JURY VOTINGS





Project name: Opencyclone	
Designer:	Lion Sanguinette, Germany Jonathan Stein, Germany
University:	Kunsthochschule Burg Giebichenstein, Germany

Production system for open source hardware. Open source and economic efficiency are not mutually exclusive. To illustrate this, we have designed a conventional industrial product - a hoover - that can be produced in three different levels of complexity. Both private and commercial players can manufacture Opencyclone. The blueprints are available in three levels - DIY, Advanced and Professional - and can be downloaded from <u>os-systems.eu</u>.

<u>Video</u>





WINNER

Project name: GyneCare

Designer: Lirjeta Maxhuni, Switzerland

University: ECAL, Switzerland

GyneCare is an innovative gynecological outfit that aims to protect and provide people with greater safety and reduced vulnerability during medical exams.

Starting from the observation of unresolved issues in the gynecological field, I identified one of the most important problems: the nudity. Thus, my outfit offers a solution by allowing a medical controlthat is more respectful of people's modesty.

This design project responds to a real need by offering a more comfortable and human alternative for patients, while improving the quality of gynecological care.





Project name: Running on (h)airDesigner: Manuel Steffan, GermanyUniversity: ECAL, Switzerland

Running on (h)air is a 3D-printed lightweight running shoe sole. The weight of a shoe directly influences a runner's performance and therefore the sole aims to be the lightest, yet high performing running sole. Runners customize and optimize the density, compression, and positioning of cushioning zones to achieve a perfect fit and getting rid of excess material. The 3D printed structure mimics the lightweight cushioning effect of spacer fabrics and can be easily recycled at the end of its life due to its monomaterial properties. The project has been developed at ECAL during a collaboration project with on_running.





Project name:Soft ObjectsDesigner:Gaspard Fleury, FranceUniversity:The Swedish School of Textiles, Sweden

The soft object project aims to combine new digital crafts and classic industrial flat bed knitting techniques to promote the potential of textiles without production waste in the field of object and furniture design. The collection is organized in three families, all exploring a different aspect or aesthetic of the concept of "soft object". This project proposes a vocabulary of shapes and patterns for different typologies of knitted objects such as vases, vessels and bottles. Different thermoforming yarns are explored for their aesthetic qualities. Knitted in a spacer structure combined with short rows, they allow to knit dense but still soft volumes produced without any material loss.





WINNER

Project name: ButtonUpDesigner: Lilian Onstenk, GermannyUniversity: ECAL, Switzerland

The textile industry generates an extensive amount of pollution worldwide. Many clothes ending up in donation bins have malfunctioning closures such as buttons, press studs, zippers, etc., making them unfit for the second-hand market. Before repurposing and shredding the textile, remaining fasteners must be taken out manually within the recycling facilities – a labour intensive procedure.

ButtonUp proposes a system in which buttons are treated as precious goods. Instead of sewn-in fasteners, ButtonUp allows for simple and easy exchange or removal by the user without a needle or yarn. Aluminium closures and cotton fabric can be reused, changed, or finally, at the garment's end stage of life - fed back separately into recycling.





Project name: **New Gen** Designer: Marcus Götschl, Germany

University: Schulen für Holz und Gestaltung Bezirk Oberbayern, Germany

A bridge between stress and tactile relaxation. As a new generation bed, "New Gen" embodies simplicity and minimalist aesthetics to create well-being and balance in hectic everyday life. The focus is on sustainability principles: resource consumption is minimised and the use of replaceable components challenges the culture of disposable consumption. Simple production and environmentally friendly flat-pack shipping reduce energy consumption and make this bed accessible to people all over the world. Its timeless design makes it a reliable companion in an ever-changing world. The bed is assembled and disassembled without fittings or tools, simply by plugging it in.





Project name: **Copine** Designer: Nir Neria, Israel

University: Bezalel Art and Design Academy, Israel

Copine is the outcome of experimentation with two materials: Leftover copper wire and natural pine needles, which both have antiviral properties in the search of a new textile. A dedicated loom was built to execute this novel weaving technique, creating a constructive yet flexible textile with a shiny natural look. The clutch bag was created with one pre-planned sheet of woven material with no excess or waste.





