



**ZELLER+GMELIN**

# Research+Development INKS

Structure and Projects

**EXPERTLY DONE.**



# R+D Team

**EXPERTLY DONE.**

# New Head of R+D



## **Dr. Stefan Götzendörfer**

**+ Ph. D. Chemist**

**+ Joined Z+G in November 2023**

**+ Successor of Michael Handl**

**+ Deferral of some projects due to personnel change**



# New Head of R+D



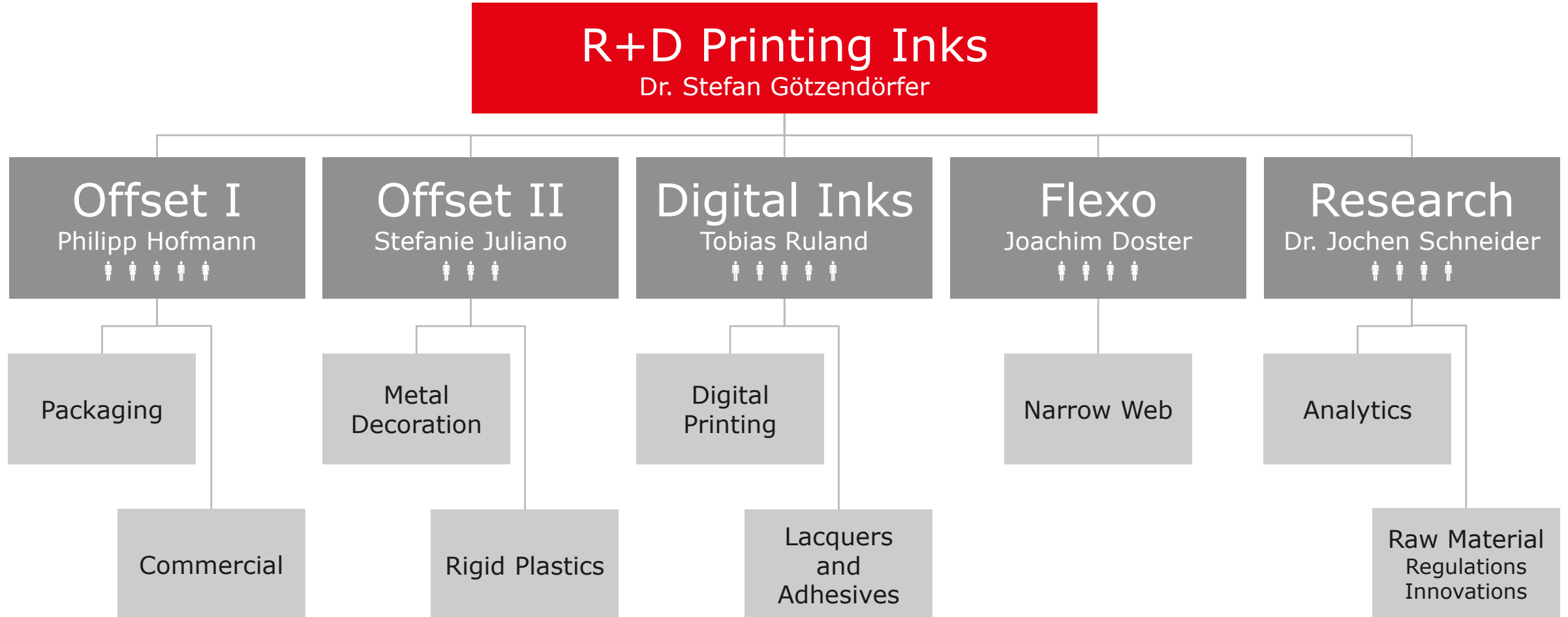
## Dr. Stefan Götzendörfer

- + **Ph. D. Chemist**
- + Joined Z+G in November 2023

Expertise in thin film and surface technology

- + **Sol-Gel chemistry**  
4 years at Fraunhofer-Institute for Silicate Research
- + **Abrasive surface texturing**  
4 years at Berliner Glas Surface Technology
- + **Hybrid polymer lacquers and coatings**  
8 years at Aalberts Surface Treatment

