-long quarantine period, and then

(15c) receive an up-to-date, negative COVID-19 test in order to satisfy the requirements our labs, which took more than a week at that time.

In turn, Dr. Leong’s modeling expertise was central to completing calculations essential for this paper.

This is the second of two papers I have submitted to JGR this spring, for incorporation into the Special Issue on Ophiolites and Oceanic Lithosphere. I wrote them in order, and thus did not complete this one until the other was complete and submitted. Research essential to the other paper was even more seriously delayed by the effects of the COVID-19 pandemic.

Those are the reasons for the delays whose details I know about personally.

Finishing this paper also required completion of geochemical analyses by Marguerite Godard at the University of Montpellier (paper in prep for JGR), completion of work by Eric Ellison, Alexis Templeton, Dan Nothalf and others on analyses of rock cores and water samples, and so on. I am sure that most or all of these other scientists could supply a similarly long list of reasons for delay of their work, related directly or indirectly to the pandemic.

I hope that you find this letter informative.

Sincerely,

A handwritten signature in black ink, appearing to read 'Peter B. Kelemen'.

Peter B. Kelemen
Arthur D. Storke Professor
Dept. of Earth & Environmental Sciences
peterk@LDEO.columbia.edu

cc: Steve Parman, Editor, JGR Solid Earth