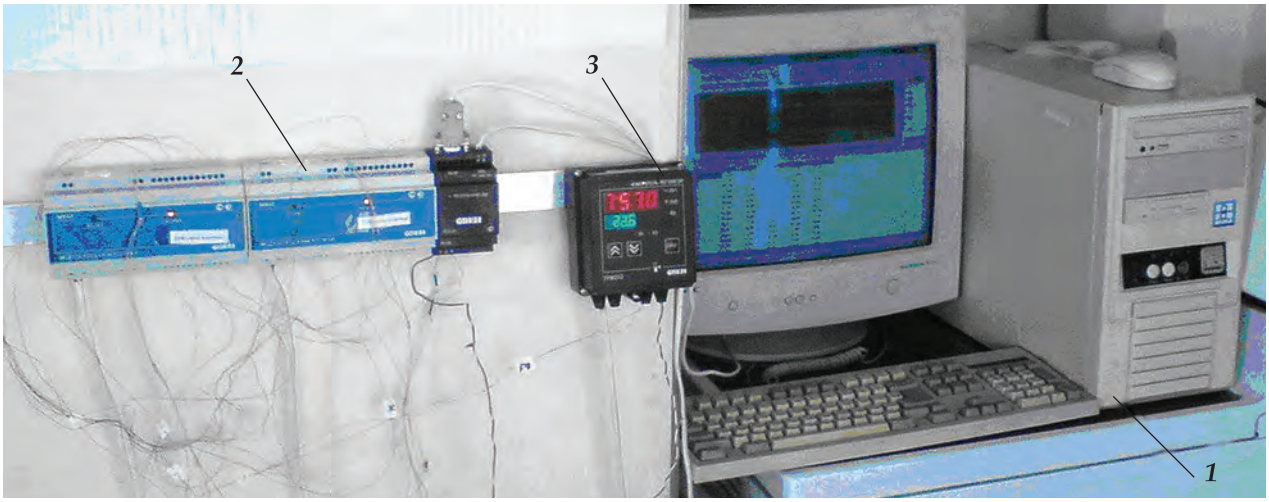
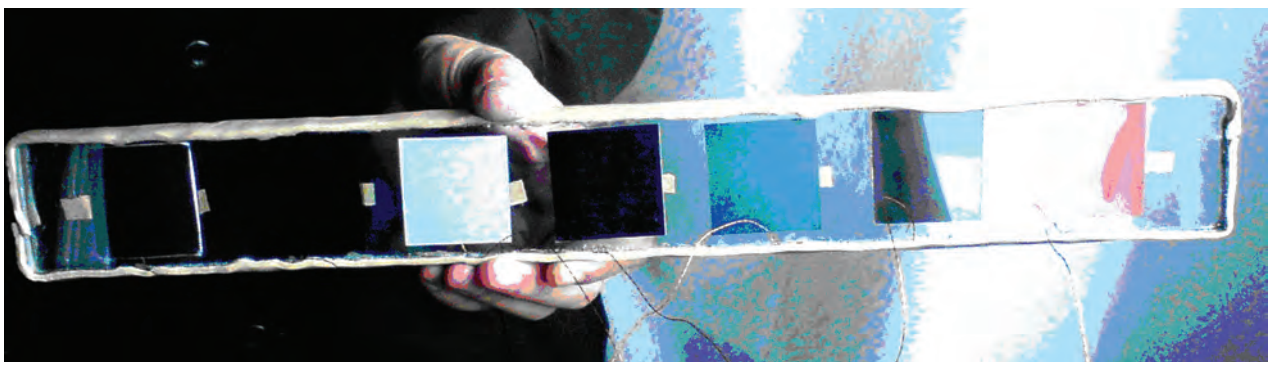
PHOTOACTIVE COATINGS





Device (above) and magazine of samples (below) for measuring sunlight absorptance: (1) recording unit, (2) magazine, and (3) measuring unit

Areas of Application

The coatings are to be used as absorbing layer of solar collectors

Specification

Composition: nanostructured oxide composite materials based on chromium and molybdenum; sunlight absorptance is 98%

Advantages

The method enables to obtain stable metal compounds and their composites, to simplify requirements for process equipment, and to reduce the number of manufacturing operations (down to 2—3) for the formation of absorbent layer on the solar collector surface

Stage of Development. Suggestions for Commercialization

IRL3, TRL3
The method for synthesis and application of coatings has been successfully tested at solar collector prototype for one year and are ready for manufacturing materials

IPR Protection

IPR3

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