

SHELL HOMAGE, GERMANY

Shell Homage – Bio Material Out of Egg & Nut Shells

Shell Homage is a biodegradable composite material made from egg and nut shells. It contains no toxic chemicals, is completely biodegradable, and is 100% compostable when no longer used. It can be applied in several industries such as product design, interior design, 3D filament consumable goods, and jewelry design. It's the ultimate solution for getting rid of things instead of storing them for years and getting rid of oil-based plastics, which never decay.

Shell Homage was founded by the integrated designer Rania Elkalla and was initiated during her master's re-

search project. Rania can control the material properties according to the application – from stiff, hard, transparent, translucent, or opaque surfaces to elastic and malleable sheets. The surfaces look like marble or natural stone, but the substance is much lighter. The created composite material can be pressed, extruded, 3D printed, or formed by injection molding. Each surface is handcrafted into a unique combination of colors and patterns.

GOLD AWARD WINNER

Rania Elkalla, Shell Homage, Germany



Coffee Talk with Rania

Please tell us about yourself, Rania! I am the founder of Shell Homage. As an integrated designer with a product and graphic design background, I am also experienced in material science and production techniques. Initially, I studied product design and industrial design and learned about the idea of integrated design when studying at KISD, the Köln International School of Design. Then I went on to do my master's at the Polymer Science Institute, TU Berlin. My work can be described as eclectic. I love traveling and getting exposed to different cultures and styles and merging between different disciplines. Also, I like to design things with humor and interaction with users. I had a passion for material from a very young age – being a person who loves to touch things, explore the surfaces of things – and always likes to explore the things around me.

How did you come up with the idea for your Shell Homage project? It actually came by coincidence. I was inspired by my father who always likes to buy fresh nuts from the local market and crack them open at home. Being astounded by how strong the shells were I started analyzing the material to use in design. Then the same thing happened with eggs. We liked to have a family breakfast together, where we often ate eggs and I became fascinated with the shells. I started collecting egg shells from friends, from local bakeries, and then went on to get them from restaurants. I wanted to change the perception of food waste so that the user doesn't really know what the material's origin is – was it nut or egg shells? And then when you know you have this 'Aha!' moment. I like playing with a material and to change the perception of it.

Where do you see the future for Shell Homage? I'm currently producing materials and also creating examples out of this material for my other products. Also, I would love to collaborate with different designers, whether in the interior design industry or even fashion or jewelry to scale up the material so that it can be more accessible to different people in different countries. I've also started to use the material as a 3D printing filament, but not yet on a commercial basis. My goal is to make it accessible because it's a very interesting material when you 3D print it.

How did you achieve the remarkable media coverage? Any tips for us? I've been really lucky in terms of marketing. I entered competitions and after winning received a lot of publicity. There was even a German TV documentary produced! We did street interviews and asked people "What do you think of this material?" and no one really knew it was egg or nut shells. My tip would be to keep applying for international competitions. Even if you don't win, you will usually get feedback. It's good to expose your idea to see how it works compared to others and see what people think of it. Furthermore, Shell Homage had the chance to participate in several fairs where people can experience the material and give feedback and this really helps a lot.

