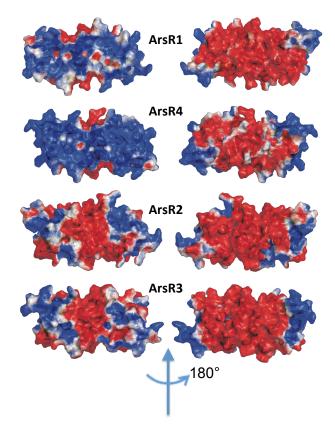


**Figure S1.** Structural modelling of the ArsR proteins. **(A)** A structural model of the ArsRs represented by ArsR3 (Chosen based on the orientation of the C-terminal loop, which did not interfere with the depiction of the core structure). The two chains of the dimer are shown in purple and green and cysteines located at the C-terminal end of  $\alpha$ 5 are shown as yellow ball and sticks. **(B)** Superposition of the ArsR structures. ArsR1 and ArsR4 are not differentiable, shown in green ribbon, ArsR2 in purple, ArsR3 in blue.



**Figure S2.** Electrostatic surfaces of the ArsR. Red surface denotes predicted negatively charged regions on the protein surface, blue depicts predicted positive charge. Images on right are flipped 180° about a vertical axis on the plane of the paper.