

+Composites News

Awareness and Transfer of Innovation in Composites Materials

Happy New Year to all!

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NEWS

2013 bodes well for a year full of activities and innovation focused on businesses specialized in composite materials!

Before relating the +Composites project activities for 2013, let's review those of the last quarter of 2012.

+Composites was present during the 5th edition of **Agrocomposites European Days** on **November 22, 2012** in Saint-Quentin – the professional meeting of bio-based composites professionals.



The +Composites team had the great honour to welcome you to the **1st +Composites International Forum 2012**, held on **December 6, 2012** at the Luxembourg Chamber of Commerce. It was a great success made even more so by the presence of big names in the industry and by the support of JEC Composites.



1st +Composites International Forum 2012 - Luxembourg

You may view the event video via this link: <http://www.youtube.com/watch?v=lt-pajrMEeU&feature=youtu.be>

2013 will not be less active. Take a look at our upcoming schedule in the region:

- A booth at the [Métamorphoses 2013](#) event in Liège on **January 30-31, 2013**
- A shared booth during the [8th International Symposium on RTM & Infusion](#) in Saint-Avold (Lorraine) on **February 6-7 2013**.
- The organisation of the [European Forum of Trades and Training in the Field of Composite Materials](#) that will take place in Saint-Quentin (Picardy) on **February 7, 2013**

[JEC Europe 2013](#) will take place in Paris on **March 12-14, 2013** will be a special opportunity to meet +Composites, its partners and its experts at a dedicated booth and exchange experience.

The first quarter of 2013 will also provide an opportunity to participate in technical seminars organised in your region. Look out for our announcements on: <http://www.pluscomposites.eu>

BEHIND THE SCENES

Métamorphoses 2013 – Liège, January 30-31, 2013

In order to stand out companies must incorporate design and innovation into all their research and development, production, communication and marketing processes. As an economic development agency, SPI has for several years invested in differentiation, in particular through innovation and design.

Having raised companies' awareness to the importance of incorporating a 'design' approach, supported others in launching new applications and collaborated with various partners in the field, SPI detected the opportunity to organize a show in Liège where 'creators of materials' could meet 'users'.

Information & registration: <http://www.salon-metamorphoses.be/>



Saarland foreign trade promotion programme 2013 – Saarbrücken, February 4, 2013.

IHK Saarland, Franz Josef Röder-Straße 9, 66119 Saarbrücken, room: 1

This presentation is about the foreign trade promotion programme of the Ministry of Economy, Labour, Energy and Transport. There is new funding for a number of trade missions, trade fairs and matchmaking events. This event is organised in cooperation with the Rhineland-Palatinate Ministry of Economic Affairs, Climate Protection, Energy and Regional Planning and the Enterprise Europe Network.

8th International Symposium RTM & Infusion - Saint-Avoid (Lorraine), February, 6-7, 2013

+Composites representatives will be present at this event. This will be an opportunity to meet them and discuss the services provided by the project or potential future collaborations.

For this 8th edition, a world premiere will be the subject of the conference and live demonstrations in RTM and thermoplastic infusion will take place!

The other key themes of the conference concern:

- The full composite auto-structured car body
- The vitrimer resins
- The thermoplastic composites assembly



8th International Symposium
PPE February 2013 - 6th & 7th
Saint-Avoid - France

BOOK YOUR DATE ! THE WORLD UNIQUE EVENT
RTM & INFUSION

MAIN INNOVATIONS 2013:
World Premiere - Conference & live demonstration

- Thermoplastic resins for injection, infusion and RTM of composite parts for large volume production

> Other Main Thematic:

- Full composite auto-structured car body
- Vitrimer resins
- Thermoplastic composites assembly

> Live demonstrations
> Simultaneous translations

Contact / Information : Tel : + 33 (0) 3 87 92 93 94
Pre registration : <http://ppe.evenementcom.net/>
www.ppe-composites.fr

The European Forum of Trades and Training in the Field of Composite Materials - Saint-Quentin (Picardy), February 7, 2013

The Aisne Chamber of Commerce and Industry and GRETA Laon-Hirson-Chauny have decided - on the basis of more than 60 diagnostics and audits in companies - to organize a European Form on **February 7, 2013** from 9.00 am to 5.00 pm, on the premises of the Aisne CCI in Saint-Quentin. This event is dedicated to future trades inherent to the new industrial activity due to composite materials in Picardy, and more broadly in North-West Europe.

