Case Study

Johannes Kepler University, Linz, Austria

BAYFERROX® Color for Life.

COLORED CONCRETE WORKS®
An initiative of LANXESS

QUALITY WORKS.

LANXESS Energizing Chemistry

CAMPUS FACELIFT IN LINZ

With four buildings and redesigned free spaces, the JKU Johannes Kepler University in Linz has been developed into the largest and smartest campus in Austria.

This campus is home to transdisciplinary research groups and companies that are united by their focus on driving forward technological innovation. They are devoted to topics such as industry 4.0, robotics and artificial intelligence, as well as the law in digital transformation.

LIT Open Innovation Center

A spacious, covered outdoor area is to be used as a meeting point or even for events, such as the Ars Electronica Festival.

Together with DnD Landschaftsplanung, the Linz-based architect firm Riepl Riepl has succeeded in uncovering the original qualities of the JKU from under decades of deposits and bringing them into a form open to future developments.

Open room sequences across several floors are intended to create a markedly communicative atmosphere, allowing a special team spirit to develop here.

Colored concrete has been used in two of the new buildings for this purpose: a lively red brown in the LIT Open Innovation Center and an elegant, timeless black in Kepler Hall.

Kepler Hall, exterior view

Kepler Hall, entrance area

COLORED CONCRETE FOR THE NEW UNIVERSITY BUILDINGS

Kepler Hall, roughly 3,000 m² in size, serves as an imposing entryway into the JKU campus. The building is designed to be an auditorium and event center.

The lower story is black exposed concrete, and the upper stories are steel construction with a wood and glass façade structure. Finished parts and cast-in-situ concrete were successfully combined into the same colored concrete.

The planners benefitted from the interaction between the concrete technology and the color pigments used. As a result, the colored concrete retains its characteristic concrete texture and shows slight color nuances, giving the surface a natural appearance.

700 m³ of colored concrete were used with a mixture of Bayferrox 365 GP powder pigment and an additional black liquid pigment dye.

The floors in the interior were made from diamond-cut black-colored concrete.

Open spaces on the outside are also made from black concrete with a brush stroke finish. The square is marked by the dark base of the building, which will open in 2020. Kepler Hall's projecting roof, which extends eastwards, sends a strong signal to the city, conveying the university's self-image.

THE COLORFULNESS SENDS
A STRONG SIGNAL

The LIT Open Innovation Center is a modest, north-south oriented block on the south-western edge of the campus. Riepl Riepl Architekten used the gentle slope of the grounds to position a basement accessible at ground level from one of the traffic areas in the south, which houses a supermarket. In the north of the basement, built using exposed concrete dyed red/brown, there are cleanrooms for various institutes of the university.

Rising above the base is a two-and-a-half-story-high wooden structure whose support structure lying against the façade and shading wooden slats are painted the same color as the concrete.

Hidden behind the high attic are saw-tooth roofs sloping southwards, which light up the interior space without glare, while their roof surfaces fitted with photovoltaic panels generate power.

The base of the building was constructed using 400 m³ of colored concrete, dyed using a specially developed pigment mixture of Bayferrox 120 N and Bayferrox 686.

LIT Open Innovation Center:

The 8,000 m² open space serves as the base of operations for transdisciplinary research groups and companies that are united by their focus on driving forward technological innovation.

BAYFERROX®
Color for Life.

CLICK HERE

Picture owner: City of Linz

PROJECT FIGURES

LOCATION
Linz, Austria

ARCHITECT
Riepl Riepl Architekten, Linz, Austria
www.rieplriepl.com

CONSTRUCTION YEAR
2019/2020

BUILDER AND OWNER
City of Linz

AMOUNT OF CONCRETE
1,100 m³

AMOUNT OF PIGMENT
approx. 31,450 kg

DELIVERY FORM
Powder

PIGMENTS

BAYFERROX®
Color for Life.

BAYFERROX® 120 N	BAYFERROX® 686	BAYFERROX® 365 GP

LOOKING FOR
TECHNICAL ADVICE?

Top-level technical service

As a technological leader in the field of synthetic iron oxide and chrome oxide pigments, LANXESS as the sole provider disposes of a global network of technical service centers with which we can provide support to our customers on every topic regarding the use of our inorganic pigments.

The service portfolio includes a wide range of specific testing and consultation services.

