



SICHTBARMACHUNG EINER SYMBIOSE NATUR+BETON



E NIT DECKUNG

VISUALIZATION OF A SYMBIOSIS NATURE + CONCRETE

EXHIBITION CATALOG

» Competition

The art competition is organized by the Collaborative Research Centre/Transregio 280 "Construction strategies for material-minimized carbon concrete structures - foundations for a new way of building", which has been funded by the German Research Foundation (DFG) since July 2020.

The SFB/TRR 280 invited artists to be inspired by the themes of the Collaborative Research Center. The target of the competition was to show that carbon reinforced concrete, as a product of science and technology, has a variety of relations to art and nature.

What becomes visible, what stays hidden from the researcher and what from the external perspective?

How can nature and carbon concrete be combined as an art piece?

» Discovery

Concrete is simple, quick and cost-efficient to produce, it can take on and preserve almost any shape and is the only building material that is used across the globe, even in developing and emerging countries. The SFB/TRR 280 develops strategies for innovative concepts and intelligent constructions made of the new material carbon concrete. Methods for design, modeling and construction with this new material require profound basic research. New mindsets and changes to established approaches are necessary to protect our natural habitat and to reduce CO2 emissions and resource consumption when building with concrete. Besides botany and mathematics, art should be a source of ideas for new construction methods. In combination with other materials, concrete serves as a medium for the creative ideas of artists.

For the SFB/Transregio 280 art com-

»Target

petition 2023, ideas and designs were sought that implement the use of concrete or carbon concrete in a visionary way in relation to the topics of the research network. The competition did not specify a precise design object; the artistic technique was optional. The participants were free to choose the context for their design.

The convincing implementation of the design and its creativity were decisive for the assessment of the works. The submitted works were judged by an independent jury.

Freelance artists and students of art and design and related subjects were

» Call of tenders

eligible to participate.

The competition applications had to be submitted anonymously to allow an independent assessment.

The content and style of the design was basically optional. Sketches, collages, objects, models and films were possible, to be submitted in analog or digital form. The designs and their special features should be understandable without further explanation. All submissions were to be created by the participants themselves and were free of third-party rights.

After the entries were submitted by April 26, 2023, the jury decided on the first three places on May 2, 2023. These were endowed with work contracts to realize

» Exhibition

the submitted competition ideas. The three winners had until 10.09.2023 to implement their ideas. They received significant support from employees of the RWTH's Institutes of Textile Technology and Structural Concrete.

All ideas submitted and the realized objects of the winners will be presented in a joint art exhibition in Aachen's Annahalle, Annastraße 14-16, from 14 to 17 October 2023. Special thanks go to Mr. Martin Görg from the company Görg & Görg, who kindly provided us with the location for the art exhibition for free.

The art competition was initiated by the team of the SFB/Transregio 280 public relations sub-project.

Angela Alvarez y Leal from the Chair and Institute of Structural Concrete at RWTH Aachen University was in responsible

» Organization

for the lead. She received all submissions and organized the jury meeting. She was also responsible for communicating with the participants, the jury members and the supporting institutes, as well as organizing the exhibition and vernissage. Stefan Gröschel and Silke Scheerer from the TU Dresden provided support with organizational issues and the creation of the exhibition catalog.

» The Jury



When two art historians, whose research focuses on architecture in general subject and the visual arts of the Middle Ages and Early Modern Period, are given the honor of being on a jury to judge contemporary works of art, it may seem unusual at first. After all, such juries are usually made up of experts who can sometimes even tell at first glance who the authors of the artworks are, which are of course submitted anonymously.

After all, we are two art historians who know that the competition system, as we take it for granted today, had its origins in distant times, for example with the competition for the dome of Florence Cathedral or for the bronze doors of the Florentine Baptistery. The principle of selecting the best was applied here to reward artistic innovation, the appropriate form, the resource-conserving use of materials and the courage to cross boundaries.

As is appropriate, we took a close look at the submitted works, enthusiastic about the idea that art can make a substantial contribution to materials research and that it also makes sense to promote it within the framework of special research areas.

We not only wanted to reward the use of carbon concrete according to the criteria of form, space creation, quality, con-

Prof. Bruno **Klein**

 Bruno Klein is an art historian and was a professor at the Technical University of Dresden until his retirement in 2022, where he was Dean of the Faculty of Philosophy. After studying in Berlin, Paris, Cologne and Bonn, he was a research assistant in Florence and Göttingen and then a university lecturer in Bochum, Bonn, Fribourg, Paris, Rome and São Paulo. His specialist interests include medieval art and its modern reception as well as architecture from antiquity to the present day. He has taught and published extensively on these topics.



ceptual stringency and visual persuasiveness, but also how it actually pushes the boundaries of what was imaginable. As the works presented in the catalog demonstrate, all of the participating artists have succeeded in achieving this. We were particularly impressed by the very different models and ideas of Ekkehard Neumann, Heinke Haberland and Anja Schubert, not least because they are works of art that unfold their special qualities precisely in the confrontation with carbon concrete.

The art of engineering in the truest sense of the word is absolutely essential for its realization. The maximum dimensions that are possible and artistically appropriate here will remain to be seen. What we can already see in the models of the award-winning works: Concrete as a material has never been used in such an impressive way before.

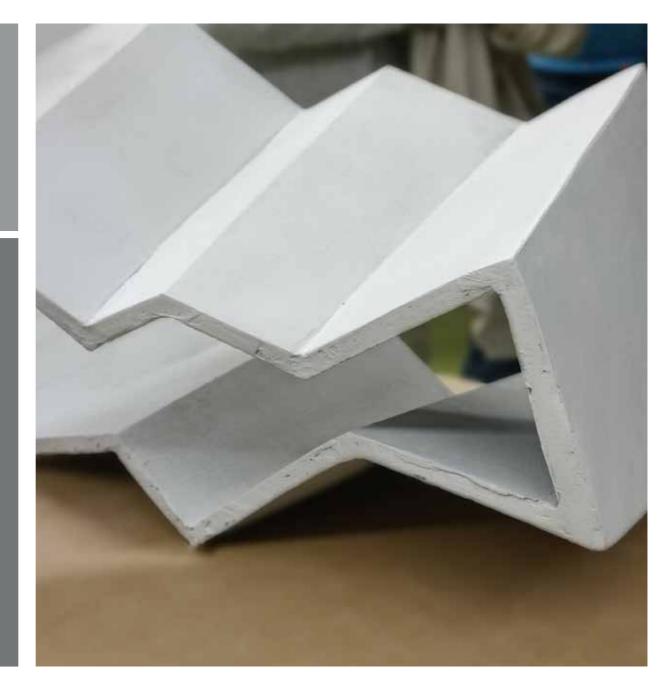
Alexander Markschies and Bruno Klein (Aachen and Dresden in September 2023)

Prof. Alexander Markschies

 Alexander Markschies is an art historian, professor at RWTH Aachen University and director of the university's Reiff Museum, a musée inconnu. He is passionate about teaching, is involved in academic self-administration in many ways, for example as Dean of the Faculty of Architecture or as a representative for university sports, and frequently changes his research topics. Most recently, he published on Albrecht Dürer and Karl Friedrich Schinkel. A book on the ground plan as an abstract pictorial form is in preparation.

