

6TH INTERNATIONAL

CFK-VALLEY STADE CONVENTION

“Productivity and Economic Efficiency”

12–13 June 2012, STADEUM Stade (Germany)

2012



Expert Conference on the Topic of
Composite Lightweight Constructions



CFK VALLEY STADE

CONVENTION™

70 % Gewichtsverlust mit der Niedersachsen-Diät!

Leider bislang nur für Flug- und Fahrzeuge erhältlich.

Weitere Informationen zu neuen CFK-Werkstoffen unter: www.innovatives.niedersachsen.de



Niedersachsen

Sie kennen unsere Pferde. Erleben Sie unsere Stärken.

GREETINGS



CFK-Valley Stade has become one of the leading lightweight clusters in the periphery of the Airbus plant, which has been active in aircraft production for more than 35 years. This positive development is strategically significant for the state of Niedersachsen as a location for aerospace with approximately 30,000 employees working in this field.

There is a consensus between CFK-Valley and the state of Niedersachsen that the excellent material properties of CFRP can lead to decisive impetus that increase competition and optimize consumption in other important branches of industry as well. CFRP, for example, enables the production of more efficient XXL rotor blades for powerful wind turbines.

The specific material properties of CFRP pose considerable challenges for the manufacturing industry. Compared to metals, many processes, ranging from material processing and manufacturing technology to assembly, must be redefined. Manufacturing technologies in particular must be developed that allow for the reliable, automated manufacture of large structures in high quality and amount.

CFK NORD, the new research center in Stade, specializes in precisely this area. At this center, the large-scale research

establishments Fraunhofer IFAM, ZLP, DLR, and NTH work together with the industry on realizing these necessary innovations. CFK NORD is supported by the state of Niedersachsen with a budget of 70 million euros.

Recent results of a study carried out by a renowned consulting firm show that the production of carbon fiber-reinforced polymers will increase by about 20% per year by 2030. CFRP will increase in significance in the field of aviation. According to this forecast, the application of this material will also considerably increase in the automobile industry and in offshore/wind technology.

The mobility industry shapes the industrial and technological landscape of the state of Niedersachsen just as the topic of "wind power as an alternative form of energy" does. We want to maintain and further develop our leading position in Germany in all of these areas.

I wish all participants of the Convention a successful event, interesting conversations and a pleasant stay in Stade.

A stylized, handwritten signature in black ink, appearing to read 'Jörg Bode'.

Jörg Bode

Minister for Economics, Labour and Transport
of Niedersachsen

GREETINGS



The key topic of this year's CFK-Valley Stade CONVENTION is "Productivity and Economic Efficiency". The specific requirements for the process design require a comprehensive approach to the value-added chain in order to establish stable and high-quality production processes.

A number of new things have happened at CFK-Valley in Stade since the last CONVENTION. The first robots for a fully automatic assembly of the Fraunhofer IFAM were installed at CFK NORD and the "BALU" autoclave of the DLR has begun operation. Also, the CFK-Valley Stade e.V. network has sustainably surpassed the mark of 100 members. In addition, new challenges, particularly those from automobile manufacture and the wind power industry, are bringing interesting topics into play.

The lectures at this year's CFK-Valley Stade CONVENTION specifically deal with the automatization of CFRP. Progress in the area of process technology is particularly interesting with regard to the aircraft and automobile industries. The core objective is always the acceleration of the complicated handling and the shortening of the curing time of the material in the production process. Here it is important to establish stable processes for production batches of more than 100,000 pieces per

year. From the application of innovative multi-material systems to the topic of repairing CFRP structures, the 6th CFK-Valley Stade CONVENTION offers you a broad spectrum of interesting lectures and presentations.

The contributions of the speakers will once again provide the basis for in-depth discussions during the exhibition. Like last year, one part of the CONVENTION will be the presentation of new items on the topic of CFRP at the exhibition of more than 40 companies and research establishments. Interest in this year's CONVENTION was enormous at the forefront, just as it was last year – a sure sign that we are operating in a highly dynamic growth market.

I wish all participants of this year's CFK-Valley Stade CONVENTION interesting contacts and lively discussions that will lead to new technical solutions and economic success.

A handwritten signature in black ink, appearing to read "A. Herrmann". The signature is fluid and cursive.

Prof. Dr.-Ing. Axel S. Herrmann

Chairman of the Steering Board of CFK-Valley Stade e.V.

COMPOSITE INNOVATIONS AWARD

The "Composite Innovations Award" for developments with a particularly high degree of innovation in CFRP lightweight construction will be bestowed for the sixth time at the CFK-Valley Stade Convention.

The "Composite Innovations Award" is endowed with a Master's grant for the new "Composite Materials/Composites" Master's course of studies valued at 18,000 Euro. The award is endowed by the City of Stade, CFK-Valley Stade e.V. and by the Private University of Applied Sciences Göttingen (PFH Göttingen).