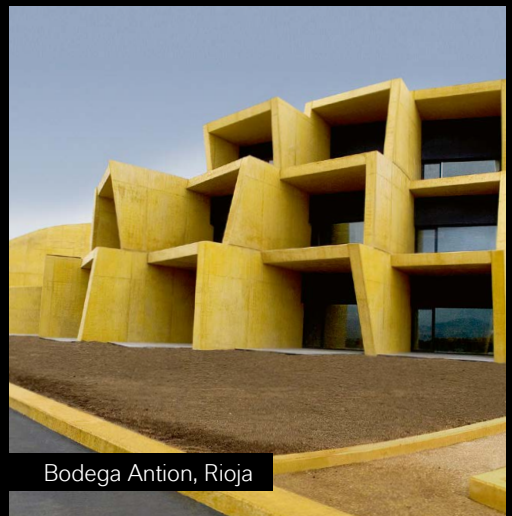
LANXESS specialists test the feasibility of customer requests under realistic conditions in fully equipped laboratories. They provide information about optimal pigment selection and processing in various application systems and provide cause analysis in the event of problems. We consider ourselves to be a service provider that offers its customers tailor-made pigment solutions and advice of the highest quality.

CLICK HERE

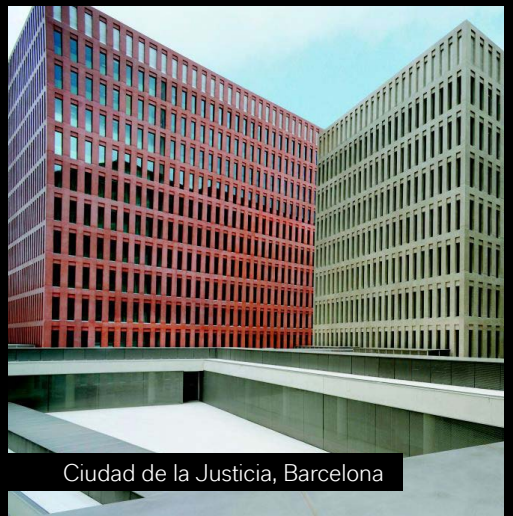
Get in touch with us.

COLORTHERM® Color for Life.

BAYFERROX® Color for Life.



Bodega Antion, Rioja



Ciudad de la Justicia, Barcelona

LANXESS
Energizing Chemistry

LANXESS Deutschland GmbH
Business Unit Inorganic Pigments
Rheinuferstraße 7–9
47829 Krefeld
Germany

www.bayferrox.com
www.colored-concrete-works.com

Health and Safety Information
Appropriate literature has been assembled which provides information concerning the health and safety precautions that must be observed when handling the LANXESS products mentioned in this publication. For materials mentioned which are not LANXESS products, appropriate industrial hygiene and other safety precautions recommended by their manufacturers should be followed. Before working with any of these products, you must read and become familiar with the available information on their hazards, proper use and handling. This cannot be overemphasized. Information is available in several forms, e.g. material safety data sheets, product information and product labels. Consult your LANXESS representative in Germany, or contact the Regulatory Affairs and Product Safety Department of LANXESS Germany or – for business in the USA – the LANXESS Regulatory Affairs and Product Safety Department in Pittsburgh, Pennsylvania.

Regulatory Compliance Information
Some of the end uses of the products described in this publication must comply with applicable regulations, such as those of the FDA, BfR, NSF, USDA and CPSC. If you have any questions on the regulatory status of these products, please consult your LANXESS representative in Germany, or contact the Regulatory Affairs and Product Safety Department of LANXESS Germany or – for business in the USA – your LANXESS Corporation representative, the LANXESS Regulatory Affairs Manager in Pittsburgh, Pennsylvania. The manner in which you use and the purpose to which you put and utilize our products, technical assistance and information (whether verbal, written or by way of production evaluations), including any suggested formulations and recommendations, are beyond our control. The same applies to suggested formulations and recommendations. Therefore, it is imperative that you test our products, technical assistance and information to determine to your own satisfaction whether they are suitable for your intended uses and applications. This application-specific analysis must at least include testing to determine suitability from a technical as well as a health, safety and environmental standpoint. Such testing has not necessarily been done by us. Unless we otherwise agree in writing, all products are sold strictly pursuant to the terms of our General Conditions of Sale and Delivery. All information and technical assistance is given without guarantee and is subject to change without notice. It is expressly understood and agreed that you assume and hereby expressly release us from all liability, in tort, contract or otherwise, incurred in connection with the use of our products, technical assistance and information. Any statement or recommendation not contained in this brochure is unauthorized and shall not bind us. Nothing herein shall be construed as a recommendation to use any product in conflict with industrial property rights such as patents covering any material or its use. No license is implied or in fact granted under the claims of industrial property rights such as patents.

Copyrights of all images by Mark Sengstbratl, Ars Electronica, Robert Bauernhansl, Bruno Klomfar.