Indeed, composite materials allowing for structure lightening are increasingly used in automotive, aeronautic and rail transportation, but also in various sectors of activity, such as sports, leisure, buildings, healthcare, etc.

At this event, Picardy secondary and higher education establishments as well as specialized structures in lifelong learning will present certified training cycles related to these new growth trades.

+Composites is a strategic European project, integrated within the framework of the INTERREG IVB North-West Europe Programme, which aims at accompanying the companies towards a transfer of technology in composite materials. In Picardy, the Aisne CCI and GRETA Laon-Hirson-Chauny are partners, along with the Université de Picardie Jules Verne (UPJV), the 3 competitiveness clusters IAR, i-TRANS, UP-tex, Oise CCI and the Maison de l'Emploi et de la Formation (MEF) in Saint-Quentin.

Organisation & Media Contact:

- Aisne CCI: Catherine MACADRE, c.macadre@aisne.cci.fr
- GRETA Laon Hirson Chauny: Benoit BOULET, bboulet.lhc@ac-amiens.fr

Round-table on new materials for the aerospace industry - Saarbrücken, February 25, 2013

INM, Campus D2 2, 66123 Saarbrücken, Germany

Dr. Matthias Jessrang, Airbus R&T for Composite Technology, is visiting INM, Saarbrücken. +Composites is organizing a round-table talk for interested companies about new material needs in the aerospace industry. Please contact INM for details.

**Non-Destructive Testing (NDT) for composite materials structures -
Angleur, February 28, 2013**

Date: 28/02/2013

**Tests non-destructifs (NDT)
pour structures en matériaux
composites**

- Détection de défauts internes (délamination, décollement...)
- Mesure de déformation
- Mesure de dilatation
- Cartographie interne

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Organisé par



Avec le support de



Programme cofinancé par l'Union européenne - Fonds européen de développement régional

Venue

Centre Spatial de Liège
Liège Science Park
Avenue Pré Aily, Bât. 29
4031 Angleur; BELGIQUE
www.csl.ulg.ac.be

Contact & Registration*

CSL - Jana MITEVA
Tel: +32 (4) 382.46.82
Email: smiteva@ulg.ac.be

*The participation is free of charge, but the registration is mandatory.

+Composites will welcome you at the booth B34 during JEC Europe 2013 – Paris, March 12-14, 2013

JEC europe

COMPOSITES SHOW & CONFERENCES
PARIS MARCH 12, 13, 14, 2013

JEC is the largest composites industry organization in Europe and the world with a network of 250,000 professionals from 100 different countries.

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It represents, promotes and expands composites markets by providing global and local networking as well as information services.

+Composites event: Reinforced plastics and thermoplastic biocomposites – Luxembourg, March 26, 2013

Composite materials are often used in order to reduce the structural weight or better control the functional properties of final products.

Their fields of application are becoming broader and more innovative in the field of construction, as means of transportation with low fuel consumption, as well as in the elaboration of equipment goods with optimized performance.

This seminar given by specialists in synthetic materials proposes a review of various possibilities of polymer matrix reinforcement, as well as a better understanding of the valorisation in the industrial applications of bio-sourced and bio-reinforced matrices.

WATCH PLATFORM ACTIVITIES

Are you interested in what composite materials offer? What kind of components made from composites already exist? In which areas are composites already being used? Our Watch Platform may answer your questions. It is up-to-date, with about 500 articles already online. These articles provide an overview of what is already possible with composite technologies. Moreover, on the Watch Platform website you can find the latest news on upcoming events in the field of composites. Last not least, several qualified websites are presented that will provide further knowledge on the topic. You can access the Watch Platform through the +Composites website: <http://www.pluscomposites.eu>.

