**Bruce Horne**

www.linkedin.com/in/bruce-horne-93344813/

(832) 588-3659 | BHorne7541@msn.com | Sugar Land, TX 77498

**Demulsification/Clarification Scientist | Emulsion Breaking**

Accomplished scientist with expert knowledge in Demulsification and Water Clarification for global application in the oil and energy industries. Skilled in petroleum, refining, fuels, product optimization, and research and development (R&D). Also extremely experienced in other product lines (Flow Assurance and Corrosion) due to travel into remote locations. Known as a strong business development professional, with excellent interpersonal and international skills coupled with leadership and project management to deliver high quality solutions to the petroleum industry.

**Key Skills**

• Field Applications • Negotiations. • Project Management

• Research & Development • Troubleshooting • Sales

• Oil & Gas • Leadership • Interpersonal Skills

**Experience**

**Consultant: Demulsification and Water Clarification May 2020 – Present**

**OmniTreat** Covina, CA **May 2020 – October 2020**

**Vice President Technology/Business Development**

**Baker Hughes** Sugar Land, TX **November 2005 – April 2020**

**Global Subject Matter Expert – Demulsifiers and Water Clarifiers** 2012 – 2020

* Was Project Manager for all technology activity pertaining to Demulsification and Water Clarification within the Sugar Land technology center, including field development of new intermediates and blends, 95% of all research projects, and all technology problems from field locations
* Led all training of new employees (30+) in demusification which can take up to two years before becoming a lead scientist

**Production Optimization Demulsifier/Clarifier Team Leader** 2010 – 2012

* Led all demulsifier and water clarifier activities in the laboratory
* Specialized in heavy oil demulsification
* Specialized in slop oil, drilling mud flowback, completion fluid emulsions, and heavy oil demulsification
* Extremely proficient in paraffin, asphaltenes, and biocides applications and chemistries due to their connection to emulsions

**Senior Chemist – Finished Fuel Additives (Demulsification)** 2009 – 2010

* Oversaw development of demulsifiers and demulsifier packages for detergents
* Handles technical support for demulsification issues and P2R
* Developed multiple dehazers for gasoline

**Project Manager/Scientist – Commercial Development Group** 2007 – 2009

* Project Lead/Scientist of Research and Development downstream project for oil sand desalter demulsifier, resulting in the highest selling desalter chemical for five years
* Project Lead of Research and Development Upstream project for heavy oil demulsifier development

**Senior Chemist - Industrial Technology Process Demulsification** 2005 - 2007

* Primarily responsible for heavy oil desalter demulsifier development
* Provided sales support and technical recommendations for desalter trials
* Troubleshoot and provide support for problems associated with desalting in WH

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**Champion Technologies, Inc.,** Fresno and Odessa, TX **July 1997- October 2005**

**Senior Research Chemist** (Fresno, TX) 2001 – 2005

* Emulsion Breakers and Water Clarifiers Research and Development
* Responsible for management of multiple scientists and laboratory technicians in daily operations as team lead for Phase Separation section
* Managed all Requests for Proposal (RFPs) for Phase Separation section, including initial screening to approval stage
* Conducted field-testing for chemical recommendations
* Successfully replaced existing competitor accounts through technology and service
* Performed synthesis to develop new and refine existing products
* Ensure compliance with American Standard Testing Method (ASTM) protocols with regards to laboratory testing
* Responsible for the collection of raw data, preparation of results, and implementation into proposals for client reports
* Performed informational and sales presentations to clients and team members
* Created and implemented product procedures for reactions and blends for Emulsion Breaker group
* Represented company at various oilfield conventions and seminars

**Quality Control Chemist,** Odessa, TX1997 – 2001

* Performed routine testing on formulations and new products including centrifuge, Fourier Transform Infrared Spectroscopy, ultra-violet analysis, specific gravity, and multiple quality control evaluations
* Diagnose and identify problems with manufacturing processes
* Maintained laboratory calibrations and reagent standards
* Responsible for laboratory equipment compliance with ISO 9001 standards
* Assisted in scale up of reactions and blends in manufacturing plant

**Education**

**Bachelor of Science (B.S.), Chemistry, Minor in Environmental Science**

The University of Texas of Permian Basin, Odessa, TX

**Publications**

* "Homing in on Heavy Crudes", Horne, Bruce; Hydrocarbon Engineering, Oct. 2009
* “Chemical demulsifier development based on critical electrical field measurements”, Beetge, J.H.; Horne, B.O.; SPE International Symposium on Oilfield Chemistry, SPE 93325PP, February 2005.
* “The use of catalytic hydrogenation to intercept carbohydrates in a dilute acid hydrolysis of biomass to effect a clean separation from lignin”, Robinson, J.M; Burgess, C.E.; Bentley, M.A.; Brasher, C.D.; Horne, B.O.; Lillard, D.M.; Macias, J.M.; Mandal, H.D.; O’Hara, K.D.; Mills, S.C.; Pon, J.T.; Raigoza, A.F.; Sanchez, E.H.; Villarreal, J.S.; Biomass & Bioenergy, 2004, 25(5), 473-483.
* “Chemical Conversion of Biomass Polysaccharides to Liquid Hydrocarbon Fuels and Chemicals”, Robinson, J.M; Banuelos, E.B.; Barber, W.C.; Burgess, C.E.; Chau, C.; Chesser, A.A.; Garrett, M.H.; Goodwin, C.H.; Holland, P.L.; Horne, B.O.; Marrufo, L.D.; Mechalke, E.J.; Rashidi, J.R.; Reynolds, B.D.; Rogers, T.E.; Sanchez, E.H.; Villarreal, J.S.; ACS FUEL Chemistry Preprints, 1999, 44(2), 224.