APRIL 3-4-5, 2007

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JEC COMPOSITES SHOW

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RISO NATIONAL LABORATORY (Denmark)
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SAMPE (USA)
SIXTH FRAMEWORK PROGRAMME
SPITZER EUROVRAC (France)
STUDIO SERGIO ABRAMI & C. YACHT DESIGNERS (Italy)
TECNARO GmbH (Germany)
TRANSFURANS CHEMICALS Bvba (Belgium)
UNIVERSITÉ DE NANTES (France)
VIA MARE (Italy)
VISTAGY (USA)
YOLE DEVELOPPEMENT (France)

JEC COMPOSITES MAGAZINE

JEC GROUP

Together, composing the future of composites

End-users Forums Programme

MARINE

PROCEEDING IN MARINE INDUSTRY

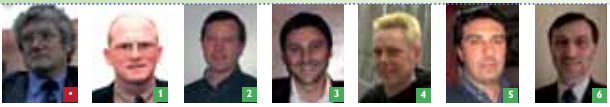
- Materials
- Design
- Production
- Technology

In partnership with:

VIAMARE

octimann

APRIL 3RD, 2007 • 10.30am/1.00pm



• MODERATOR

Mr. Sergio Abrami
STUDIO SERGIO ABRAMI & C. YACHT DESIGNERS (Italy)

Sergio Abrami is an Italian Naval Architect. Passionate of sailing, he raced in 420 class, FD, Soling and after in the Mini Ton Class. During the last 35 years, the Studio Sergio Abrami & C.Yacht Designers designed integrally or as Consultant: regatta or cruise S/Y, motor yachts, fast power boats, RIB, MOB, SOLAS fast rescue boats, all purpose work boats and anti-pollution boats. Moreover, he realized the executive plans of large PRFV superstructures for the Italian Navy, plans and calculations of PRVF structures of large vessels like funnels and decks, semi-submersible boats for underwater vision (from 4 to 36 meters, in PRVF steel an light alloy), composite structures for the industry like the large shelters designed for AGIP.

1 Advanced composite design, materials and processing techniques can reduce the cost of Marine composite components to the same level as GRP

GURIT (United Kingdom)
Mr. Steve Main
Prototyping Development Manager

- Advanced composites.
- Marine structures and higher performances.
- Epoxy carbon fibre.
- Example of a new Fast Inshore Rescue Boat.

2 Development of operational monitoring sensors for the SILL et VEOLIA monohull skippered by Roland Jourdain

MER et PROJETS (France)
Mr. Roland Jourdain
Skipper of the SILL et VEOLIA Yacht
UNIVERSITÉ DE NANTES (France)
Mr. Pascal Casari 2
Associate Professor

- Sensor integrated into the sandwich structure and capable of recording shear strain while sailing.
- Measuring stresses on the boat appendages (one-piece-moulded keel in prepreg carbon, prepreg carbon rudder blades, and gauges).

3 Serial industrial production analysis of vacuum manufactured GFRP hulls and decks

FIART MARE SpA (Italy)
Mr. Giuseppe Coccia,
Composite Division Manager

- Approach to the engineering project: evaluation of the basic materials.
- Structural design considerations and realisation of the process.
- Production time analysis of VIP compared with traditional technologies.

4 The clever way to infuse: go with the flow

POLYWORX (Netherlands)
Mr. Arjen Koorevaar
General Manager

- Resin infusion process for parts like 30 meter falling boat and 50 meter powerboat hulls.

5 CNC innovative milling method to obtain direct production moulds (without plugs) for maxiyachts' build

PERSICO SpA (Italy)
Mr. Andrea Rottigni
Engineer

- New applications.
- Case history: Mangusta 165'.

6 Composite: adaptability and industrialisation

BESENZONI SpA (Italy)
Mr. Ezio Gaspari
Commercial Manager

- Design and metal: from the concept to the reality.
- VTR: a valid alternative to labour.
- One shot: strong contribution to industrialisation.

BIOCOMPOSITES

The European funded (FP6) project BIOCOMP aims to develop high performance engineering composites materials made entirely from renewable resources. These bio-composites are composed of bio-derived resins reinforced by natural fibres and address the issue of environmental sustainability and technical suitability for future consumer and engineering products.
The aim is to have these new composites competing with synthetic composites in terms of performance and price in order to promote uptake in mass market commercial environments.

