



WELCOME
UV & PVD Forum 2013

An Introduction to the IST METZ Group of companies

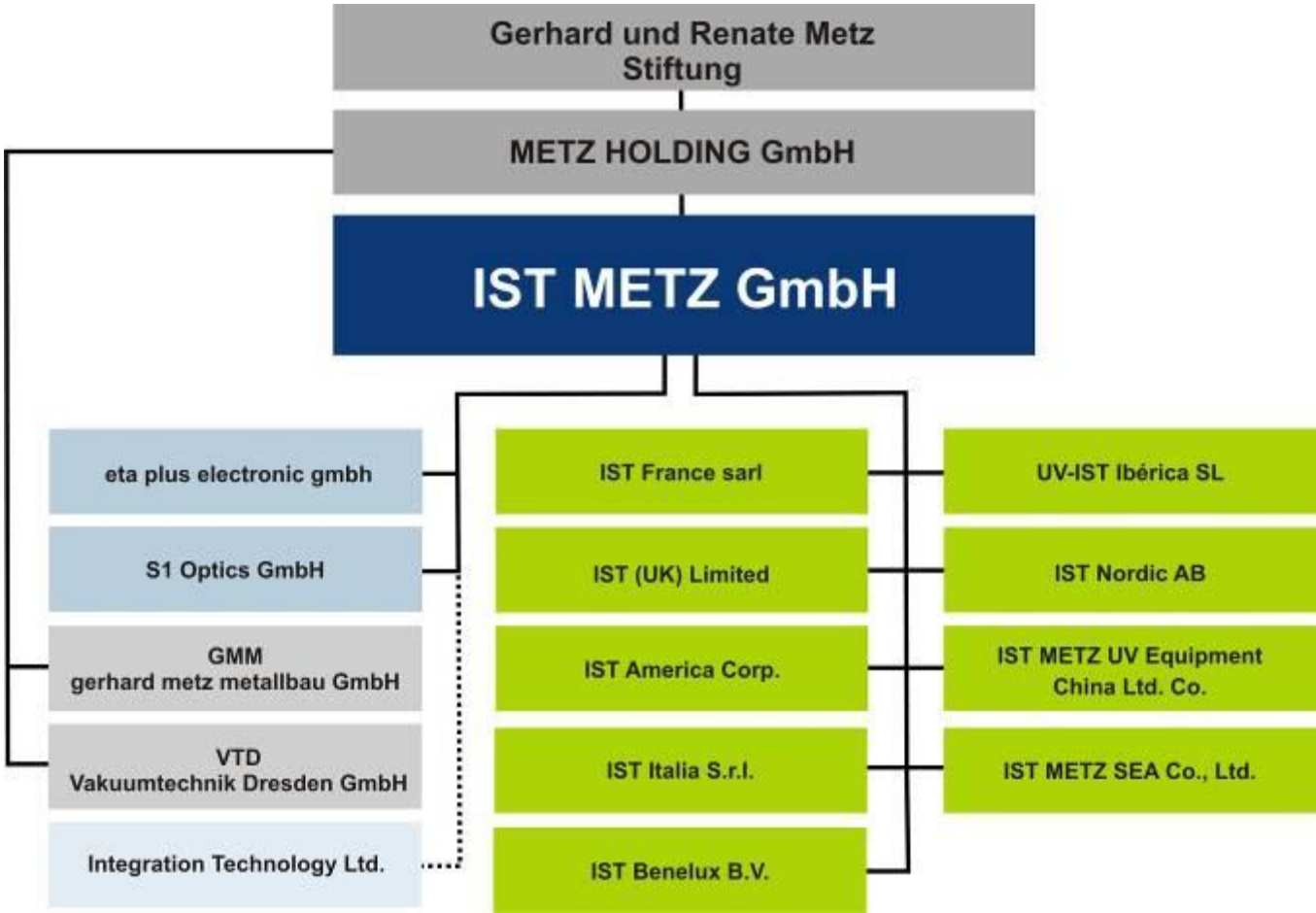


Head Office:

- **IST METZ GmbH**

Subsidiaries:

- **eta plus electronic gmbh**
- **gerhard metz metallbau gmbh**
- **S1 Optics GmbH**
- **VTD Vakuumtechnik Dresden GmbH**
- **IST France sarl**
- **IST (UK) Limited**
- **IST America Corp.**
- **IST Italia S.r.l.**
- **IST Benelux B.V.**
- **IST METZ UV Equipment China Ltd. Co.**
- **UV-IST Ibérica SL**
- **IST Nordic AB**
- **IST METZ SEA Co., Ltd.**
- **Strategic Alliance: Integration Technology**



