# Elements

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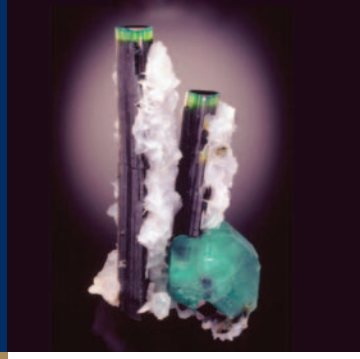
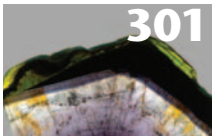


About the Cover:
These elongate tourmaline crystals, probably an elbaitic species, display a common color change toward the top of the crystal. Tourmaline is associated with plates of albite (white) and a crystal of fluorite (green). The specimen is from Stak Nala, Pakistan, and is 10.6 cm high. However, tourmaline is more than just another pretty mineral—it can be a single-mineral thermometer, a provenance indicator, and a recorder of *P–T–X* conditions.
Photo © courtesy of Jeffrey Scovil

## Tourmaline

Guest Editors: **Barbara L. Dutrow and Darrell J. Henry**

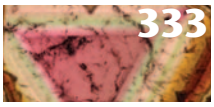

**Tourmaline: A Geologic DVD**
Barbara L. Dutrow and Darrell J. Henry

**Tourmaline the Indicator Mineral: From Atomic Arrangement to Viking Navigation**
Frank C. Hawthorne and Dona M. Dirlam

**Tourmaline Isotopes: No Element Left Behind**
Horst R. Marschall and Shao-Yong Jiang

**Tourmaline as a Recorder of Ore-Forming Processes**
John F. Slack and Robert B. Trumbull

**Tourmaline as a Petrologic Forensic Mineral: A Unique Recorder of Its Geologic Past**
Vincent J. van Hinsberg, Darrell J. Henry, and Barbara L. Dutrow




**Tourmaline: The Kaleidoscopic Gemstone**
Federico Pezzotta and Brendan M. Laurs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