All firms and institutes participating at the CFK-Valley Stade Convention are eligible to apply for this grant. Research and engineering performances that make particularly innovative contributions to the development of materials and processes for marketable carbon-fiber reinforced composite structures are included in the evaluation process.

The laureate will be determined by CFK-Valley Stade e. V. steering board and a representative of the City of Stade. The deadline for entries is **27 April 2012**.

Further information and application forms can be found on the Internet at www.cfk-convention.com/award



CFK-Valley Stade
Innovations Award 2011
Rubber & Plastics



10:00

Opening speech from CFK-Valley Stade Convention GbR and the Company Partners, CFK-Valley Stade e.V. & innos - Sperlich GmbH
Prof. Dr.-Ing. Axel Herrmann, Chairman Steering Board CFK-Valley Stade e.V. (Stade)

Greetings

Silvia Nieber, Mayoress of the City of Stade (Stade)

10:15

"The (Textile) Empire Strikes Back" - from airplane construction in the past to carbon fabrics for composites in the future
Peter D. Dornier, Lindauer DORNIER GmbH (Lindau/Bodensee)

10:30 Coffee Break & Exhibition

SESSION: APPLICATIONS



Chairman:
Dr. Matthias Geistbeck,
EADS Deutschland GmbH -
Innovation Works (Ottobrunn)



11:30

Automotive prospective on the application of carbon fibre
Dr. Armin Plath, Volkswagen AG (Wolfsburg)

11:55

CAMISMA: Carbon/Amide/Metal based Interior Structure with Multi material system Approach
Axel Köver/Dr. Ulrich Riedel, Johnson Controls GmbH (Burscheid)

12:20

Serial production of structural CFRP parts for the aerospace industry
Dr. Bernd Hirthammer, HDE Consult GmbH (Stade)/Dr. Holger Puro, xperion Aerospace GmbH (Immenstaad)

12:45 Lunch Break & Exhibition

SESSION: PRODUCTION TECHNOLOGY



Chairman:
Dr.-Ing. Martin Röhrig,
Composite Technology
Center Stade GmbH [Stade]



14:15

Recent advances in robotic automated deposition of different materials

Niko Naumann, Coriolis Composites GmbH [Augsburg]

14:40

The use of infrared heating for the production of fiber reinforced polymers

Dr. Lotta Gaab, Heraeus Noblelight GmbH [Kleinostheim]

15:05

Resin transfer prepregging - process chain for large scale production of structural composite parts

Marc Linus Fecher, RWTH Aachen University - Institute of Plastics Processing in Industry and the Skilled Crafts [Aachen]

15:30

Continuous composite fuselage panel production – a progressive approach for future aircraft structures

Joachim Piepenbrock, Composite Technology Center Stade GmbH [Stade]/
Jan Verhaeghe, ACROSOMA NV [Gent Area, Belgium]

15:55 Coffee Break & Exhibition

SESSION: SIMULATION



Chairman:
Prof. Dr. Richard
Degenhardt, German
Aerospace Center, DLR
(Brunswick)



16:55

Simulation-based optimization of the manufacturing process for a composite marine propeller

Dr.-Ing. Hannes Kroeger, Voith Turbo Advanced Propeller Technologies GmbH & Co. KG (Rostock)

17:20

Potentials of novel FE simulation techniques for the machining of CFRP and composite materials

Dr.-Ing. Kay Marschalkowski, ISBE GmbH - Tool Engineering Center (Unna)

17:45

Digitized process chains - quality based production of large CFRP components

Sebastian Rosskamp, German Aerospace Center, DLR - Institute of Composite Structures and Adaptive Systems (Stade)

18:30 EVENING EVENT

Location: Gut Deinster Mühle

A shuttle service will bring all participants from the STADEUM directly to the manor and back to the hotels later in the evening.

EVENING EVENT 12 JUNE 2012

All participants are warmly welcome to the „Gut Deinster Mühle“ in Deinste as a special way of concluding the first day of the Convention. Relax and unwind together with the speakers, exhibitors and participants at this 800-year-old manor and savor the summer atmosphere of a grill buffet with jazz music in the background.

Enjoy the fascinating contrast of the traditional and modern world and take advantage of the opportunity for more in-depth conversations on your first day of the Convention in a relaxed atmosphere such as in the traditional manor stables.

Highlight of the evening will be the bestowal of the “Composite Innovations Award” 2012.

A shuttle service will bring you from the STADEUM directly to the manor and back to the hotels later in the evening.

Come join us!

