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## POSITIONS AVAILABLE

### PROCESS SAFETY SPECIALIST/ENGINEER

Provide Process Safety Support within the Americas Region; including developing procedures and guidelines, providing training, leading audits, and providing plant consulting support in process design review, operating procedures, mechanical integrity, facility siting, and process hazards analysis. Minimum 15 years experience required. Contact: Edward Gunderson, Huntsman International LLC, 10003 Woodloch Forest Dr. The Woodland, TX 77380, phone: 409-723-3351.

### IRC NORTH AMERICA, LP

#### SENIOR AND PRINCIPAL SAFETY AND RISK CONSULTANTS

IRC is an international risk consultancy firm based in Houston, looking for Senior and Principal Safety and Risk Consultants. Qualifications: Ideally, candidates will be Chemical (Process) Engineers with experience in one or more of the following industries: energy, petrochemical and mining. A Master's degree will count towards experience, potentially resulting in earlier promotion. Experience: The Senior position requires at least five years relevant industry experience with a minimum of four years conducting risk and safety analyses and preparing reports. The Principal position requires at least seven years risk and safety consulting experience, including preparing top-quality reports for clients. Knowledge of the Safety Case regime, particularly offshore oil and gas/energy and a wide and/or a deep understanding of risk assessment would be beneficial. Package and Benefits: We provide a competitive salary and profit share scheme, interesting work, unique environment, recognition for great performance and excellent career opportunities. Benefits include four weeks vacation, employee's 100% health coverage (zero deductible), life insurance, short and long term disability, profit sharing and 401(k). **To be considered for this position, email your resume to [talent@irc-americas.com](mailto:talent@irc-americas.com) - with reference to job # IRCNA042007.**

### SR. PROCESS ENGINEER MIDWEST/EAST COAST

Utilize scientific methods to create business opportunities that support Fortune 1000 Food Companies' strategic market objectives. Provide technical and business risk assessment/perspectives related to new product development. Design and execute experiments, and analyze and interpret data to make sound technical recommendations on product and process issues. Initiate innovation and development of new technology to maintain and grow the business. Bachelors Degree in Chemical Engineering or related field. 4+ Years Experience (Research and/or Industry). Translate business objectives into strategic and tactical project goals and objectives. Make significant technical scientific advances utilizing internal and/or external resources. Incorporate business needs into technical decisions. Laboratory, pilot plant and manufacturing scale environments. Strong communication skills (oral and written). Travel: Up to 25%. Arnold Zimmerman - Hollander Horizon International, 1617 S. Pacific Coast Highway, Suite C, Redondo Beach, CA 90277, Wk: 310-540-3231, FAX: 310-540-4230, e-mail: [azimmerman@hhsearch.com](mailto:azimmerman@hhsearch.com)

### WVURC SR. RESEARCH ENGINEER - IGCC RESEARCH CENTER MANAGER

The West Virginia University Research Corporation (WVURC) seeks applications for a Senior Research Engineer position that serves as Technical Liaison to the US DOE National Energy Technology Laboratory (NETL) for a project to develop a world-class Integrated Gasification Combined Cycle (IGCC) Dynamic Simulator & Research (DS&R) Center. The Center will be housed within West Virginia University's National Research Center for Coal and Energy (NRCCE). The DS&R Center is part of the Collaboratory for Process & Dynamic Systems Research supported by NETL. Liaison activities will support work at NETL's Morgantown and Pittsburgh campuses. The Senior Research Engineer (IGCC Manager) will lead the IGCC dynamic simulator development and deployment phases, participate in the formation of and detailed planning for the DS&R Center, manage its on-going technical R&D projects, training activities, and operational/administrative functions, and work closely with R&D technology collaborators and industry advisory panel members. The incumbent will supervise DS&R Center staff. Project lead responsibilities, sharing of knowledge, team participation, and oversight of deliverables under the Center are also duties of the incumbent. Responsibilities require a Ph.D. in Chemical Engineering, Mechanical Engineering, or a closely related field and 5 or more years of experience in dynamic simulation, process control, and training applications, or equivalent combination of education and/or experience. The candidate must have a strong background in fossil energy power generation applications and a proven track record as a technical program manager. Preference will be given to applicants with experience in dynamic process modeling, simulation, and control; full-scope, high-fidelity operator training simulators (OTS); process and power OTS applications; distributed control system (DCS) emulation; and, experience in the development, implementation, and support of operator-training simulator projects. A PE license is preferred. Competitive salary and benefits package offered. Review of applications is ongoing and will continue until the position is filled. The WVURC is an EEO employer. **In order to receive consideration for this position, applicants should send a resume, cover letter and three professional references to: WVURC Department of Human Resources, PO Box 6221, Morgantown, WV 26506; or, by email to [WVURCHR@mail.wvu.edu](mailto:WVURCHR@mail.wvu.edu). Applications should reference the IGCC Research Center Manager position.**