Ekkehard **Neumann**

- 1951 born in Oldenburg, residence and studio in Münster
- 1973–1974 studied art history at the University of Göttingen
- 1974–1978 Studies at the State Art Academy Düsseldorf, Department for Art Teachers Münster with Prof. Jochen Zellmann and Prof. Hans-Paul Isenrath, focus on sculpture/plastic art
- 1979–2014 Teaching activities as an art teacher at grammar school
- 2009–2011 Lectureship at the WWU Münster





» Leporello

Suggestion of movement in static presence

1. Platz

Changing directions of surfaces in different "amplitudes" ... - The leporello can be seen and read in its various extensions in different ways: outwards, opening up via the folds at the top and bottom - or - from the outside via the upper and lower levels joining together

Making the sculpture

- 1. Materials: fine concrete, carbon fabric, formwork oil, concrete filler, concrete paint
- 2. the metal model is adopted as a concrete shape, intended material thickness 10 mm
- 3. Attachment of 10 mm high side limiting strips according to the Leporello shape
- 4. Preparing the carbon fabric to the full width and length of the model
- 5. Construction of the entire mold in three sections: lower surfaces -

connecting area from lower to upper surfaces - upper surfaces, one day drying time for each of these work sections

- 6. Work steps: Applying the first layer of concrete ca. 5 mm - Inserting the carbon fabric into the concrete
 - Applying the second layer - Leveling the surface
- two additional layers of fabric are integrated in the area of the link between the upper and lower surfaces to absorb tension and pressure
- 8. After removing the formwork, defects are filled with concrete filler
- Finally, the surface is finished with concrete paint (color light grey RAL 7035)



www. ekkehardneumann.de



Heinke **Haberland**

- 1966 born in Kiel
- 1985-1990 studied fine arts at the Muthesius-University Kiel
- 1989 DAAD/Erasmus scholarship at the Norwich School of Art (Great Britain)
- 1990-1996 Studied fine arts/ sculpture at the Düsseldorf Art Academy
- 1995 Master student
- since 2006 independent art and creative director and freelance artist
- Numerous exhibitions and prizes





» Fibonaccibikini

Hyperbolic geometries in space

2. Platz

The extensive increase in vibrant growth using the example of the mathematical Fibonacci sequence results in spatial structures of peculiar inversions and unfoldings that follow the universal laws of the cosmos. I wanted to transform such mathematical-abstract ideas into threedimensional sculptures and at first tried in vain to imagine the resulting spatial bodies in a purely imaginary way and to realize them in drawings or classical sculptures - but only when I had the idea of crocheting along these laws did I succeed.

In creating these structures, I operate on the edge of my own sculptural imagination and allow myself to play with the resulting structures, which - in accor dance with the prerequisites of the laws of nature - emerge of their own accord, as it were.

But crochet itself as a production technique is not necessarily of primary aesthetic interest, but rather a curious means to an end. And yet it always remains a one-dimensional thread, from which - stitch by stitch - a hyperbolic guasithree-dimensionality results, but which remains essentially two-dimensional. For me, this brings up an even more farreaching question - about the inner essence of the material, and if it could be possible not only to crochet one-dimensional threads, but if a kind of structure could already be present inside the substance, unfolding three-dimensionally into space according to the principles of hyperbolic geometry.

In other words, a material that is infused with these Fibonacci principles.



My artistic curiosity here revolves around how it might be possible to reproduce such crocheted objects in concrete - but ultimately even more so around the question of whether it is potentially possible to develop the underlying principles deep within the material.

DThe exciting topic would then be what kind of structures can grow out of this material. And to what extent the underlying laws of nature raise new aesthetic and philosophical questions. The resulting artifacts serve as inspiration and as models for further ideas about the deep

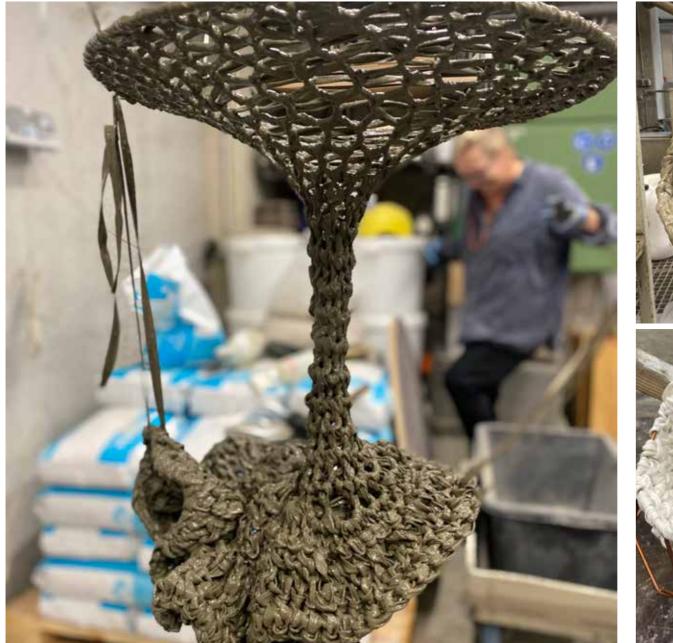


shape of the cosmos.

Current impulses from philosophy and natural science, such as those of Roger Penrose, are translated into sculptural forms of expression. The ancient findings of the mathematicians Leonardo Fibonacci (1170-1240) and Nicolas von Kues from the 15th century, which describe the deep, inner garment of nature in a model-like manner, also provide intellectual roots.