# Team Structure



# Business Segments



**Packaging**



**Philipp Hofmann**

**Commercials**



**Metal Deco**



**Stefanie Juliano**

**Rigid Plastics**

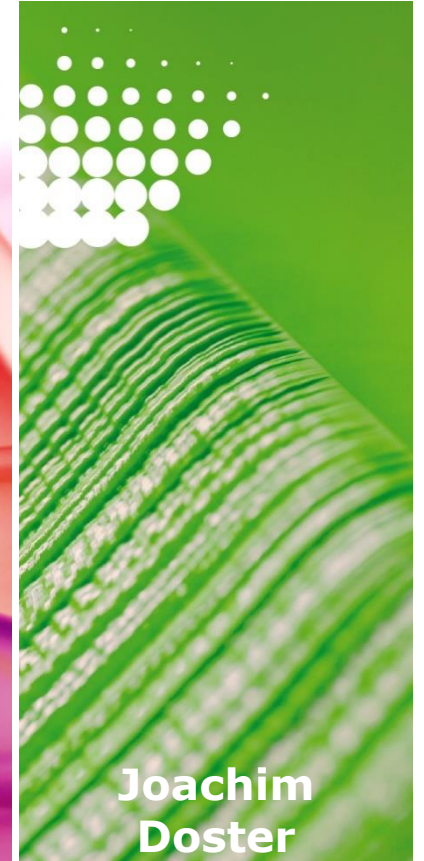


**Digital Print**



**Tobias Hofmann**

**Narrow Web**



**Joachim Doster**



# R+D Projects

## Current and Future



# Driving Forces for R+D



## Current material issues

- + **Raw material purchasing**  
Suppliers stop production due to high regulatory effort
- + **Raw material logistics**  
Military conflicts disrupt established transport routes (red sea etc.)
- + **Volatile raw material quality**
- + **Price increase** of raw materials
- + **Permanent increase of regulatory material restrictions**  
ECHA, EuPIA, GIO, customer preferences, country listings

## R+D

- + **Permanently searches and qualifies alternative materials**
- + **Enables the use of low quality batches**

**EXPERTLY DONE.**



# Driving Forces for R+D



## Diversification versus Consolidation

- + **Currently 3300 different articles** at Z+G Printing Inks (excluding subarticles)
- + **Individual modifications** may require reformulation of whole series
- + **400 different raw materials in use**

## R+D

- + **Takes care about special customer requirements**
- + **Supports Technical Service Center and application technology**
- + **Works together with Process Technology for process optimization and simplification**

PMS Yellow	PMS Yellow 012	PMS Orange 021	PMS Bright Red	PMS Warm Red
PMS Red 032	PMS Rubine	PMS Rhodamine	PMS Pink	PMS Purple
PMS Med. Purple	PMS Violet	PMS Blue 072	PMS Dark Blue	PMS Reflex Blue
PMS Proc. Blue	PMS Green	PMS Mixing Black	Transparent White	

# Almost finished



## **Grinding of concentrated pigment dispersions**

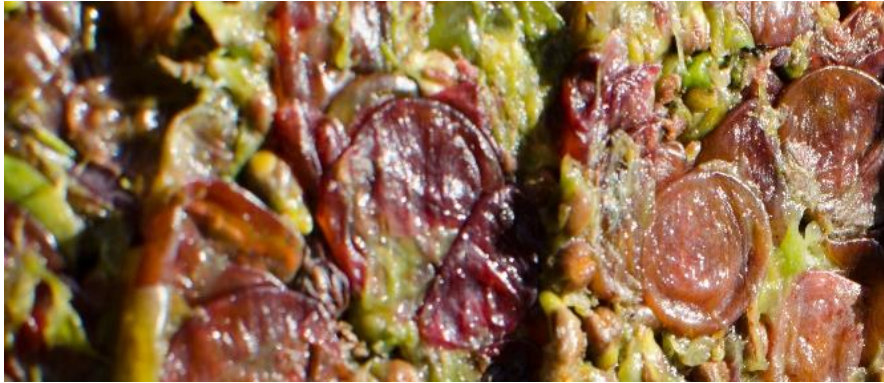
- + lowers production costs by reducing the number of grinding cycles
- + Currently extended to further ink series