Project name: **STUHL**

Designer:	Cornelius Richter, Germany
University:	Folkwang Universität der Künste, Germany

STUHL is the result of an experimental design process with the aim of approaching the way children make decisions in creative processes. The design is the outcome of a negotiation process between the archetypal silhouette and the ergonomics of a chair. The central question is: To what extent can the consistent orthogonality of the chair - as if drawn by a child's hand - be preserved, despite ergonomic interventions? STUHL is a hybrid between traditional craftsmanship and modern production technology. Four legs, a backrest and a seat. Ash wood.



Project name: Hotspot

Designer:	Moritz Walter, Germany
University:	Kunsthochschule Berlin Weißensee, Germany

How do we want to heat in the future?

We will have to switch to sustainable and renewable energy sources, as fossil fuels do not offer a long-term perspective. Furthermore, conventional heating systems with complex infrastructure can only insufficiently meet individual heating needs. The project Hotspot explores the possibilities of decentralized, electricity-based heating. By creating smaller heat zones in the room, heating is both more comfortable and more efficient. The product family includes a heating panel for large-area heating and mobile, modular heat storage units for heating close to the body. The objects are able to respond flexibly to individual heating requirements and fit seamlessly into living environments.





Project name: Off the Grid

- Designer: Eva Benamou, Israel Antonia Gauß, Germany
- University: Bezalel Art and Design Academy, Israel Akademie der Bildenden Künste Stuttgart, Germany

Inspired by the textile dyeing technique of silk painting, "Off the grid" deals with the dyeing of textiles with a pen plotter. In collaboration with Eva Benamou (Industrial Design, Bezalel Academy) and Antonia Gauss (Textile Design, ABK Stuttgart), the project develops a textile dyeing system and researches the creative possibilities offered by the pen plotter as a digital tool at the interface between textile craftsmanship and industrial reproduction. The combination of both disciplines makes it possible to learn the perspective and knowledge of the other. The results includes silk sheets painted with line and drop patterns, expressing the dance between the designers and the machine.





Project name: LayerDesigner: Marcus Angerer, GermanyUniversity: ECAL, Switzerland

3D printing has been predicted as the next industrial revolution for a long time. Still the technology has not made the final step into mass manufacturing, primarily due to its limitations in precision and efficiency.

However, the printing setting Vase Mode shows promise as a potential solution to overcome these limitations. By enabling printing in a continuous spiralized line, this setting produces cleaner results while significantly accelerating the process. LAYER is a lighting system designed to be produced using Vase Mode, taking advantage of its unique features. The distinct layers of the prints thereby serve a functional role, utilizing the spiralized structure to seamlessly unite all components through screwing.





Project name: Radiator Flask

Designer:	Valerio Sampognaro, Germany
University:	Hochschule für bildende Künste Hamburg, Germany

The Radiator Flask is a modular cooling element made of clay, which in dry, hot climates is able to cool the room air through evaporative cooling.

The elements are bisque fired and filled with water, which is transported to the surface by the porous clay. When warm air flows around the objects, the water evaporates by absorbing energy from the air and thus cooling it down.

The modular design allows for self-contained objects as well as standing or hanging spatial structures.

The design gives a new form to an ancient cooling method from the Arab and Mediterranean regions, making it more efficient and accessible and conveying the importance of ancient knowledge for dealing with today's environmental conditions.





Project name: Designing the Afterlife		
Designer:	Juni Sun Neyenhuys, Germany	
University:	Kunsthochschule Weissensee Berlin, Germany	

Biobased, biodegradable packaging could replace conventional, hard-to-degrade materials, but its use is limited due to challenges in seamless integration into existing disposal systems. "Designing the Afterlife" has developed algae-based, biodegradable packaging that closes the biological cycle and utilizes the current disposal infrastructure. The "Water to Water" series includes packaging for solid cosmetics that dissolves during use, is disposed of through wastewater, and completely breaks down in sewage treatment plants.

"Water to Water" focuses on the brand experience and product communication. The packaging communicates how it can be easily disposed of. A QR code leads to a video that vividly and playfully explains the "Afterlife."





Project name: Mantis Designers: Esther Betz, Germany Elisa Bessega, Italy Sylvia Chen, USA University: Bauhaus-Universität Weimar, Germany Politecnico di Milano, Italy Pratt Institute, USA

Designed using generative design, Mantis is a lightweight cargo scooter that aids in the transportation of everyday loads in an urban environment. The Soft-Kill-Option method was used to optimize material usage, aiding us in creating a steel frame that is high-strength at a low weight, ensuring efficient material usage and portability. The side-to-side steering and spacious cargo basket offer an intuitive user experience, while the threewheeled design ensures stability without compromising maneuverability. Mantis stands as a more sustainable and user-friendly alternative to traditional cargo vehicles.