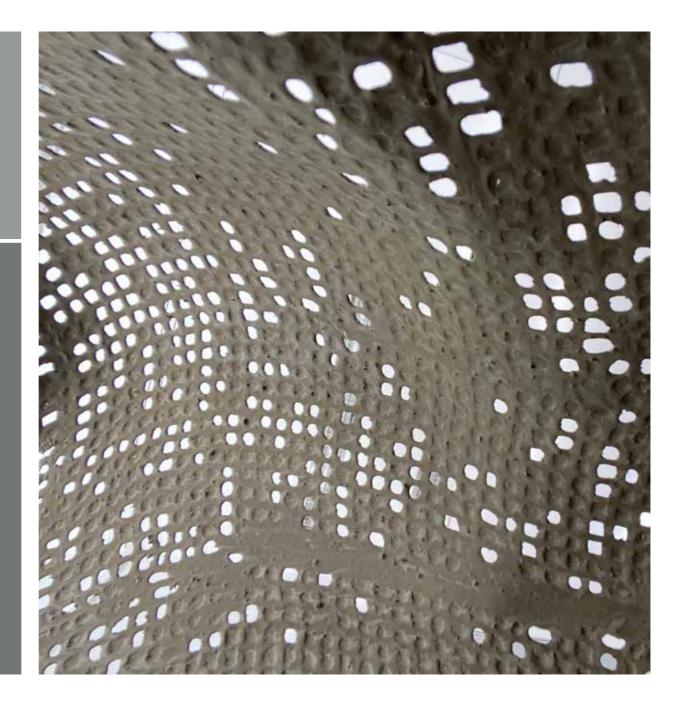
www.heinkehaberland.de





Anja **Schubert**

- 1972 born in Düsseldorf
- 10/1993–06/1994 Central Saint Martins College of Art and Design, London (Großbritannien), National Diploma with distinction
- 09/1994–06/1998 Bachelor of Arts at Middlesex University, London (Großbtitannien)
- Scholarship for sculpture at the College of fine arts, Sydney (Australia)
- 1998–2000 Freelance artist in Sydney (Australien)
- seit 2000 freelance artist artist in Düsseldorf





» Hülle

A poetic rewriting of the void

3. Platz



My sculpture from the "Hülle" series is a very delicate, thin-walled hollow body that circumscribes a emptiness with its almost translucent walls. It balances on a single small point, which makes its lightness even more significant.

Its organic, amorphous form is borrowed from nature, but it does not represent anything specific, leaving it open for the viewer to explore their own ideas. The described emptiness has a certain attraction. You want to enter the void to envelop yourself in its vastness and tranquillity.

The art prize "Visualization of a symbiosis - nature and concrete" and my associated work with carbon textile and concrete is an opportunity for me to find out whether my delicate, fine, light objects made of polymer plaster can be transferred to concrete and carbon textile. Is it even possible to think and build in completely different dimensions using these new materials and their properties? Imagine a sculpture that people could walk on. This would require fundamental research into materials and construction.

Over the past few months, with the help of the SFB/Transregio team, I have come closer to finding answers to these questions and thoughts through tests and experiments. The results of my work so far are some un-

successful or unsatisfactory objects.

One of the results did surprise and fascinate me, and it also showed me new ways of thinking. Before my work at the Institute of Structural Concrete and the Institute of Textile Technology at RWTH Aachen University, I could not have imagined building thin-walled, translucent or light-transmitting, but still stable





sculptures out of concrete. The carbon textile in combination with epoxy resin and "concrete milk", has created a structure with a surface that is translucent in a completely different way compared to my previous sculptures and conveys a delicacy.

It is these DISCOVERIES that make me so enthusiastic about this project. Experimenting and the inevitable failure that results from it opens up new paths for me and also opportunities for further

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» Register: 25 Graukarten

Concrete is used globally as a material, but as a natural material it has different regional specifications. This creates a field of tension between universalism and particularism. The grains of sand revealed during the acidification process become a site-specific natural pigment that makes this ambivalence tangible to the senses. In its uniformity, the group of works presents an image of togetherness and connection. At the same time, the individual slabs lay claim to specific characteristics of diversity and uniqueness depicted in their grain size on a singular level.

The work consists of 25 concrete slabs of the same dimensions, which are different in color. The various shades of gray are created by acidifying the slabs, a process in which the top layer of cement paste is removed by acid treatment and the underlying grain structure is exposed. Each slab contains sand from a different part of the world. The color and composition of the different types of sand create different surface structures that influence the shade of the slab. Each slab has an engraved code number and a reference to the sand's place of origin in the bottom right-hand corner.

Jasper Bamberger

- born on 17.09.1996 in Offenbach on the Main
- since 2017 studies at the University of Art and Design, Offenbach, Faculty of Art
- Previous works are close to post-internet art, dealing with the relationship between digital media and creative representation
- Working with various technical media, e.g. using analog techniques to transform digital content





www.winfried-becker.de

» Flügel

The starting point for my design was the ability of carbon concrete to produce very thin, stable and corrosion-resistant structures.

As I work at the performance limits of concrete structures in the sculptural field and springs and wings form a very thin, powerful and natural unit, I chose this as my theme.

Winfried **Becker**

- 1966 born in Erlenbach am Main
- 1984–1990 Dental technician training and professional activity
- 1990–1995 Studied architecture
- since 1999 freelance as sculptor and architect
- Exhibitions in Aschaffenburg, Augsburg, Dortmund, Füssen, Halle, Holl-feld, Irsee, Kempten, Cologne, Lohrhaupten, Marcigny (France), Marktoberdorf, Munich - Haus der Kunst, Nuremberg, Pfronten, Rheinbach, Worms, Würzburg





www.vanessacardui.de

» KörperBau

Videoart | Videoperformance

"KörperBau" is the name of my video performance and reflects the relationship between body and space, between people and architecture. The static construction becomes mobile through my intervention. The concrete buildings are brought to life - they are given hands, feet, even a whole body. The tectonic construction method with carbon concrete takes on something organic, mobile and alive through the body. And on the other hand, the human body is given something solid, constructed through the images of the concrete structures - the body is understood as something that can be actively shaped and rebuilt.

In this day and age of self-optimization and the cult of fitness, we are increasingly trying to "carve" our ideal body and model our outer shell according to our own ideas. Our body cult is reminiscent of chiseling a perfect sculpture. We experience our body as a "statue" or a "facade" that we can build according to our own ideas through diet, sport, etc. The concrete images on the portable screen complement the body and expand it. It is becoming increasingly difficult to separate man and technology - the relationship between man and technology is artistically reflected here.

