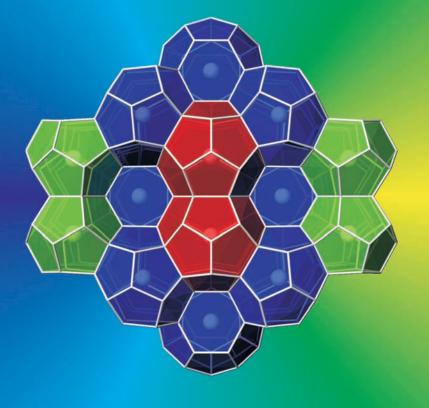
CHEMISTRY

A EUROPEAN JOUR**NAL**

16/42

2010

THERMOELECTRIC POWER



OF CLATHRATE III



The fascinating...

... crystal structure of type-III clathrates consisting of cage polyhedra of three types (shown in green, red, and blue in the picture) is not the only grace of the compounds in the Si-P-Te system. They combine effective charge-carrier transport and poor transport of heat with chemical stability in air up to 1500 K, making them a solid base for designing powerful thermoelectric materials for high-temperature power generation. For more details, see the Full Paper on page 12582 ff., by A. V. Shevelkov et al.

Supported by ACES



www.chemeurj.org

Inside Cover

Julia V. Zaikina, Takao Mori, Kirill Kovnir, Detre Teschner, Anatoliy Senyshyn, Ulrich Schwarz, Yuri Grin, and Andrei V. Shevelkov*

The fascinating...

... crystal structure of type-III clathrates consisting of cage polyhedra of three types (shown in green, red, and blue in the picture) is not the only grace of the compounds in the Si-P-Te system. They combine effective charge-carrier transport and poor transport of heat with chemical stability in air up to 1500 K, making them a solid base for designing powerful thermoelectric materials for high-temperature power generation. For more details, see the Full Paper on page 12582 ff., by A. V. Shevelkov et al.

