Polymer Webinar Series
November - December 2016

Intertek
Valued Quality. Delivered.

Polymer Webinar Series

Polymer testing to meet performance specifications and regulatory requirements

In today's marketplace, it is more important than ever to maintain a competitive edge. Our webinars offer a unique opportunity to learn from industry leaders.

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Polymer testing to meet performance specifications and regulatory requirements

Innovators, across many sectors such as medical devices, packaging, construction and transport are able to develop new products based on new polymeric materials which have been specifically developed for their applications. Choosing the right polymer for an application is fundamental to achieving quality products; however, by understanding the properties and composition of materials and knowing how to test them, an innovator can match the material's properties to the application whilst meeting expected performance and regulatory compliance requirements.

Polymer Properties & Analytics

The study of polymers and their performance requires use of modern analytical methods including spectrometric, chromatographic & thermal analysis techniques to obtain physical and chemical information. This information can also to help determine the root cause of polymer failure.

Regulatory Requirements

When developing new polymer applications, such as packaging for food or pharmaceuticals, the dynamic regulatory landscape presents a challenge for companies developing and manufacturing these products and articles. Each company involved in the production process of a food contact substance, for example, is responsible for the compliance of the end product. For these stakeholders, it is important to know their obligations and to be able to demonstrate compliance.

The Polymer Webinar Series

Intertek is pleased to invite you to a webinar series, an opportunity to learn more about key polymer industry challenges. Our experts have extensive experience across a wide range of polymer related testing topics and have worked in the polymer and polymer application industries for many years, gaining crucial insight.

What is the cost?

These webinars are complimentary.

How can I register?

Learn more and register by clicking here.

Why should I attend?

These webinars are an opportunity to learn from industry experts, gaining knowledge that can help you and your organisation to achieve a competitive edge in the marketplace which is so vital to success.

Who should participate?

This seminar is ideal for industry representatives who are aware of these topics but would like to learn more. It is relevant to Research and Development specialists, Technical Managers, Production Technicians and Laboratory Managers who are working either to develop, process or manufacture polymers and plastics or polymer products.

Webinar Series

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Meet Our Experts

John Dale, BSc MBA

Business Scientist, Industrial Forensic Microscopy, Intertek UK

Peter Mühlschlegel, PhD

Project Manager, Intertek Switzerland

David Stocks

Senior Research Scientist Rheology Laboratory, Intertek Wilton

Emmanuelle Brendle, PhD

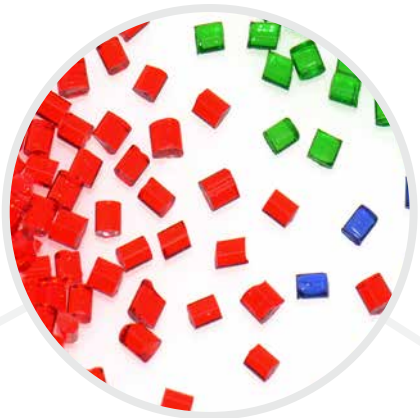
Project Manager Analytical Testing, Intertek Switzerland

Tino Otte, PhD

Senior Scientific Consultant, Intertek Switzerland

Inge Würtz, PhD

Business Development Consultant and Polymer Specialist, Intertek Germany



Wednesday 16th November -15:00 GMT | 16:00 CET

Failure Analysis of Polymer Materials - Speakers: John Dale, Peter Muehlschlegel

Failure of polymer material such as fibers, films and membranes, polymers, engineering plastics, composites and coatings can happen at any time. Design faults, moulding issues, stress, overload, degradation, unintentional service conditions, misuse and even sabotage can be factors. Determining the root cause of polymer failure, through multi-disciplinary failure investigations is necessary however the complexity can present challenges. This webinar describes the strategic steps you can take for effective failure analysis with example case studies from end-user applications that vary from simple packaging films through consumer goods to advanced aerospace materials.

Wednesday 30th November -15:00 GMT | 16:00 CET

Polymer Rheology Testing - Speaker: David Stocks

Polymer rheology testing is the study of how the stress in a material or force applied is related to deformation and flow of the material. Understanding the rheological properties of polymers through laboratory testing can help to optimize products and process conditions, thereby saving costs and minimizing potential waste. This talk will summarise the various rheological tools available within Intertek to characterise materials ranging from high performance plastic composites to dermal fillers. Examples of specific case studies will be presented which demonstrate how rheology has contributed to an improved understanding of the effect of polymer structure (either by accident or design) and inherent properties on processing behaviours.

Wednesday 7th December - 15:00 GMT | 16:00 CET

Analysis of Additives in Polymers: From Simple to Complex Chemistries - Speaker: Emmanuelle Brendle

A multitude of polymer additives are added to commercial polymers in order to enhance performance and achieve various functional properties. This can be challenging due to the complexity of the materials; the presence of various groups of additives, compounding ingredients and fillers all in one sample. Chemical identification of polymer additives is essential to all parts of the plastics supply chain as additives can impact both the functional properties of the materials and the production cost of polymers. Robust quantification of polymer additives is also required. In all cases, additive analysis requires fit-for-purpose analytical methods. This webinar covers analysis approaches for additive identification and measurement in raw materials, solid polymer or plastic materials and composites.