Location: Gut Deinster Mühle - www.allesistgdm.de





09:15

Greetings

Dr. Jens Walla, Airbus Operations GmbH – Plant Stade (Stade)

SESSION: MATERIALS



Chairman:
Dr. Dirk Niermann,
Fraunhofer Institute
IFAM (Stade)



09:30

Lightweight aircraft components in multi-material design for small series production

Prof. Dr.-Ing. habil. Prof. E.h. Dr. h.c. Werner Hufenbach/Dr.-Ing. Andreas Ulbricht, TU Dresden -
Institute of Lightweight Engineering and Polymer Technology (Dresden)

09:55

Wind rotorblade manufacturing - stepchanges by new resins and release foils

Dr. Bernd Hoevel, Dow Deutschland Anlagengesellschaft mbH (Mietingen-Baltringen)

10:20

Performance of recycled carbon fibre materials with examples of potential applications

Tim Rademacker, carboNXT GmbH (Wischhafen)

10:45 Coffee Break & Exhibition

SESSION: POST PROCESSING



Chairman:
Jürgen Richter,
Premium AEROTEC
GmbH (Varel)



11:30

High-speed spot welding of continuous fibre reinforced thermoplastic composites

Irene Fernandez Villegas, Delft University of Technology - Design and Production of Composite Structures (Delft, The Netherlands)

11:55

Adaptive machining for efficient manufacture and repair of CFRP components

Dr. Claus Bremer, BCT GmbH (Dortmund)

12:20

Automised assembly of CFRP Structures

Dr. Patryk Burka/Gregor Graßl, Fraunhofer Institute for Manufacturing Technology and Advanced Materials IFAM (Stade)

12:45

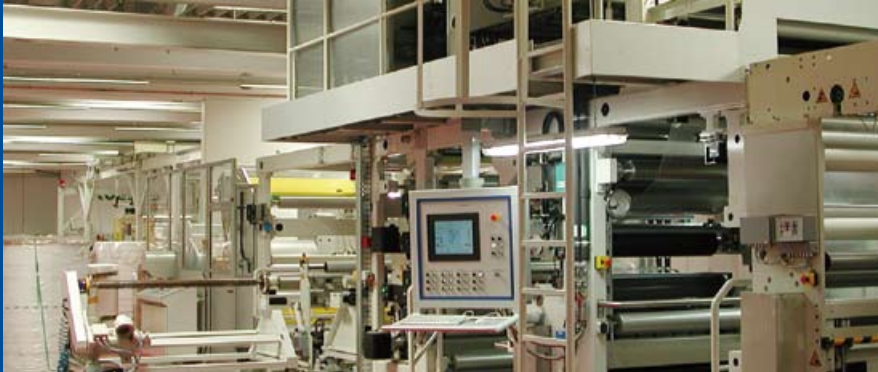
Laser in Black: potentials of lasers within CFRP production

Dr.-Ing. Dirk Herzog, LZN Laser Zentrum Nord GmbH (Hamburg)/
Malte Scherner, Kämmerer GmbH Engineering (Hamburg)

13:10 SUMMARY/CLOSING REMARKS

Machines for Prepreg Production

Horizontal and Vertical Process Impregnation



Aerospace



Wind Energy Plants



Ship-building



Sporting Goods

KROENERT has been producing composites for more than 25 years. Besides machines for resin coating (PAK 400 EP), we also offer machines for the production of Prepregs (RECO EP) in either the horizontal or vertical processes. Prepregs manufactured using KROENERT machines are found in the aerospace industry, wind energy plants, medical technology and light-weight components for the automotive and ship-building industries, as well as in the sporting goods industry. **Contact us now!**



Automotive Manufacturing



Aircraft Interior Trim

KROENERT 

www.kroenert.de

BMB 

www.bmbag.ch

DRYTEC

www.drytec.net

HOTELS

We offer all participants a hotel room contingent at special rates until **May, 08 2012**. Please, book under the **keyword "CFK"**.

PARKHOTEL STADER HOF

**Distance to Convention: 0.1 km
starting from 95.– EUR**

Schiffertorsstr. 8
21682 Stade
Tel. +49 4141 499-0
www.parkhotel-staderhof.de

HOTEL AM HOLZHAFEN

**Distance to Convention: 1.1 km
starting from 69.– EUR**

Salztorscontrescarpe 8
21682 Stade
Tel. +49 4141 529088
www.hotel-in-stade.de

AKZENT HOTEL „ZUR EINKEHR“

**Distance to Convention: 1.6 km
starting from 72.– EUR**

Freiburger Straße 82
21682 Stade
Tel. +49 4141 2325
www.hotelzureinkehr.de

HOTEL „VIER LINDEN KIEK IN“

**Distance to Convention: 1.9 km
starting from 69.– EUR**

Schölischer Str. 63
21682 Stade
Tel. +49 4141 92702
www.hotel-vierlinden.de

RAMADA HOTEL "HERZOG WIDUKIND"

**Distance to Convention: 3.1 km
starting from 90.– EUR**

Große Schmiedestraße 14
21682 Stade
Tel. +49 4141 99980
www.ramada.de/stade

GOLF-HOTEL „GUT DEINSTER MÜHLE“

**Distance to Convention: 10.5 km
starting from 65.– EUR**

Im Mühlenfeld 30
21717 Deinste
Tel. +49 41 49 925250
www.allesistgdm.de



the **JEC** network

COMPOSITES

Serving more than 250,000 professionals worldwide.