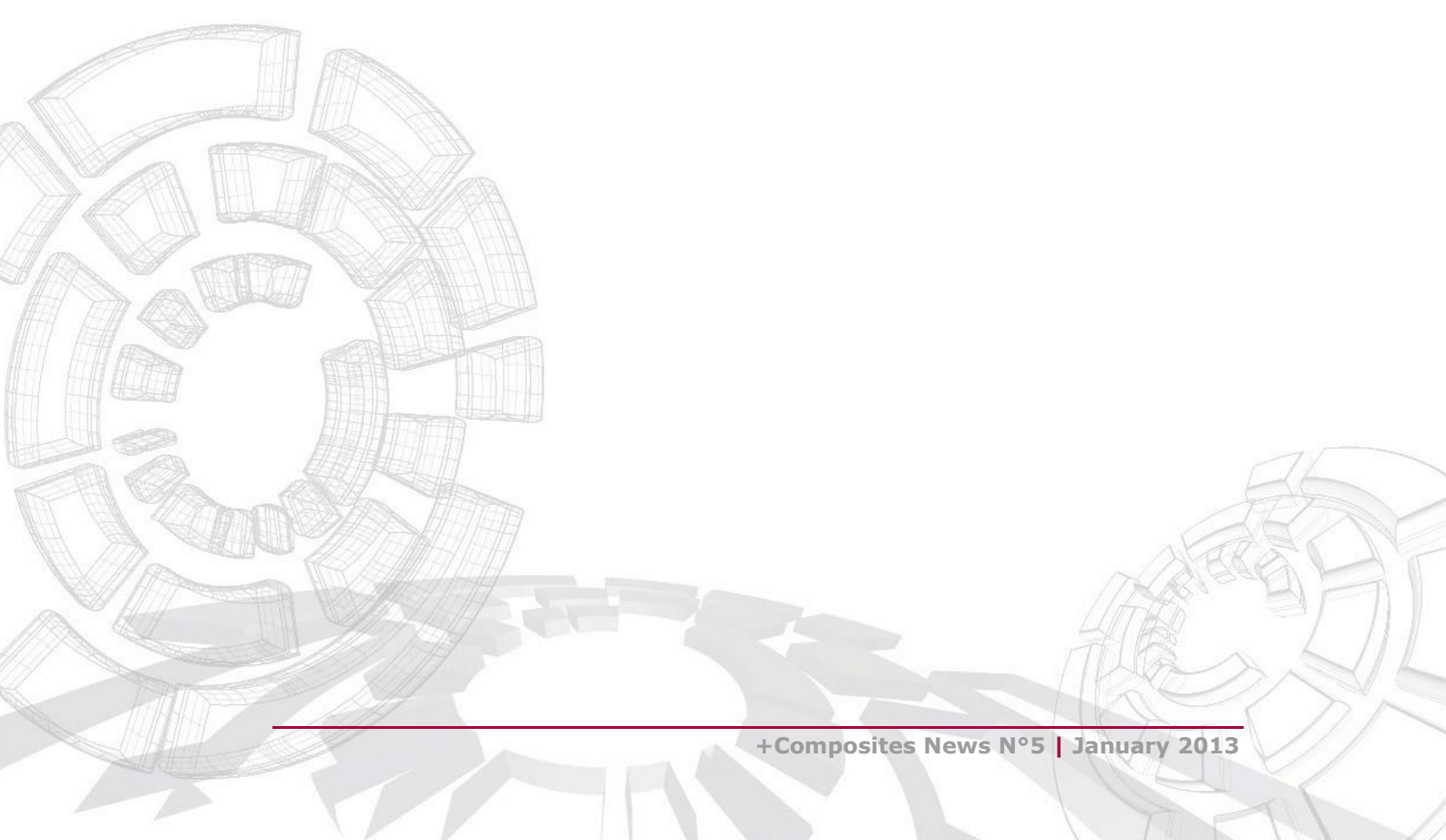
BUSINESS CLUB ACTIVITIES

The Business Club is a privileged meeting point for industry professionals in search for contacts, competencies, or partners for future industrial projects. +Composites offers the Business Club in order to facilitate high-level contacts.

