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# **Archives of Materials Science and Engineering**



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Leszek A. Dobrzanski M Dr hc  
Editor-in-Chief of the AMSE  
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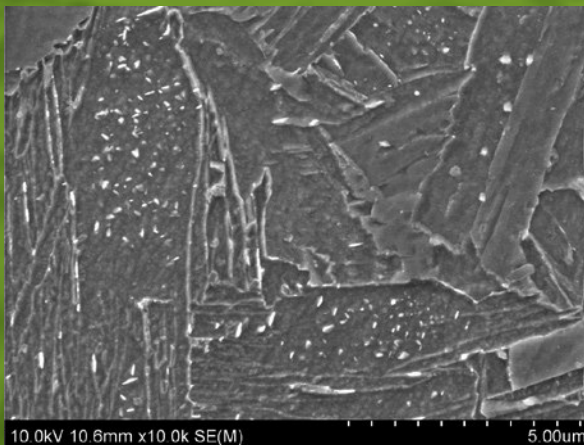


Dear Readers,

As usual we hand over a few next scientific papers for reading.

In the first working day of September 2013 the very important decisions for the Authorities of the Association of Computational Materials Science and Surface Engineering were made. It was decided that from that moment the Association as an independent non-governmental organisation, changed its seat and would start completely independent organizational and publishing activity, without the official patronage of any scientific research institution, in particular the Silesian University of Technology in Gliwice, Poland. One of the reasons is the fact that the number of these scientific institutions in Poland and other countries of the World is much larger, which does not justify favouring any of them. The Authorities of the Association, as a JAMME journal publisher, evaluate that it may have a positive impact on the development of the scope of activity and further enhance the achievements and the Society and the Journal in the future. These important decisions are the cause of several days delay in publishing the Journal issue.

We wish a nice reading.



Authors: R. Dziurka, J. Pacyna and T. Tokarski in the paper entitled "Effect of heating rate on the phase transformations during tempering of low carbon Cr-Mn-Mo alloy steel" on a page 13 present the effect of heating rate to the tempering temperature on the microstructure and properties of lath martensite tempered at a various temperatures was studied in literature from point of the cementite precipitations view. It has been shown that cementite dispersion is finer and more uniform in the rapidly heated and tempered than in the slowly heated and tempered specimen. The aim of this work is to investigate the effect of heating rate on the phase transformations during tempering. The investigations of phase transformations during tempering of the low carbon steel were made on the grounds of dilatometric curves recorded during heating from as-quenched state. Heating to isothermal holding at 350°C was made with two different heating rates (100°C/s and 5°C/s) and was performed by use of the L78 R.I.T.A. dilatometer made by Linseis. The investigations of phase transformations during continuous heating from as-quenched state were performed by use of the DT 1000 dilatometer made by Adamel. It is possible to reduce probability of the occurrence of some phase transformations in favour of others. The difference in advancement of the various phase transformations can effect on various mechanical properties of the steels. The obtained information may be used to design new technologies of steels tempering.