Wednesday 8th December - 15:00 GMT | 16:00 CET

Polymer Physical Testing to Ensure Material's Quality - Speaker: Inge Würtz

Physical and mechanical testing of polymers ensures that the material complies with industry specifications. With the vast array of product types and additives available, understanding the capabilities and limitations of a material is a key concern to suppliers, manufacturers and product developers on every level of the polymer industry. This webinar covers the physical testing methods (mechanical, thermal properties testing) suitable to can help raw material suppliers and manufacturers to determine the properties of their products, when to apply the most relevant techniques and which tests are required to obtain the data needed to make decisions to ensure a material's quality.

Wednesday 14th December - 15:00 GMT | 16:00 CET

Extractables / Leachables For Pharmaceutical Container Closure Systems - Speaker: Tino Otte

The evaluation of Extractable and Leachable substances is extremely important for the protection of patients and for regulatory authorities such as the FDA and EMA. Extractables and leachables (E/L) studies help to identify, quantify and minimize harmful impurities which could leach from pharmaceutical container closure systems and packaging into pharmaceutical products. In recent years, the pharmaceutical industry was sensitized to the negative impact of leachabels on the patients accompanied by stricter compendial regulations (e.g. clear statement regarding E/L in USP <661.2>). Moreover E/L studies are more and more performed in industry branches related to the pharmaceutical business such as cosmetics or packaging industry. Beside the primary packaging also related parts of containers which are not in direct contact with the drug could be a source of leachables which impacts the required study design. This webinar is an introduction to the topic for scientists who have a general awareness of what is involved in an extractables /leachables study but would like to know more.

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Meet Our Experts

Dr Inge Würtz, PhD, Business Development Consultant and Polymer Specialist, Intertek Germany

Dr Inge Würtz has 30 years' experience in polymer chemistry. After her PhD in physical chemistry at the TH Kaiserslautern with the focus on polymers. She started her career in 1986 at DOW in the Analytical Research Lab, and since 1995 she has worked for different international compounders and distributors in various positions, from Application specialist, to head of Technical Department, Marketing and Key Account Manager on a global basis. She works with Polyolefins, Polystyrene based polymers, engineering polymers such as PA, PBT, POM and blends up to Thermoplastic Elastomers on the basis of TPE-S and TPE-V. Inge joined Intertek in February 2016 as polymer specialist and business development consultant.

David Stocks, Senior Research Scientist Rheology Laboratory, Intertek UK

David studied applied science to first degree level at Sheffield Hallam University before being employed by the University of Nottingham and studying the effect of polymer coatings on metals as part of a M Phil degree. He joined ICI in 1988 as a polymer melt rheologist and is now technique leader.

David's main interests are the processing behaviours of polymeric materials from melts to pastes and adhesives. He is also resource manager for the mechanical and tribological testing group at Wilton and is an active member of the IUPAC working party on the structure and properties of commercial polymers. He has published scientific journal articles as well as presenting papers at international Rheology conferences.

Emmanuelle Brendle, PhD, Project Manager, Intertek Switzerland

Emmanuelle has worked for Intertek since 2010, and is involved in the management of analytical projects with focus on E&L, food contact migration and polymer additives analysis, including writing of reports for regulatory approvals, with expert knowledge of quality system compliance (ISO9001, GLP, GMP).

Prior to joining Intertek, she worked as a speciality chemicals manufacturer for Ciba with extensive experience as analytical methods developer using chromatography, XRD, IR and NMR, and has experience working with migrations studies, and with analysis of polymer additives in polymer matrixes.

Dr Tino Otte, PhD, Senior Scientific Consultant, Intertek Switzerland

Tino Otte joined Intertek TechCenter Reinach (Switzerland) in 2016 as Senior Scientific Consultant specialising in extractables and leachables analysis as well as GMP testing. Before joining Intertek he studied analytical and polymer chemistry in Leipzig and Halle (Germany). After earning his PhD at the Technical University of Darmstadt (Germany) he worked for many years in the instrumental analysis and pharmaceutical characterization sectors.

Tino Otte is responsible for organic trace analysis, special analytics for registration, migration studies, extractable and leachable studies for pharmaceutical packaging, for GMP quality control analysis, stability tests and polymer analysis.

Peter Mühlschlegel, PhD, Project Manager, Intertek Switzerland

Peter graduated 2006 with a PhD in applied Physics from the University of Basel. He joined Ciba AG for a Postdoc in research analytics. In 2007 he became manager of the Electron Microscopy laboratory for pigment, coating and polymer characterization.

In 2008 he switched to the Ciba Expert Services division where he was responsible for projects in the field of Surface- and Nanoanalysis. In 2010 he joined Intertek (Schweiz) AG as project manager for Microscopy (TEM, SEM) and Spectroscopy (EDX, IR, RAMAN). His main focus is the morphological characterization and chemical identification of polymeric materials and coating systems as well as failure analysis and investigations for contaminant control. His special interests are chemical imaging and correlated microscopy.

John Dale, BSc MBA, Business Scientist, Industrial Forensic Microscopy, Intertek UK

John joined ICI in 1977. His early years with the company were spent in the polymer, catalyst and surfactants businesses. His current role is that of Contamination Consultant and leader of the Analytical Microscopy team within MSG. John advises on all aspects of contamination analysis and on-site contamination control. Another particular research interest is in developing an understanding of microstructure - property relationships in fabricated foodstuffs. He is well known for a pragmatic and down to earth approach to solving high profile issues. Typically these involve him establishing the causes of product litigation cases, compromised supply chains, environmental contamination problems and the mechanical failure of materials.

John's interests within Intertek MSG are in integrating a variety of technologies and technical experts in an approach he calls "Industrial Forensic Science". His team within Intertek MSG encompasses the technical areas of microscopy (optical and electron), image analysis and particle size characterisation.

Questions?

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