## **Completion of LED-curing series**

- + For all appropriate printing technologies
- + FCM- and non-FCM versions

**Transfer of lacquer and adhesives production** from UK to Eislingen

# Revenants

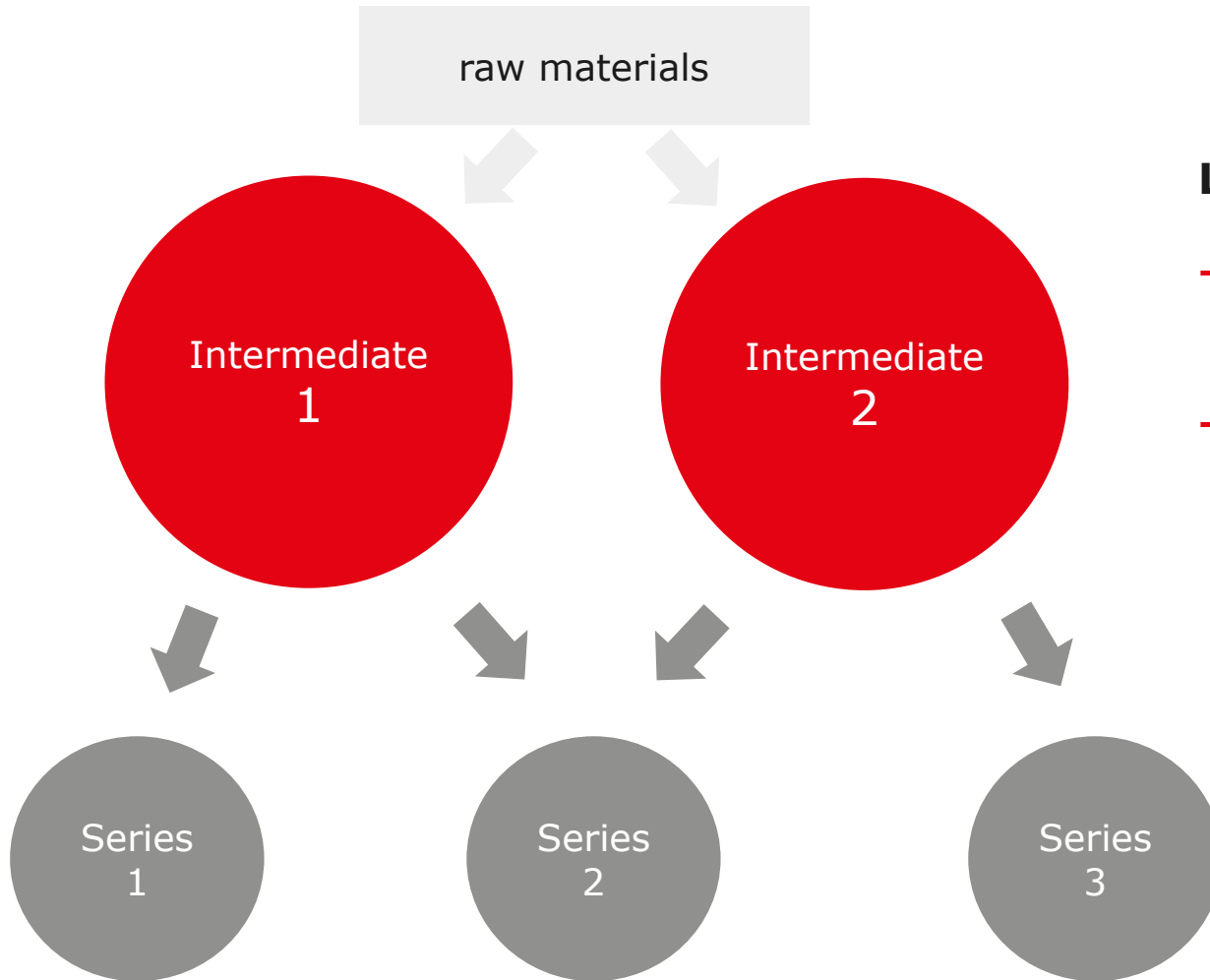


## Long-term projects

- + **Sustainability:** Utilization of bio-based raw materials
- + **Global R+D collaboration:** D – USA – UAE
- + **Deinking**



