

盘龙城杨家嘴 M26 出土青铜罍足内壁白色物质的初步分析

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摘要: 利用光学显微镜、能谱仪、拉曼光谱仪和红外光谱仪等仪器,对盘龙城杨家嘴 M26 出土青铜罍足内壁白色物质进行分析,结果表明其为碳酸钙。结合罍足存在破损的现象,推测古人使用熟石灰乳液作为胶结材料修补罍足,并利用其与二氧化碳转变为不溶于水的碳酸钙达到密封效果。

关键词: 盘龙城遗址; M26; 青铜罍; 碳酸钙; 科学分析

A Preliminary Analysis of White Products on the Feet of Bronze Vessel (*Jia*) Unearthed from Tomb No.M26 in Panlongcheng Site

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Abstract: The white residue found on the feet of the bronze vessel (*Jia*) from Tomb No. M26 in Panlongcheng Site were characterized by OM, EDS, Raman and FT-IR. The experimental result revealed that: the white residue was identified as CaCO_3 . Considering the phenomenon of the hole on the foot of the bronze vessel, it suggests that the ancient casters used $\text{Ca}(\text{OH})_2$ as cements to repair damaged feet. And it may have sealing properties because the $\text{Ca}(\text{OH})_2$ would have turned into CaCO_3 when exposed to the air is becomes insoluble in water.

Keywords: Panlongcheng Site, M26, bronze vessel (*Jia*), CaCO_3 , scientific analysis