

Bioalcohol As Green Energy -A review

Yatri R. Shah , Dhrubo Jyoti Sen, Int J Cur Sci Res. (2011) *Bioalcohol As Green Energy -A review*. [Journal (Paginated)]

Full text available as:



[PDF \(Bioalcohol As Green Energy -A review\)](#) - Published Version
Available under License [Creative Commons Attribution No Derivatives](#).
1755Kb

Abstract

Bioethanol has now become a big industry and this industry seems to become much bigger in the near future. People regard bioethanol as renewable and sustainable new energy source, although some contraversies such as the rivalry of bioethanol for human food widely exist. Actually, bioethanol can also be a good source of basic raw materials. In early days, ethylene, the most important organic chemical raw material, was produced from dehydration of ethanol. Later, things reversed as petrochemical industry well developed after World War II, when industrial ethanol was mostly produced mainly via hydration of ethylene. Now that bioethanol has already become an important fuel blender, we should well expect that bioethanol should also be new resources for basic organic raw materials, as well as other more valuable fine and specialty chemicals, instead of merely a fuel blender. Nowadays, countless new bioethanol companies are setting up every day. It should lead to more research on bioethanol also as a starting raw chemical material.

Item Type: Journal (Paginated)

Keywords: Bioethanol, Lignocellulose, Cellulases, Pretreatment, Ethanologens, Vacuum cycling

Subjects: [JOURNALS](#)

ID Code: 7310

Deposited By: CurrentSciDirect Publications, International Journal of Current Scientific Research (IJCSR)

Deposited On: 02 May 2011 16:53

Last Modified: 02 May 2011 16:53

References in Article

Select the SEEK icon to attempt to find the referenced article. If it does not appear to be in cogprints you will be forwarded to the paracite service. Poorly formated references will probably not work.

[1] Tijmensen M JA, Faaij A PC, Hamelinck C N, van Hardeveld, M RM. CO₂ as a Carbon Neutral

Fuel Source via Enhanced Biomass Gasification. Biomass Bioenergy.2002; 23: 129–152. [Seek](#)

[2] Farrauto R J, Heck R M. Environmental catalysis into the 21st century. Catal Today. 2000; 55: 179–187. [Seek](#)

[3] Carlson T R, Vispute T R, Huber G W. Chemsuschem. 2008;1: 397–400. [Seek](#)

[4] Tilman D, Hill J, Lehman C. Carbon-negative biofuels from low-input high-diversity grassland biomass. Science.2006; 314: 1598–1600. [Seek](#)

[5] Foidl N, Foidl G, Sanchez M, Mittelbach M, Hackel s. Jatropha curcas L. as a source for the production of biofuel in Nicaragua . Bioresour Technol. 1996;58: 77–82. [Seek](#)

[6] Tiwari K, Kumar A, Raheman H. Biomass Bioenergy.2007; 31: 569–575. [Seek](#)

[7] Gressel J. Plant Sci.2008; 174:246–263. [Seek](#)

[8] Demirbas A. Political, economic and environmental impacts of biofuels: A review. Applied Energy. 2009; 86: S108–S117. [Seek](#)

[9] Farrell AE. Ethanol can Contribute to Energy and Environmental Goals. Science. 2006; 311, 506-508. [Seek](#)

[10] Hammerschlag R. Ethanol's Energy Return on Investment: A Survey of the Literature 1999-Present. Environ Sci Technol. 2006;40;1744-1750. [Seek](#)

[11] Redman G. The Andersons Centre."Assessment of on-farm AD in the UK" National Non-Food Crops Centre. 2008; 06: 09. [Seek](#)

[12] Oliver R. David I, King A. Fischer-Tropsch synthesis of liquid fuels: learning lessons from homogeneous catalysis. Phys Chem Chem Phys. 2009; 11, 11110–11112. [Seek](#)

[13] Yeoman CJ, Han Y, Dodd D, Schroeder CM, Mackie RI, Cant IK. "Thermostable enzymes as biocatalysts in the biofuel industry". Advances in Applied Microbiology. 2010; 70: 1–55. [Seek](#)

[14] Kalita, D. Hydrocarbon plant—New source of energy for future. Renewable and Sustainable Energy Reviews. 2008; 12 (2): 455–471. [Seek](#)

[15] Inderwildi OR, King DA. Quo Vadis Biofuels. Energy & Environmental Science. 2009; 2: 343. [Seek](#)

[16] Roman M. Molar enthalpy of vaporization of ethanol–gasoline mixtures and their colloid state. Fuel. 2007; 86:323. [Seek](#)

[17] Navarro RM, Pena MA, Fierro JLG, Chem Rev. 2007; 107: 3952–3991. [Seek](#)

[18] Sun Y, Cheng JY. Bioresour Technol.2002; 83: 1–11. [Seek](#)

[19] Schulz H. Appl Catal. 1999; 186: 3–12. [Seek](#)

Metadata

- [ASCII Citation](#)
- [BibTeX](#)
- [DIDL](#)
- [Dublin Core](#)
- [EP3 XML](#)
- [EPrints Application Profile \(experimental\)](#)
- [EndNote](#)
- [Eprints Application Profile](#)
- [HTML Citation](#)
- [ID Plus Text Citation](#)
- [JSON](#)
- [METS](#)
- [MODS](#)
- [OAI-ORE Resource Map \(Atom Format\)](#)
- [OAI-ORE Resource Map \(RDF Format\)](#)
- [OpenURL ContextObject](#)
- [OpenURL ContextObject in Span](#)
- [RDF+N-Triples](#)
- [RDF+N3](#)
- [RDF+XML](#)
- [Refer](#)
- [Reference Manager](#)
- [Search Data Dump](#)
- [Simple Metadata](#)
- [YAML](#)

Repository Staff Only: [item control page](#)