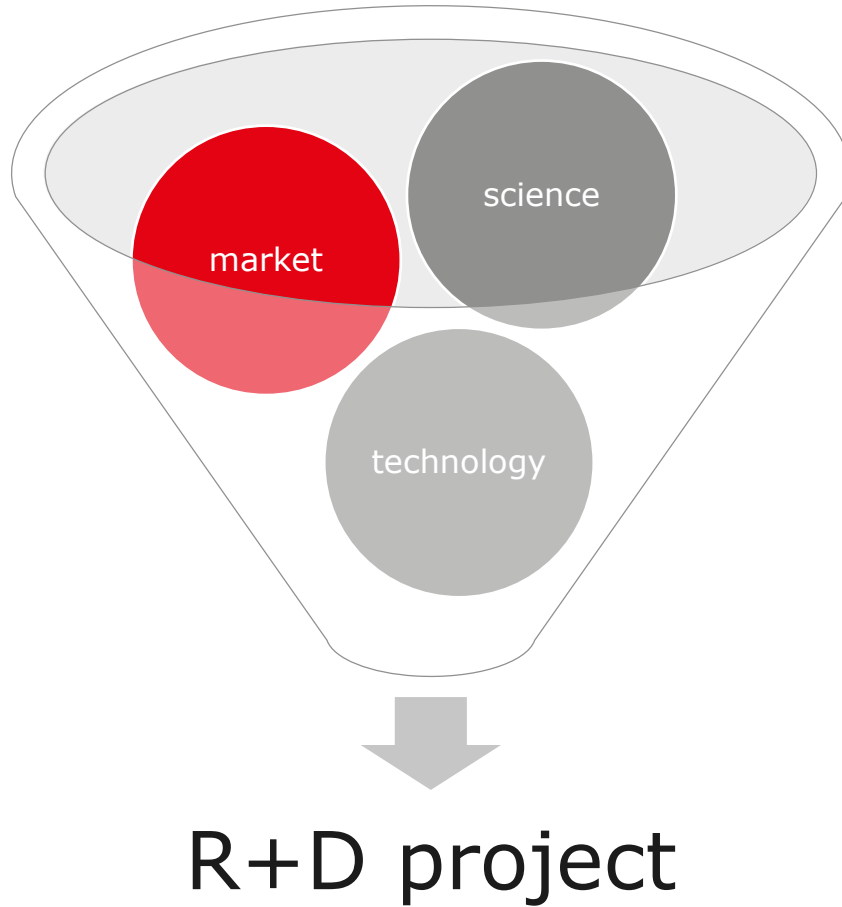
# Coming up



## Long-term projects

- + **German Ink Ordinance**  
Getting prepared
- + **Simplification of ink series**  
consolidation by shared intermediates

# Future Projects



## Input and inspiration for R+D

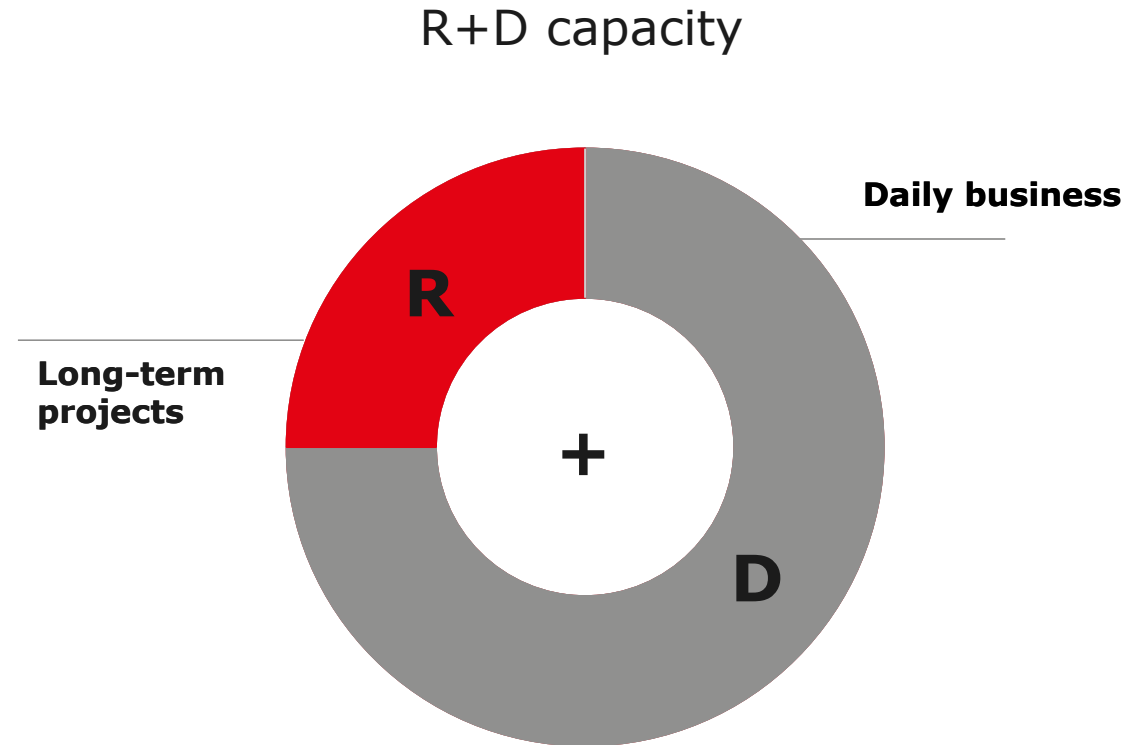
- + **Customer** requests and problems
- + New devices and technologies in **science**
- + Activities of our **competitors**
- + New products and offers of **suppliers**
- + **Legislation and associations**

# Future Projects



**Biggest challenge for R+D:**

**Not only being driven by external forces, but retaining resources for genuine research**



**Thinking outside the box is the way to achieve REAL USPs**





**Thank you for your attention**