Vanessa **Cardui**

- 1987 born in Halle/Saale
- 2011 Master of Art and Media, University of Hildesheim and Université de Provence (France)
- 2021 Group exhibition "Fresh Legs", Inselgalerie Berlin
- 2022 artistic director of the Berlin Minute Festival
- 2022 Curator of the Kunstraum Fuge with the year-round exhibition series "Bewegte Bilder"
- 2022 Work scholarship for media art, Onomato e.V.
- 2023 Group exhibition "The Reclining Figure", Magistrale of the Parkklinik Weißensee





www.tanjaevers.de

www.dua-collection.com

» Asymmetrische Ausblicke

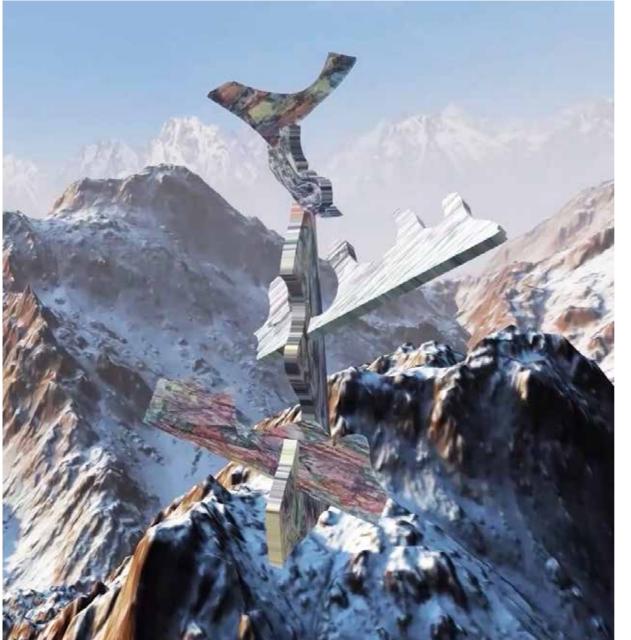
Peaceful sections versus dynamic form

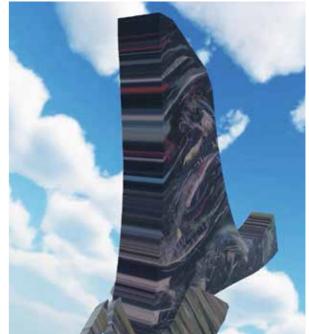
The design is concerned with the transformation of a surface into a form. The stylistic device of folding transforms two-dimensional surfaces into a threedimensional object. This constructive change, through active human intervention, represents a positive model for the future. The result is a horizontally oriented space with a dynamic formal language in its external effect. In exciting contrast to this are the calm, concentrated interior views with a view of the image section - nature.

The asymmetrical design and the two asymmetrically designed viewing windows offer two different views from the room. Two views and perspectives.

Alexander Esslinger Tanja Evers

- Alexander Esslinger, born on 26.04.1981, business graduate and autodidactic designer
- since 2009 founder and owner of dua - design label for author design | 2011 scholarship from Design Quartier Ehrenfeld | 07/2017-12/2021 projEKT - Esslinger Kraus Tomasianpour
- Tanja Evers, born 1977 in Olpe, professional photographer, freelance since 2002, national and international photo productions
- 2017-2023 Seminars and studies in sculpture, Paul Advena, Bildhauerhalle Bonn





www.ziemowitfincek.com

» Trashtopia

An Animation

The animation was created during the artist residency Pilotenküche in Leipzig. The monumental statue covered with my painting was created on the basis of real waste that I found at a garbage dump. The change of scale and three different settings are meant to open the gates of imagination and pose a question to the recipient without unnecessary narration:

Is what I see garbage or treasure, am I nobody or everything?

Ziemowit **Fincek**

- 2009 Graduated from the School of Fine Arts in Kalisz (Poland), Specialization in renewal of architectural elements
- 2011-2012 Scholarship at the Faculty of Painting of the Accademia di Belle Arti di Venezia (Italy)
- 2014 M. F. A., Academy of Fine Arts and Design Wroclaw (Poland)
 painting with prof. Piotr Błażejewski, prof. Przemysław Pintal, assist. prof. Anna Kołodziejczyk
- 2015 Studies at the Academy of Fine Arts and Design in Wroclaw (Poland) - glass with prof. Małgorzata Dajewska, prof. Beata Mak-SobotaMałgorzata Dajewska, prof. Beata Mak-Sobota





www.tanjagoethe.de

» Great Barriere Reef 2023

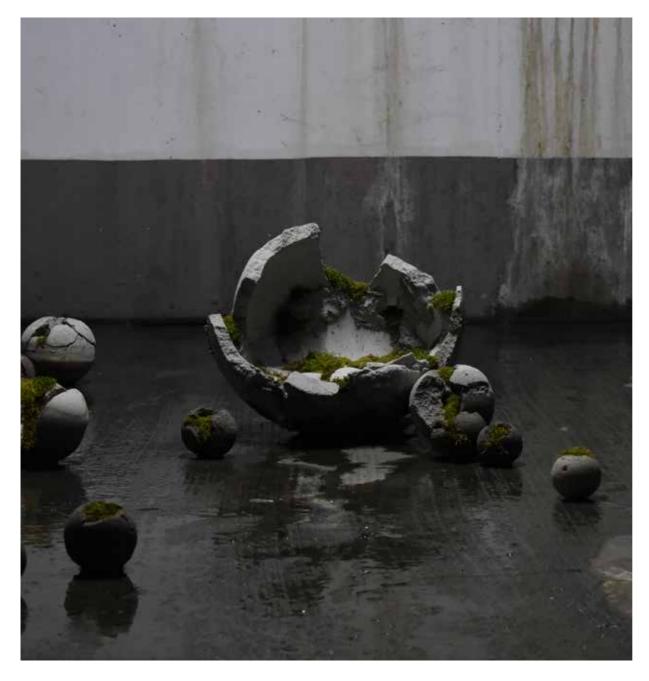
The submitted design entitled "Great Barrier Reef" plays with the shape of the vase. In the image, the space around the vase opens and folds with niches around the central body.

The concept presents an exemplary type of building that ideally combines residential and garden structures in a standardized way. The individual building would be dissolved and become more of a natural landscape in the river. The plants in the structures serve various needs: Nutrition, recreation, biodiversity, climatic qualities.

Building with carbon concrete can follow shapes and flow in its flexibility, creating new living spaces based on nature's example.

Tanja **Goethe**

- Born 1981 in Bergisch Gladbach, lives and works in Cologne
- 2004-2005 Studied Fine Arts -Ceramics at the Koblenz University of Applied Sciences (IKKG)
- 2005-2006 Studied fine arts at the Städelschule Academy of Fine Arts in Frankfurt
- 2006-2011 Studied fine arts at the Düsseldorf Art Academy, master student of Prof. Rosemarie Trockel and Prof. Marcel Odenbach
- 2018 »#likeamuseum Tanja Goethe, Selma Gültoprak, Pauline M'barek«