information

- Web Hub and E-letters
- Digital and Print Magazine



learning

- Forums and Workshops
- Innovative Composites Summit (I.C.S.)



intelligence

- Strategic Studies
- Symposiums



publications

- Technical Books and Proceedings
- Directories



innovation

- Awards
- Showcases



connecting

- JEC Composites Shows and Conferences
- Business Meetings

www.JECcomposites.com

LOCATION

Stade has a lot to offer. No wonder, with a history of over a thousand years! History that can be seen not only in museums, but also living history that can be experienced in the beautifully renovated old town. Stade, the town on the Schwinge, has continued to develop as a cultural center of the Elbe-Weser Triangle since the completion of the STADEUM culture and congress center in 1989. The secret of the avant-garde building's success is the effective synthesis of atmosphere, experience, organisation, and engineering.

STADEUM Kultur- und Tagungszentrum GmbH & Co. Betriebs KG

Schiffertorsstraße 6
21682 Stade
www.stadium.de



The Expert Forum for
Composite Lightweight
Construction

EXHIBITION

Space B

- 1 Airtech Europe Sarl
- 2 GKD-Gebr. Kufferath AG
- 3 Airbus Operations GmbH/CTC GmbH
- 4 Fraunhofer IFAM
- 5 Fraunhofer-Institut für Zerstörungsfreie Prüfverfahren IZFP
- 6 Flow Europe GmbH
- 7 LAP GmbH Laser Applikationen
- 8 PRIVATE HOCHSCHULE GÖTTINGEN
- 9 DE-STA-CO Europe GmbH
- 10 GMA-Werkstoffprüfung GmbH/GMA-Engineering GmbH
- 11 ESI Engineering System International GmbH
- 12 KauPo Plankenhorn e.K.
- 13 Heraeus Noblelight GmbH
- 14 Klenk GmbH & Co. KG
- 15 DLR - Institut für Faserverbundleichtbau und Adaptronik
- 16 Toho Tenax Europe GmbH
- 17 AXSON GmbH
- 18 M. Torres Deutschland GmbH
- 19 MAPAL Präzisionswerkzeuge Dr. Kress KG
- 20 Coriolis Composites GmbH
- 21 Evonik Industries AG

- 22 CFK-Valley Stade e.V. - Joint Booth
 - > Acrosoma NV
 - > CGTech Deutschland GmbH
 - > BRÖTJE-Automation GmbH
 - > BCT GmbH
 - > Bolle & Cords Elektrotechnik GmbH
 - > Hufschmied Zerspanungssysteme GmbH
 - > KUKA Systems GmbH
 - > Premium AEROTEC GmbH
 - > MET Motoren- und Energietechnik GmbH
- 23 b Linn High Therm GmbH