The Business Club was launched during the +Composites International Forum 2012 held on December 6, 2012 in Luxembourg-Kirchberg on the premises of the Luxembourg Chamber of Commerce.

About twenty professionals at international level are currently members of the Club.

We invite you to participate and to register via the site:
<http://businessclub.pluscomposites.eu/>



IN THE SPOTLIGHT

1st Eurometropolitan Workshop on Smart Systems & Smart Materials – Froyennes, March 28, 2013



> Jeudi 28 Mars 2013

MULTITEL - Eurometropolitan e-Campus
7503 Froyennes-Tournai (Belgique)

Workshops, Product show,
Démonstration, Tables rondes,
Networking ...

TRANSPORT - PROTECTION - SPORT
SANTÉ ET BIEN ÊTRE



1st Eurometropolitan Workshop on
Smart Systems & Smart Materials
Quand le textile intelligent rencontre le textile technique



+Composites est un réseau de compétences européennes qui se sont rassemblées avec le soutien de la Commission Européenne afin de faciliter l'accès au marché des composites aux entreprises, et particulièrement aux PME. Ces marchés sont porteurs et stratégiques pour l'économie. (<http://www.pluscomposites.eu>)



The textile is inescapable whether as a smart textile (intelligent systems) or technical textile (intelligent materials), and especially in:

- Transportation: composite materials and carbon fibres allow the lightening of the structure while maintaining a high level of resistance;
- Protection: intelligent materials and textiles help ensure better protection of the person in ballistics or at the workplace by issuing automatic alert messages in case of danger;
- Sports: new textiles strengthen the performance of sports equipment and support the personalized coaching of athletes;
- Healthcare: remote monitoring offers home hospitalisation opportunities while maintaining optimized patient follow-up, for example.

In order to be at the core of the discussion and in search for innovation in the textile sector, MULTITEL and its partners invite you to learn about the evolution of these technologies and exchange with experts in the field (researchers, industrials).

Also take advantage of the support tools and innovation aid offered in the field of smart textiles and composites.

When ?

Friday, March 28, 2013

Where ?

MULTITEL

Eurometropolitan e-Campus

Rue du Progrès - 7503 Froyennes

Tel.: +32(0) 65 34 27 32 Web: <http://www.multitel.be>

Information and free registration:

<http://www.pluscomposites.eu/content/smart-systems-smart-materials>



FEATURED PROJECT PARTNERS



Skywin is the Aerospace Competitiveness Cluster of the Walloon Region of Belgium. Created in 2006 in order to increase the competitiveness of Walloon enterprises in the Aeronautics and Space sectors, Skywin represents more than 110 members coming mainly from industry, but also universities and dedicated research centres. This represents a total of more than 6,000 direct jobs in the region for about EUR 1 billion in turnover.

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Skywin gathers several major regional players like Thales Alenia Space, Sabca, Sonaca, Spacebel, Techspace Aero, FN Herstal, Thales Belgium as well as numerous innovative and proactive SME's working in engines, structures, systems and equipment technologies. Members activities consist of R&D, design, virtual prototyping, manufacturing, MRO and upgrades of airplanes, helicopters, UAV, engines sub-assemblies or rocket components and space equipment and related services.

Skywin's objective is to foster and promote the technological advance of the Walloon Region in the Aerospace sector and therefore to supply competitive products and services which are the mainstay of business development.

Strongly oriented toward industrial projects and benefits, Skywin activities can be categorized into 3 orientations:

- Innovation and Training Projects: Since 2006, through 7 Calls for Projects, Skywin is currently managing 40 projects (23 R&D, 8 Training and 9 Investment) totaling 244 contributions from industrial companies, research centres and universities with a total budget of EUR 134 million.
- Clustering activities: The Clustering process is mainly based on Business Development actions, setting-up of partnerships, benchmarking, and technology watch programs.
- International business development: The Cluster also supports international business development actions and promotes its members know-how in various trade fairs and dedicated Aerospace events. The Cluster also promotes transnational or trans-regional cooperation and communicates with similar clusters located in Europe.



