

Augmented reality applied to molecular modeling

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Augmented Reality (AR) consists on the superposition of virtual elements into the real world. It is an innovative technology which is starting to be introduced in many fields, including research and education, as a complementary system for improving understanding and visualization of complex concepts.

This communication presents a mobile application automatized to display Protein Data Bank (PDB) files in Augmented Reality, with configurable displaying options and environments. The standard format of the PDBs and the extensive existing data bank in the network allows this application to be universalized and introduced in a wide range of fields.

The innovation that offers the fact of transforming a plain text file into a three dimensional model displayed in the real world and which can be easily manipulated presents special interest for:

- Researching scenarios, as a complementary tool for visualization and collaborative works.
- Education and Conferences as a support during explanations enhancing the interactivity between lecturer and audience.

The creation of self-explanatory posters and books where pictures can come alive and add dynamic content to the static descriptions.