



July 2015



## Big-Scale Thinking

### **Carbon Fiber Industry Participants Tour Harper's Advanced Microline™ and 3M Oxidation Oven**

GOCarbonFibre 2015 attendees received the unique opportunity to tour Harper's research and development Microline™ and 3 Meter Oxidation Oven. The day culminated in a networking dinner at the historic Niagara Falls. Learn more about this exclusive event...

[Read More](#)



### **Novel Oxidation Oven Technology for the Next Generation of Carbon Fiber Manufacturing**

Our latest presentation by Dr. Bill Stry discusses how insights from advanced oven CFD modeling can guide designs offering improvements to efficiency and safety, how utilities for Ovens can be optimized for flexibility and performance, and how modular designs can offer improvements to typically long lead time installations. Learn more here...

[Learn More](#)



### **Insights from Industry: Selecting Rotary Furnaces for Advanced Material Processing**

Harper's material processing expertise is the focus

of this *A to Z of Materials* article, with Sales Manager Brian Fuller offering technical advice in the area of Rotary Tube furnaces. Take a [virtual tour](#) of Harper's state-of-the-art rotary furnaces, and check out the interview here...

[Read More](#)

### **In Case You Missed It: Thermo, Chemical, Process Model of Non-Textile Reinforcing Fiber**

One format used for making advanced reinforcing fibers including non-PAN based carbon fiber has the precursor as a non-woven mat. Harper's model can be used to analyze the heating of nonwoven mats of arbitrary reinforcing fiber precursor fibers, using radiation, convection, gas-phase conduction and process thermodynamics to predict the thermal and chemical profiles over time. Learn more with this presentation from SAMPE 2015...

[Learn More](#)

### **Focus on: Ignite™ Program**



Just like our experience in the Carbon Fiber market, we help customers develop unique thermal processes for [emerging materials](#) to efficiently and effectively progress them into the global marketplace. Read below to learn how to [ignite](#) your next project with Harper...

Scale Up Support - [Harper's Research and Pilot Facilities](#)

Case Study - [Ignite™ Success Story - Nano-Engineered Powders](#)

Case Study - [Ignite™ Success Story - Activated Carbon](#)

Editorial Feature - [Think Process Before Scale-Up](#)

[Learn More](#)

### **Upcoming Harper Happenings**

[MS&T 2015](#)

Columbus, OH

October 4-8

Booth 818

Presenter - "Modeling of a Thermochemical Process in a Vertical Packed Bed Reactor"

[GOCarbonFibre Europe 2015](#)

Manchester, UK

October 26-28

Presenter - "Designing the Carbon Fiber Line for Maximum Efficiency"

[CAMX 2015](#)

Dallas, TX

October 26-29

Booth J94

Presenter - "Maximizing the Benefits of Low Cost Natural Gas in the Manufacturing of Carbon Fiber"

For more information, visit [harperintl.com](http://harperintl.com) or

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[Sampe 2015](#)

Baltimore, MD

May 18-21

Booth J43/J45

Presenter - "Thermo, Chemical, Process Model of Non-Textile Reinforcing Fiber Precursor: Description and Example Results"

[PowderMet 2015](#)

San Diego, CA

May 17-20

Booth 321

For more information, visit [harperintl.com](http://harperintl.com) or

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