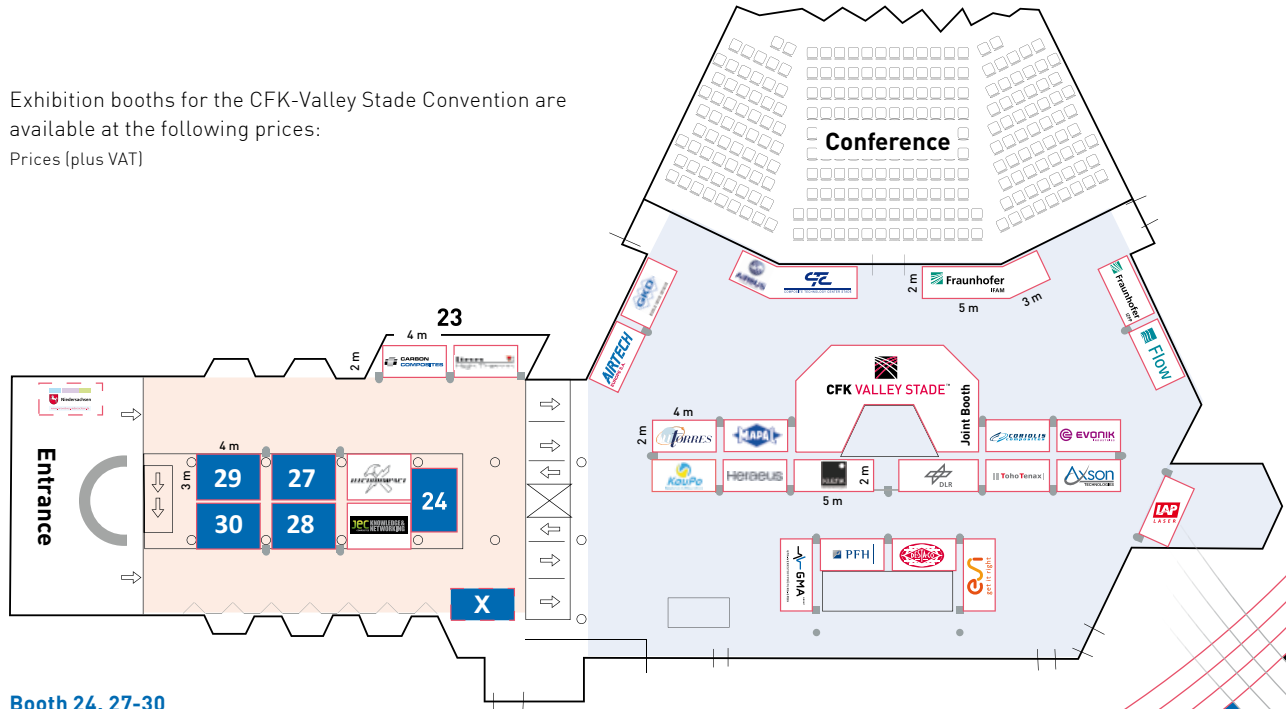
Space A

- 26 JEC SAS

Additional Exhibition

- > Hansestadt Stade - Wirtschaftsförderung
- > Innovatives Niedersachsen GmbH

Exhibition booths for the CFK-Valley Stade Convention are available at the following prices:
 Prices (plus VAT)



Booth 24, 27-30
 12 m², max. height 2.30 m

3.360 €

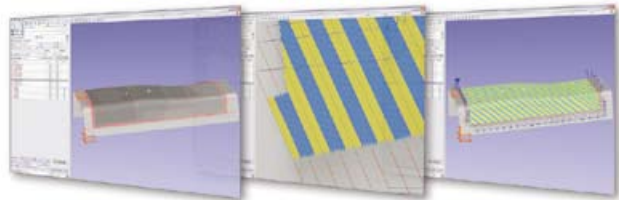
Booth X
 8 m², max height 2.50 m

on Request

Last Chance

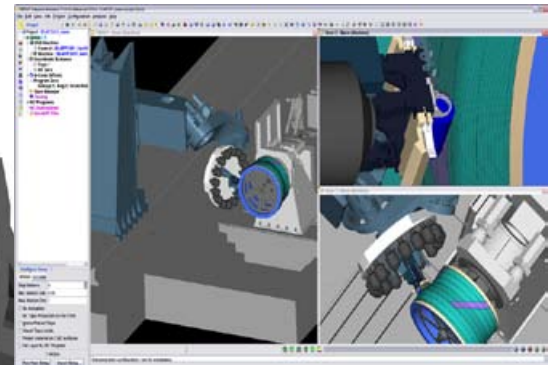
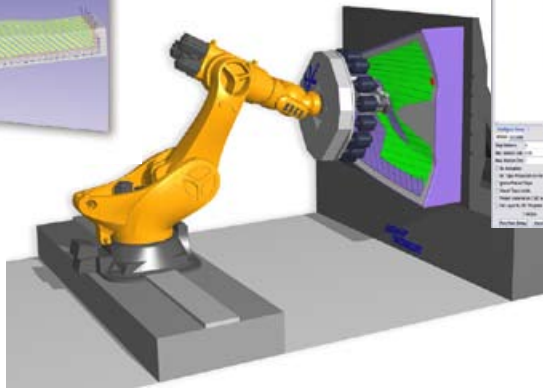
to reserve an exhibition booth!
info@cfk-convention.com

Maschinenunabhängige Programmierung & Simulation von automatisierten Fiber-Placement Anlagen



VERICUT Composite Programming (VCP)

liest die CAD-Geometrie der Ablegeform sowie die Legkonturen mit Materialinformationen ein. Anschließend wird Material innerhalb der Konturen unter Berücksichtigung konstruktiver und fertigungsrelevanter Vorgaben verlegt. Die Ablegebahnen sind miteinander verknüpft und bilden bestimmte Ablegefolgen. Sie werden als NC-Programme für die automatisierte Ablegemaschine ausgegeben.



VERICUT Composite Simulation (VCS)

liest CAD-Modelle und NC-Programme von VCP oder anderen Anwendungen für die Erzeugung von Ablegebahnen für Verbundwerkstoffe ein und simuliert die Abfolge der NC-Programme auf einer virtuellen Maschine.

