

SAMPE

Europe



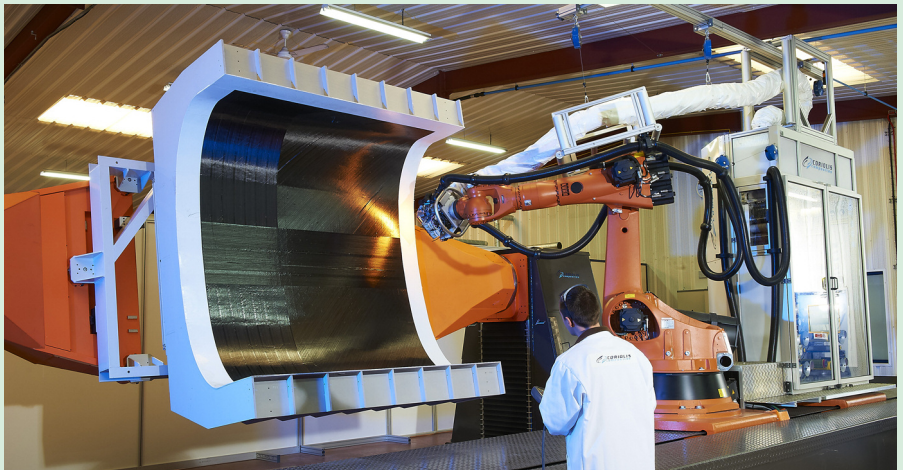
2nd Symposium on Automation in Composite Technology

Neue Messe München

AUTOMATICA
INNOVATION AND SOLUTIONS

5th International Trade Fair for Automation and Mechatronics

24th May - 25th May, 2012



Tape-Layer Robot – by courtesy of COROLIS Composites GmbH., Augsburg

Website: www.sampe-europe.org

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SAMPE EUORPE 2nd International Symposium SEMAT 12 Munich

At a Glance

Wednesday, May 24th **Registration 16.00 – 18.00**
Thursday, May 25th **Registration 08.30 – 16.30**
Friday, May 26th **Registration 08.30 – 14.00**

THURSDAY, May 24th	FRIDAY, May 25th
<p>08.00 – 16.30 Registration 09.00 – 17.30 Sessions</p>	<p>08.00 – 14.30 Registration 08.30 – 15.30 Sessions</p>
<p>09.00 – 09.30 Opening & Key-Note</p> <p style="margin-left: 40px;">Opening SEMAT 12, K. Drechsler Past-President SAMPE Europe</p> <p>Key-Note Paper 13 Actual Status of Automation for Advanced Composites and outlook for complementary developments</p> <p><i>Speaker:</i> Otto Kellenberger, KUKA Augsburg</p>	<p>08.30 – 10.00 Session 4</p> <p style="margin-left: 40px;">Session 4A – Automation Technology for Aerospace Industry Chairman: t.b.a.</p> <p>P 07, Speaker: Andreas Strobel, Eurocopter Ottobrunn P 03, Speaker: Stefan van der Elst, KE-works BV P 08, Speaker: Ulrich Ebert, Eurocopter Ottobrunn</p>
<p>09.30 – 10.00 Coffee Break 10.00 – 12.00 Session 1</p> <p style="margin-left: 40px;">Session 1 – Automation Technology for Car Industry Chairman: K. Drechsler</p> <p>P 04, Speaker: Reinier van Dijk, TU Delft P 05, Speaker: Stefan Carosella, UNI Stuttgart P 06, Speaker: Christian Sorg, BMW Group P 01, Speaker: Karl-Otto Strömberg, FlexProp AB</p>	<p>10.00 – 10.30 Coffee Break 10.30 – 12.30 Session 5</p> <p style="margin-left: 40px;">Session 5 – Material & Modelling Aspects Chairman: R. Ziegmann</p> <p>P 23, Speaker: Massimiliano Moruzzi, CYTEC P 16, Speaker: Michael Kupke, DLR P 26, Speaker: Olaf Leonhardt, SCA Schucker GmbH P 24, Speaker: Samuel Hill, CYTEC</p>
<p>12.00 – 13.00 Lunch 13.00 – 15.00 Session 2</p> <p style="margin-left: 40px;">Session 2 – Fibreplacement & Preform Application Chairman: t.b.a.</p> <p>P 02, Speaker: Timo Driessen, BROETJE Automation P 12, Speaker: Felix Fröhlich, TU Munich P 15, Speaker: Henning Wagner, KIT Karlsruhe P 11, Speaker: Andreas Glück, IWB Augsburg</p>	<p>12.30 – 14.00 Lunch 14.00 – 15.30 Session 6</p> <p style="margin-left: 40px;">Session 6 – Novel Aspects for Automation Chairman: Mark Erath</p> <p>P 20, Speaker: Martin Styer, Manz Tübingen GmbH P 22, Speaker: Stefan Thumfart, Profactor GmbH P 25, Speaker: Adriano Di Pietro, Quickstep Technologies Pty Ltd.</p>
<p>15.00 – 15.30 Coffee Break 15.30 – 17.00 Session 3</p> <p style="margin-left: 40px;">Session 3 – Advancements in Robotic Chairman, t.b.a.</p> <p>P 10, Speaker: Michael Muser, Ingersoll P 17, Speaker: Guido Jaeger, KSL, Lorsch P 18, Speaker: Johannes Treiber, Coriolis P 27, Speaker: Anders Brodsjo, AIRBORNE</p>	<p>15.30 – 15.45 Closing SEMAT 12 15.45 – 16.15 Coffee Break</p>
<p>17.30 – 22.30 SETEC Dinner integrated in AUTOMATICA Bavarian Evening</p>	

