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Authors: J. Cebulski and S. Lalik in the paper entitled "Kinetics of corrosion on the intermetallic phase matrix FeAI in high temperature" on a **page 7** discuss the results of tests concerning

kinetics of corrosion processes of alloy on intermetallic phase matrix FeAI type Fe40AI5CrTiB after vacuum casting and plastic treatment with the use of co-extrusion method and comparably for flameproof steel X12CrCoNi2120. Alloys on intermetallic phase matrix of iron and aluminium are considered the future materials for high-temperature applications as they are highly resistant to oxidation to temperature of 1100°C. It was stated, on the basis of tests results that the increase of weight of corrosion products in time function has a parabolic character, where the highest mass was weighed for samples after test conducted in temperature of 1100°C. A significantly higher corrosive resistance of alloys was found in comparison with the resistance of flameproof steel types CrNi with austenitic structure. The last feature is the reason to conduct the research for this group of materials as corrosion resistance materials. Especially FeAI intermetallic phase based alloys are objects of research in Poland and around the world in recent years. Corrosion tests were conducted in gas environment including 0.08% SO2, 0,02% HCI, 9% 02 and nitrogen in temperature from 900°C to 1100°C in time of 100 hours. Kinetics of corrosion processes was marked, the condition of the surface of samples after tests was characterized with the use of electron scanning microscope and also the chemical composition of corrosion products was determined. The aim of this paper was to determine the influence of passivation in gas environment including 0.08% SO₂, 0.02% HCl, 9% O₂ and nitrogen in temperature from 900°C to 1100°C in time of 100 hours on corrosion resistance of Fe4OAI5CrTiB intermetallic phase based alloy.



Dear Readers,

In this Issue of the Journal of Achievements in Materials and Manufacturing Engineering a particular attention is paid to the need of the natural environment protection. For many years it has been known that it is not enough to remove the effects of environmental degradation caused among others as a result of civilisational progress, in particular connected with the industrial activity. Cleaner production is a set of actions undertaken at present and included in the sphere of influence of numerous industrial processes and degradation in the natural environment made in the past decades require a very costly and long-term rehabilitation and revitalization of brownfield sites currently being undertaken in many parts of the World. At the same time it is necessary to increase activities that allow to preserve for posterity the most valuable natural resources. The opportunity to remind those statements which are obvious today is the approaching 175 anniversary of birthday of John Muir (21st April 1838 – 24th December 1914) who was a Scottish-born American naturalist, author, and early advocate of preservation of wilderness

in the United States of America. His activities helped to preservation organizations in the United States of America. He is today referred to as the "Father of the National Parks" in USA. It coincides with the National Park week, which will take place on 20th-28th April 2013 and the Earth Day which will take place on 22nd April 2013. Yosemite National Park is a United States National Park is a United States National Park spanning eastern portions of Tuolumne, Mariposa and Madera counties in the central eastern portion of California, USA. The park covers an area of 3,080.74 km² and reaches across the western slopes of the Sierra Nevada mountain chain. Over 3.7 million people visit Yosemite each year. Designated a World Heritage Site in 1984, Yosemite is internationally recognized for its spectacular granite cliffs, waterfalls, clear streams, Giant Sequoia groves, and through suitable worked out manufacturing technological processes and engineering materials processing to publish their work in our pages. Handing over the subsequent Issue to PT Readers, we wish them a nice reading.

Gliwice, in February 2013

Prof. Leszek A. Dobrzanski M Dr hc Editor-in-Chief of the JAMME President of the WAMME President of the ACMSSE