UV fields of applications

Market Segments

Graphic Arts industry



Converting



Coating, Bonding, Metallisation



UV for Industrial Applications



- Automotive industry
- Anti-scratch coating for plastics
- UV powder coating
- Cosmetic packaging
- Varnishing of steel pipes
- Polymerisation of Hotmelt PSA
- Siliconisation
- PVC-floor-varnishing
- Decorative paper coating

UV in the Automotive Industry



- Headlamp lenses
- Reflectors
- Protective strips
- Central consoles
- Instrument panels
- Indoor wood veneers
- Screen printing of instrument boards or measuring instruments
- Cylinder head gaskets
- Steering wheels
- UV-adhesives for antinoise-mats
- Black parts (pumps, gears, linkages)
- Brake- and clutch linings
- wheel hubs
- Car windows



- Especially in the field of varnish curing of 3D-components the use of UV modules on robots is taken into consideration.
- Advantage UV:
 - Moves along the edges therefore possible to irradiate spots which are difficult to reach.
 - Reduction of number of UV lamps possible.
 - Lots of application possibilities, however, the production output and the geometry of the component are to be considered.

Further UV applications

- Scratch resistant coatings on plastic
- Primer before PVD
- Scratch resistant coatings on wood
- Decoration – Screen print / flexo print on diverse materials
- Sealing / encapsulation
- Scratch resistant coatings on PVD
- UV-Pretreatment

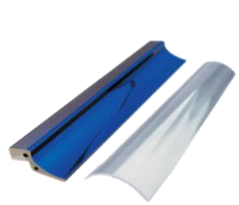
- Bonding
- Test (labs)
- Cleaning



- Primer for galvanized steel
- Foils for IMD
- Sterilisation / Desinfection

- Anti-fingerprint on stainless steel
- Corrosion-protection coatings on metals
- Polymerization of plastics
- Divers chemical and mechanical resistant top coats - functionalised
- Specialities for producing super absorbers, increasing refraction indices, changing properties on textile
- Bond-coat on wires

IST METZ Group of companies



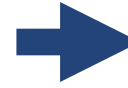
S1Optics
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IST[®]
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more than UV



VTD
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**INTEGRATION
TECHNOLOGY**

