## Rheology 2016 (Theme: Highlighting and focusing on future prospects in Rheology)

#### **Summary:**

Rheology is the study of the flow of matter, primarily in a liquid state, but also as 'soft solids' or solids under conditions in which they respond with plastic flow rather than deforming elastically in response to an applied force. It applies to substances which have a complex microstructure, such as muds, sludges, suspensions, polymers and other glass formers (e.g., silicates), as well as many foods and additives, bodily fluids (e.g., blood) and other biological materials or other materials which belong to the class of soft matter.

OMICS International inviting participants across the globe to take part in the **Annual Meeting on Rheology** at **Alicante, Spain** during **November 10-12, 2016**. This scientific gathering guarantees that offering the thoughts and ideas will enable and secure you the theme "Highlighting and Focusing on future prospects in Rheology". It provides a premier technical forum for reporting and learning about the latest research and development, as well as for launching new applications and technologies.

For more details please visit http://rheology.conferenceseries.com/

#### **Importance& Scope:**

Rheology 2016 is aimed at recent and novel approaches in the field of Materials Science and Physics. Rheology is principally concerned with extending continuum mechanics to characterize flow of materials, that exhibits a combination of elastic, viscous and plastic behaviour by properly combining elasticity and (Newtonian) fluid mechanics. It is also concerned with establishing predictions for mechanical behaviour (on the continuum mechanical scale) based on the micro- or nanostructure of the material, e.g. the molecular size and architecture of polymers in solution or the particle size distribution in a solid suspension. Materials with the characteristics of a fluid will flow when subjected to a stress which is defined as the force per area. There are different sorts of stress (e.g. shear, torsional, etc.) and materials can respond differently for different stresses. Much of theoretical rheology is concerned with associating external forces and torques with internal stresses and internal strain gradients and flow velocities

## Why Alicante?

Of all Spain's mainland provincial capitals, Alicante is the most influenced by tourism, thanks to the nearby airport and resorts. Nevertheless this is a dynamic,



attractive Spanish city with a castle, old quarter and long waterfront. The eating scene is exciting and the nightlife is absolutely legendary, whether you're chugging pints with the stag parties at 7pm or twirling on the dance floor with the locals seven hours later. On a weekend night, it's impossibly busy and buzzy year-round.

## Why to attend???

Rheology paves a platform to globalize your research by installing a dialogue between industries and academic organizations and knowledge transfer from research to industry. Rheology-2016 aims in proclaim knowledge and share new ideas amongst the professionals, industrialists and students from research areas of Materials Science and Nanotechnology to share their research experiences and indulge in interactive discussions and special sessions at the event.

## Major Materials Science Associations around the Globe

- Society of Rheology
- International Manganese Institute
- International Union of Materials Research Societies
- International Union of Vacuum Science, Technique, and Applications
- International Union of Crystallography
- Society for Biomaterials
- Society for Experimental Mechanics
- Society of Glass Technology



## **Target Audience:**

Eminent Scientists/ Research Professors, Junior/Senior research fellows, Students, Directors of companies, Engineers, Members of different physics and Materials Science associations.

#### **Target Audience:**

- Industry 50%
- Academia 40%
- Others 10%

## **Top 5 Universities in World:**

- Massachusetts Institute of Technology (MIT)
- University of California, Berkeley (UCB)
- Stanford University
- University of Cambridge
- Imperial College London



## Glance at Market of Rheology Materials Science and Engineering

Advanced materials category covers a range of industries including ceramics, glass, metals, alloys, construction materials and other high technology processing areas. 2009 was one of the most difficult years for the global economy, and the material test equipment market was no exception, witnessing an almost xx percent decline in revenue.

The U.S. Bureau of Labor Statistics (BLS) produces annual wage estimates for more than 800 individual occupations. Newly released figures for 2012 put BLS Code 19-2032 (an occupational group encompassing materials scientists) in 82nd place in

yearly wages. The group, which includes 7,970 employees across the country, posted an average annual salary of \$89,740.

The rheology modifiers market is projected to register a CAGR of 3.3% (between 2015 and 2020) and is expected to be worth \$5,600 Million by 2020. The Asia-Pacific region is the largest market for rheology modifiers and is projected to retain this position over the next five years.

The thin film material market is expected to grow at a healthy CAGR over the next five years to reach \$10,250 million, by 2018. Europe dominates the thin film material market due to high usage of thin film material in its various end-user industries.

## Statistics which shows growth in importance of Materials Science Globally (Market Growth of Materials Testing and Service Industries)



# **Companies Associated with Materials Science (Materials Testing and Service Companies, Aluminum Association Companies and Others)**

		Worldwide	Worldwide
2012		2011	2012
Rank	Company	Revenue(USS)	Revenue(USS)
1	Schaefer holding International GmbH	2.5 billion	2.57 billion
2	Daifuku Co.,Ltd.	2.5 billion	2.57 billion
3	Dematic	1.3 billion	1.3 billion
4	Murata Machinery.Ltd	1.05 billion	1.05 billion

5	Mecalux,S.A.*	952 million	952 million
6	Vanderlande Industries	747 million	785 million
7	Beumer Group GmbH	657 million	722 million
8	Swisslog AG	617 million	680 million
9	Kardex Ag	596 million	630 million
10	Intelligrated	435 million	524million
11	Fives Group *	508 million	508 million
12	Knapp AG	423 million	490 million
13	TGW Logistics Group GmbH	394 million	473 million
14	KUKA Systems North America **	352 million	
15	Witron Integrated Logistics,Inc	270 million	352