### SR. RESEARCH ENGINEER - CMFR

The West Virginia University Research Corporation (WVURC) invites applications for a Senior Research Engineer position in the National Research Center for Coal and Energy (NRCCE) to serve as technical liaison to the US Department of Energy, National Energy Technology Laboratory (NETL) for collaborative research projects under the newly established Collaboratory for Multiphase Flow Research (CMFR). The Engineer will assist in the formation of the CMFR, advise the leadership and administrative oversight of CMFR operations, and contribute technically to collaborative projects funded in association with the CMFR. The Senior Research Engineer will also prepare, deliver and provide papers, presentations, training, advice and mentoring for professional colleagues at NETL, West Virginia University, Carnegie Mellon University and the University of Pittsburgh. The Senior Research Engineer will conduct research in computational fluid dynamics (CFD) in collaboration with researchers at these institutions, as well as others served by the CMFR. The incumbent, as part of the CMFR program, will be involved in the development of a suite of validated models and experimental capabilities, and in the application of the models to NETL sponsored technologies. Responsibilities require advanced knowledge of processes and procedures to work on collabor-

orative projects involving device scale modeling of advanced power generation and co-production components with the ultimate goal of reducing time, cost and technical risk in developing high-efficiency, zero-emission power plants. Supervision of others is not required; however, project lead responsibilities, sharing of knowledge and team participation is expected in the role. The position requires a Ph.D. in Mechanical or Chemical Engineering or a closely related field, 5 or more years of experience in developing CFD methods, and a strong background in thermal and fluid sciences or an equivalent combination of education and/or experience. The CFD experience must be demonstrated through peer reviewed publications and conference presentations. The candidate must have experience in programming in FORTRAN or C++ or both. It is desirable that the candidate has familiarity with parallel computing, computational multiphase flow, commercial or open source CFD software, and fossil energy applications. Competitive salary and benefits package offered. Review of applications is ongoing and will continue until the position is filled. The WVURC is an EEO employer. **In order to receive consideration for this position, applicants should send a resume, cover letter and contact information for three professional references to: WVURC Department of Human Resources, PO Box 6216, Morgantown, WV 26506; or, by email to WVURCHR@mail.wvu.edu. Applications should reference the CMFR Senior Research Engineer position.**

### SR. RESEARCH ENGINEER - POWER SYSTEMS MODELING

The West Virginia University (WVU) Research Corporation seeks applications for a Senior Research Engineer position in the National Research Center for Coal and Energy (NRCCE) to serve as technical liaison to the US Department of Energy, National Energy Technology Laboratory (NETL) for collaborative research projects in modeling power systems. The incumbent will perform studies involving systems analysis of advanced fossil energy power generation and co-production facilities to better understand and optimize overall plant performance. Design goals include reducing time, cost and technical risk in developing high-efficiency, zero-emission power plants. The incumbent will advise NRCCE and NETL on process modeling, simulation, analysis, and cost estimates for a broad range of advanced coal-fired, gasification-based plants using the Aspen Plus® steady-state process simulator. The incumbent will focus on researching, analyzing, designing and testing data or systems to develop and evaluate processes and modeling methods, assuring compliance with standards, and providing guidance consistent with theories and principles of mathematics, engineering and computer sciences. The research engineer will independently use professional concepts and organizational policies to solve a wide range of moderate to complex problems in imaginative and practical ways. Responsibilities require advanced knowledge of processes and procedures to support duties of the

