

BIOLOGICAL CHEMISTRY

*Founded in 1877 by Felix Hoppe-Seyler as
Zeitschrift für Physiologische Chemie*

Felix Hoppe-Seyler (1825–1895) was a pioneer of biochemistry, remembered not only for his discovery of hemoglobin and his contributions to the chemical characterization of many other biological compounds and processes but also for having been the mentor of Friedrich Miescher and Albrecht Kossel. In his preface to the first issue of *Zeitschrift für Physiologische Chemie*, Felix Hoppe-Seyler coined the term *Biochemistry* ('Biochemie') for the then newly emerging discipline.



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COVER ILLUSTRATION

Carbon monoxide dehydrogenase (cover figure) is a central metalloenzyme in the reductive acetyl-CoA pathway where it reduces CO₂ to CO at the nickel site (cyan sphere) of the unique active site metal cluster. The corrinoid-iron sulfur protein takes a methyl group in its reduced cobalt and nickel-dependent acetyl-CoA synthase condenses CO, the methyl group and CoA into acetyl-CoA as a metabolic building block. An extension of the pathway by ATPases, which incorporate catalytic metals and transfer electrons at the expense of ATP is vital to mature and reactivate the metalloenzymes of the pathway.



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