

**PECULIARITIES OF OPTICAL EMISSION SPECTROSCOPY  
OF COPPER-CHROMIUM-AIR PLASMA**

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Nowadays, Cu-Cr composites are of great interest in electric power industry as contact materials due to their specific properties, such as: low tendency to welding, high strength, good vacuum getter property due to chromium, etc. It is obviously that different branches of industry require the specific features of the used materials. Therefore, in order to optimise the characteristics of the resulting product, which determine its properties, it is necessary to provide the various fabrication technologies and/or conditions of existing methods of manufacturing such materials.

Thus, this work is devoted to the peculiarities of optical emission spectroscopy of plasma of electric arc discharge between Cu-Cr composite electrodes manufactured by pressing and sintering technologies at different temperatures, namely: 650, 750, 850, 950, 1050 and 1150°C. The investigations are carried out at arc current of 3.5 A. The comparison of radial distributions of plasma temperatures, which were determined by Boltzmann plot technique both on the base of Cu I and Cr I spectral lines, are performed and discussed.