## Company Name. Exir Nano Sina

## **Company Overview**

Exir Nano Sina Company (ENSC) is a knowledge-based nano-pharmaceutical company focused on the research, development and commercialization of innovative nano-pharmaceutical products based on its proprietary drug delivery technologies. It's strengths lies in lipid-based formulation and scale-up for parenteral, oral and topical drugs using liposomes, micelles and nanoparticles to optimize the pharmacokinetics of drugs for better efficacy and lower toxicity, and thus prolong the product lifecycle of branded drugs.

#### Technology Overview.

Liposomes are the most widely used antimicrobial drug delivery system. One of the distinguishing features of liposomes is its lipid bilayer structure, which mimics cell membranes and can readily fuse with infectious microbes. By directly fusing with bacterial membranes, the drug payloads of liposomes can be released to the cell membranes or the interior of the bacteria. Thus, using Nanoliposomes for drug delivery reduces the treatment side effects and increases the transfer and penetration to the surface of fungi.

#### Applicable Industries and Companies

- Pharmaceutical companies related to cancer treatment
- Cancer pharmaceutical R&D centers
- Ministry of Healthcare

## Company Name. Behran Filter

#### **Company Overview**

The Behran Filter industrial manufacturing company has achieved a high level of technological capability and wide variety of products since it was first established in 1993. Starting with the production of a few auto filters in those days, it is now producing over 500 kinds of high quality filters for various types of vehicles such as passenger cars, pickups, busses, trucks, agricultural and road constructional machineries; as well as industrial filters such as those used in gas and petrochemical refineries, turbines, power plants, steel and copper industries, etc. The reputation of our filters in quality and price made it possible export to several countries.

#### Technology Overview.

One of the latest advancements in Filtration is the use of Nano Technology. With this technique surface of cellulose and synthetic fibers (usually with diameter of 10 to 50  $\mu$ m) is covered with very fine Nano fibers (usually with diameter of 50 to 400 Nm) which enhance the filtration performance considerably.

Applicable Industries and Companies

- Automotive industry
- Power plants
- Ministry of environmental protection
- Ministry of energy

# Company Name. Parsa Polymer Sharif

## **Company Overview**

Parsa Polymer Sharif Company is active in the two sections of producing advanced polymer compounds and providing laboratory and engineering services. In the section of nanotechnology-based polymeric compounds, the company produces scratch resistant polypropylene.is material is one of the additives used to improve the resistance of polymers against scratches. polymers are used in the production of vehicles' internal parts, home appliances, decorative objects, etc.

## Technology Overview.

Using special Nano sized mineral particles in formulation of Polypropylene adds some characteristics to final product. In case of silent pipes for example makes it more silent, more strong, lighter (low weight) and easier to use.

## Applicable Industries and Companies

- Automotive industry
- Packing Industry
- Plastic film companies
- Pipe producers
- Engineering Master batches Companies

# Company Name. Aria Polymer Pishgam

## **Company Overview**

The Aria Polymer Pishgam Company (APP) was established in 2009 by several masters of IUT graduates .The primary mission of Aria Polymer Pishgam is to work on PP/MMT Nano composites. Since the establishment of APP ,the company has grown steadily to become a truly global business providing composites and nanocomposites. Now, APP is focused on designing ,consulting and producing numerous compounds that have used in polymer industries .The engineers at APP have developed an extensive database of solutions that satisfy a wide range of engineering problems. If our standard products do not meet your requirements, our engineers will work with you to develop creative and cost effective solutions to fulfill your design needs. Further, Among the most achievement in this period, we could get The Sheikh Bahai National Festival Prize in Nanotechnology.

## Technology Overview.

improve properties on UPVC, PP and PE By adding Nano additives:

- more strength
- more thermal resistance

#### **Applicable Industries and Companies**

- Pipe producers
- UPVC door and window producers
- Packing industry

## Company Name. Yar Nikan Saleh (YNS Co.)

#### Company Overview

Yar Nikan Saleh (YNS Co.) is a high-tech company which is active in Nano-structured hard coating. It applies this technology to Decorative Coating System (Catholic Arc Deposition System) and produces equipment which is used for the deposition of hard and resistance nanostructured coatings, optical coatings, and decorative coatings on metals, glass and ceramic.

### Technology Overview.

YNS Catholic arc deposition (Arc-PVD) is a PVD technique in which an electric arc is used to vaporize material from a cathode target. The vaporized materials then condenses on substrate, forming a thin film.

### Applicable Industries and Companies

The technique can be used to deposit metallic, ceramic, and composite films. It is actively used to give a superior quality to products like handles, faucets, watchband and cases automotive mirrors, lighting reflectors, fashion accessories and eye glass frames.

# Company Name. TAVANA Co.

## Company Overview

TAVANA company offers education and research packages by which students learn the very basic concepts of Nanotechnology and furthermore, the company will be able to enhance students' knowledge by having them observe the applications and manufacturing of Nano-products. With over ten years of experience in Nanotechnology research and education, TAVANA Corporation has introduced and presented this advanced technology to students at national and international levels, by holding hands-on workshops, using general and professional Nano lab equipment, and publishing supplementary books.

#### Technology Overview.

- Educating Nanotechnology to students by professional equipment and versatile and attractive methods
- Providing educational and technical services for Nanotechnology laboratories

#### Applicable Industries and Companies

- Students (from elementary school to university level)
- Teachers
- Researchers of Nanotechnology