**2nd SEMAT 12 Symposium – of SAMPE Europe on Automation
for Advanced Composite Material Systems and Technology – set up
in conjunction with AUTOMATICA Exhibition, Neue Messe Munich,
May 24th – 25th 2012**



Dear Attendee and dear SAMPE Member,

We are pleased to welcome you to attend SEMAT 12 Munich Symposium focusing on requirement and progress of automation in different industrial market-segment.

The aim of the Symposium is to provide to its attendee in deep going information on the constant changing requirements in regard of innovation, automation and progress to achieve to provide to the industry involved the required advantage in technology – ecology and commercial success in the market segment involved by means for an ongoing process to define and achieve complementary target of automation under sustainable conditions.

The AUTOMATICA –Exhibition provides a very extended spectrum of the technology engaged in today's Automation and offers therefore to each SEMAT attendee the possibility to find possibly any answer to any question from the exhibitors present at SEMAT 12.

The structure of the papers to be presented at SEMAT 12 foresees that for each presentation the respective speakers saves a 5 minutes time-block to answer questions from the audience. Please take an advantage from this possibility to get a good information basis for your interests or projects.

This year's SEMAT Symposium Dinner will be organized on Thursday evening as an integrated element of the AUTOMATICA Exhibitor evening proving to you all the possibility to meet with a very large field of specialist in Automation.

SAMPE Europe wishes you a successful and rewarding stay here in Munich and does express its gratitude for you attendance to SEMAT 12.

Mark Erath
Symposium Manager, Past President

SAMPE Europe – 2nd International SEMAT 12 Symposium Munich

PROGRAMME on Tuesday, May 24th 2012

09.00 – 09.30

Opening and Key-Note Presentation

Opening

Welcome address by Prof. Klaus Drechsler, TU Munich
Past-President SAMPE Europe

Key-Note:

Paper 13 – Actual Status of Automation for Advanced Composites and
Outlook for complementary developments

Speaker:

Otto Kellenberger, KUKA Augsburg

Authors:

O. Michael, O. Kellenberger, KUKA Robotics, Augsburg

09.30 – 10.00

COFFEE BREAK

10.00 – 12.00

Session 1 – Automation Technology for Car Industry

Chairman: K. Drechsler, TU Munich

Paper 04:

Intelligent Design Software for a smart Car – Knowledge based
Engineering in the Automotive Industry

