Does $\mathcal{P} = \mathcal{NP}$?

According to Wikipedia:

Nobody has yet been able to determine conclusively whether NP-complete problems are in fact solvable in polynomial time, making this one of the great unsolved problems of mathematics.

The Clay Mathematics Institute is offering a US \$1 million reward to anyone who has a formal proof that $\mathcal{P} = \mathcal{NP}$ or that $\mathcal{P} \neq \mathcal{NP}$.