



II. Material Information Technologies Seminar

29 NOVEMBER 2013

ANKARA





II. Material Information Technologies Seminar - November 2013

08:00-08:30	Registration	
08:30-08:45	Introductions & Welcome	Onur Öztürk, ONATUS
08:45-09:00	Introduction Of Atılım University Metal Forming Excellence Center	Prof.Dr.Bilgin Kaftanoglu MSMM
09:00-09:20	Introduction Of METU Welding Technology and Non-Destructive Testing Center Research Activities Of The Center	Prof.Dr.C.Hakan Gür Dr. Caner Batıgun METU
09:20-09:35	Why are we here today? Introduction to Granta Design and materials information technology—what are the key drivers for the use of materials information management and materials selection software in industry?	Thomas Weninger, GRANTA
09:35-10:00	Round table discussion: How is materials information used in industry? Identifying the key materials information problems faced by participants (and by leading engineering companies in general)—this session will provide context for the following case studies and make sure that these are tailored to the interests of the delegates.	ALL
10:00-10:30	COFFEE BREAK	
10:30-11:15	 Ensuring value from corporate materials information The materials information available within and to your company is a valuable asset. But only if you capture this information effectively, can trace and validate its pedigree, and can make it available in a way that ensures it can be applied. This session will describe and demonstrate: A system providing a single source for all corporate materials data How to manage critical Materials & Process data (e.g., from testing, QA, research) Storing and linking to data beyond M&P (e.g., preferred materials, restricted substances) Deploying data to the engineering desktop 	Ben Meyer GRANTA
11:15-12:00	 Applying materials information to meet key business challenges How can we apply available materials information to make better materials decisions? This session will discuss methods and tools for: Materials selection and substitution in the context of key business challenges (lightweighting, cost reduction, design for global manufacturing) Helping to manage risk due to restricted substance regulations such as REACH 	Fatih Cetin GRANTA
12:00-12:20	CES Selector Applications in ASELSAN	Evren Tan ASELSAN
12:20-12:50	Material Data Needs for Bulk Metal Forming Simulation Material data needed for cold and hot bulk metal forming operations (Hot/Cold Forging, Extrusion, Rolling etc.). Data sources, experimental and computational techniques , data processing and management	Dr. Omer Music MSMM
12:50-13:50	LUNCH	
13:50-14:20	Material Data Needs for Sheet Metal Forming Simulation Material data needed for sheet metal forming simulations (stamping, deep drawing etc.). Data sources, experimental and computational techniques, data processing and management	Dr.Celalettin Karadogan MSMM
14:20-15:10	Material Data Needs for Metal Thermal Process Simulation Material data needed for metal thermal process simulations (i.e. heat treatment, welding, casting and hot-stamping etc.). Data sources, experimental and computational techniques for data acquisition, data processing and management.	Dr. Caner Simsir MSMM

15:10-15:40	Microstructure Characterization for Metal Processing Simulations The importance of microstructure. Ways of characterizing the micro-structure and implementing the obtained information in metals processing (metal forming, heat treatment, welding, casting etc.) simulations. Microstructure as a validation tool.	Dr. Kemal Davut MSMM
15:40-16:10	COFFEE BREAK	
16:10-17:00	Live Demo For Material Characterization Computational Methods for Acquisition of Material Data for Metal Process Simulation	Dr. Caner Simsir MSMM
17:00-17:30	Discussion & close	All

II. Materials Information Technology Seminar

Dear colleague,

Please join us for a seminar on materials information technology in Atılım University Metal Forming and Exellence Center - Ankara on 29 November 2013. The event is relevant to **materials scientists and engineers in any industry**. Attendance is also recommended for managers with responsibility for **product development and engineering**, or with an interest in the impact of materials on the **supply chain** or **environmental** objectives.

Date:	29 November 2013
Location:	Atılım University Metal Forming and Excellence Center - Ankara
Topic:	"Materials Information Technology in Industry" How is materials information managed and used in industry? Materials decision support. Material intelligence in the design process.

The seminar will be led by Granta Design, the materials information technology experts. A spin-out from **Cambridge University** in the UK, Granta is the world leader in this area, working with industrial consortia whose members include **Boeing**, **Eurocopter**, **GE**, **Honeywell**, **Rolls-Royce**, and **NASA**.

At the seminar you can:

- Hear case studies outlining practical applications of relevance across industry
- See the latest materials information technology in action (including software and data to support materials data management, selection, substitution, and eco design)
- Network with other engineers and managers in leading manufacturing organizations
- Get your questions answered by Granta experts

We hope that you can join us. Further details are provided below.

For the event pre-registration is required.

Registration:

E-Mail : <u>onurozturk@onatus.com</u>

or

Telephone : (+90) 533 386 94 66

Best Wishes,

Onur Ozturk / Business Development Manager

SEMINAR TOPICS

Seminar sessions include:

Materials information management. How can materials information be managed efficiently and applied effectively? Insights into: management of in-house test data for alloys, composites, and other materials; efficient access to materials reference data; and how data can be deployed for use in engineering software (e.g., CAD, CAE, FEA).

Materials decision support tools: selection, substitution, cost, and more. How can we apply the available materials information to make better materials decisions? For example, how do we select materials or identify substitute materials, combining considerations such as engineering performance, cost, regulatory constraints, and eco impact?

Integration with design. The merits and challenges of providing designers and engineers with appropriate materials data and software tools within their familiar web browser, CAD, or PLM environments. The goal is to promote consistent, "right first time" materials decision-making. The need to account for restricted substances in design will be used as a particular example.

Implementing eco design. New data and tools help designers to minimize the environmental footprint of products during design, when changes cost least and have maximum impact. You will see the benefits of integrating these capabilities with materials and process selection, and with CAD.

WHY SHOULD YOU ATTEND?

Materials engineers and materials scientists—do you need to consolidate and use complex materials data from disparate sources? Do limitations in your control of test and analysis results mean that you duplicate work, or find it hard to trace the pedigree of data? Do your designers sometimes use the wrong data? Join us to hear how other organizations address these challenges.

Senior product development and engineering managers—you make significant investments in PLM systems, materials testing, quality assurance, and purchase and processing of materials. To fully exploit such investments, you need best practice in capturing the right materials data, analyzing it to generate valuable information, and controlling and deploying the results. Join us to find out more!

Managers responsible for supply chain or environmental product stewardship—how can you guide designers towards corporate preferred materials, optimize costs, and improve compliance with environmental regulations? Join us to see unique tools that help to achieve these goals.