position and demonstrated knowledge of steady-state process simulation software. Supervision of others is not required; however, project lead responsibilities, sharing of knowledge and team participation is expected in the role. The successful candidate will possess a Ph.D. in Chemical Engineering, Mechanical Engineering, or a closely related field, and 3 to 5 years of experience in the application of process modeling and simulation to fossil energy applications; or, an equivalent combination of education and experience to fulfill position requirements. A working knowledge of Aspen Plus® or a similar process simulator is required. Familiarity with FLUENT® or a similar CFD package is desirable. Competitive salary and benefits package offered. Review of applications is ongoing and will continue until the position is filled. The WVURC is an EEO employer. **In order to receive consideration for this position, applicants should send a resume, cover letter and three professional references to: WVURC Department of Human Resources, PO Box 6221, Morgantown, WV 26506; or, by email to WVURCHR@mail.wvu.edu. Applications should reference the Power Systems Modeling Sr. Research Engineer position.**

### RESEARCH ASSOCIATE

A research associate position is available immediately. An earned doctorate degree in chemical engineering in the area of catalytic reaction engineering is required. Candidates should have experience in experimental research methods in catalysis such as TPD/TPR, XRD, SEM and other basic catalyst characterization techniques. Duties include synthesis and characterization of catalysts; modification and operation of a reactor setup for catalyst testing, including a GC/MS system; and the evaluation of the experimental data. **If interested, please submit resume and the names of three references to: Dr. Ates Akyurtlu, Chemical Engineering Department, Hampton University, Hampton, VA 23668; e-mail: ates.akyurtlu@hamptonu.edu.**

### ACADEMIC OPENINGS

#### SYRACUSE UNIVERSITY, BIOMEDICAL AND CHEMICAL ENGINEERING

The L. C. Smith College of Engineering and Computer Science at Syracuse University invites applications for two tenure-track faculty positions in the Department of Biomedical and Chemical Engineering. Syracuse University is focusing strategically on the area of Biomaterials with cluster hiring across multiple colleges and departments, including these two junior faculty positions. Applicants should have a Ph.D. and academic and/or industrial experience indicating promise of an exceptional future in engineering research in the biomaterials area, including tissue engineering, controlled drug release, smart medical devices, biodegradable polymers, biointerfaces, computational or imaging techniques, and/or biocompatibility. In addition to collaboration with faculty in other schools and colleges, the Institute for Sensory

### The World Needs Us. That's Why We Need You.



#### Process Engineers Southern California Offices

Fluor has an immediate need for Process Engineers (all levels) with process design experience in petroleum refining, petrochemicals, gas processing, coal gasification, GTL plants, and chemical plants.

You will be responsible for process work such as process simulations in Hysys, Pro II and Aspen; process flow diagrams; process equipment design; and P&ID's.

Requirements include a Bachelor's degree or Master's degree in Chemical Engineering with a minimum of 5+ years of applicable industry experience. In addition, you must be capable of performing process studies, conceptual design, front-end engineering and detailed engineering as well as applying chemical engineering principles to the work process. The ability to work in a project oriented environment and interface effectively with project and engineering disciplines is necessary.

Salary equal to your experience and performance, with generous benefits including, health, dental, 401(k), defined retirement plan and more. To apply, visit our web-site at: [www.fluor.com/careers](http://www.fluor.com/careers).

Fluor is an Equal Opportunity Employer that recognizes the value of a diverse workplace. M/F/D/V.

