Technology Request

# A Chinese company is looking for cooperation on processing technology of waste battery

## Summary

*A Chinese environmental protection company, with main business in recycling electronic products and used household appliances, is looking for cooperation on waste battery processing technology. They are expecting technical cooperation with potential partners.*

| | |
|---|---|
| **Expiration Date** | 16 August 2017 |
| **Reference** | TRCN20160812001 |
| **Profile link** | |

## Details

### Description

The company locates in the first national level venous industrial park, which was listed as one of the first national demonstration bases for “Urban Mining”. The company is dealing with recycling and classification, storage and transportation, dismantling and sorting and comprehensive utilization of household appliances, etc. The company has independent research and development of the international advanced design, suitable for all kinds of waste electric and electronic products disassembly recycling technology and complete sets of equipment, disposable including refrigerators, air conditioners, washing machines, TV, computer scrap and waste materials, small appliances, office appliances, mobile phone, the waste electric and electronic products.
The project supports the high precision components such as restriction of the use of certain hazardous substances (ROHS) testing laboratory, professional electronic media center, freon recovery purification and regeneration system of destruction, cathode ray tube (CRT) disposal system, mobile phone and dismantling line, fragmentized separation system and so on, renewable raw materials in line with the restriction of the use of certain Hazardous (ROH) directive, noise reduction facilities and continuous running of dust purification equipment to ensure healthy and safe working environment.
The Company seeks technical cooperation partners on processing technology of waste battery,including dry battery, lead-acid battery, lithium batteries, especially power lithium battery for vehicle, etc. The application value of waste battery disposal technology is that the technology can be used for dry batteries, lead-acid batteries, or lithium batteries (especially automotive power lithium battery) recycling disposal. The technology will be used in waste battery recycling disposal application field. The company owns an industrial park that deal with the waste including all kinds of electronics and batteries. In order to fully recycle the electronic wastes, the company looking for matures technologies that could be used at all kinds of battery recycling.

### Technical Specification or Expertise Sought

The application value of waste battery disposal technology is that the technology can be used for dry batteries, lead-acid batteries, or lithium batteries (especially automotive power lithium

battery) recycling disposal. The technology will be used in waste battery recycling disposal application field.

## Keywords

**Technology**

10004003 Wastewater Recycling

**Market**

08004003 Water treatment equipment and waste disposal systems

**NACE**

E.38.2 Waste treatment and disposal

## Open for EOI : Yes

## Client

**Type and Size of Organisation Behind the Profile**

Industry SME 50-249

**Client Country**

China

## Partner Sought

**Type and Role of Partner Sought**

The partner shoud have waste battery disposal technology and willing to cooperate with Chinese enterprises with technical cooperation.

**Type of Partnership Considered**

Technical cooperation agreement

Technology Request

# Request on steam generation technologies for concrete production

## Summary

*A Ukrainian building materials company specialized in production of reinforced concrete constructions, commercial concrete, construction bricks, blocks, ready-mixed mortar, perlite and perlite bricks is seeking for steam generation technologies and investments for purchasing and installing of steam generation equipment. The main company's objective is to reduce natural gas consumption and water consumption during the process of hot moisture laden air generation.*

**Expiration Date** 12 November 2016
**Reference** TRUA20150812002
**Profile link**

## Details

### Description

The production capacity is 58'000 m3/y of finished products and the company employs 470 persons. Annual natural gas consumption of the construction materials company is 460'000 m3/year, annual water consumption is 11'200 m3/year. The technological process of reinforced concrete constructions production includes dosing and mixing of dry components in a concrete mixing machine, damping of concrete, addition of special additives, mixing in damp condition and supply to casting mold or to mixtures (commercial concrete). To reinforce the concrete a welded reinforcing cage is installed in the mold, concreted and consolidated, after this a final thermal treatment with steam is applied to finish the product. On this final production stage an enterprise has the most significant amount of natural gas consumption and water consumption moreover a production line has a great losses of water and condensed air. Implementation of a steam generation technology will lead to partitive independency from natural gas supply and will reduce losses of water and condensed air during transportation.
The company requires a steam generation technologies for concrete production and steam generation equipment. Expected charges on company's modernization amount to 50 000 €.

