**BIOGRAPHICAL SKETCH**

**Zhengrong Gu**

Title: Professor of Agric. & Biosystems Engineering

South Dakota State University

**a Professional Preparation**

East China Univ. of Sci. & Tech. Chemical Engineering B.S. 1997

East China Univ. of Sci. & Tech. Chemical Engineering M.S. 2000

Iowa State University Chemical Engineering Ph.D. 2006

U Illinois-Urbana Microbiology Postdoctoral 2008

**b Appointments**

Dec. 2008-present Assistant Professor, Agricultural and Biosystem Engineering Dept., SDSU

Mar.-Nov. 2008 PostdoctoralResearcher, Microbiology Dept., U Illinois-Urbana

Sep. 2006-Feb. 2008 Lead Application Scientist, GE Healthcare Lifescience, Shanghai, China

Sep. 2001-July 2006 Grad. Research Assistant, Chem. Eng. Dept., Iowa State University Ames

Jul. 2000-Jul. 2001 Research Engineer, Chem. Eng. Dept., ECUST. Shanghai, China

Sep. 1997-Jul. 2000 Grad. Research Assistant, Chem. Eng. Dept., ECUST. Shanghai, China

**c products**

**5 most closely related to the proposed project**

1. H Jin, X Wang, Z Gu, Q Fan, B Luo, A facile method for preparing nitrogen-doped graphene and its application in supercapacitors, Journal of Power Sources, 2015, 273, 1156-1162
2. K Wang, M Xu, Y Gu, Z Gu, QH Fan, 2016 Symmetric supercapacitors using urea-modified lignin derived N-doped porous carbon as electrode materials in liquid and solid electrolytes, Journal of Power Sources 332, 180-186
3. Cao Y, Wang X, Gu ZR, Fan Q, Kharel P, Hierarchical porous activated carbon for supercapacitor derived from corn stalk core by potassium hydroxide activation, Electrochimica Acta, 2016, 212, 839-847
4. K Wang, M Xu, Z Gu, P Ahrenkiel, J Lee, W Gibbons, J Croat, Q Fan, Pyrrole modified biomass derived hierarchical porous carbon as high performance symmetrical supercapacitor electrodes, International Journal of Hydrogen Energy, 2016, 41, 13109–13115
5. K Wang, Y Cao, X Wang, MA Castro, B Luo, Z Gu, J Liu, J Hoefelmeyer, Q Fan, Rod-shape porous carbon derived from aniline modified lignin for symmetric supercapacitors, Journal of Power Sources, 2016, 307, 462-467

**Other Significant Publications**

1. R Gupta, M Dubey, P Kharel, Z Gu, Q Fan, Biochar activated by oxygen plasma for supercapacitors，Journal of Power Sources, 2015, 274, 1300-1305
2. H Jin, X Wang, Y Shen, Z Gu, A high-performance carbon derived from corn stover via microwave and slow pyrolysis for supercapacitors，Journal of Analytical and Applied Pyrolysis, 2014, 110,18-23
3. H Jin, X Wang, Z Gu, J Polin, Carbon materials from high ash biochar for supercapacitor and improvement of capacitance with HNO3 surface oxidation, Journal of Power Sources, 2013, 236, 285-292
4. Wang, K.; Cao, Y.; Wang, X.; Kharel, P.; Gibbons, W.; Luo, B.; Gu, Z.; Fan, Q.; Mtzger, L (undergraduate), 2015. Nickel catalytic graphitized porous carbon as electrode material for high performance supercapacitors. Energy 101, 9-15
5. Wang K, Wang XM, Cao YH, Gu ZR, Q Fan; W Gibbons; T Johnson; B Luo; 2015 Pyrolytic cyanobacteria derived activated carbon as high performance electrode in symmetric supercapacitor, Energy 94, 666-671

**(d) Synergistic Activities**

1. Mentor for REU program in SDSU in 2010 (**Brandon Robinson, Carbon solid acid and membrane filtration**), 2012 (**David Moore,** **Photocatalysis of** **Organic Pollutants in Water**); 2013 (**Jacob Bassett**, “Desorption Thermodynamics of Volatile Organic Compounds from Activated Carbon”); 2014 (**Vu Han** “**Recovery of Butanol from Fermentation Using Chemically Modified Activated Carbon Adsorbent**”) 2015 (**Tyler Ambrico, Bio-renewable hierarchical carbon adsorbents for artificial kidney and dialysis liquid recycling - adsorption of creatinine; Maria Andrea Castro, Lignin based porous carbon as supercapacitor electrode material)**
2. Review activity for various journals: Energy & Environmental Science, Nanoscale, RSC Advances, Carbohydrate Polymers, Biotechnology Progress, Soil Science Society of America J., J. Analytical & Applied Pyrolysis, Bioresource Technology, J. Membrane Sci., J. Materials Chemistry A, J. Bioscience and Bioengineering, Separation and Purification Technology, J. Chromatography A, Current Analytical Chemistry, International J. Food Properties and International Journal of Energy Research.
3. Peer Review Panel for **USA NSF** “Biochemical and Chemical Separation” Program, **Canada** “**NSERC** Strategic Projects Grant”; **USDA** 1890 Capacity Building Grant Program 2014; **Canada “Alberta Innovates Bio Solutions”** 2014; **Sun-Grant (North Eastern)** DOE Bioenergy 2014; **USDA-SBIR** (Bifuel and Bioenergy) 2015.
4. Serve on Editor Board for Editor for International Journal of Environment and Bioenergy;
5. Chair "Materials for Energy Storage" in AICHE, 2014 Atlanta GA; Co-Chair for "Materials For Energy Storage" and "Industrial Forum: Recent Advances In Biotechnology" in AICHE Nov 4-8, 2013 San Fran Scio CA; Moderator of “Biofuels & Renewable Energy” in ASABE Intersectional Meeting 2014. Brookings, SD