Instagram: @seongyeon___k

» Terra

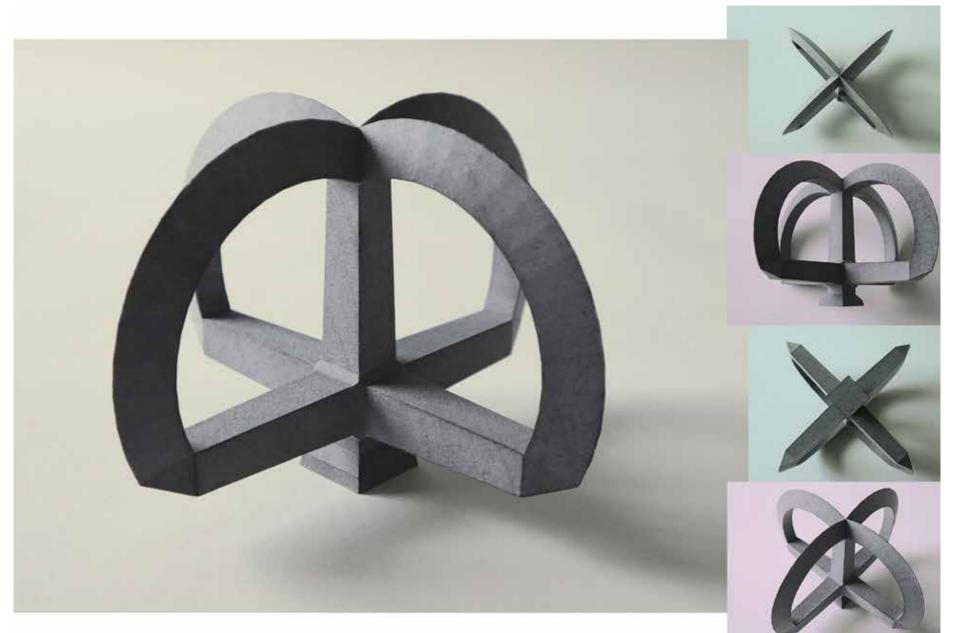
Zerstörung und Erneuerung

In this work, I wanted to create a comparison between dead and living materials. To do this, I used cement to create a sculpture with an intuitive and abstract form and planted moss on it. I hoped that this sculpture would look like a natural object.

Seongyeon **Kang**

- born on 29.09.1998 in Seoul (South Korea)
- 03/2014-02/2017 Gyeongi Art High School in Seoul (South Korea)
- 11/2016 College Scholastic Ability Test
- since 10/2019 studies at the Mainz University of Fine Arts
- 05/2021 take me on take on me

 exhibition at Basis e.V. project
 space in Frankfurt/Main
- Tour of the Kunsthochschule Mainz in July 2021, 2022 and 2023



www.ra-oul.eu

» Nobjects

A series

The sculpture shown here as a miniature model from the 3D printer (made of polyamide, scale 1:20) is a free fantasy within a series of works about possible objects that I call NOBJECTS. These switch between geomorphic, biomorphic and technomorphic design. In this specific example, I used the 3D design software "Zbrush" to derive the sculptural object from a simple square, from which an obelisk grows out as a supporting column pointing in the four directions of the compass.

The whole is based on a closed loop, strictly symmetrical and at the same time harmoniously self-contained. The frequently recurring individual parts, based on straight lines and bends, are kept simple, but create a contemplative, natural effect in the overall construction. It therefore seems to me that a realization in carbon concrete - precisely because of its special properties (better load-bearing capacity and lower weight of the components compared to conventionally reinforced concrete) - is anything but implausible and worth a try. The final real size of this NOBJECT is measured by the maximum physical load-bearing capacity in the interaction of its individual parts.

Raoul **Kaufer**

- 1957 born in Weidenau/ Siegen
- since 1974 painting, installations, interventions
- 1983 Diploma in psychology, University of Regensburg
- 1986 Julius F. Neumüller Scholarship for Painting from the City of Regensburg
- 2014 (Founding) member of the Paradoxa group, with Stefan Ebeling and Peter Nowotny
- Since 2021 Studio in the industrial building of a former paper mill in Klardorf-Stegen near Regensburg





www.philippkeidler.de

» Luftstütze

Plant inspired

A Monstera deliciosa served as my inspiration for the "air support" sculpture. The nodes and internodes of the plant are a reminder of an expandable, modular system from which the aerial roots push out and give the plant support and stability. The organic sculpture picks up on this aspect. The freely hanging elements lend the sculpture a lightness and stability despite a certain volume.

The construction of the sculpture is also based on the aerial root of the Monstera deliciosa. Conventional constructions for sculptures are not sustainable, as polystyrene and synthetic resins are used. By using carbon concrete and a substructure made of wood and reeds as a filler, the load-bearing capacity and weather resistance can be guaranteed, even outdoors.

Philipp **Keidler**

- 1993 born in Wiggensbach (Allgäu), lives and works in Halle/ Saale since 2015
- 2015-2018 art/biology teacher and 2018-2021 art education dagogy at the Martin Luther University Halle-Wittenberg and at the Burg Giebichenstein University of Art and Design Halle
- 2019-2020 Fine arts, Villa Arson, école nationale supérieure d'art, Nice (France)
- 2021 Mentoring-Programm with Ulrich Vogl



» Die Natur im Inneren

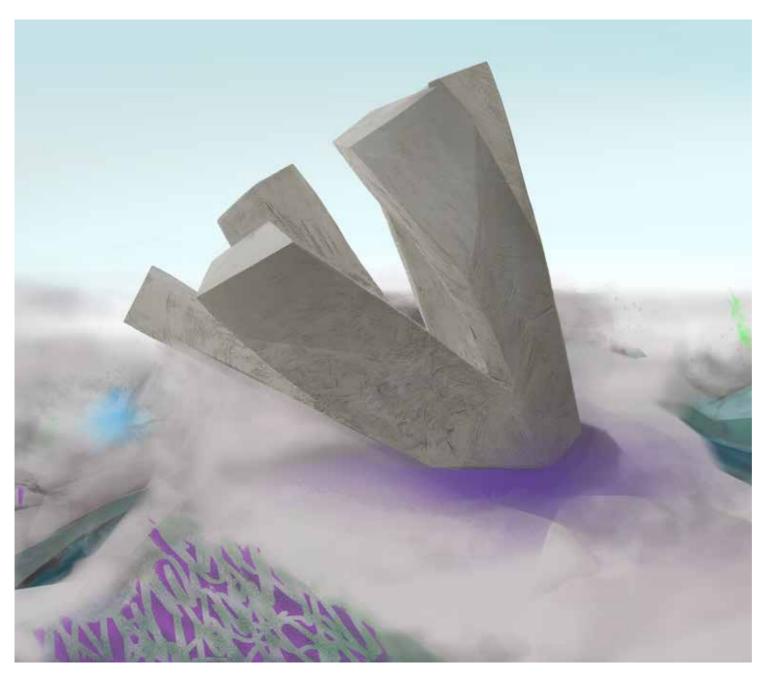
Carbon concrete sculpture

The focus of my artistic work lies on large-scale sculptures, especially for outdoor use. The interplay between nature and sculpture is important here in terms of form and content. Carbon concrete is an almost ideal material for me. I have adapted my working technique, the handling of the material carbon concrete, for my artistic work and developed it in various directions.