### Technical Specification or Expertise Sought

Use of distributed sources of heating instead of one remote boiler – i.e. thermal generators of hot moisture laden air with total capacity of 1MWt will allow reduction in gas consumption by 46 %. Saving of natural resources leads to decrease of a carbon footprint of the enterprise and increase of its resource efficiency.
Basic advantage of steam generation technologies implementation is an independency from natural gas supply. While also this modernization will allow to reduce a great losses of water and condensed air and to cut an environmental impact of the enterprise.

## Keywords

**Technology**

| | |
|---|---|
| 04 | ENERGY |
| 04002004 | Furnace and boiler technologies |
| 04005006 | Solid biomass |

**Market**

| | |
|---|---|
| 06003008 | Other alternative energy |
| 06003009 | Biomass and Biofuels |

**NACE**

| | |
|---|---|
| F.43.9.9 | Other specialised construction activities n.e.c. |

## Open for EOI : Yes

## Client

**Type and Size of Organisation Behind the Profile**

Industry 250-499

**Client Country**

Ukraine

## Partner Sought

**Type and Role of Partner Sought**

A potential business partner should be able to install the biomass heating systems and offer a maintenance service to the costumers.
Spare parts are always on stock and fast available from the company's own production.

**Type of Partnership Considered**

Manufacturing agreement
Commercial agreement with technical assistance
Joint venture agreement

Technology Offer

# Development of polymer membrane producing method with non-heatable nanomaterial additives for manufacturing process.

## Summary

*Researchers from a university in Latvia have developed a method of producing polymer membranes with non-heatable nanomaterial additives for manufacturing process. The resulting membrane is suitable to perform in low and medium hydrogen fuel cells and most likely in future devices for direct conversion of biofuel into electricity. The university is looking for commercial agreement with technical assistance.*

**Expiration Date** 05 October 2017
**Reference** TOLV20160914002
**Profile link**

## Details

### Description

Latvian Researchers have developed a method introducing industrial aspect in research by combining nanotechnologies and innovative approach. It involves combining the polymer (polyetheretherketone) with inorganic nanoparticles (zirconia) and ionic liquids. The resulting basic polymer with inorganic nanoparticles is suitable for methanol fuel cells. The method is adapted for spin-coating type methods or spray methods, because the crystalline polymers are not suitable for traditional hot-pressing methods. The university is looking for commercial agreement with technical assistance.

### Advantages and Innovations

The method is suitable for manufacturing process with non-heatable nanomaterial additives. The strength of the polymer made by this technology is greater than polymers made by classic synthesized methods. It holds a European patent.

### Stage of Development

Available for demonstration

### IPR Status

Patents granted

## Keywords

### Technology

| | |
|---|---|
| 03003 | Apparatus Engineering |
| 04 | ENERGY |
| 04008002 | Fuels and engine technologies |
| 04008003 | Micro- and Nanotechnology related to energy |

**Market**

| | |
|---|---|
| 08005 | Other Industrial Products (not elsewhere classified) |

**NACE**

| | |
|---|---|
| P.85.4.1 | Post-secondary non-tertiary education |

## Open for EOI : Yes

## Dissemination

**Send to Sector Group**

Intelligent Energy

## Client

**Type and Size of Organisation Behind the Profile**

University

**Languages Spoken**

English
Latvian
Russian

**Client Country**

Latvia

## Partner Sought

**Type and Role of Partner Sought**

The university is seeking partners for commercial agreement with technical assistance e.g. companies/research centres involved in polymer applications, energy efficiency solutions, biofuels etc.

**Type and Size of Partner Sought**

>500

**Type of Partnership Considered**

Commercial agreement with technical assistance