**Public Research Centre Henri Tudor
Advanced Materials & Structures (AMS)**

The Public Research Centre Henri Tudor is a leading Luxembourg-based organisation in focused and applied research. Our objective is to translate research results into useful innovations for the economy and society. Our strategic direction and our research topics are therefore determined by the needs of the market and society.

CRP Henri Tudor's research departments have developed competencies in advanced materials technologies, environmental technologies, healthcare technologies, information and communication technologies and in business organisation and management. They excel in their research and produce work of a high scientific quality, which is further enhanced through an interdisciplinary, creative and enthusiastic approach. CRP Henri Tudor is ISO 9001 certified for its methods in RDI project management. By working closely with partner networks that bring together national and international research and innovation organisations (RTOs), universities and companies, our research departments are constantly extending their expertise. Today, CRP Henri Tudor is involved in many projects at European level, both as a partner and coordinator.

CRP Henri Tudor plays an active role in raising the international reputation of the Luxembourg scientific community. We produce and disseminate – through our training courses organised in collaboration with universities and through our publications – original and innovative knowledge and continuously enhance our technological expertise. We also provide an environment conducive to doctoral research and maintain active links with the international scientific community.

The Advanced Materials & Structures department undertakes research and innovation activities focused on the conception and design of advanced, multi-functional materials based on polymers, and on the applied modelling and numerical simulation of materials, structures and industrial processes. AMS is made up of 68 researchers (as of 30/06/2012).

More information on: <http://tudor.lu/en/departments/AMS>

REGIONS

+Composites during the Agrocomposites Days Europe in Saint-Quentin!

Aisne CCI organised in Saint-Quentin the 5th edition of Agrocomposites Days Europe, an event realised in partnership with the competitiveness clusters IAR, i-TRANS and UP-tex. This event brought together international companies and experts from all sectors of activities, giving participants access to new markets.

In short, the event offered two days to discover numerous opportunities and to create new partnerships, since the growth prospects in agro-resources and composite materials markets remains very promising for 2012. A whole area of the industrial sector and especially the automobile sector is now turning towards natural fibres for high-tech applications.

On November 23, 2012 researchers and industry professionals met in Dury at the Center for Glucide Recycling in the framework of the Agrocomposites European Days, sponsored by +Composites.

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+Composites International Forum 2012 - Luxembourg

The first-ever +Composites International Forum took place on December 6th, 2012 at the Chamber of Commerce in Luxembourg. Organised by the +Composites project partners, this open forum on innovation in composite materials attracted more than 130 participants.

The forum proved to be a true meeting space that fostered the emergence of proposals and debates among composites professionals. Through a plenary session, a round table, six workshops and a closing presentation, a wide range of topics related to composite materials and their benefits and challenges were discussed. Equipment manufacturers and research centres also shared their practical experience in composites.

To open the event, Dr Marc Lemmer, CEO of the Public Research Centre Henri Tudor – coordinating partner of the +Composites project – highlighted the Centre's role in the project both in terms of management and scientific synergy in support of industrial innovation. Ruut Louwers, Director of INTERREG IVB NWE, then spoke about the project in the context of objectives to promote cohesion between the regions involved. Finally, Dr. Georges Thielen, President of the Luxembourg Materials Cluster,

highlighted the need for innovation in the industry and the use of new materials for market development.

The round table, moderated by Laurent Federspiel, Senior Executive Adviser at Luxinnovation, brought together three major players in the aerospace, automotive and rail industries: Mathias Jessrang, Leader of R&T for Composite Technology at Airbus, Patrick Latry, Composite Materials Expert at Alstom Transport and Laurent Rota from PSA Peugeot-Citroën SA. Together, they focused on the importance of composite materials for the future of these sectors and emphasized the growing place they occupy in product production.