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Research and the Center of Excellence in Environmental and Energy Systems within Syracuse University, collaborative research opportunities extend to the adjacent campuses of the SUNY Upstate Medical University and the SUNY College of Environmental Science and Forestry. The Department offers B.S. (ABET-accredited), M.S. and Ph.D. degrees in both chemical engineering and bioengineering and the successful applicant will be able to teach in these programs. The greater Syracuse region is growing industry-academic opportunities in the biotechnology realm as evidenced by planned construction of a life sciences building at Syracuse University (see <http://lifesciences.syr.edu/main.html>), the new Syracuse Biotechnology Research Center (see <http://www.upstate.edu/biocenter/>), and the recent creation of MedTech (see <http://medtech.org/>) a regional organization to foster commercialization of biomedical technologies. **Applicants should submit a curriculum vitae, and statements of research and teaching interests to: Dr. Jeremy Gilbert, Search Chair, Department of Biomedical & Chemical Engineering, 121 Link Hall, Syracuse University, Syracuse, NY 13244-1240. At least three letters of reference should be sent to the same address. Application materials should be submitted electronically to [www.sjobopps.com](http://www.sjobopps.com).** Review of applications will begin July 1, 2007 and will continue until the positions are filled. Syracuse University is an equal opportunity/affirmative action employer with a strong commitment to equality of opportunity and a diverse work force.

**THE DEPARTMENT OF CHEMICAL AND BIOMOLECULAR ENGINEERING AT TULANE UNIVERSITY** invites applications for tenure-track/tenured faculty positions. Tulane's chemical engineering department is the third oldest in the country, with a vibrant research program in the signature areas of nanotechnology, biotechnology and advanced materials. There are tremendous collaborative opportunities for interdisciplinary research. Candidates should have a demonstrated excellence in research, as well as a chemical engineering background and a strong commitment to excel in both undergraduate and graduate chemical & biomolecular engineering education. **Applicants should submit a curriculum vitae, research and teaching plans, and a list of references to: Chair, Faculty Search Committee, Department of Chemical and Biomolecular Engineering, Tulane University, New Orleans, LA 70118.** Applications will be reviewed on an ongoing basis until the positions are filled. We especially encourage applications from women, minorities, and persons with disabilities. Tulane is an affirmative action, equal opportunity employer.

**ENDOWED CHAIR POSITION, TULANE UNIVERSITY, DEPARTMENT OF CHEMICAL & BIOMOLECULAR ENGINEERING.**

We invite applications and nominations for The Herman and George R. Brown Chair in Engineering. We seek an outstanding individual with an internationally-distinguished record of research and publication, proven excellence in both undergraduate and graduate chemical & biomolecular engineering education, as well as a demonstrated ability to attract external research support. All research areas will be considered. We especially encourage applications from women, minorities, and persons with disabilities. **Applicants should submit a curriculum vitae, research and teaching plans, and a list of at least three references to: Chair, Endowed Chair Search Committee, Department of Chemical and Biomolecular Engineering, Tulane University, New Orleans, LA 70118.** Complete applications will be accepted and reviewed until the position is filled. Tulane is an affirmative action, equal opportunity employer.

**CLARKSON UNIVERSITY, DEPARTMENT OF CHEMICAL AND BIOMOLECULAR ENGINEERING** invites applications for a senior level faculty position in the field of Process Intensification. The Department seeks individuals who possess an outstanding academic record and have made significant contribution to teaching and research related to process intensification. Applicants should possess a Ph.D. in Chemical Engineering or a closely related field. Tenure may be offered on initial appointment, subject to University guidelines. The Department is specifically interested in candidates who have research interest in the field of intensified reactors, compact heat exchangers and novel process technologies. Applicants should also have a strong international reputation in the area of process intensification. The successful candidate will find opportunities to work closely with NY State companies through Clarkson's New York State supported Center for Advanced Materials Processing (CAMP). Review of applications will begin immediately. **To receive full consideration, applications should be received by August 15, 2007. Please submit letter of application, resume, statement of research plans, statement of teaching interests, a set of representative publications, and a list of four references to: Ruth E. Baltus, Chair, Department of Chemical and Biomolecular Engineering, Clarkson University, Potsdam, NY 13699-5705.** Clarkson University is an Affirmative Action/Equal Opportunity employer. Position # 123-06.