It would be very interesting to further develop the sculpture's technology through interaction with the CRC researchers, to optimize the supporting structure, minimize the use of materials, try out new carbon structures and adapt the concrete mix in order to be able to build even more delicate and larger sculptures.

Martin **Kleppe**

- born 1973 in Cologne
- 1993-1999 studied at the Kunstakademie Düsseldorf, master student of Tony Cragg
- Since 2005 research-related work with textile concrete
- 2011-2012 teaching position at the HfBK Dresden, since 2015 teaching at the Trier University of Art and Design, Department of Architecture
- Lives and works in the Eifel region



www.chiharukoda.com

» Aus dem Boden am Fluss

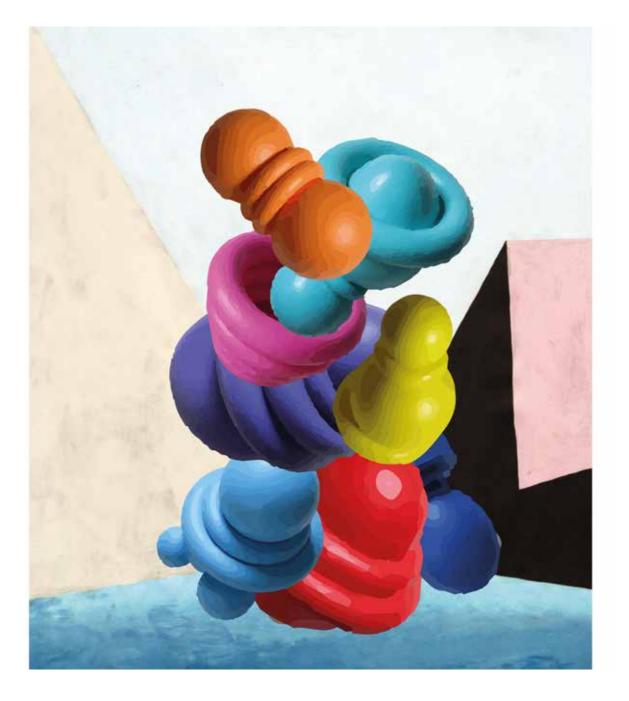
I am interested in how spaces are created and how memories work in spaces of the present. I have observed changes near a riverbank since I was a child. The course of the river, which changes when it rains heavily, how types of grass and different vegetation shine and transform in the light.

One year, a concrete embankment was created in a place where you could go for a walk. Grass and flowers shone through the gaps in the concrete. This composition changed the atmosphere of the place. To me, the concrete on the riverbank looked like a living creature that carried the memories of the riverbed within it.

In this work, the river and the concrete are represented in two sculptures.

Chiharu **Koda**

- born in Okayama (Japan)
- studied ceramic design at Okayama Prefectural University and ceramic techniques at Tajimi City Pottery Design and Technical Center
- 2012 Scholarship abroad, trip to Europe and Ecuador
- 2013-2020 Studied sculpture at the State Academy of Fine Arts Karlsruhe
- Discovery of new forms of expression through the coexistence of selected digital and physical materials



www.patricialondonanteparis.blogspot.

» Chaperon

A polymorphic orbital sculpture composed of a 3D carbon concrete structure inspired by a polypeptide network that results in lower weight and toughness, standing on a flooded city street derived from anthropocentric heat acceleration.

My artistic practice consists of participatory performances, painting and sculpture in the interplay of dance, music, awake contemporaneity and color-intensive works, because everything visible is only desirable through color.

Patricia **London Ante Paris**

- until 1988 Studied at the Academy of the Academy of Fine Arts in Munich with Daniel Spoerri
- Works have been exhibited worldwide since then
- in Germany, she designed the stairwell of the Munich Cultural Department and the Mercedes-Benz Sales Germany in Berlin, among others
- numerous prizes and scholarships, including DAAD and Kunstfonds scholarships, City of Munich scholarship, guest residencies at the Goethe Institutes in Bangkok, Tbilisi, Windhoek and Madrid





www.katharina-luedicke.de

» Supernatural - Polar

The glacier-like and amorphous model "Supernatural - Polar" for the "Discovery" competition was developed from my concept "SculptuReal" 2019. In order to make the handling of artistic sculpture exciting and tangible for a wider public, I designed an app with which sculptures can be easily "played" via the interface of a smartphone or tablet and transferred into the real world using the 3D printing process.

Experiencing sculptures in a playful way serves to relax, meaning is created through the printed object. The artistic exploration of sculpture begins with the intuitive creation of a harmonious and abstract form. This allows existing inhibitions to be overcome. The stimulus to find one's own forms in a computeraided environment creates the desire to create in the real world and in more diverse materials and forms.For me, the process of how a model can be scaled to a walkable size using modern techniques and materials is exciting and a key factor in taking part in the competition. From today's sustainability perspective, a surface design with mosses and lichens would be possible for me, similar to rocks and stones.

Katharina **Lüdicke**

- born 1981 in Potsdam-Babelsberg
- 2012 Project funding from the Cultural Foundation of the Federal Government
- 2014 Working grant from the Bonn Art Fund Foundation
- 2017 Artist Residency Program Berlin-Beijing, Society for German-Chinese Cultural Exchange (GeKa e.V.)
- 2020, 2021 "NEUSTART KULTUR" working grant and funding
- 2022 Berlin Research Fellowship of the Senate Department for Culture and Europe





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» Botanik brut

Photographic concrete

"Botanik brut" is a series of botanical photographs that were exposed and developed in analog form on concrete. This is an elaboration of approx. 320 black and white 35mm negatives from the years 2019 to 2022, taken in the botanical gardens of Berlin, Lisbon, Paris, Zurich and Makarska. It is an attempt to artistically explore the poetry and uniqueness between nature and culture.

As part of the art competition 2023 ENT-DECKUNG Visualization of a symbiosis of nature + carbon concrete, the concrete technology side is to be reconsidered and developed. In this way, a completely new series of works can be produced in terms of format, weight, material thickness and statics.