During the six workshop sessions, participants had the opportunity to attend technical presentations given by composites professionals on the following topics:

- Ecomposites: "Green" composites and biocomposites, and their innovative value;
- Matrices and nanocomposites: their functions in the industry and in everyday life;
- Quality control of composites: measurement solutions and tests for composite materials;
- The life cycle of composite materials: eco-design and recycling of composite materials;
- The design and industrialisation of composites: industrial case studies and methods for using composites, which are very specific compared to conventional materials;
- Composites and fire regulations: ensuring fire safety of composite materials throughout the production chain.

One-to-one business meetings were held throughout the day and allowed thirty participants to meet with potential partners with the aim of launching innovative projects.

To bring the forum to a close, Frédéric Reux, Media Director & Editor-in-Chief at JEC Composites, spoke about the rapid growth and prospects of composite materials.

The event was then followed by a convivial networking cocktail.



Composites Meeting: Special Edition – Wind Technology

For two years now, the Pôle d'Excellence Plasturgie Nord-Pas-de-Calais has organised 'Composites Meetings' in the framework of the +Composites European project. This year, about 35 people came to discuss the theme of composite materials in the wind technology market.

There are nearly 850 wind farms in France. Our region benefits from an interesting maritime surface due to its winds and dimensions. This is why the wind market presents an opportunity for manufacturers of composite materials. During this workshop, a number of actors from the wind power sector shared their experience and knowledge on the subject. Reflecting on these talks, we can note that the wind market remains local, due to the large size of certain elements, and that the trend is to enlarge these. For this purpose, we should develop and use new technologies.

Currently, the composite materials market still remains very manual and requires a technological leap in order to meet demand. As an initial response, we could participate in the presentation of a new RTM technology that allows the manufacture of blades as one piece. This technique enables production in a single stage, without the joints that are traditionally present. The blades produced by RTM present even better mechanical properties over time. Nevertheless, this method is still not widespread due to its costs and manufacturers prefer infusion for the time being. Only Siemens has moved to the new manufacturing method.

In terms of trends, we can also notice the growing use of carbon fibre, mainly due to its weight, however the price remains quite high. A good balance between price and the required properties must be found. Another point for reflection, which gives rise to many questions, is recycling. It is estimated that there will be 235 000 tonnes of blades to recycle each year by 2034. In order to deal with this, a number of scientists are currently considering ways to develop parts from high-performance thermoplastic matrices. Nevertheless, the market will be there, considers Mr Delhaes of EADS Astrium. And it remains open to the SME due to its limited number of actors present today. But it is important to structure this sector now and in order to be ready when the market matures. Ms. Ducreux of Nidaplast reminds us of the importance of these days for exchange on the market structure in order to facilitate its penetration.