**THE DEPARTMENT OF CHEMICAL ENGINEERING AT TEXAS TECH UNIVERSITY** invites applications for a tenure track position at the assistant or associate professor level. Outstanding candidates with expertise in research areas such as cellular engineering, systems biology, biomaterials, metabolic engineering, nanotechnology, polymer and materials engineering, alternative energy sources, and molecular modeling are encouraged to apply. Preference will be given to candidates who have a biological research focus. Applicants must have a Ph.D. degree in Chemical Engineering or a closely related field. The ideal candidate will have at least one degree in Chemical Engineering. During the last four years, the department had average annual research expenditures of

\$2.23 million in the following four focus areas: Bioengineering and Biotechnology; Polymers, Material Science, and Rheology; Process Control and Optimization; and Computational Methods in Chemical Engineering. The research environment at Texas Tech features a \$37 million Experimental Sciences Building (ESB) for interdisciplinary research. The ESB houses core facilities for Biotechnology and Genomics, Imaging and Bioinformatics, as well as Plant Growth Chambers, and an animal care facility. The Chemical Engineering Department will also have significant research space in the \$10 million renovated Livermore Building, a project to be completed by the fall of 2008. The TTU Health Sciences Center, adjacent to the TTU general academic campus, likewise offers collaborative opportunities for biomedical research. Successful candidates will be expected to develop an independent research program, to teach existing graduate and undergraduate courses in chemical engineering, and to develop new courses. **Please apply online at <http://jobs.texas-tech.edu>, using 62249 as the position number. Applicants should send a detailed CV, a statement of research and teaching interests, and the names and addresses of at least three references to: Chair-Search Committee, Department of Chemical Engineering, Texas Tech University, Box 43121, Lubbock, TX 79409-3121. Review of applications will begin on October 1, 2007; and applications will be accepted until the position is filled.** The position may be filled as early as January 1, 2008. Candidates must be currently eligible to work in the United States. Texas Tech University is an equal opportunity/affirmative action employer and actively seeks the candidacy of women and minorities.

# MICHIGAN STATE UNIVERSITY

## Bioenergy Faculty Positions

### Chemical/Biochemical/Biological Engineering

The College of Engineering and the College of Agriculture and Natural Resources are establishing a center for bio-based renewable energy. A cluster of several new academic tenure track faculty positions has been established within these two colleges to complement the activities of several current faculty members working in this area. These new faculty positions are academic tenure track positions at the Assistant and Associate Professor levels. These faculty positions will have appointments (possibly joint appointments) in the departments of Chemical Engineering and Materials Science, Biosystems and Agricultural Engineering, and Forestry.

The faculty member will be expected to develop a nationally recognized, externally funded research program and to provide leadership in educational and outreach programs in the areas of bioenergy and bio-based products. Examples of possible topical areas include biological conversion processes, thermochemical conversion processes, conversion of biomass to liquid and gaseous fuels; separation of bioproducts; integration of biomass production/conversion/utilization concepts; plant metabolic engineering; and other relevant topics. Candidates are expected to have a Ph.D. in chemical engineering, biochemical engineering, biological engineering or a related field of engineering with demonstrated credentials in research, scholarship, and teaching as appropriate for either the assistant or associate professor level.

Applicants are invited to send their curriculum vitae, a statement of plans for research and teaching, and the names and addresses of three references to: Professor Bruce Dale, Search Committee Chairperson, Bioenergy Faculty Positions, Bio-Based Renewable Energy Center, 215 Farrall Hall, East Lansing, MI 48824-1323, e-mail address: [bdale@egr.msu.edu](mailto:bdale@egr.msu.edu), phone: 353-6777, fax: 517-432-2892.

Applications received by September 1, 2007 will receive full consideration; however, the search will continue until a satisfactory pool of candidates has been identified.

Michigan State University, a research intensive premier Land Grant University, enjoys a park-like campus of over 2,000 developed acres and over 3,000 acres of outlying research facilities and natural areas. The campus is adjacent to the city of East Lansing and the capital city of Lansing. The Greater Lansing area has approximately half a million residents. The local communities have excellent school systems and place a high value on education. Michigan State University is pro-active in exploring opportunities for the employment of spouses, both inside and outside the University.

Michigan State University is committed to achieving excellence through cultural diversity. The university actively encourages application from women, persons of color, veterans and persons with disabilities.

**MSU IS AN AFFIRMATIVE ACTION, EQUAL OPPORTUNITY EMPLOYER.**