

Stanford Geothermal Program

32<sup>nd</sup> Workshop on  
Geothermal Reservoir Engineering  
2007

January 22 – 24, 2007  
Stanford, California, USA

Stanford Geothermal Program  
Workshop Report SGP-TR-183

**Printed from e-media with permission by:**

Curran Associates, Inc.  
57 Morehouse Lane  
Red Hook, NY 12571  
[www.proceedings.com](http://www.proceedings.com)

ISBN: 978-1-60423-971-3

Some format issues inherent in the e-media version may also appear in this print version.

## TABLE OF CONTENTS

<u>PREFACE</u> .....	3
<u>INTRODUCTION</u> .....	4
<u>RESERVOIR ENGINEERING</u> .....	27
<u>FIELD STUDIES</u> .....	81
<u>TRACERS</u> .....	183
<u>MODELING</u> .....	192
<u>PRODUCTION ENGINEERING</u> .....	270
<u>INJECTION</u> .....	292
<u>HOT DRY ROCK / ENHANCED GEOTHERMAL SYSTEMS</u> .....	301
<u>GEOCHEMISTRY</u> .....	350
<u>GEOPHYSICS</u> .....	366
<u>GEOLOGY</u> .....	408
<u>LOW TEMPERATURE</u> .....	434
<u>EMERGING TECHNOLOGY</u> .....	443
<u>PARTICIPANT LIST</u> .....	453
<u>AUTHOR LIST</u> .....	459
<u>SUBJECT INDEX</u> .....	461

# Introduction

## **Updated U.S. Geothermal Supply Characterization**

5

*Susan Petty and Gian Porro*

## **The Future of Geothermal Energy: An Assessment of the Energy Supply Potential of Engineered Geothermal Systems (EGS) for the United States**

26

*Jefferson Tester, David Blackwell, Susan Petty, Maria Richards, Michal Moore, Brian Anderson, Bill Livesay, Chad Augustine, Ron DiPippo, Ken Nichols, Ralph Veatch, Elisabeth Drake, Nafi Toksoz, Roy Baria, A.S. Batchelor, John Garnish*