GEO-HEAT CENTER QUARTERLY BULLETIN ISSN 0276-1084 **A Quarterly Progress and Development Report** on the Direct Utilization of Geothermal Resources **CONTENTS** Page PUBLISHED BY **GEO-HEAT CENTER First GEA/GRC Geothermal** 1 Oregon Institute of Technology **Excellence Award** John W. Lund 3201 Campus Drive Klamath Falls, Oregon 97601 Tawau Hill Park Springs, 3 Sabah, Malaysia All articles for the Bulletin are solicited. If you wish to Harry Chong Lye Hin and Mohd. Noh Dalimin contribute a paper, please contact the editor at the above address. **Operational Characteristics of** 5 The Gaia Snow-Melting System in Ninohe, Iwate, Japan **EDITOR** Koji Morita and Makoto Tago **Drilling Geothermal Well ISO** 12 John W. Lund I'SOT, Inc. and Burkhard Bohm Typesetting and Layout - Donna Gibson Graphics - Tonya "Toni" Boyd **Energy Department Advancing** 20 **Geothermal Power in the West** WEBSITE http://www.oit.edu/~geoheat Geothermal Energy Association FUNDING **Book Review - Stories From a** 22 Heated Earth - Our Geothermal The Bulletin is provided compliments of the Geo-Heat Center. This material was prepared with the support of *Heritage* The U.S. Department of Energy (DOE Grant No. DE-Pegamon and Ronald Dippo FG07-99-EE35098). However, any opinions, findings, **Geothermal Pipeline** 25 conclusions, or recommendations expressed herein are those of the author(s) and do not necessarily reflect the **Progress and Development Update** From the Geothermal Progress Monitor the view of DOE. SUBSCRIPTIONS The Bulletin is mailed free of charge. Please send your name and address to the GEO-HEAT CENTER for addition to the mailing list. If you wish to change your Bulletin subscription, please complete the form below and return it to the CENTER. Name_____ **Cover:** *Top:* Glass Geothermal Excellence Bottom Left: Klamath Falls City Hall, Award. Address geothermally-heated. Bottom Right: CalEnergy's V.P. of Operations, Jim Turner discussing the zinc Zip recovery plant with the 49-MWe Unit 5 geothermal Country _____ plant under construction in the background (photo courtesy of Ted Clutter).