In partnership with:

BIOCOMP

SIXTH FRAMEWORK PROGRAMME

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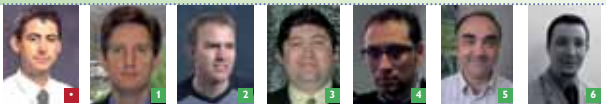


• MODERATOR

Dr. Rod Martin,
Chief Executive Officer
MERL Ltd (United Kingdom)
Specialist on fatigue, fracture mechanics, long term properties, analysis and test methods for composites for engineering structures in the oil & gas, aerospace, automotive and marine industries. Currently on the Institute of Materials Composites Division Board. Previous experience includes working under contract at NASA Langley Research Centre for eight years. Author of more than 50 scientific and technical publications on advanced materials in aerospace applications.

1 Engineering thermoplastic biocomposites

TECNARO GmbH (Germany)
Mr. Helmut Nagele
- The development of high performance composites from entirely renewable resources.
- Using PLA, Lignin, PHB and starch as polymers.
- Using hemp, flax and reinforcement.
- Mapping properties to achieve the performance of synthetic polymers and reinforcements.

2 Guidelines from mechanical design with biocomposites

RISO NATIONAL LABORATORY (Denmark)
Mr. Bo Madsen
- Mechanical design with biocomposites.
- Overview of properties.
- Weight and price.
- Examples of related model products.

3 Testing, treatment and processing of fibres

LULEA UNIVERSITY OF TECHNOLOGY (Sweden)
Mr. Roberts Joffe
Division of Polymer Engineering
- General overview of properties of natural fibres.
- Processing of natural fibres.
- Composites based on natural fibres.

4 Biomass based thermoset furan resin systems

TRANSFURANS CHEMICALS Bvba (Belgium)
Mr. Hans Hoydonckx
- Application of novel furan resins in composite technology.
- Development of furan resins for application in compression moulding with natural fibres, hand lay up, prepreg, BMC, resin infusion.

5 Development of a new composite material based on natural fibres and a thermoset

KOMPETENZZENTRUM HOLZ GmbH (Germany)
Mr. Günter Wuzella, Project Manager
- Semi-finished product made from natural fibres.
- Whole description of the process: from the raw materials to applications and their properties.
- Properties as function of the density of pressed parts, the mixing ratio of binder and additives.

6 New applications in the wood-plastics composites sector: the French example

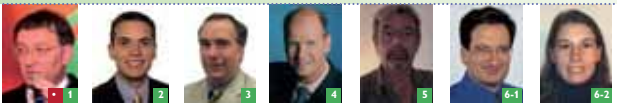
RETTENMAIER France (France)
Mr. Stéphane Laurent
WPC Manager
- Wood fibres used.
- The different current markets.
- Examples of applications and new composites products.

AUTOMOTIVE

COMPOSITES SOLUTIONS TO MEET NEW AUTOMOTIVE FUNCTIONS IN A COMPETITIVE WAY

- Today's and tomorrow's materials
- New innovative applications
- Expected trends

APRIL 4TH, 2007 • 10.30am/1.00pm



• MODERATOR

Mr. Michael Sommer
MENZOLIT - FIBRON (Germany)
Sales & Marketing Director

After degree in chemistry at University of Wuppertal, (Germany) in 1986, he started to work for Menzolit as a Technical Service Engineer for SMC and BMC.
Then, he joined 3M Laboratories Europe in Neuss in 1989 as a Technical Service Specialist for masking tapes where the experience on various paint processes was obtained. Focus was Auto-OEM, Auto-repair and industrial painting. In 1995, BYK-Chemie hired him as a Sales Representative for additives for moulding compounds. After 5 years, he took over the worldwide responsibility as end-use Manager for the Marketing and Sales of those additives. In 2005, he joint Menzolit as Business Development Manager for Menzolit´s compound divison. Since 1st October 2006, his responsibility changed to Sales & Marketing Manager.

1 Changing times, changing demands

MENZOLIT - FIBRON (Germany)
Mr. Michael Sommer
Sales and Marketing Manager

- What has changed?
- Why is it necessary to change the process for composites?
- What does this mean for the parts? For the composites technology?
- What has changed already and what will future bring?

2 New Tailor made recipes for Interior and Exterior part application

SAINT GOBAIN VETROTEX (France)
Mr. Philippe Pardo
LFT & Twintex Product Development

- Automotive structural parts.
- Additional functions.
- The final parts performances.

3 RTM-tool with integrated 2D-Permeability Measurement Work Cell

INSTITUT FUR VERBUNDWERKSTOFFE GmbH (Germany)
Mr. Ralf Schledjewski
Group Leader

- The 2D-COMP (Cell for Online Measurement of Permeability).
- A continuous online Permeability Measurement System.

4 Ceramic composite car brakes

BREMBO CERAMIC BRAKE SYSTEMS SpA (Italy)
Dr.-Ing Ralf Goller
Technology Manager

- Material characteristics.
- Process technology.
- Development and testing.
- Applications.