Mirko **Mielke**

- 1997-2005 Study of visual communication/experimental design, HdK/UdK Berlin
- freelance since 2000
- 2003-2004 Studied photography/sculpture at the Accademia di Belle Arti in Bologna (Italy)
- 2005 graduated with a degree in design
- creative focus is the use of concrete as photo paper - coating of cast concrete objects with liquid photo emulsion and exposure with analog photo technology or use as massive pinhole camera negatives





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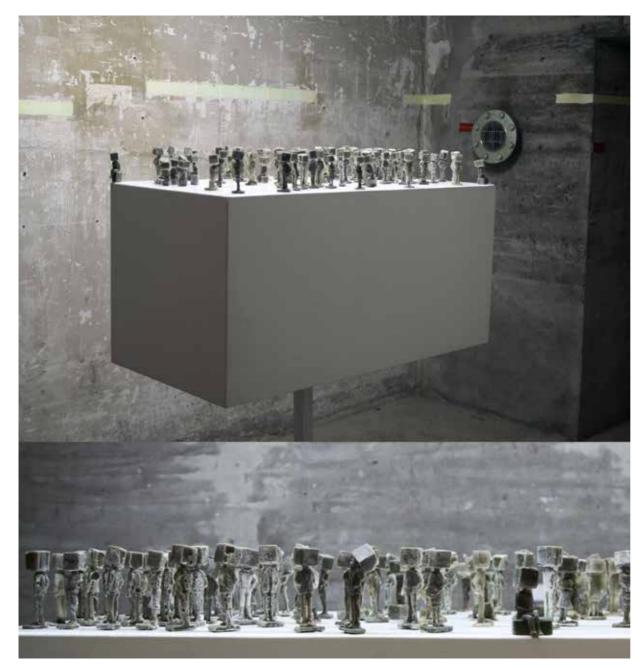
» Würfelzwilling

The intersection of cubes has been one of my themes in recent years. Based on Platonic solids, the tetrahedron forms the "Stella Octangula" from two tetrahedrons. I discovered the double cube in the circular construction of the Flower of Life (BdL). By folding the drawing sheet alternately through the center, along the lines to the corners of the hexagon, a star appears. Two stars join to form two cubes. The pyramid, icosahedron, tetrahedron and a pentagon can be read from a "BdL". The connection of two BdL constructions creates a double cube. Two cubes contain a regular hexagonal face. The outer dimensions are contained in one cube.

During my research, I found similarities to the mineral fluoride. In terms of cultural history, the geometric representation of the flower of life is very old and was used, for example in the tomb of Osiris (6,000 years ago), in India, in Cusco in Peru, in the Assyrian palace threshold, in China as an ornamented sphere under the paw of the guardian lion at the Gate of Supreme Harmony, in Europe in Westminster Abbey (Cosmati ornament), in the silver treasure of Kaiseraugst, on half-timbered houses in Strasbourg and many other places.

Johannes Nürnberger

- Born in Marktbergel in 1957, academic sculptor and master stonemason
- Worked in Hans Nußbächer's lithography and etching workshop
- 1979 Apprenticeship as a stonemason in Kleinrinderfeld with Hubert Schäfer
- 1981 Apprenticeship with sculptor Helmut Lutz in Freiburg
- 1983 Sculpture studies in Nürnberg with Prof. Christian Höpfner
- Since 1988 self-employed in restoration and design





www.casparreuter.de

» Betonkoeppe

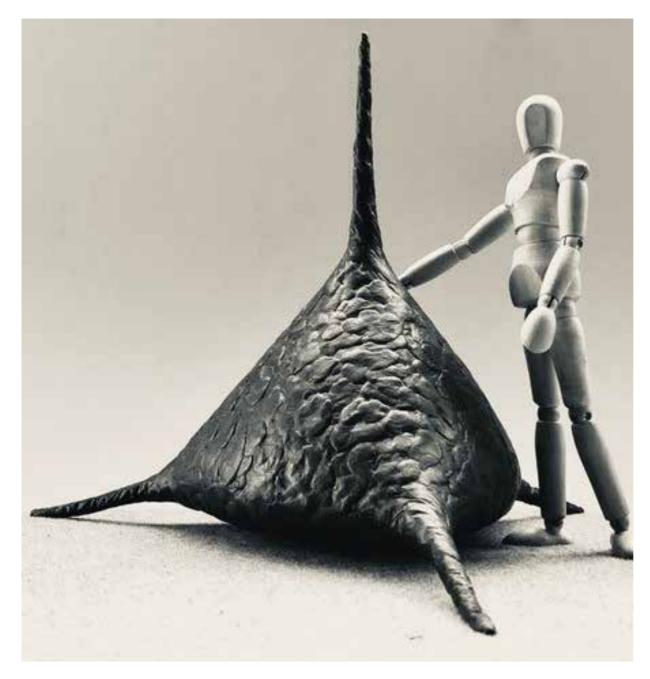
But the first glance is deceptive. The combination of tradition, transferred knowledge and contemporary interpretation offers space for creativity and discovery.

The installation shows a seemingly chance encounter. A large concrete head is curiously observed by a pair of miniature concrete heads or vice versa. The figures curiously delve deeper into their discovery. The human observer is also quickly drawn into the scenery and constantly finds new perspectives.

Caspar **Reuter**

- 1976 born in Frechen, lives and works in Cologne
- 2000-2005 Assistant to W. Göddertz
- 2005-2011 Studies at ArtEZ University of the Arts, Arnhem (Netherlands)
- 2014-2015 Art teacher in Wuhan (China)
- 2021 Distance art-figura
 2021 Museum Perla Castrum,
 Schwarzenberg Castle
- 2022 Power of the myth Stadtmuseum Düsseldorf

It is said that heads are round so that thoughts can circulate freely. The square concrete heads appear narrow-minded.





www.sven-ruenger.de

» VOYAGER

The basic form of the sculpture "VOYA-GER" is the tetrahedron, one of the five Platonic solids. This geometric figure ap-

pears repeatedly in nature as a structural principle, invisible to the human eye. We find it in electron orbitals, in the lattice structure of quartz crystals or as the molecular structure of methane CH4. Nerve cells and larger cell groups such as radiolarians, foraminifera and other conceivable organisms can be associated with this form.

Space explorers, which were developed with the help of bionics, among other things, also follow this construction principle. The imagination and possibilities are limitless.

Heading for new shores and unknown worlds, even within ourselves.

Sven Rünger

- 1967 born in Düsseldorf, lives and works there and in Pietrasanta
- 1991-1994 Trained as a stone sculptor with Wolfgang Kuhn, Neuss
- 1994-1995 Art Academy Düsseldorf with Prof. Beate Schiff
- 1997 Start of teaching at the Campo dell' Altissimo summer academy (Italy)
- since 2001 Studio in Meerbusch
- since 2010 Lecturer at the international art academy Heimbach/Eifel
- since 2012 Lecturer at the Alanus Werkhaus Alfter, BonnWerkhaus Alfter, Bonn





www.stefansous.de

» Forme perdu

I have studied your innovative concrete construction methods with great curiosity. My wish and the aim of my application is to produce exemplary models on an appropriate scale in order to create large sculptural structures for outdoor spaces. If necessary, skylights are available as plastic molds with different ball radii. The advantages of this technology, the lightweight construction due to minimized use of materials, the weather resistance, the strength and three-dimensional formability are visibly brought to bear here. The result is a modern variation on the usual and classic sculptural production methods.