Booth 1

Airtech Europe Sarl

ZI Haneboesch
L-4562 Differdange

Phone +352 58 22 82
s.radu@airtech.lu
www.airtech.lu

Booth 2

GKD-Gebr. Kufferath AG

Metallweberstr. 46
52353 Düren

Phone +49 2421 803-0
hans.schlebusch@gkd.de
www.gkd.de

Booth 3

Airbus Operations GmbH/CTC GmbH

Airbus-Str. 1
21684 Stade

Phone +49 4141 938-500
www.ctc-gmbh.com
www.airbus.com



WORLD WIDE WEAVE



AIRBUS
AN AIRBUS COMPANY



COMPOSITE TECHNOLOGY CENTER STADE



Booth 4

Fraunhofer-Institut für Fertigungstechnik und Angewandte Materialforschung IFAM

Wiener Straße 12
28359 Bremen

Phone +49 421 2246-400
anne-grete.becker@ifam.fraunhofer.de
www.ifam.fraunhofer.de

Booth 5

Fraunhofer-Institut für zerstörungsfreie Prüfverfahren IZFP

Maria-Reiche-Straße 2
01109 Dresden

Phone +49 351 88815-501
sabine.saemisch@izfp-d.fraunhofer.de
www.izfp-d.fraunhofer.de

Booth 6

Flow Europe GmbH

Gewerbestr. 95
75015 Bretten

Phone +49 7252 538-0
awuerfel@flowgroup.com
www.flowwaterjet.com



Study Program Composites

Find the way to your career

European-wide unique study program +++ Located in Stade
+++ Cooperations with Airbus Operations GmbH and CFK-Valley
Stade e. V. +++ Excellent career opportunities in the CFRP
sector +++ Bachelor of Engineering: Includes two semesters of
apprenticeship with skilled worker degree "Composite Mechanic"
+++ Duration: 8 semesters +++ Tuition fees: 500,- Euro per
month +++ Master of Science: Extra-occupational executive
study program +++ Duration: 3 semesters +++ Tuition fees:
990,- Euro per month +++ **www.pfh.de**



Booth 7

LAP GmbH Laser Applikationen

Zeppelinstr. 23
21337 Lüneburg

Phone +49 4131 9511-95
t.armbruster@lap-laser.com
www.lap-laser.com

Booth 8

PRIVATE HOCHSCHULE GÖTTINGEN

Airbus-Str. 6
21684 Stade

Phone +49 4141 7967-0
studieninfo@pfh-stade.de
www.pfh.de

Booth 9

DE-STA-CO Europe GmbH

Hiroshimastraße 2
61440 Oberursel

Phone +49 6171 705-0
pmathis@destaco.com
www.destaco.com

Booth 10

GMA-Werkstoffprüfung GmbH/ GMA-Engineering GmbH

Julius-Leber-Weg 24
21684 Stade

Phone +49 4141 7944-0
r.vollmerhaus@gma-group.com
www.gma-group.com

Booth 11

ESI Engineering System International GmbH

Mergenthalerallee 15-21
65760 Eschborn

Phone +49 6196 9583-0
agi@desigmbh.de
www.esi-group.com

Booth 12

KauPo Plankenhorn e.K.

Max-Planck-Str. 9/3
78549 Spaichingen

Phone +49 7424 95842-3
joerg.plankenhorn@kaupo.de
www.kaupo.de



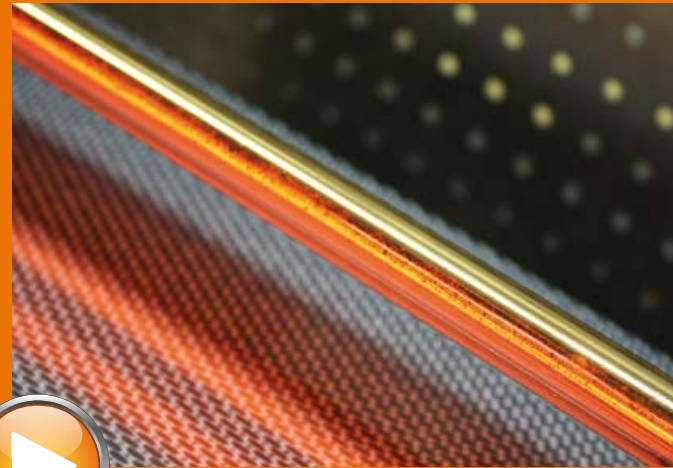


Heraeus

Faster Heating for Composites with Infrared

In the growing market of composites there are many processes that can benefit from heat which is delivered fast but in a precise and efficient way.

In automotive and aerospace, wind turbine technology and general engineering infrared heating solutions from Heraeus allow customers to target heat where it is required when it is required saving time, energy and money.



Your contact to our Infrared Team

hng-infrared@heraeus.com



So improve your competitive advantage!

