Theme: (Emerging technologies and scientific advancements in Chemical Engineering)

Summary:

Chemical engineering is a branch of engineering that applies physical sciences and life sciences. It essentially deals with the engineering of chemicals, energy and the processes that create and/or convert them. Modern chemical engineers are concerned with processes that convert raw materials or chemicals into more useful or valuable forms. They are also concerned with pioneering valuable materials and related techniques which are often essential to related fields such as nanotechnology, fuel cells and bioengineering. A unit operation is a physical step in an individual chemical engineering process. Unit operations (such as crystallization, filtration, drying and evaporation) are used to prepare reactants, purifying and separating its products, recycling unspent reactants, and controlling energy transfer in reactors. Chemical engineers "develop economic ways of using materials and energy". Chemical engineers use chemistry and engineering to turn raw materials into usable products, such as medicine, petrochemicals and plastics on a large-scale, industrial setting.

The organizing committee is gearing up for an informative conference program including plenary lectures, symposia, workshops on a variety of topics, poster presentations and various programs for participants from all over the world. We invite you to join us at the Chemical Engineering-2016, where you will be sure to have a meaningful experience with scholars from around the world. All members of the Chemical Engineering-2016 organizing committee look forward to meeting you in USA, PHOENIX.

For more details please visit:<u>http://chemicalengineering.conferenceseries.com/</u>

Importance& Scope:

Chemical engineering has a number of applications in our day to day lives. Chemical engineering also has applications in production of electronics, clothing, paper and photographic equipment etc. The scope for individuals in the field of chemical engineering is bound to grow in time. This is mainly because of industrial growth as well as the related scarcity of the resources those are required. In future years, chemical engineers will be needed to develop synthetic replacement for those resources as well as materials that are low in supply. In overall, it can be said that chemical engineers will be able to make very crucial contributions to the improvement in addition to the

maintenance of the quality of our lives. Chemical Engineering techniques are used for the production of usable, high quality products such as fibres, fabrics, paints, medical drugs, biomaterials, gasoline, lubricants etc used in various industries such as textile, food, plastics, automotive, aerospace, petroleum, oil and gas, biomedical, biotechnology and pharmaceuticals, thereby increasing the scope of Chemical Engineering.

This conference will highlight the important topics like

- Advances in renewable chemicals
- Thermodynamics
- Electrochemical process
- Biochemical engineering
- Polymer Technology
- Petroleum Refining and Petrochemicals
- Separation process
- Chemical reactor
- Inorganic chemistry

Why Phoenix:

Phoenix is the capital and largest city of the state of Arizona. Phoenix is the most populous state capital in the United States, as well as the sixth most populous city nationwide. Phoenix is the anchor of the Phoenix metropolitan area, also known as the Valley of the Sun, which in turn is a part of the Salt River Valley. The city is the 13th largest metro area by population in the United States. Phoenix is the county seat of Maricopa County and is one of the largest cities in the United States by land area. Phoenix has a hot desert climate typical of the Sonoran Desert in which it lies. Phoenix has long, very hot summers and short, mild winters.

The early economy of Phoenix was focused primarily on agriculture and natural resources, dependent on the "5Cs" of copper, cattle, climate, cotton, and citrus. The top five industries were: real estate, financial services, manufacturing, health care, and retail. The city is a home to numerous institutions of higher learning Arizona State University, Barrow Neurological Institute, Grand Canyon University, Arizona Christian University, University of Phoenix, Phoenix School of Law.

Why to attend???

Chemical Engineering 2016 is an exciting opportunity to showcase the new technology, the new products of your company, and/or the service your industry may offer to a broad international audience. Conduct workshops, distribute information, meet with current and potential customers, make a splash with a new product line, and receive name recognition at this 2-day event. World-renowned speakers, the most recent

techniques, tactics, and the newest updates in field of Chemical Engineering are hallmarks of this conference.

A Unique Opportunity for Advertisers and Sponsors at this International event:

Major Chemical Engineering Associations around the Globe:

European Federation of Chemical Engineering

American Chemical Society (ACS)

Canadian Society for Chemical Engineering (CSChE)

Society of Chemical Engineers New Zealand

Argentinian Association for Chemical Engineers

National Organization for the Professional Advancement of Black Chemists and Chemical Engineers (NOBCChE)

Indian Institute of Chemical Engineers (IIChe)

Society of Chemical Engineers

Thai Institute of Chemical Engineering and Applied Chemistry

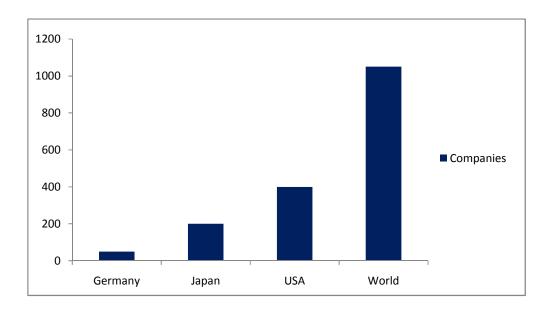
Israel Institute of Chemical Engineers (IIChe)

Major Chemical Engineering Associations in USA:

American Chemical Society American Institute of Chemical Engineers (AIChE) Association of Energy Engineers (AEE) Mexican Institute of Chemical Engineers (IMIQ) Argentinian Association for Chemical Engineers Brazilian Association of Chemical Engineering Colombian Association of Chemical Engineering Association of Chemical Engineers of Uruguay

Top Universities in USA:

Massachusetts Institute of Technology (MIT) University of California, Berkeley (UCB) Stanford University University of Cambridge National University of Singapore (NUS) Imperial College London California Institute of Technology University of Oxford



Companies Associated with Chemical Engineering:

Figure 1: Companies Associated with Chemical Engineering

Glance at Market of Chemical Engineering:

In the U.S. there are 170 major chemical companies. They operate internationally with more than 2,800 facilities outside the U.S. and 1,700 foreign subsidiaries or affiliates operating. The U.S. chemical output is \$750 billion a year. The U.S. industry records large trade surpluses and employs more than a million people in the United States alone. The chemical industry is also the second largest consumer of energy in manufacturing and spends over \$5 billion annually on pollution abatement. In Europe the chemical, plastics and rubber sectors are among the largest industrial sectors.[citation needed] Together they generate about 3.2 million jobs in more than 60,000 companies. Since 2000 the chemical sector alone has represented 2/3 of the entire manufacturing trade surplus of the EU.

The chemical industry has shown rapid growth for more than fifty years. The fastestgrowing areas have involved the manufacture of synthetic organic polymers used as plastics, fibres and elastomers. Historically and presently the chemical industry has been concentrated in three areas of the world, Western Europe, North America and Japan (the Triad). The European Community remains the largest producer area followed by the US and Japan.

Market Statistics of chemical Engineering companies:

Statistics that show the growth in importance of Chemical Industries

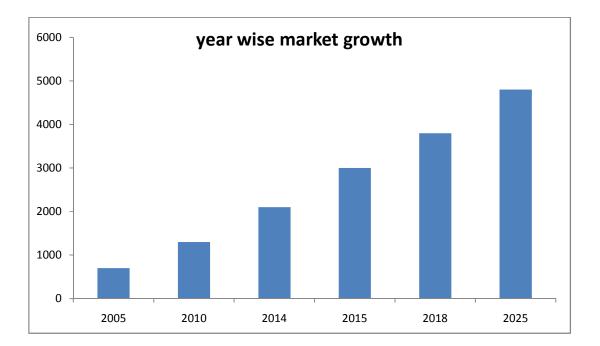


Figure 2: chemical industries market Growth Forecast