

## **Quantum dots for analytical test-methods**

Olga A. Goryacheva, Irina Y. Goryacheva

Saratov State University, 83 Astrakhanskaya Street, Saratov, 410012, Russia

Analytical systems involve different approaches to delivering results. One of the easiest methods to define is to attach a label and visualize the signal. This approach allows you to create both qualitative and quantitative analysis. Due to different methods, the same label can be used both in tests with naked eye detection and for machine methods with simultaneous testing of a large number of samples.

Quantum dots have unique optical properties, which allows them to be used as a substitute for dyes. Another feature of the structure is the possibility of modifying the flat surface with completely different structures. We consider several approaches to hydrophilization and their use in analytical systems.

The reported study was funded by the Russian Science Foundation: project number 21-73-10046.