# (Theme: Biodiesel: Sustainable Future Fuel)

# Summary:

Biodiesel is produced using a broad variety of resources. This diversity has grown significantly in recent years, helping shape a nimble industry that is constantly searching for new technologies and feedstocks. In fact, industry demand for less expensive, reliable sources of fats and oils is stimulating promising research on next-generation feedstocks such as algae and camelina.

With just over a decade of commercial-scale production, the industry is proud of its careful approach to growth and strong focus on sustainability. Production has increased from about 25 million gallons in the early 2000s to about 1.7 billion gallons advanced biofuel in 2014. This represents a small but growing component of the annual U.S. on-road diesel market of about 35 billion to 40 billion gallons. Consistent with projected feedstock availability, the industry has established a goal of producing about 10 percent of the diesel transportation market by 2022.

Reaching that goal would significantly lessen U.S. dependence on imported oil, bolstering national security and reducing our trade deficit. At the same time, biodiesel's growth would boost the U.S. economy, not just by creating jobs but also by reducing our dependence on global oil markets and vulnerability to price spikes. There are currently about 200 biodiesel plants across the country – from Washington state to Iowa to North Carolina – with registered capacity to produce some 3 billion gallons of fuel. The industry is supporting more than 62,000 jobs, generating billions of dollars in GDP, household income and tax revenues. The industry's economic impact is poised to grow significantly with continued production increases. The industry supports jobs in a variety of sectors, from manufacturing to transportation, agriculture and service.

Biodiesel is produced using a broad variety of resources. This diversity has grown significantly in recent years, helping shape a nimble industry that is constantly searching for new technologies and feedstocks. In fact, industry demand for less expensive, reliable sources of fats and oils is stimulating promising research on next-generation feedstocks such as algae and camelina.

We invite you, on behalf of the Organizing Committee, to this excellent meeting with great scientists from different countries around the world and sharing new and exciting results in Biodiesel production and usage, which will be held in USA from December 8-10, 2016. This exciting and 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.

#### Importance& Scope:

Increasing energy demand, climate change and carbon dioxide (CO2) emission from fossil fuels make it a high priority to search for low carbon energy resources. Biofuels have been increasingly explored as a possible alternative source of fuel and represent a key target for the future energy market that can play an important role in maintaining energy security. It is primarily considered as potentially cheap, low-carbon energy source. Bioenergy- 2016 is the event designed for the International professionals to facilitate the dissemination and application of research findings related to Bioenergy as replacement fuels. It is a scientific platform to meet fellow key decision makers all-around the Biotech organizations, Academic Institutions, Industries, & Environment Related Institutes etc., and making the congress a perfect platform to share and gain the knowledge in the field of bioenergy and biofuels. Biofuels -2015 is a platform to gather visionaries through the research talks and presentations and put forward many thought provoking strategies of production and scale up of renewable Energy and making the congress a perfect platform to share proficiency.

# Why San Antonio, USA?

The city is located in the American Southwest, the south–central part of Texas, and the south western corner of an urban region known as the Texas Triangle. San Antonio has a transitional humid subtropical climate The weather is hot in the summer, comfortably warm or mild winters subject to descending northern cold fronts in the winter with cool to cold nights, and warm and rainy in the spring and fall. Dewpoints in the summer months average at around 68 °F (20 °C). As San Antonio offers a culture of business that values growth and supports it with financial incentives, affordable land and energy and much more.

San Antonio is home to six Fortune 500 companies Valero Energy Corp, Tesoro Corp, USAA, Clear Channel Communications, NuStar Energy and CST Brands .San Antonio headquarters include Bill Miller Bar-B-Q Enterprises, Carenet Healthcare Services, Eye Care Centers of America, Frost Bank, Harte-Hanks, Kinetic Concepts, NewTek, Rackspace, Taco Cabana and Whataburger.

Nanotechnology Universities in Texas

- Austin Community College
- Lamar University

- Rice Quantum Institute
- Rice University
- Texas A&M University
- Texas State University Nanomaterials Application Center
- University of Houston
- University of Texas at Arlington
- University of Texas at Austin
- University of Texas at Dallas

#### Why to attend?

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

# Major Biofuels Associations around the Globe

- Advanced Biofuels Association
- Renewable Fuels Association
- Biofuels Association of Australia
- Russian Biofuels Association
- European Biodiesel Board
- European Bioamass Industry Association
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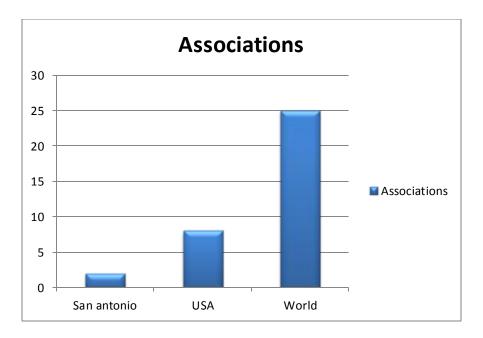
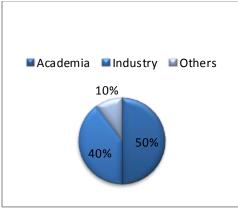


