## 9 Rainbow printing

A special type of printing that ensures there is a smooth transition among the main colors of the image, avoiding breaks and displacements.

10 Microlettering

Repeated legends that can be read under a magnifying glass.
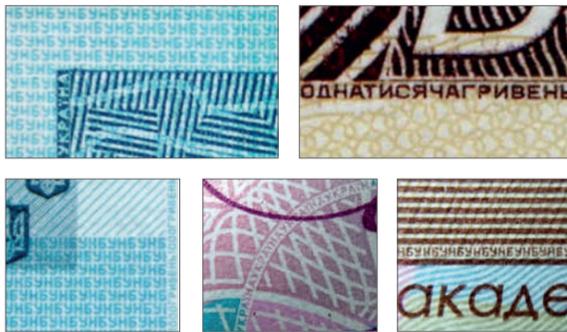
11 Serial numbers

Printed in relief printing:

- horizontally in red ink;
- and vertically (with the numbers having a variable height) in black ink.

A A 0000000

12 Anti-scan/anti-copy pattern

Made of fine, multi-shaped lines that impede the reproduction of the images by copying or scanning equipment, which will produce a moiré pattern.

Ultraviolet feature

front of the note

back of the note

Under an ultra-violet light, security fibers that are scattered randomly in the paper and invisible in daylight, glow red and green.

Under an ultra-violet light, portions of a polymer security thread, which is fully embedded in the paper, glow yellow and light blue.

Infrared feature

front of the note

back of the note

National Bank of Ukraine

1000 hryvnia
designed in 2019

front of the note

The main image on the front of the note is a portrait of

VOLODYMYR VERNADSKYI

Volodymyr Vernadskyi (1863 – 1945) was a famous Ukrainian scientist, philosopher, natural scientist, and the founder of the scientific fields of geochemistry, biogeochemistry and radiogeology. He was also one of the founders and the first president of the Ukrainian Academy of Sciences, which was established in 1918.

back of the note

The central design element on the back of the note is an image of the

PRESIDIUM OF UKRAINE'S NATIONAL ACADEMY OF SCIENCES

The Presidium of Ukraine's National Academy of Sciences was built in the 1850s to a design by architect Alexander Beretti. In 1892, a third floor was added to the building. Its facade features rustication and an attic decorative element with a cast-iron grid. The building was transferred to the Academy of Sciences in 1918.

The banknote is printed on tinted light-blue paper, which is the dominant color of the banknote images. The banknote is sized 75x160 mm.

front of the note

back of the note

1 Watermarks

The multi-tone watermark is a repeated portrait of Volodymyr Vernadskyi formed by paper fibers in different shades (lighter and darker than the paper); the light watermark element is the numerical indication of the denomination (horizontal, in the right bottom part of the multi-tone watermark).

2 SPARK feature

The SPARK feature (optically variable image) is a composition made of conventionalized fragments of a crystalline grid and a floral ornament, which has dynamic light effects. When the banknote is tilted, some areas of the image gradually change color from gold to jade green.

3 Security thread

A stripe, fully imbedded into the paper, on which the words "1000 ГРН," Ukraine's small coat of arms (the trident), and the underlined words "1000" can be seen as direct and inverse images under a magnifying glass.
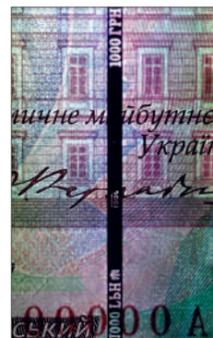
4 Window thread

A magenta window stripe that is partially imbedded into the paper, and has pronounced dynamic light effects. The stripe features the numeral 1000 and Ukraine's small coat of arms. When the banknote is tilted in one direction, the background image on the stripe moves in the opposite direction.

5 Latent image

When the note is held at a sharp angle to the light at eye level, the numerals become visible:

- they appear dark against a light background when the note is looked at from the long side;
- and light against a dark background when the note is looked at from the short side.

6 Relief features

These are elements on the front of the note that are rough to the touch. For better visibility, these elements have been enlarged:

- a) legends and images;
- b) feature for the partially sighted;
- c) a fragment of the portrait.

7 See-through register

When the note is held up to the light, irregular shapes printed on the back and front combine to form the banknote's denomination "1000".

front of the note   back of the note   to the light

8 Orlov printing

A special type of printing that ensures there is an abrupt change of one color into another, without breaking and shifting.