

## **Quality Assessment of Protein Tertiary Structures: Past, Present and Future**

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## **Abstract**

The quality assessment of protein structures is one of the most critical steps in the regime of reliable protein tertiary structure prediction. Post-conformational sampling of the decoys for a protein sequence, the scoring functions to perform quality assessment usually dictates the overall success of protein structure prediction. The field of protein structure quality assessment has achieved a chronological success over the years in differentiating between accurately and spuriously modelled structures. Implementation of physics based, knowledge based, and consensus approaches have contributed immensely in pushing the field to higher levels. Recently, the addition of metaserver approaches while integrating previously known methodologies have further pushed the field of protein structure quality assessment to a more reliable zone. Here, we described some of the tools/software/servers which implements diverse parameters to quantify the accuracy of modelled protein structures.

## **Keywords**

Protein Structure Prediction, model quality assessment program, Modelled Structures Accuracies, error estimation, quality assessment, RMSD, MQAP.