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.
The first repeat is in dark green with RVD residues in orange in space filling representation. See the article by Bochtler on pp. 1055–1066 in this issue.

oryzae

Left image: Interaction of the naturally occurring TALE (transcription activator-like effectors) protein, PthXo1, from the rice pathogen Xanthomonas oryzae

Fe(CN)

While HypA and HypB are involved in the Ni insertion, the other four Hyp proteins are required for the biosynthesis, assembly and insertion of the enzyme. The [4Fe-4S] cluster is represented as a sphere model. The active site of [NiFe] hydrogenases contains a complex NiFe(CN)2CO group. See the article by Watanabe et al. on pp. 1089–1100 in this issue.

HypA and HypB are involved in the Ni insertion, the other four Hyp proteins are required for the biosynthesis, assembly and insertion of the enzyme. The [4Fe-4S] cluster is represented as a sphere model. The active site of [NiFe] hydrogenases contains a complex NiFe(CN)2CO group. See the article by Watanabe et al. on pp. 1089–1100 in this issue.

Bottom image: Crystal structure of HypD from T. kodakarensis (PDB 2Z1D). The two α/β domains I and II, and the Fe-S cluster-binding domain are shown in blue, magenta and yellow, respectively. The [4Fe-4S] cluster is represented as a sphere model. The active site of [NiFe] hydrogenases contains a complex NiFe(CN)2CO center, and the biosynthesis/maturation of these enzymes involves primarily six Hyp proteins (HypABCDEF). While HypA and HypB are involved in the Ni insertion, the other four Hyp proteins are required for the biosynthesis, assembly and insertion of the Fe(CN)2CO group. See the article by Watanabe et al. on pp. 1089–1100 in this issue.

Left image: Interaction of the naturally occurring TALE (transcription activator-like effectors) protein, PhxX1, from the rice pathogen Xanthomonas oryzae with DNA. Fifteen repeats and DNA are shown (top view). The repeats are presented as green ribbons, the DNA is in space filling representation. The first repeat is in dark green with RVD residues in orange in space filling representation. See the article by Bochtler on pp. 1055–1066 in this issue.
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