

THE SCIENCE BEHIND EYRACURE

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Summary:

Hénsus AB offers a scientifically proven product - Eyracure for advanced hair care, permanent repair and protection. The strength of the company lies in strong scientific work combined with established business expertise that will enable us to reach out with our products and technology worldwide.

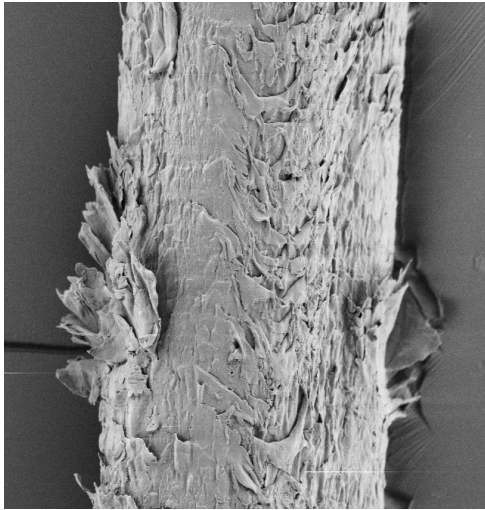
Hair is the most controllable aspect of physical appearance for every human. Like the rest of the human body, hair also consists of proteins, lipids and other trace elements. Morphologically, human hairs are fiber-like structures with three major components called cuticle, cortex and medulla. Hair fibers are made of a protein called keratin, where the individual amino acids are linked through di-sulfide, hydrogen, ionic and hydrophobic bonds. Any damage to hair fibers (either physically or chemically) leads to breakage of bonds including the disulfide bonds which in turn leads to hair fiber damage. Any such hair damage causes the hair to lose its function and ultimately leads to hair breakage.

Scientifically, on the site of hair fiber damage, there is an exposure of free thiols by disulfide cleavage resulting from conversion of cystine to cysteine. The scientists behind Hénsus AB have invented a scientific technology and developed the first product “Eyracure” to treat these hair fiber damages using biomolecules. Eyracure consists of environmentally friendly bio-organic molecules, that are functionalized with unique light reactive functional groups that covalently crosslinks with exposed thiols at the damaged site under light (>365nm-900nm). This leads to permanent repair and recombination of broken disulfide bonds leading to regained function of the hair and the prevention of hair breakage.

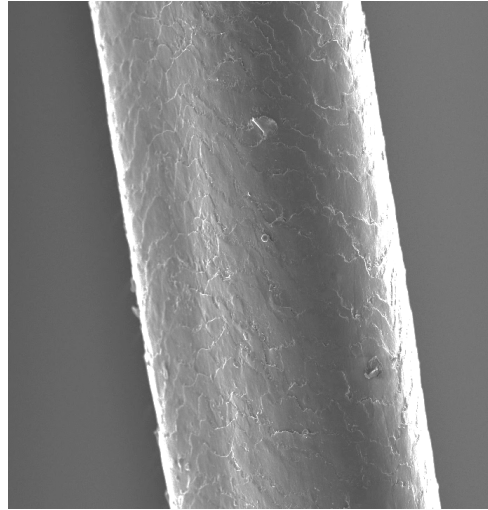
Eyracure was developed using our patent pending technology which offers a uniqueness in its superior product quality and in the application process. Eyracure consists of botanical molecules that significantly enhances the general appearance of hairs. The utilization of light offers a controlled and quick treatment process, where a single Eyracure treatment takes about 5-10mins. Eyracure has a high number of binding groups that repair any damages in hair effectively to offer a long-lasting effect after a single dose of application. Our experimental proofs have shown that after a single application of our technology to damaged hair, the damaged areas were permanently repaired, resulting in restoration of hair thickness from 65 micrometers to 100-105 micrometers (μm).

Scientific evidence:

Quality

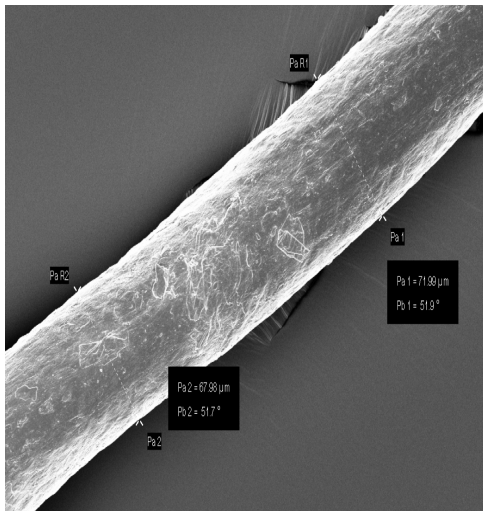


Before Eyracure treatment,
(damaged hair fiber)

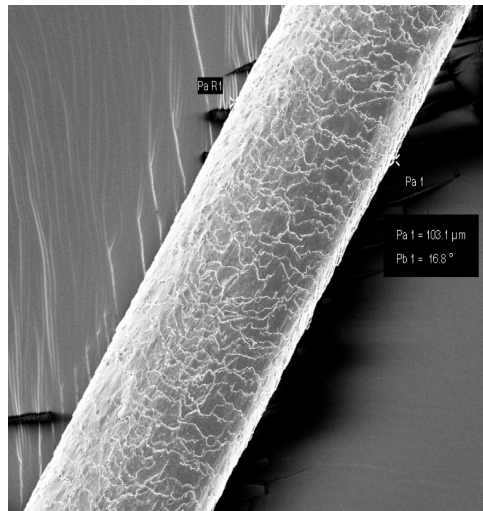


After Eyracure treatment,
(repaired hair fiber)

Thickness



Before Eyracure treatment,
(65 μm)



After Eyracure treatment,
(100-105 μm)

Microscopic studies on the treatment shows the results on both hair quality and hair thickness. A healthy European hair measures around 100 μm, but many damaged hairs are only 60 μm or thinner. Eyracure repairs the surface of the hair (cuticles) with strong, stable protein bonds that give long-lasting results.

Study conducted by:

Ranjithkumar Ravichandran

Award winning scientist having PhD in Molecular Physics from Linköping University and previously Master in Medical Nanotechnology. My PhD expertise is on biomaterials for tissue engineering and regenerative medicine applications and filed patents contributing to on biomedical applications.

Petter Sivlér

Petter is a Serial Entrepreneur and Co-founder of S2Medical AB and Instagraft AB. Petter holds an M.Sc. In Biomedicine and is a current PhD candidate in Molecular Physics at Linköping University. Previously researcher at the division of regenerative medicine, Linköping University.