Heraeus Noblelight GmbH
www.heraeus-noblelight.com/infrared

Booth 13

Heraeus Noblelight GmbH

Reinhard-Heraeus-Ring 7
63801 Kleinostheim

Phone +49 6181 3585-45
silke.jung@heraeus.com
www.heraeus-noblelight.com

Booth 14

Klenk GmbH & Co. KG

Mühlstr. 17
88481 Balzheim

Phone +49 7347 950-0
stefanie.dempff@klenk-tools.de
www.klenk-tools.de

Booth 15

DLR - Institut für Faserver- bündelichtbau und Adaptronik

Lilienthalplatz 7
38108 Braunschweig

Phone +49 531 295-2301
jana.hoidis@dlr.de
www.dlr.de/fa

Heraeus



|||| **Toho Tenax** |



Booth 16

Toho Tenax Europe GmbH

Kasinostraße 19-21
42103 Wuppertal

Phone +49 202 32-2339
katja.cohrs@tohotenax-eu.com
www.tohotenax-eu.com

Booth 17

AXSON GmbH

Waldstraße 72
63128 Dietzenbach

Phone +49 6074 40711-0
ballin@axson.de
www.axson.com

Booth 18

M. Torres Deutschland GmbH

Wolf-von-Baudissin-Weg 1
21684 Stade

Phone +49 4141 93994-0
sabine.ghoniem@mtorres.com
www.mtorres.es

Booth 19

Mapal Präzisions- werkzeuge Dr. Kress KG

Obere Bahnstraße 13
73431 Aalen

Phone +49 7361 585-0
info@de.mapal.com
www.mapal.com



BOLLE & CORDS
Elektrotechnik GmbH



BOOTH 22 · JOINT BOOTH CFK-VALLEY STADE E.V.

Acrosoma NV

Wolfsakker 2
B-9160 Lokeren

Phone + 32 934043-30
administration@acrosoma.com
www.acrosoma.com

CGTech Deutschland GmbH

Neusser Landstr. 384
50769 Köln

Phone +49 221-97996-0
info.de@cgtech.com
www.cgtech.com

BRÖTJE-Automation GmbH

Stahlstraße 1-5
26215 Wiefelstede

Phone +49 4402 966-170
eberhard.goette@broetje-automation.de
www.broetje-automation.de

BCT GmbH

Carlo-Schmid-Allee 3
44263 Dortmund

Phone +49 231 975010-0
c.bremer@bct-online.de
www.bct-online.de

Bolle & Cords Elektrotechnik GmbH

Gewerbestr. 16/16a
25358 Horst

Phone +49 4126 38812
info@bolle-cords.de
www.bolle-cords.de

Hufschmied Zerspanungs- systeme GmbH

Edisonstr. 11d
86399 Bobingen

Phone +49 8234 9664-0
info@hufschmied.net
www.hufschmied.net

KUKA Systems GmbH

Blücherstr. 144
86165 Augsburg

Phone +49 821 797-0
stefan.bayer@kuka.de
www.kuka-systems.com

CFK-Valley Stade e.V.

Ottenbecker Damm 12
21684 Stade

Phone +49 4141 40740-0
info@cfk-valley.com
www.cfk-valley.com

Premium AEROTEC GmbH

Haunstetter Straße 225
86179 Augsburg

Phone +49 821 801-0
info@premium-aerotec.com
www.premium-aerotec.com

MET Motoren- und Energietechnik GmbH

Erich-Schlesinger-Str. 50
18059 Rostock

Phone +49 381 44032-0
office@met-online.com
www.met-online.com

KUKA

KUKA Systems GmbH



CFK VALLEY STADE™

PREMIUM
AEROTEC

 **MET**

SPONSORS OF CFK-VALLEY STADE

Premium Sponsors

inGenics

And Future Works.

voh
Von der Heyde

werkzwo®
messebau

Gold Sponsors

RKM  

lightweightdesign
Die Fachzeitschrift für den Leichtbau bewerkstelligter Massen

Silver Sponsors

Ing.-Büro Löbel
NDB- Elektrotechnik
GmbH & Co.KG

A background image featuring a musical score with a treble clef, a key signature of one flat, and a dynamic marking of 'f'. An airplane icon is superimposed on the notes. The score is written on a white background with black lines and notes. A red horizontal bar is at the top of the page.

BRÖTJE
AUTOMATION



Solutions for the aerospace industry

With the statement "Composed to compete" we would like to express our promise to continually increase our knowledge about the manufacturing processes of the aerospace industry. As a first tier supplier we offer solutions to our customers for a continuous improvement of competitiveness in their production process. Worldwide.

COMPOSED TO COMPETE

BRÖTJE-Automation GmbH

www.broetje-automation.de

E-Mail info@broetje-automation.de

Booth 20

Coriolis Composites GmbH

Universitätsstraße 1
86159 Augsburg

Phone +49 821 598-3570
nico.naumann@coriolis-composites.com
www.coriolis-composites.com

Booth 21

Evonik Industries AG

Kirschenallee
64293 Darmstadt

Phone +49 6151 18-1005
rohacell@evonik.com
www.rohacell.de

Booth 26

JEC SAS

25 avenue de l'Amiral Bruix
75116 Paris (France)

