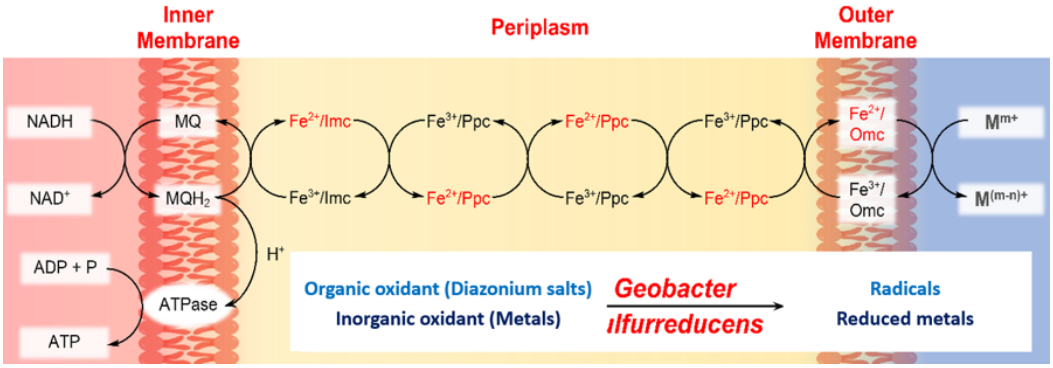
Electron transfer processes in *Geobacter sulfurreducens*

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Geobacter sulfurreducens reduces many metal ions by transporting electrons from the inside of the bacterial cell to the outside using different type of cytochromes that act as electron shuttles [1]. The kinetic study of the reduction of silver and other metal ions has revealed some first insights into the chemistry of bacterial homeostasis and extracellular electron transfer (EET) processes, however the mechanism of transfer of electrons from one cytochrome to another remains to be investigated [2].

More investigations are needed to understand the EET mechanism. In our study, the reduction of some inorganic and organic oxidants such as aryl diazonium salts are investigated. We are particularly interested in the interactions between the generated radicals from the reduction of the diazonium salts and the different cytochromes. Results obtained from protein labelling and modification using generated radicals from redox reaction between the cytochromes of *Geobacter sulfurreducens* and diazonium salts will be discussed.



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[2] Toshiyuki Ueki, *Appl. Environ. Microbial,* **2021,** 87 (10), 03109-20.