The principle is based on tension-loaded surface statics - and is similar to historical cross vaults, such as those in Aachen Cathedral, only in reverse. My further wish is to develop sculptural bodies up to architectural dimensions. The sketches and models submitted show free, organic forms that are reminiscent of models from nature. But walk-in housings or other applications such as ventilation towers and soundproof walls are also possible - sculptures including function..

Stefan **Sous**

- 1964 born in Würselen
- 1990-1996 studied at the Kunstacademy Düsseldorf with Prof. Tony Cragg, 1995 master student
- 2008-2012 Sculpture for the representative driveway, Federal Intelligence Service, Berlin
- 2010 Art in architecture, Architekturgalerie Berlin
- 2011 Container Houses, NRW-Forum Düsseldorf | Fetish Car. I drive, therefore I am. Museum Tinguely, Basel | 1:8, art in architecture, new double sports hall Pankow, Berlin
- 2012 Beaufort04 Triennial, Bel-





Variante nit freve Mitte, die bepflamzt oder anderwahg gestattet werden kann



Variante mit flacher Ichale, die als Jonighumen Konzipred werden Kann

www.catrinasteffen.de

» Beton durchwachsen

An art object made of concrete that gives space to nature

The theme of the competition inspired me to create a floor design for public spaces that can be permeated and taken over by nature. The circular surface consists of six perforated concrete segments that are produced in series and can be designed in different ways, e.g. with mosaics of colored ceramic shards or natural stone. The center of the six segments forms a shallow bowl, which is intended as a fountain or water bowl. The openings in the segments filled with soil can be planted with wild flowers to attract bees, butterflies and other insects. The water bowl is intended to serve as a drinking trough for insects and birds.

In the season when there is little vegetation, the floral ornamentation of the floor design creates a friendly atmosphere. In spring and summer, it increasingly takes a back seat to nature, which unfolds out of it and turns it into a small oasis.

The design is intended for public spaces that invite people to linger, relax and recover, such as inner courtyards or small squares. I associate this with the vision that nature, with its vitality, diversity and beauty, is respected, protected, incorporated and promoted in the planning of urban structures.

Catrina **Steffen**

- born 1967, mother of three children
- Apprenticeship as a potter, Burg Giebichenstein University workshop in Bürgel with Wolfgang Philler
- Studied at the University of Art and Design Burg Giebichenstein chenstein Halle/Saale, FB Ceramics, graduated with a diploma
- Master's degree in ceramics with Prof. Antje Scharfe
- Ars Halensis art prize, various exhibitions
- Works and lives as a freelance artist artist, musician and director of a children's studio in Potsdam





www.maritwolters.com

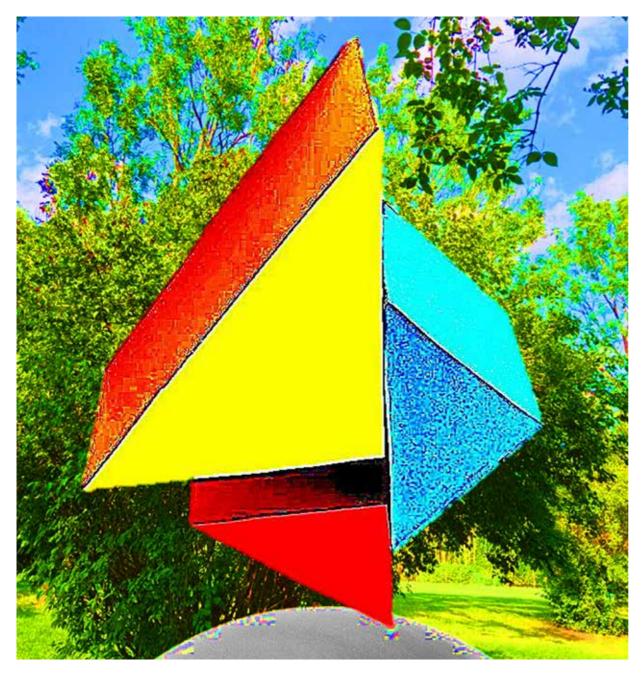
» Bonboo

sign, adapts to the given mold, but grows internally according to its own rules. The air bubbles in the material form a cellular bundle with an irregular structure. As the experimentally mixed concrete mass is poured, it begins to swell, bubble and hiss.

PPorous concrete is a material that creates a direct link between architecture and nature. It gives people room for deLike an organic cluster of cells that grows and breathes. The material produced is lighter than normal concrete and often fragile due to the experimental work.

Marit Wolters

- born 1985 in Achim, lives and works in Vienna
- 2006-2010 studied literature and art history
- 2010-2019 Studies at the Kunsthoch-Dresden School of Art (Monika Brandmeier) and University of Applied Arts Applied Arts Vienna (Brigitte Kowanz)
- 2016-2019 Master student with Monika Brandmeier
- Various scholarships and prizes, e.g. 2021 Kunstfonds Bonn scholarship, 2022 State Grant for Visual Art (Austria)
- Numerous national and international exhibitions



www.QiufuYangMoeller.com

» QY03

The art object made of carbon concrete is to stand in front of the building of the Institute for Solid Construction at RWTH Aachen University. Research, science and major innovations are the most important building blocks of our future. The art object can be a monument to science and exploration. The natural color of carbon concrete is grey, and grey depresses us especially in winter. Therefore, the color of carbon concrete should be changed, just like the monument in cheerful colors, to please and refresh all people, to beautify the environment. The red exudes the spring mood, the openness, honesty and strength of the scientists' fighting spirit. The blue has a calming effect, exuding the peace, serenity and infinite expanse of the scientists' research areas. The yellow conveys the cheerfulness, optimism and courage of the scientists. The meeting of the colors forms an Elysium of the scientists. The radiance of the colors dispels the depression of the setbacks of the scientists' research.

The free-spirited and powerful structures of the monument reflect the energy, innovation and spirit of change in our society, giving all scientists the power, hope and outlook for the future.

Qiufu Yang-Möller

- born on 03.07.1958 in China and grew up there
- in China dancer, presenter, actress and most recently editor, author, director and producer for television
- has lived and worked in Germany since the end of November 1987
- works as an author, artist and fashion designer
- since 1996 creation and development of art in architecture

» Impressum

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vertreten durch die Sprecher, Prof. Manfred Curbach (Institut für Massivbau, TU Dresden) und Prof. Josef Hegger (Institut und Lehrstuhl für Massivbau, RWTH Aachen University)

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