

SUBMIT AN ABSTRACT BY JULY 1

THE WORLD COMES HERE

TMS 2020

149th Annual Meeting & Exhibition

February 23-27, 2020 • San Diego, California, USA



Submit an abstract to:

Materials Processing

Low-Cost Titanium: 'Affordable Ti'

Titanium and titanium alloys are used in many demanding applications in aerospace, automotive, biomedical, and terrestrial systems because of their excellent combination of mechanical properties and corrosion resistance. However, titanium alloys are excluded from many applications because of their high cost—a result of an energy-intensive extraction process and complex fabrication sequence to mill products. This is particularly true in the cost-obsessed automobile industry; albeit some in-roads are now being made even into the family car.

In this symposium, papers addressing all aspects of cost reduction in titanium and its alloys will be presented. The various segments of titanium technology to be covered will include, but will not be limited to: extraction (with emphasis on innovative and low-cost Kroll approaches), new lower cost alloys, creative melting including cold hearth approaches, near net shape techniques (including powder metallurgy variants such as near net shapes, spraying, laser forming, and casting approaches), additive manufacturing, biomedical applications, processing/fabrication advances such as warm drawing, extrusion, superplastic forming (also in combination with diffusion bonding), high speed machining and knowledge based processing with emphasis on computer aided approaches, better process control including enhanced inspection methods, and creative designs such as functionally graded materials, porous alloys and infiltrated concepts.

ORGANIZERS

Ramana Reddy, University of Alabama, USA

M. Ashraf Imam, George Washington University, USA

SYMPOSIUM SPONSORS

TMS Structural Materials Division

TMS Titanium Committee

TMS Powder Materials Committee

Abstract Deadline is July 1, 2019. Submit online at
www.programmaster.org/TMS2020.

Questions?
Contact programming@tms.org