

<b>Project Title</b>	<b>Integrated management and exploitation of multi-dispersed agricultural residues – application to energy production</b>		
<b>Acronym</b>	SYNAGRON	<b>Project Coordinator</b>	Prof. Vagelis G. Papadakis
<b>Organization</b>	Beijing United Pioneer Environmental Engineering Co., Ltd (BUPEE)		



**Beijing United Pioneer Environmental Engineering Co., Ltd**, formerly known as Beijing United Venture Capital Environmental Engineering limited company, was founded in 2008 and had a registered capital of ≈2.700.000€. The company was officially listed on the New Third Board in 2014. At present, the company has two

wholly-owned subsidiaries: Jiangsu Joint Venture Environmental Protection limited company and Anhui Joint Venture Renewable Energy Technology limited company; a joint stock company. **In 2010 and 2011, the company was chosen as the national high-tech enterprise and Zhongguancun high-tech enterprise.** The company is a member of the Beijing Zhongguancun Corporate Credit Promotion Association and a member of the Beijing Science and Technology Promotion Association. The company has contractor qualifications of environmental protection engineering and is mainly engaged in environmental protection (water pollution prevention and control and governance), **bioenergy (comprehensive management and utilization of biomass and solid pollutants, efficient biogas anaerobic fermentation)**, project construction, manufacturing and sales of environmental protection equipment.

In regards to environment protection, the company has been committed to research and innovation on environmental pollution control, construction of sewage treatment plant, and equipment installation. It has conducted in-depth research on the treatment of high-concentration organic wastewater using new technologies and materials and has achieved excellent results in a series of projects such as sewage treatment, paper mills, beverage plants, grease factories, chemical plants, printing and dyeing plants, small or medium-sized cities and other polluted areas.

In regards to bioenergy, the company is mainly engaged in an industry chain (including research, development, production and sales) **of high-temperature pyrolysis treatment equipment for wastes (such as sludge), as well as construction projects of biomass gasification, centralized gas supply and biogas projects.**

The company pays attention to the application and protection of intellectual property rights and has applied for a number of patents, 12 of which have been authorized by the State Patent Office (6 invention patents and 6 utility model patents). At the same time, the company also focuses on scientific research investment, maintaining a close cooperation with Beijing University of Chemical Technology (BUCT), China Agricultural University, Beijing Municipal Academy of Environmental Protection, Edinburgh University, Technical University of Denmark and other domestic and foreign tertiary institutions and research institutes, aiming to develop new technologies.

It should be noted that in the case that the project proposed herein will be successful, **Beijing United Pioneer Environmental Engineering Co., Ltd** will provide an additional **130.000€ in funding to the Beijing University of Chemical Technology**, demonstrating its commitment to the project and its interest to its results.

#### SELECTED PROJECTS:

- 2015** Jiangsu Jihua Chemical Co., Ltd. Sewage Treatment Project, Wastewater treatment 4.000m<sup>3</sup>/day, Treatment process: anaerobic + aerobic.
- 2015** Lily Flower Group Co., Ltd. Solid Waste Disposal Project, Project Scale: Daily treatment of solid waste 20 tons, moisture content 60%, daily gas 4.000m<sup>3</sup>, Treatment process: SWP-14 solid waste pyrolysis treatment process.
- 2013** Lily Flower Group Co., Ltd. Wastewater Anaerobic Treatment Project, Project Scale: Phase I: 10.000 tons/day, including 1.000 tons/day of high-concentration wastewater and 9.000 tons/day of low-concentration wastewater, Phase II: 3.000 tons/day, Treatment process: UASB.



**Fig.1:** The sewage treatment project



**Fig.2:** The wastewater anaerobic treatment project



**Fig. 3:** The solid waste disposal project