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# **Heusler and Half-Heusler Compounds**

Guest Editor:

### Prof. Dr. Yaniv Gelbstein

Department of Materials Engineering, Ben-Gurion University of the Negev, Beer-Sheva 84105, Israel

Deadline for manuscript submissions:

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# **Message from the Guest Editor**

The increasing interest in Heusler and half-Heusler compounds, since the first discovery of the 1st Cu<sub>2</sub>MnAl Heusler compound by the German scientist Friedrich Heusler in 1903, passing 100,000 publications in 2017, with more than 1500 reported compounds, is due to their high potential for a wide variety of applications in future energy fields (including thermoelectrics, solar cells) spintronics. New ferromagnetic, semiconducting, or even topological-insulating Heusler and half-Heusler compositions with unique properties are constantly reported, highlighting their scientific and applicative significance. The more than 250 semiconducting phases reported to date can be tuned to modify their energy gaps. from 0 to 4 eV, using chemical composition and process parameter variations. Magnetism can be controlled in the metallic phases and combining superconductivity with topological states can lead to new multifunctional materials

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http://www.mdpi.com/journal/materials/special\_issues/heusler\_half\_heusler\_compounds

Prof. Yaniv Gelbstein *Guest Editor* 













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#### Prof. Dr. Maryam Tabrizian

1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada

2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, OC H3A 0C7, Canada

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