

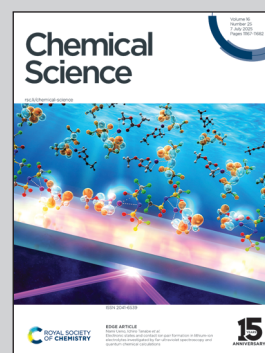
Showcasing research from Professor Mansy's laboratory, School of Biochemistry, University of Trento, TN, Italy.

Preferential survival of prebiotic metallopeptides in the presence of ultraviolet light

Ultraviolet light naturally selects for biologically relevant metal-binding peptide motifs. This occurs because the binding of a metal ion dramatically reduces the photolytic vulnerability of cysteine compared to the unbound form. Binding to a metal ion stabilizes the transiently generated radical centres that form on the sulfur and carbonyl carbon atoms, thus protecting the peptide from deleterious radical recombination. These findings support the hypothesis that environments at the surface of the early Earth favoured the emergence and enrichment of a restricted set of high-affinity, extant-like metallopeptides.

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See Sheref S. Mansy *et al.*,  
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