

Nemertine des Genfer Sees, auch hier in allen Merkmalen mit jener vollkommen übereinstimmend, in einem Sumpfe nicht selten vorkommt.

Basel, 2. März 1894.

II. Mittheilungen aus Museen, Instituten etc.

1. A new and easy method for bleaching animals and microscopical sections fixed with osmic mixtures.

By Dr. D. Carazzi, of the Spezia Civic Museum.

eingeg. 12. Februar 1894.

For the purpose of getting rid of the blackening that occurs in animals and microscopical sections, as a consequence of treatment by osmic mixtures, Paul Mayer and Marsh have found the well known »chlorine method«. But the objects are required to remain in acid liquid, and heat is often necessary for evolving chlorine; at last, the chlorine appears to have an injurious effect on the tissues.

These inconvenients are avoided by the »oxygenated-water method«. The peroxide of hydrogen, H^2O^2 , becomes reduced at contact with organic matter, and this is bleached by the O at the statu nascenti. This is undoubtedly a valuable method, but the oxygenated water is very instable, and in a short time H^2O^2 is converted in H^2O .

The difficulties are very perfectly got over by my »Peroxide-of-sodium method«. The compound has the formula Na^2O^2 and is a yellowish powder; when put in water it evolves O, and the liquid becomes alkaline, Na^2O^2 being reduced at Na^2O , and $Na^2O + H^2O = 2 Na HO$ (caustic soda). But if the water is mixed with acid the liquid remains neutral, because the soda combines with the acid.

You must not put large quantities of peroxide in a small quantity of water, nor take mineral acids. If these precautions be not observed a very violent reaction is set up, the evolving of O is very strong, and molecules of powder are thrown all around.

The acids more convenient for use are tarttric and acetic. For bleaching the objects I suggest the following method: A solution of tarttric or acetic acid (10 per cent.) is put in a vessel for animals, and in a test-tube for microscopical sections; sink small quantity of the peroxide, add slowly alcohol 70 per cent. at the surface of the water; put in the alcohol the objects (which are before in alcohol). The O escapes from the water, rises quickly to the level of separation of the two liquids and dissolves in the alcohol slowly, bleaching the specimen.

La Spezia, Civic Museum, 4. Febr. 1894.

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