Project name: ANTI throw-away mentality

Designer:	Zixuan Zhou, China
University:	Akademie der Bildenden Künste Stuttgart, Germany

"ANTI throw-away mentality" promotes sustainability in household electrical appliances. Many of these appliances are discarded prematurely due to mass production using non-repairable designs and materials.

To counter this, I designed toasters and kettles, the two of the most common electrical household items, with simplified structures, focusing on utility and function. These products use heat-resistant ceramics for durability and easy part replacement, promoting long-lasting relationships between users and their appliances and sustainability in a society prone to disposability.





Project name: Morari

Designers: Jesse Altmann, Germany Klara Schneider, Germany Valentina Lenk, Germany

University: Fachhochschule Potsdam, Germany

Bus and tram stops are often inadequately equipped: there is a lack of seating and lingering options. The Morari series brings more life, joy, and relaxation to bus stops. Various seating options, practical storage and leaning possibilities now allow for comfortable stays, transforming the wait into a pleasant break in everyday life. The basis for the series is formed by standardized bus stop railings, which serve as the key point for Morari and its locking system. The manufacturing process in 3D printing opens up new perspectives for Morari, leading to an amorphous design. This is further complemented by the transparency of the manufacturing process and the integration of the printing lines on the surface of the series.





WINNER

Project name: **RE**•**IN**•**WASTE**

Designer:	Daniela Cimen, Germany
University:	Hochschule Hof, Germany

In this study, experimental methods were employed to develop materials from household food waste. The addition of natural binders resulted in a flexible, partially water-resistant, and biodegradable material with circular value creation. All utilized waste was indeed generated from household food waste. The aim of this work was to explore the development of material alternatives through the utilization of organic waste and to test their industrial scalability. Implementation was carried out through experimental methods and subsequent product development. Material samples were created from orange peels, leading to the production of durable clothing items.





Project name: [ORIORI] :: folding woven textileDesigner: Emilie Palle Holm, DenmarkUniversity: The Swedish School of Textiles, Sweden

ORIORI presents a collection of transformable, fully-woven, and self-supporting sculptural objects utilizing 3D origami structures as construction principle. Each object can alternate between different visual and tactile form outcomes based on contrasting elements within the aspects of shape, texture, color, and pattern.

ORIORI is reimagining the craft of origami within the context of contemporary textile design through jacquard weaving. By embedding form-transformable mechanisms directly in the woven textile, material and form are created simultaneously in the loom. Through a hand-folding process, the 2D woven textiles are transformed into 3D origami objects hereby demonstrating a method to generate form exclusively through weaving.





WINNER

Project name: **YSHELF**

Designer:	Jan Penka, Austria
University:	Universität für angewandte Kunst, Austria

The shelf system is based on two simple mechanisms created through precise laser cuts into the stainless steel tubes and the use of plastic inserts. This results in an almost invisible yet highly functional mechanism, making the assembly of the shelf a relaxed and enjoyable experience. Additionally, the shelf is characterized by exceptional stability and can bear loads of 80+ kilograms. Thanks to its minimalist design, the shelf effortlessly integrates into living spaces. It is flat-packable and remarkably lightweight. Assembly only requires a 15mm wrench and two hands.





Project name: SATTEL

Designer:	Sofia Kocher, Austria
University:	Universität für angewandte Kunst, Austria

"SATTEL" is a comfortable seating object that presents an alternative and sustainable approach to traditional upholstered furniture. Comprising a few easily disassembled parts, this design facilitates recycling. The foldable steel frame tensions the fabric upon unfolding. Comfort is achieved solely through the fabric tension, eliminating the need for traditional padding. The frame shapes the elastic fabric into a saddle-like surface, visually reminiscent of a large pillow. The assembly requires no tools and allows for easy washing or even replacement of the cover. The potential for future enhancement lies in the integration of 3D knitting technology to provide even better support in specific areas.





Project name: Cable Mania

Designer:	Josua Roters, Germany
University:	Kunsthochschule Burg Giebichenstein, Germany

Cables are much more than conductors of electricity, troublemakers and chaos. Despite the increasing use of wireless devices, they remain an indispensable part of our infrastructure. Cable Mania focuses on the - in the design process often neglected - product element cable. In a playful approach, the experiment finds form in a collection of six diverse objects.