Speaker & Author:

Reinier van Dijk Technical University Delft, Delft ,NL

Paper 05:

Tailored Fibre Placement – an option for automated
high volume Preform Production

Speaker & Author:

Stefan Carosella, Universität Stuttgart, IFB Institut, Stuttgart

Paper 06:

Artificial Intelligence in high-volume Composite Manufacturing

Speaker:

Christian Sorg, BMW Group, Landshut

Authors:

Markus Kühberger, Christian Sorg, BMW Group, Landshut

Paper 01:

Light Weight Production Technology

Speaker & Author:

Karl-Otto Strömberg, Flexpro AB., S-302 41 Halmstad

12.00 – 13.00

LUNCH

13.00 – 15.00

Session 2 – Fibreplacement & Preform Application

Chairman: t.b.a.

Paper 02:

Dry-Fiber-Placement with a Standard Articulating Robot System

Speaker:

Timo Dierssen, BROETJE-Automation GmbH

Authors:

Timo Dierssen, Christian Weimer, Eurocopter Deutschland

Paper 12:

Automated Manufacturing of Carbon Fiber Preforms
using the Brading Technology

Speaker:

Felix Fröhlich, Technical University Munich, Garching

Authors:

Olaf Rüger, Felix Fröhlich, Technical University Munich, Garching

Paper 15:

Overcoming the challenges of automated performing of semi-finished Textiles

Speaker:

Henning Wagner, Karlsruher Institut für Technologie (KIT), Karlsruhe

Authors:

H. Wagner, Ing. Brandt, KIT Karlsruhe

Paper 11: Automated Process Chain for the Manufacturing of FRP
Speaker: Andreas Glück, iwb Anwendungszentrum Augsburg, Geschäftsfeld Montagetechnik, Technical University Munich, Garching
Authors: Günther Reinhardt, Claudia Ehinger, Andreas Glück, iwb Anwendungszentrum, Augsburg

15.00 – 15.30 **COFFEE BREAK**

15.30– 17.00 **Session 3 – Advancements in Robotic**
 Chairman: t.b.a.

Paper 10: Overall Cost Reduction by selection of the right Fiber Placement
Speaker & Author: Michael Muser, Ingersoll MachineTools Inc., USA

Paper 17: 3D Application for technical Textiles
Speaker: Guido Jaeger, KSL Sondermaschinenbau, D-64653 Lorsch
Authors: Robert Keilmann, Guido Jaeger, KSL Sondermaschinenbau, Lorsch

Paper 18: Recent advances in robotic automated deposition of different materials
Speaker & Author: Johannes Treiber, Coriolis Composites GmbH., D-86159 Augsburg

Paper 27: A Composite Manufacturer's perspective on automation: Low-Cost, Product-Dedicated and in house developed
Speaker: Anders Brodsjo, AIRBORNE Technology, NL-2497 GB Den Haag
Authors: Menno Verkade, Marcus Kremers, Anders Brodsjo, AIRBORNE Technology, Den Haag

17.30 – 22.30 **SEMAT DINNER integrated at AUTOMATICA BAVERIAN Evening at the AUTOMATICA ICM – Foyer 1 – next to the Entrance Gate West**

PROGRAMME on Friday, May 25th 2012

08.30 – 10.00 **Session 4 – Automation Technology for Aerospace Industry**
 Chairman: t.b.a.

Paper 07 Automated Assembly and Bonding Technologies for Advanced Helicopters
Speaker: Andreas Strobl, Eurocopter Deutschland, Ottobrunn
Authors: Christian Weimer, Helmut Wehlan & Andreas Strobl, Eurocopter Deutschland, Ottobrunn

Paper 03: Implementing Knowledge based Engineering in Industry: Automated Electrical Wire Harness Design in Aircraft
Speaker: Stefan van der Elst, KE-works BV., NL-2629 JD, Delft
Authors: Jochen Berends, Jacques Wildemast, Stefan van der Elst, KE-works BV.,