Your partner for

- UV coating
- UV bonding
- metallisation

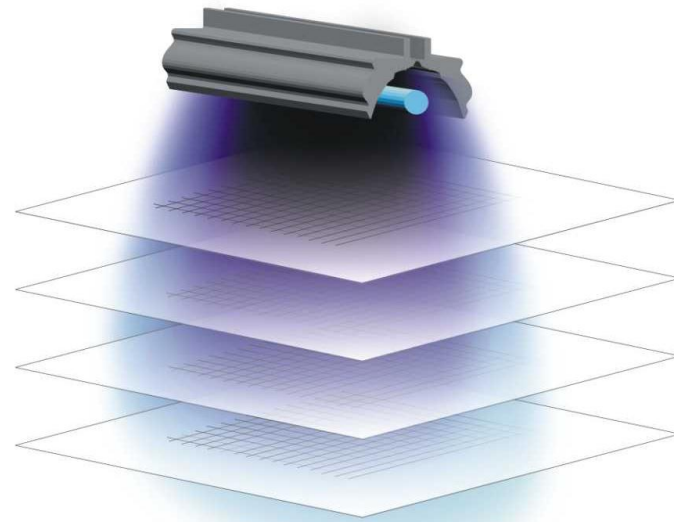
more than UV



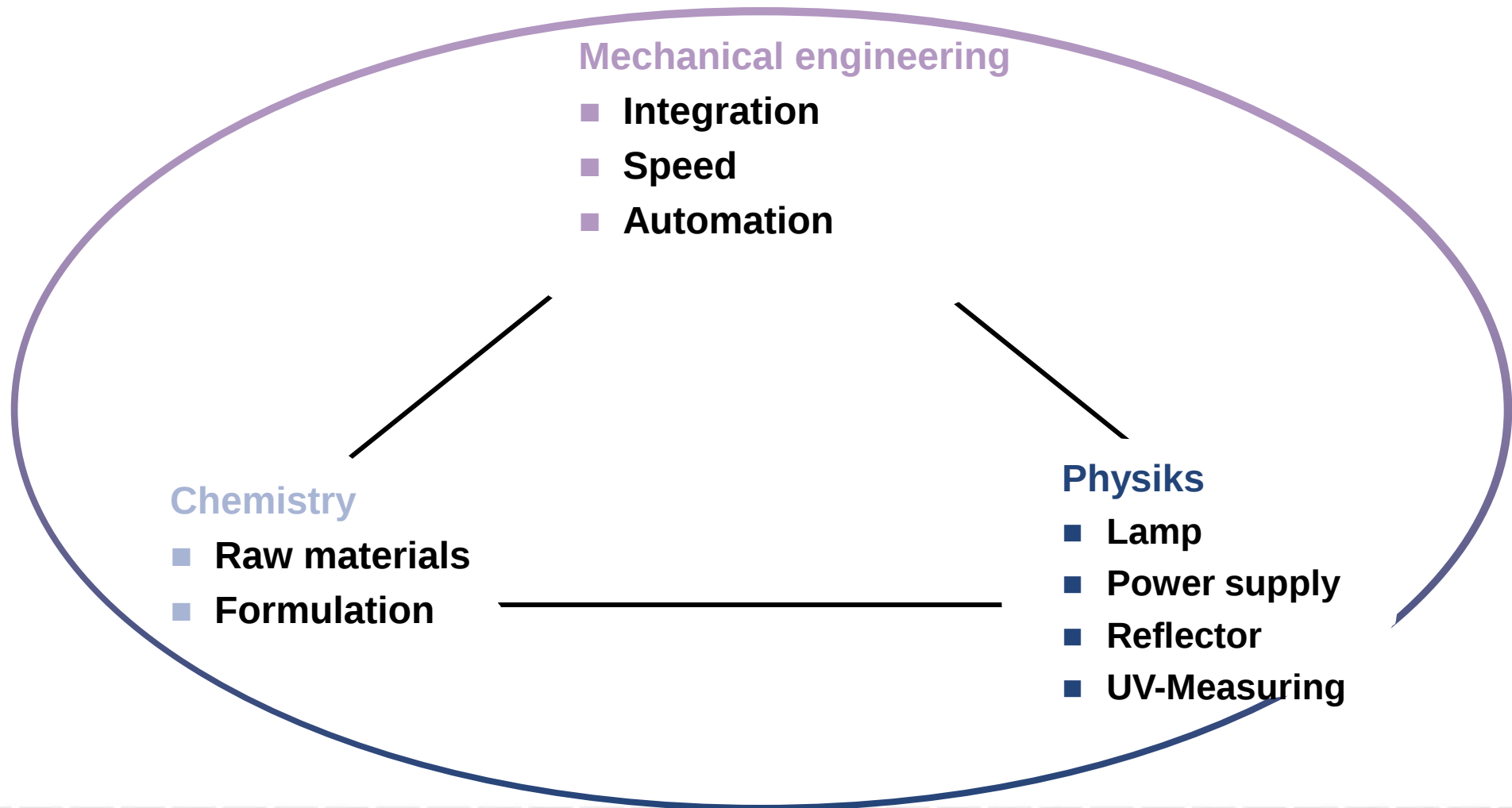
- UV Transfer Center
- Modern simulation tools
- Networking with branchpartners
- Worldwide Service und Support
- Energy efficient UV units for all printing presses and coating machines
- Best possible utilization of energy
- Further development, optimisation and manufacturing of all core components

Perfect results because of

- Raytracing
- Thermosimulation



Target: Optimisation of UV processes



Agenda 13 Mar 2013 (1/2)

Wednesday 13 MAR 2013

Time	Topic	Participants	Location
09:30-10:00	Participant check in		Hotel in Shanghai Indigo
10:00-10:30	Opening speech from board member of Mankiewicz & IST	Andreas Gehring (Mankiewicz) Carsten Bernau (Mankiewicz) Dirk Jägers (IST)	
10:30-11:00	UV technology and formulation design	Prof. Liu Xiaoya (Jiangnan University)	
11:30-12:30	Break for catering & networking of participant		
13:00-13:30	Painting equipment and quality control systems in automotive	Ms. Liang (Hinsong)	Hotel in Shanghai Indigo
13:30-14:00	Principles of UV coatings	Edward Ye (Mankiewicz) Dr. U. De Rossi (Mankiewicz)	
14:00-14:30	2D to 3D UV applications	Edward Ye (Mankiewicz) Dr. U. De Rossi (Mankiewicz) Julio Hu (IST)	
14:30-15:00	PVD technology: hardware and chemistry	Edward Ye (Mankiewicz) Dr. U. De Rossi (Mankiewicz) Julio Hu (IST)	

Agenda 13 Mar 2013 (2/2)

15:00-15:15	Break & networking for participant		
15:15-16:15	Program discussion (stage) Question and answer	Edward Ye (Mankiewicz) Dr. U. De Rossi (Mankiewicz) Steele Yang (IST)	Hotel in Shanghai Indigo
17:00-18:30	Boat event on Huang Pu river (i.e. boat trip at Huang Pu river)	Fani Fang (Mankiewicz) Lily Lu (IST)	
19:00-Open end	Welcome dinner	Fani Fang (Mankiewicz) Lily Lu (IST)	

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