THERMOCHEM GEOTHERMAL PRODUCTS AND SERVICES

Thermochem is a vertically integrated consultancy, service, and OEM instrument firm with over 30 years’ experience in the geothermal energy industry. Our specialties are well testing, analytical and process chemistry, instrumentation, engineering, geochemistry and integrated resource assessment. We provide solutions to our clients from the ground up, from exploration and production well testing, through plant design, reservoir management and operations.

Our experienced team has delivered solutions to geothermal projects in over 30 countries across the globe. Our mission is to maximize the return on assets of our clients, by ensuring the most efficient use of their resources and equipment, through well testing and resource monitoring, prevention of corrosion and scale damage to facilities and providing early detection and sustainable solutions to long-term resource problems. This company mission is now further strengthened by the new partnership between Thermochem, West JEC, and Kyuden International Corporation (KIC), which has expanded our capabilities to include resource feasibility studies, power plant design, engineering, integrated project management and O&M for geothermal projects. The synergy between Thermochem and West JEC provide full project life-cycle support, from exploration through decades of resource management and optimization to maximize generation.

GEOTHERMAL SOLUTIONS FROM THE GROUND UP

Our comprehensive suite of products and services provide solutions from exploration to resource feasibility studies, and supporting sustainable and efficient resource utilization through long-term operations:

- **EXPLORATION**
  - Comprehensive 3G Geothermal Exploration Services
  - Geothermal Analytical Chemistry: World-leading geochemistry laboratories

- **DEVELOPMENT**
  - Well Testing: Advanced LECM Mufflers, PTS Tools, full well testing services
  - Power Plant Process Simulations: scaling, corrosion, emissions
  - Pilot Plant Testing: process design and optimization
  - Power Plant Equipment: Steam Quality/Purity, pH-mod
  - Reservoir Tracer Testing: single and multiphase tracers
  - TFT: on-line two-phase flow and enthalpy measurement

- **OPERATIONS**
  - Resource Assessment: 3G conceptual modeling, reservoir simulations, well targeting
  - Feasibility Study: Drilling strategy, power plant design, social, environmental, economics
  - Power Plant Engineering - Project Management: Detailed Plant Design, O&M services
GLOBAL REACH, HIGHLY RESPECTED INDUSTRY LEADERS

Thermochem delivers solutions to geothermal projects throughout the globe, from bases in the USA and Indonesia. Our new parent companies West JEC and KIC expand our global reach to include further project activities in Japan, East Africa, South America, and the Caribbean. Our clients include the leading geothermal energy companies such as EDC, Pertamina Geothermal, Supreme Energy, KenGen, GDC, Star Energy, Calpine Ormat and many others, as well as major oil companies, utilities, governments, national labs, EPC contractors and start-up exploration firms.

The synergy between Thermochem, West JEC, and KIC allows for integrated project management and broadens our capabilities for resource assessment evaluations. Thermochem continues to offer field exploration services, integrated 3G (geology, geochemistry, geophysics) studies, the development of conceptual models, initial capacity estimates, and well targeting assessments required for pre-feasibility studies. The combined Thermochem, West JEC, and KIC teams can manage and supply the required personnel, equipment, and project management support for exploration drilling campaigns and production well tests, wellbore logging, geology and well test data evaluations, conceptual model updates, and the development of numerical models and forecast scenarios that are required for project development feasibility studies. West JEC and KIC bring significant expertise in the development of drilling strategies and power plant design, as well as the financial, economic, environmental and social impact studies that are key aspect of resource feasibility studies.

MULTIDISCIPLINARY EXPERT TEAMS

Thermochem has 64 employees based in offices and laboratories in Santa Rosa, California, USA, Bandung and Taratung, Indonesia. Our multidisciplinary team includes chemical engineers, geochemists, chemists, mechanical engineers, and technicians. The team’s collective technical knowledge and practical experience in well testing, chemical process engineering, chemical modeling, geochemistry, electronics, CADD design and manufacturing, and well testing, combined with core competencies in analytical chemistry, engineering and geosciences enables us to deliver total package solutions for all phases of geothermal projects, from exploration through operations.

Kyuden International Corporation has 78 employees with headquarters in Fukuoka, Japan, a branch office in Tokyo and representative / subsidiary offices in Bangkok, Thailand and New York, USA. West JEC has a total of 588 employees including 39 geothermal energy specialists. West JEC is headquartered in Fukuoka, Japan with branch offices in Tokyo and Jakarta.