Paper 08: Innovations for the manufacturing of Composite Helicopter Structures
Speaker & Author: Ulrich Eberth, Eurocopter Deutschland, Ottobrunn

10.00 – 10.30	COFFEE BREAK
10.30 – 12.30	Session 5 – Material & Modeling Aspects Chairman: t.b.a.
Paper 23:	Modeling Material Kinematics Behaviour during Manufacturing Layup Processes
<i>Speaker:</i>	Massimiliano Moruzzi, CYTEC UK
<i>Authors:</i>	Robert Blackburn, Massimiliano Moruzzi, CYTEC UK
Paper 16:	Development of an automated production with integrated Quality Management
<i>Speaker & Author:</i>	Michael Kupke, DLR
Paper 26:	Metering Technology – The Way to automated Composite Production
<i>Speaker:</i>	Olaf Leonhardt, SCA Schucker GmbH & Co. KG., D-75015 Bretten
<i>Authors:</i>	Thomas Schmidt, Olaf Leonhardt, SCA Schucker GmbH & Co. KG.,
Paper 24:	Material Advances for Automation in Resin Infusion
<i>Speaker & Author:</i>	Samuel Hill, CYTEC UK
12.30 – 14.00	LUNCH
14.00 – 15.30	Session 6 – Novel Aspects for Automation Chairman: M. Erath, ACMC Consulting
Paper 20:	Fiber Patch Preforming highly efficient Process for Preform Production
<i>Speaker:</i>	Martin Steyer, Manz Tübingen GmbH., Tübingen
<i>Authors:</i>	Christoph Breu, EADS Innovation Works, Martin Steyer, Manz Tübingen
Paper 22:	Vision based Sensors enabling automated production of Composite Material
<i>Speaker:</i>	Stefan Thumfart, Profactor GmbH., A-4407 Steyr-Gleink
<i>Authors:</i>	Werner Palfinger, Christian Eitzinger, Stefan Thumfart, Profactor GmbH.,
Paper 25:	RST – A Cost Effective Technology for High Quality Automotive Panels
<i>Speaker:</i>	Adriano Di Pietro, Quickstep Technologies Pty Ltd., Bankstown Airport, NSW 2200, Australia
<i>Author:</i>	Jens Schlimbach, Quickstep GmbH., D-85521 Ottobrunn
15.30 – 15.45	Closing SEMAT 12 Chairmen: K. Drechsler – M. Erath
15.45 – 16.15	COFFEE BREAK



Invitation to become a member of SAMPE Europe

SAMPE Europe with now 14 National and Regional Organisations and Chapters are providing to each of the more than 1200 members a rewarding network on local, national, European and worldwide contacts through meetings, seminars, symposiums and conferences with the latest information and presentation of state-of-the-art Research Work, Development, Testing and Application references from Industry.

The SAMPE Journal with its six issues per year is circulated free of charge to all the SAMPE members worldwide, providing in each edition reports on selected technical Topics and the latest news and opinions of Advanced Composite Technology and reference the sources and origins.

The worldwide network of SAMPE covers more than 5000 members which provides an outstanding return to each individual member, compared to the annual membership fee of only € 80.00 per year.

If you are interested to subscribe for a membership please refer to the registration-desk where application forms are available – or visit the SAMPE Europe homepage under www.sampe-europe.org where detailed information and the application form is available.

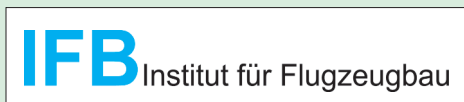
SAMPE members get a significant reduction of registration fees applied for all SAMPE Europe Conference and Symposium!

SAMPE Europe will be very pleased to welcome you soon as a new member!

For further contacts visit the SAMPE Europe homepage under www.sampe-europe.org or contact the Membership-Service of SAMPE Europe under its e-mail Address: hm8461@bluewin.ch

Sponsor support to organize SEMAT 12

SAMPE Europe, acting in all its activities as a volunteer organisation greatly appreciates the very generous Sponsorship from the following 10 Organisations and Companies for the setting-up and realization of the SEMAT 12 Symposium:



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