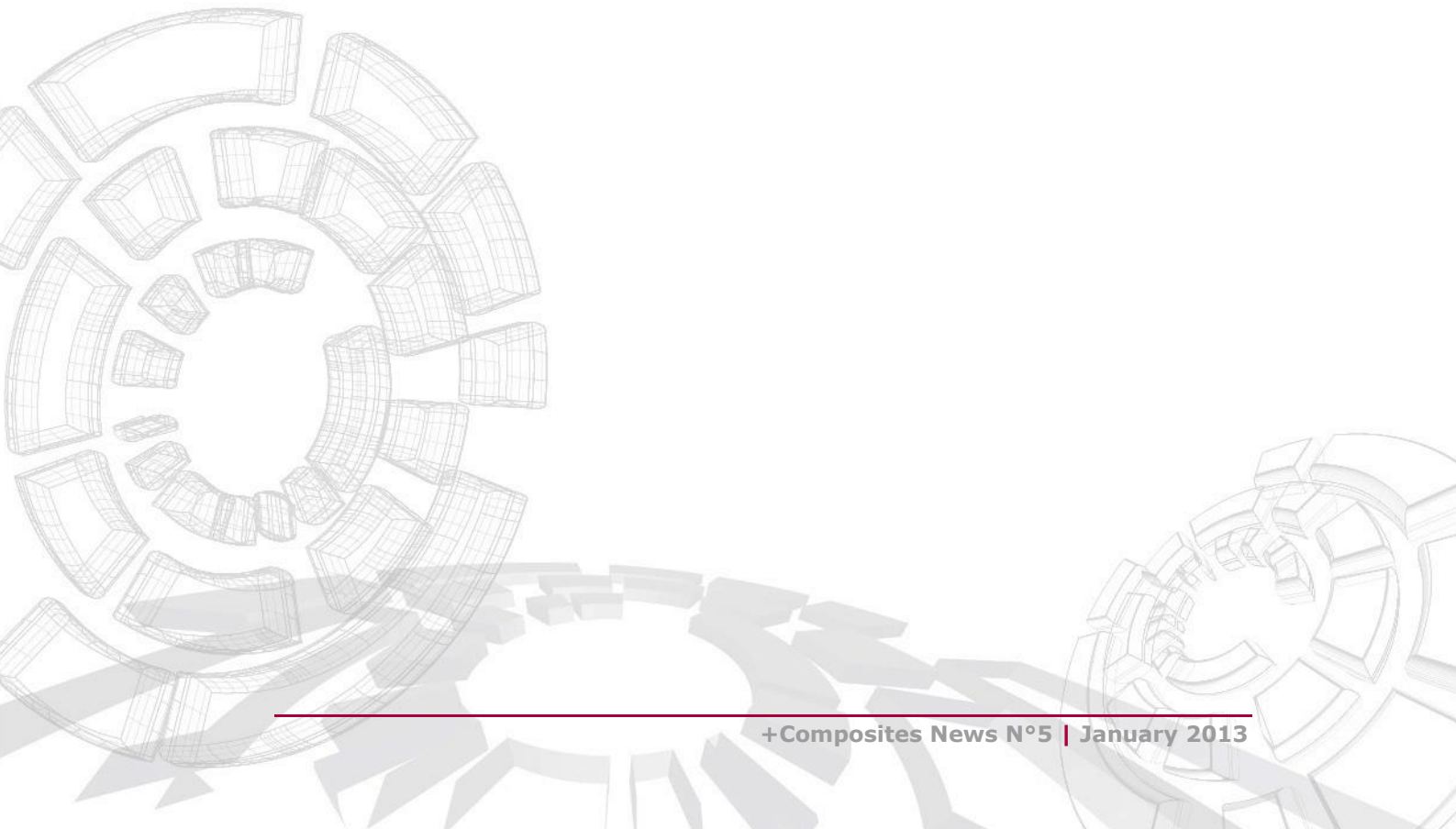
If you are interested in the theme of wind and composites in, please contact Thibaut DEFEVER, Pôle d'Excellence Plasturgie Nord Pas de Calais.

To recap, the project + Composites is a European project financed by the Interreg IVB NWE program. The consortium brings together 12 partners from 6 regions. It aims to raise awareness and support companies in using composite materials. For this, a methodology based on the monitoring, training, technological support, and business opportunities has been developed by the consortium.



UPCOMING EVENTS

Janvier 30-31, 2013	Métamorphoses 2013, Liège
February, 4 2013	Saarland foreign trade promotion programme 2013, Saarbrücken
February 6-7, 2013	8 th International Symposium RTM & Infusion, Saint-Avold (Lorraine)
February 7, 2013	The European Forum of Trades and Training in the Field of Composite Materials, Saint-Quentin (Picardy)
February 25, 2013	Round-table on new materials for the aerospace industry, Saarbrücken
February 28, 2013	Non-Destructive Testing (NDT) for composite materials structures - Angleur
March 12-14, 2013	+Composites will welcome you at the booth B34 during JEC Europe 2013, Paris
March 26, 2013	+Composites event: Reinforced plastics and thermoplastic biocomposites, Luxembourg
March 28, 2013	1st Eurometropolitan Workshop on Smart Systems & Smart Materials, Froyennes



YOUR REGIONAL PARTNERS

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