5 The influence of thickener addition on the morphology of cured UPE resin / PVAc mixtures

ECOLE POLYTECHNIQUE DE LAUSANNE (Switzerland)
Mr. Marcel Montagne
Consultant

- SMC formulation and automotive body panels.
- Better surface quality and shrink control.

6 Nanocomposites for the automotive sector: between research activities and business realities

YOLE DEVELOPPEMENT (France)
Mr. Jean-Christophe Eloy
General Manager
Ms. Barbara Pieters
Market Analyst - Materials & Instrumentation

- Case studies: utilising nanoparticles or nanotubes in the automotive industry.
- Improvements and innovations.
- The "nano" rage.

CONSTRUCTION

COMPOSITES AND CONSTRUCTION: NO LIMITS FOR INNOVATION!

- Industry, Civil Engineering, Building solutions
- Composites and corrosion
- Composites for better living

APRIL 4TH, 2007 • 2.30pm / 5.00pm

• MODERATOR

Mr. Rafic Moubarac
President
EXPERCO COMPOSITES Inc. (Canada)

Rafic Moubarac is a FRP Consultant, Chemical Engineer. He serves the FRP corrosion industry all around the world since 33 years.

1 Coatings and limings as corrosion protection in Flue Gas Desulphurisation plants

REMA TIP TOP GmbH (Germany)
Mr. Wolfgang Berger
Mr. Juergen Fenner
Senior Technical Advisor

- The corrosion protection system.
- The actual market requirements.
- The new related European standards.
- Current references.

2 World's largest FRP acid storage tanks

PT GUNUNG PUTRI GRAH MAS (Indonesia)
Mr. Abraham Lim
Mr. Karim Gunawan
Mr. Wisnu Sanjaya

3 Sand inclusion FRP pipe applied in trenchless technology by microtunneling and jacking

GUANGZHOU SUNNY FRP Co., Ltd (China)
Mr. Zhang Baode
Research and Development Manager

- Sand inclusion FRP pipe.
- Microtunneling and jacking.
- Trenchless technology.

4 A new type of SMC for outdoor applications with improved weatherbility resistance

POLYNT (Germany)
Miss Nicole Busam
R&D Manager

- Development of a superior SMC formulation based on the consideration of influencing factors and mechanisms of ageing of the material.

5 Composite Power Pole for electrical distribution network

OWENS CORNING (Brasil)
Mr. Marcio Nieble
Marketing Manager

- Infrastructure.
- Electricity distribution.
- Composites innovations.

6 Case study: primary composites structures, very large Conference Hall Roof at Library Project, Bahrain

COMPOSITE DESIGNS & TECHNOLOGY (India)
Mr. Suhas Kolhatkar
Director Engineering

- Analysis and design.
- Material specifications.
- Manufacturing, installation, closing remarks.

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AERONAUTICS

THE NUMERICAL TOOLS AVAILABLE FOR THE AERONAUTICAL INDUSTRY

- Best practices and materials behaviour
- Reducing defects and cycle times
- Enterprise Manufacturing Intelligence
- Eco-design

In partnership with:

SAMPE

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• MODERATOR

Mr. Raymond Miller
SAMPE (USA)
President
NORTHERN FIBER GLASS (USA)
President

Mr. Miller majored in Chemistry at Hartwick College, graduating in 1976. His involvement in advanced materials and processes and SAMPE began in 1980. He joined the SAMPE Cabinet in 2002, currently serving as President. Prior employment includes Milliken & Company and Data General.

1 Streamlining Global Airframe Assembly with Model-based Composites Design Processes

VISTAGY (USA)
Mr. Olivier Guillermin
Director, Product and Market Strategy

- Best practices for utilising model-based definitions as composites design communication tools.
- The benefits of streaming your global supply chain through. specialised engineering software
- Reducing manufacturing delivery times through early conceptual design strategies.

2 Meeting materials information challenges for composites

GRANTA DESIGN (United Kingdom)
Dr. Will Marsden
Product Manager, Aerospace, Defense and Energy

- The Material Data Management Consortium (MDMC) experience.
- The outline of the software environment that the project has developed.
- A better understanding of materials behaviour.

3 Inverse methods: a new way of thinking the design of laminated panels

PETER HEPPEL ASSOCIATES (France)
Mr. Peter Heppel
Principal Engineer
Mr Renaud Guerould
R&D Manager

- Inverse design methods for composite laminated panels.
- Using stiffness matrix invariants as inputs of the design.
- Added value to current applications and outlets.

4 How to reduce defects and cycle times in composites manufacturing? Discover how Enterprise Manufacturing Intelligence solutions help Industry leaders like Boeing tackle this challenge

BOEING (USA)
Mr. John Triplett, CPAT Leader
PERTINENCE (France)
Mr. Romain LAVAULT
Chief Operating Officer

- Why choosing Enterprise Manufacturing Intelligence?
- How to deploy? What results?

