

**THIS ISSUE**



Tempo. Pulse. Rhythm. Musical terms that may cause you to recall whimsical tunes, raucous rock concerts, symphonic masterpieces, or your favorite pop song playing on the radio or Pandora. Yet, these are terms that can also define the rhythm and

beat of the Earth as tectonic plates collide at convergent boundaries. The Earth's symphony may be longer than the typical concert (by a million years or so!), but the "tune" can be discerned by those who stop to listen. This issue brings together 12 scientists who are "stopping to listen to the beat" by carefully studying the composition and dynamics of magmatic arcs. Their articles reveal just how "musical" the Earth can be! They have also provided a collection of movies to complement your reading enjoyment. Movies and other supplemental materials can be found at [www.elementsmagazine.org/supplements/](http://www.elementsmagazine.org/supplements/).

**THANKS JOHN!**



With this issue, John Valley retires as a principal editor of *Elements*. During his tenure, he was in charge of the following issues: Granitic Pegmatites (v8n4), One Hundred Years of Isotope Geochronology (v9n1), Continental Crust at Mantle Depths (v9n4), Asteroids: Linking Meteorites and Planets (v10n1), Ophiolites (v10n2), and Arc Magmatic Tempos (v11n2). John has been

a vital asset to *Elements* for many years. In addition to serving as a principal editor, he was a guest editor in 2006 (Early Earth, v2n4) and a member of the advisory board (2004–2007). The *Elements* family has greatly benefited from John's guidance, hard work, and enthusiasm. Thank you John for all you have done to help make *Elements* the most readable and authoritative magazine in mineralogy, petrology, and geochemistry!

**EDITORIAL** *Cont'd from page 83*

In the future, as these processes are further studied, the tempos of magmatic arcs will be refined. This topic is important for processes of societal interest, such as the evolution of life, mineral and energy deposits, geohazards, paleoclimate, and even gem mineral exploration. In the final article, Lee and Lackey explore the effect of magmatic cycles on climate. Flare-ups cause metamorphic release of buried sedimentary carbon in the form of the greenhouse gas CO<sub>2</sub> and, in the process, form calc-silicate skarns and schists, host to beautiful minerals (Fig. 2) and economic mineral deposits. On a grand scale, perhaps arc tempos are the tectonic equivalent of Milankovitch cycles (which affect climate), with long-term mantle dynamics and mantle–lithosphere interaction providing harmonic forcing to magmatic systems.

**John W. Valley**, Principal Editor

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**CALL FOR PROPOSALS – THEMATIC TOPICS 2017**

Do you think your research area would make a great issue of *Elements*? Consider submitting a proposal. Would you like to read about a certain topic? Let the editors know!

At their next meeting in August, immediately preceding the 2015 Goldschmidt Conference in Prague, the editors will review the proposals on hand to determine the 2017 lineup. The six proposals chosen will represent a balance among mineralogy, geochemistry, and petrology topics and, of course, will be the most exciting and pertinent for *Elements'* audience.

Many potential guest editors first send an e-mail of enquiry to one of the editors about their idea for a topic. The "feeler" e-mails are circulated to the editorial team, and feedback on the proposed theme and the way the proposer plans to tackle it is then provided to the proposer. This enables him or her to develop a full proposal. You can download the proposal form at [www.elementsmagazine.org/proposal.htm](http://www.elementsmagazine.org/proposal.htm).

Don't wait! Start working on that proposal today!

**BREAKING NEWS: EDITOR 2016-2018**



We are thrilled to announce that **Friedhlem von Blackenburg** has accepted the invitation to join the *Elements* editorial team, starting in January 2016. He will replace Trish Dove whose term of office ends on 31 December 2015. We will introduce him more formally at a later date.

**Trish Dove, Gordon Brown, Bernie Wood, and Jodi Rosso**

*Arizona Radiogenic Isotope Lab*

University of Arizona, Tucson, Arizona



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