Phone +33 1 5836 1500
info@jeccomposites.com
www.jeccomposites.com

Hansestadt Stade - Wirtschaftsförderung

Hökerstr. 2
21682 Stade

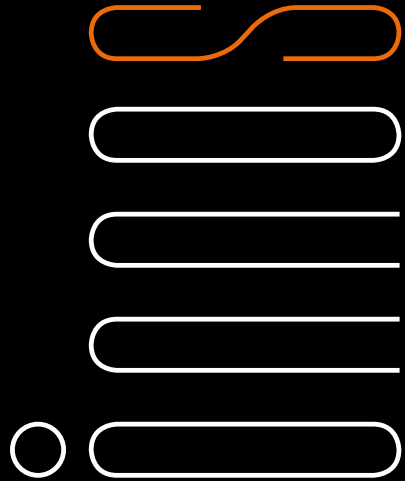
Phone +49 4141 401-140
wirtschaftsfoerderung@stadt-stade.de
www.stadt-stade.de

Innovatives Niedersachsen GmbH

Kurt-Schumacher-Str. 24
30159 Hannover

Phone +49 511 760726-0
info@nds.de
www.innovatives.niedersachsen.de





www.innos-sperlich.de



Wegbereiter für Innovationen.
Pathfinder for Innovations.

FEES

Participants **600 € plus VAT**
Every additional person **450 € plus VAT**
(will be checked upon registration)

Participants **450 € plus VAT**
(Member of CFK-Valley Stade e.V.)

Participants **450 € plus VAT**
(Member of DGLR e.V.)

The fee includes conference, exhibition, conference proceedings, lunch, refreshments during breaks, evening event

Students **80 € plus VAT**
(Please include copy of student I.D. with registration form)

The fee includes conference, exhibition, lunch, refreshments during breaks (without conference proceedings)

Legal Notice

You will receive an invoice for the participation fee upon receipt of your registration. The number of participants is limited due to organizational reasons. In justified cases, e. g. due to the cancellation of speakers or too few participants, we reserve the right to cancel the convention up to one week before the appointed day. The paid fees will be reimbursed in this case. Any further claims to CFK-Valley Stade Convention GbR will be excluded. Any cancellation of participant registration received after 01 June 2012 will require full payment (100%) of the participation fee. A legally valid cancellation (as participant) must be submitted in writing. The undersigned/participant furthermore agrees that photos and film material concerning him or her may be produced and published and that photos of him or her may be published (in further print publications). With your signature, you consent that your data may be entered into the CFK-Valley Stade Convention GbR database. Your data will be treated confidentially and will not be disclosed to third parties.

Organization

Main Office
CFK-Valley Stade Convention GbR

c/o CFK-Valley Stade e. V.
Ottenbecker Damm 12
21684 Stade (Germany)

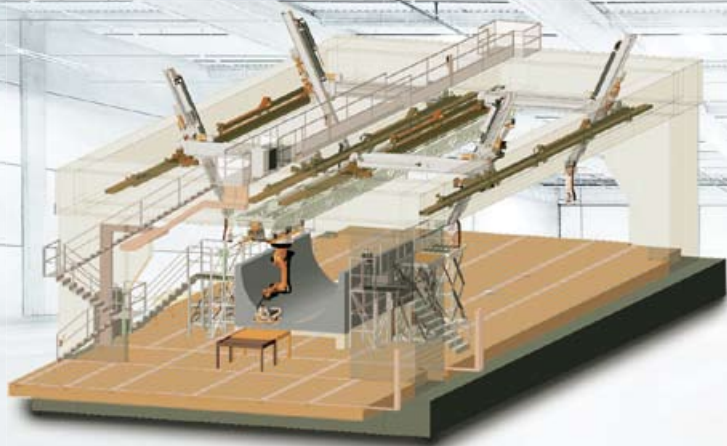
Phone +49 4141 40740-22
Fax +49 4141 40740-29
info@cfk-convention.com
www.cfk-convention.com

Company Partners


CFK VALLEY STADE™
www.cfk-valley.com


Innos - Sperlich GmbH
Pathfinder for Innovations.
www.innos-sperlich.de





KUKA

COMPOSITE SOLUTIONS

KUKA Systems is an international supplier of flexible automation systems for the automotive, aerospace, energy and general industries.

Together with our partners from Science and Research, we are developing automation for manufacturing parts made of composite materials. In this way we supply production solutions - with varying degrees of automation - for applications in different industries for example wind energy, automotive and aerospace.

www.kuka-systems.com

WORLDWIDE | BENELUX | BRAZIL | CHINA | CZECH REPUBLIC | FRANCE |
GERMANY | INDIA | MEXICO | RUSSIA | SLOVAKIA | UK | USA |

REGISTRATION

Via fax to **+49 551 49601-49**
or via E-Mail: **info@cfk-convention.com**

Last name / first name / title

Company / organisation

Position / department

Street / P.O. box

Postal code / town / country

Phone / fax

E-mail

Deadline 25 May 2012

Binding registration (please check appropriate item):

- Member of CFK-Valley Stade e.V./DGLR e.V.
- Non-Member
- Student

Date

Signature*

Registration also possible:

www.cfk-convention.com/registration





MEDIA PARTNER



COOPERATION PARTNER



Niedersachsen

www.innovatives.niedersachsen.de