5 Modelling composite damage and failure

ABAQUS (France)
Ms. Michèle Alexandre
General Manager

6 European Framework Programme 7 – Clean Sky Joint Technology Initiative – Eco-Design Platform

DASSAULT AVIATION (France)
Mr. Jérôme Lery, Project Manager

- Objectives and context of this future programme.
- Development work plan from green materials and processes to aircraft recycling.
- Comprehensive demonstration of an eco-design for airframe through the realisation of complete lifecycle demonstration.

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Groupe SAFRAN

LAND TRANSPORT

INNOVATIVE COMPOSITE APPLICATIONS IN LAND TRANSPORT

- Materials and processes
- Performances
- Applications: bus / truck / trailer

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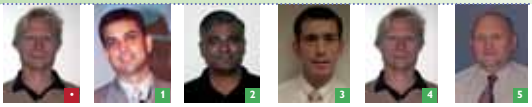

• MODERATOR

Mr. Håkan Johannsson M.Sc.
Director
COMPOSULT COMPOSITE CONSULTING AB (Sweden)

Håkan Johansson is the founder and owner to Composult Composite Consulting AB. Håkan graduated from Linköping Institute of Technology 2001. His education was concentrated in structural design (composite and sandwich mechanics). After graduation, Håkan was employed at DIAB AB (producer of structural core material, Divinycell and Klegecell) as a structural Designer and production development Engineer. In late 2005, Håkan was employed at Fagerdala Thiger Marine System AB (shipbuilding Company) as Manager of composite and sandwich Department. Since December 2006, Håkan is running his own composite and sandwich consulting company with customers from transportation and ship/boat building industries.

1 Composites solutions for the transport market

MVC MARCOPOLO (Brasil)
Mr. Gilmar Lima
General Director

- Processes and materials.
- Story of material composites in the bus segment.
- Tendencies and applications.

2 Composite Flooring for North American Van Trailers

HAVCO WOOD PRODUCTS LLC (USA)
Mr. Gopal Padmanabhan
Product Development Engineer

- Design and evolution of composite flooring.
- Testing and performance.
- Cost versus benefits analysis.

3 Development of a composite tanker trucks for the bulk transportation of substances in powder form

SPITZER EUROVRAC (France)
Mr. Patrick Gantzer
Technical Director
CETIM-CERMAT (France)
Mr. Fabrice Laurent 3
Responsible Pôle Matériaux

- Design of the composite tankers (codes, FE simulation, …).
- Process of manufacturing (Filament winding, RTM, bonding, …).
- Prototype validation.

4 The optimised post fitted foam sandwich insert for load carrying vehicle panels

COMPOSULT COMPOSITE CONSULTING AB (Sweden)
Mr. Håkan Johannsson M.Sc.
Director 4
Mr. Petter Sjödin M.Sc.

- Sandwich structures and load introduction.
- Pre-fitted inserts with optimised geometry.

5 Thermoplastic foam core pultrusion save weight and cost in trucks

MASTERCORE SYSTEM (Canada)
Mr. Andrew Rekret
President

- An efficient and cost-effective sandwich process.
- Performance advantages in production of truck bodies and trailers.
- Unlimited design flexibility.

Registration form

You can save time and order your forum on **www.jeccomposites.com/jec-show/**
You can also return this form **WITH YOUR PAYMENT before March 29th, 2007**

- **By mail:** JEC – 19 boulevard de Courcelles – 75008 Paris – France
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Forum attendance fees are **90 euros** (VAT Included) per forum.
This 90 euros fee includes:

- Free access to the Show (€30 on site)
- Access to one forum
- Free copy of the Buyers' Guide (Sold €30 on site)
- Free proceedings (80p average - regular price is €30)
- Simultaneous translation (French/English for each Forum + Italian for the Marine Forum)
- Free trade magazines from our partners

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☐ Building/Construction (April 4th, pm).....90 €
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☐ Land Transport (April 5th, pm) .....90 €
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YOUR CONTACTS

Registration/ information

● Mr. Jérémy BOYÉ
Promotion Manager
Tel.: +33 1 58 36 15 18
Fax: +33 1 58 36 15 19
boye@jeccomposites.com

Speakers contact ● Mr. Patrice SINTHON

Marketing and Communication Manager
Tel.: +33 1 58 36 15 03
Fax: +33 1 58 36 15 13
sinthon@jeccomposites.com

JEC
19, Bld de Courcelles
75008 Paris · France
www.jeccomposites.com
visitors@jeccomposites.com
Tel.: +33 (0)1 58 36 15 01
Fax: +33 (0)1 58 36 15 15