Figure 1: Statistical Analysis of Associations

#### **Target Audience:**

- Professors, Reserachers, Students and Technical Staff from the field of Chemistry
- Chemical/Petrochemical engineers
- Directors/Co-Directors of research based companies across Europe and US who are investing in Biofuels and Bioenegy.
- Oil and Refinery comapny Diresctors and Scientists.



**Figure 2:** Target Audience

# Top Universities in Spain:

Harvard University

Stanford University

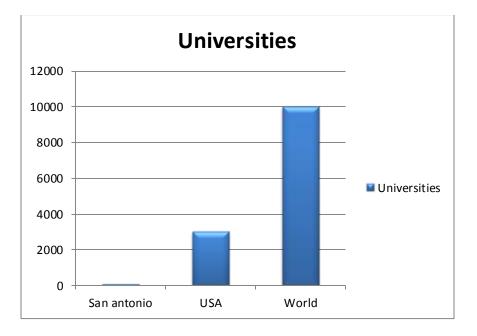
University of California, Berkeley

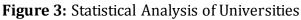
Massachsetts Institute of Technology (MIT)

**Princeton University** 

Columbia University

University of Chicago





# **Glance at Market of Biofuels:**

The demand for renewable energy is growing enormously. From the evidence available today, we believe that biofuels could, with developments in technology and favorable policy constitute up to 30% of the world transport fuel mix by 2030. The advantages of bioenergy – whether in greenhouse gas benefits, energy security or rural development-mean that many governments are keen to foster the industry through current phases of technology development to deliver material scale and reduced costs. Our belief is that the industry can be developed sustainably, provided appropriate feedstock's are grown, which do not adversely compete with food, using good land management to minimize environmental impact. This will require development of appropriate sustainability standards; it will not be easy, but by engaging in the industry, responsible businesses will work out appropriate business models and want to see enforcement of standards across the industry. This paper sets out the characteristics of the global fuels market, the significance of joint industry studies

with car manufacturers and the choices around land use that society must make. The approach taken by BP is then described whereby guiding principles have been defined to set the boundaries of our impact on ecosystems. Characteristics of the biofuels market: its size and growth rate, the world is in a state of biofuels fever. In 2006 biofuel constituted 49 bnlitres, Or 3%, of the 1,600 billion litre market for gasoline and diesel fuel. By 2015 the biofuels market is likely to have tripled to 155 billion litres. In practical terms that is an increase of around 10 billion litres per year over ten years. In terms of current ethanol yields of 5,250ltrs / ha, this equates to an increase of land use for biofuels of approximately 17,000 square km per year.

The bulk of the global demand for ethanol and biodiesel comes from a few major regions. The USA accounted for very nearly 50% of global ethanol consumption in 2006, with Brazil taking 36% of global volumes. The EU accounted for 75% of global biodiesel consumption in 2006. The reason why we believe the feverish rate of growth is likely to materialize is because, with no carbon beneficial substitutes available in the near term, biofuels are being promoted by governments. Clear examples of this are the trends of regulations in the EU, and the intentions announced in the US. BP is already a major player in the global biofuels market. In 2006 BP blended 3,016 million litres of ethanol into gasoline –a 25% increase on the previous year. Thus BP is already well exposed to the biofuels fever – and the theme of this paper is to suggest how the industry can tap the heat of the fever in a positive sense

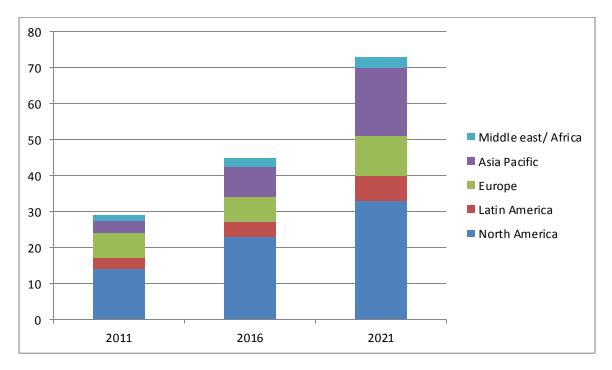


Fig 4: Biofuel demand by Region, World market: 2011-2021(In Billion Gallons)