

# **Analyzing Micro Fuel Cells 2017**

https://marketpublishers.com/r/A1C12964DEFEN.html

Date: January 2017

Pages: 50

Price: US\$ 500.00 (Single User License)

ID: A1C12964DEFEN

## **Abstracts**

The race for developing a long term solution to increasing usage of fossil fuels in the automotive sector and the rising effect of greenhouse gases has a new participant – Fuel Cell Technology.

The advent of Fuel Cells though yet to achieve mass commercial successes has presented new clean opportunities for meeting energy requirements. The rising fuel prices globally and the increasing environmental concerns with the rampant applications of fossil fuels in the transportation industry is forcing the development of alternatives like the Fuel Cell.

Aruvian Research's whitepaper – Analyzing Micro Fuel Cells - analyzes the recognition, development and advancement of fuel cell technology in the scientific arena wherein it was clearly demarcated in 1900's that fuel cells will be supplying energy and automotive power in the future. The whitepaper further provides a view on the basics of a fuel cell; its structure hardware and the working principles of a fuel cell.

The whitepaper analyzes the ground breaking invention of Micro Fuel Cells and the cost constraints as well as the overall competitive market activity in this sector along with the market scenario for Micro Fuel Cells.

A comprehensive outlook on the potential for Micro Fuel Cells is also provided in this whitepaper.



## **Contents**

#### A. EXECUTIVE SUMMARY

### **B. INTRODUCTION**

- B.1 History of Fuel Cells
- B.2 Design of a Fuel Cell
- B.3 How Does a Fuel Cell Work?
- B.4 Looking at the Different Parts of a Fuel Cell
  - B.4.1 Membrane Electrode Assembly
  - **B.4.2 Catalyst**
  - B.4.3 Hardware

#### C. TYPES OF FUEL CELLS

- C.1 Metal Hydride Fuel Cell
- C.2 Electro-galvanic Fuel Cell
- C.3 Formic Acid Fuel Cell
- C.4 Zinc-Air Fuel Cells
- C.5 Microbial Fuel Cell
- C.6 Reversible Fuel Cell
- C.7 Direct Borohydride Fuel Cell
- C.8 Alkaline Fuel Cell
- C.9 Direct Methanol Fuel Cell
- C.10 Direct Ethanol Fuel Cell
- C.11 Proton Exchange Membrane Fuel Cell
- C.12 Flow Battery
- C.13 Phosphoric Acid Fuel Cell
- C.14 Molten Carbonate Fuel Cell
- C.15 Protonic Ceramic Fuel Cell
- C.16 Solid Oxide Fuel Cell
- C.17 Polymer Electrolyte Membrane Fuel Cells
- C.18 Regenerative Fuel Cells
- C.19 Metal Air Fuel Cells
- C.20 Fuel Cells Minus Membranes

#### D. LOOKING AT MICRO FUEL CELLS



- D.1 Introduction
- D.2 Workings of a Micro Fuel Cell
- D.3 Micro Fuel Cell vs. Conventional Fuel Cell

## E. CHALLENGES IN THE GROWTH OF MICRO FUEL CELLS

- E.1 Cost Issues
- E.2 Regulatory Challenges
- E.3 Technological Barriers
- E.4 Growing Competition in the Industry
- F. MARKET PROFILE OF MICRO FUEL CELLS
- **G. MARKET FORECAST**
- H. GLOSSARY OF TERMS



## **List Of Figures**

### **LIST OF FIGURES**

- Figure 2: Diagram of an Alkaline Fuel Cell
- Figure 3: Structure of a PAFC Fuel Cell
- Figure 4: Structure of a Molten Carbonate Fuel Cell
- Figure 5: Structure of a SOFC Fuel Cell
- Figure 6: How a Micro Fuel Cell Works
- Figure 7: Storage Densities of Energy Conversion/Storage Systems



## I would like to order

Product name: Analyzing Micro Fuel Cells 2017

Product link: <a href="https://marketpublishers.com/r/A1C12964DEFEN.html">https://marketpublishers.com/r/A1C12964DEFEN.html</a>

Price: US\$ 500.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer

Service:

info@marketpublishers.com

## **Payment**

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <a href="https://marketpublishers.com/r/A1C12964DEFEN.html">https://marketpublishers.com/r/A1C12964DEFEN.html</a>