**1st Webinar Series on Historical Metallurgy**

**Sep 23, 2021, from 7:00 to 8:00 Eastern Time (US and Canada)**

**Historical research and metallurgical analysis of the declared heritage sites of the old Iron Bridge installed in 1898, in Lujan de Cuyo, Argentina, presented by Dr. Patricia Silvana Carrizo.**

Join from PC, Mac, Linux, iOS or Android: https://meetings.ringcentral.com/j/1488453866?pwd=RlZ6WEtuQURLOGt4R1B5dllsRUJpZz09

Password: 970856



**Biography:** Dr. PATRICIA SILVANA CARRIZO is a chemical engineer and metallographic analysis specialist. She is a researcher at the Metallurgy Laboratory at the National Technological University at Mendoza Regional Faculty, sited in Mendoza Province (Argentina) and also serves as a Materials Science Professor at the University. Her research focus is on Archaeometallurgy, Cavitation issues on Hydraulic Turbines and Industrial Failure Causes. She is a member of ASM International and is laso leading the effort of Archaeometallurgy Community at ASM CONNECT. She has presented at numerous international meetings in Peru, Argentina, Chile, and the United States. She is also Author and Editor of the upcoming book from Springer: Reverse Engineering of Ancient Metals.

**Abstract:**  This paper arises from the intention by the Town Hall of Lujan de Cuyo, declared heritage sites of the old Iron Bridge, which is in full use to be an important means of communication for vehicles up to 4000 kg. Thus, the relevant historical research of the origin of the bridge in the Municipal Archives were performed, with installation in 1898 decreed by President Roca. It consists of seven sections of 40.6 m each and the center to center distance of the main beams is 5.80 m. Metallographic studies confirm that the bridge structure is wrought iron or hot rolling, and the chemical composition was determined, besides thickness measurement, hardness. Tensile tests corresponding to the complete characterization of the manufacturing material of the bridge were made. His survey allowed to observe their condition, corrosive state assessment.