

صنع في القدس

Made in Jerusalem

Supporting Jerusalem
Innovations Program

برنامج دعم ومساندة
الابتكارات المقدسية



Introduction

Continuing with its pioneering initiatives to support science, innovation, and unique scientific and technological production that replace blind consumption of others' production, Al Nayzak Organization for Supportive Education and Scientific Innovation fosters a group of Jerusalem youth who present their original ideas and innovations to the public as a new step on the road of building the culture of innovation and excellence in Jerusalem.

“Made In Jerusalem” is an industrial, scientific, technological program that Al Nayzak Organization leads. It is considered an expansion to the national program “Made In Palestine” which Al Nayzak launches yearly since 2005. **“Made In Jerusalem”** Program form a pioneering initiative that aims to connect scientific research and authentic industrial and commercial ideas in Jerusalem on one hand with business and industry on the other. The program’s essence is to provide Jerusalem innovators, university students, professionals, and all those interested, with an opportunity to achieve their hopes and aspirations which, in turn, could lead to results of practical value in developing new products or solving technical problems using creative methods and mechanisms.

The Program sheds light on the most important innovations that Al Nayzak fosters and develops through a long journey of improvement which transferred them from mere ideas on papers to well constructed projects that could survive in the world of business.

Through this booklet, we wish to extend our gratitude to our main donors, The Islamic Development Bank through UNDP, in addition to expressing our thanks and appreciation to our partner the Arab Chamber of Commerce and Industry-Jerusalem for their efforts in making **“Made In Jerusalem”** for this year a success. Moreover, we wish to thank all the innovators who participated and worked hard to develop their projects.

After undergoing several unique trainings in developing their interpersonal and technical skills, developing their skills in preparing scientific papers and business plans, and after receiving financial support to construct the first prototype of their projects, the participating innovators are ready to present their projects to the public.

Participating Projects in "Made In Jerusalem" Program in 2012



Heating Device for Food Deliveries Depending on Heat from Motorcycle Exhaust

Participant:

Jamil Abu Madi

Food deliveries among other types of delivered goods have become very popular recently. Families nowadays can order hot meals from specific restaurants that deliver and receive them in very short time and for affordable prices through delivery guys on motorcycles.

Such food deliveries follow certain packaging standards to ensure the safety and warmth of the product. However, these standards fail sometimes in keeping the warmth of the food because of long delivery time that is caused by traffic or hard to reach addresses. All of this urged Jamil to think and create a device that helps in maintaining the warmth of delivered meals by using the heat from the motorcycle's exhaust. This new innovation maintains the food's warmth using a practical, affordable, and customer friendly method.



The Digital Electric Chair

Participant:

Hamza Kirresh

The results of Hamza's study indicate that 2.8% of the Palestinian population currently living in Palestine has a certain type of disability. As the percentages of each type of disability varies, physical disabilities form 48.7% of total disabilities which means that 1-2% of the Palestinian population needs a form of movement assistance like a wheel chair. This poses the question, how can we help those people with disabilities?



Normally, what is used is either a mechanical wheel chair that is controlled by the disabled person him/herself or by another assisting person, or an electrical chair that is controlled by an electrical controller which has limited efficiency.

This project proposes an expansion in the field of electrical wheel chairs control through a device that could be added to any chair and programmed to remotely respond to any digital device (cell phone, voice or movement sensors...etc). Hamza added a touch screen and an acceleration sensor to control the chair and serve as examples of digital devices.

This mechanical-digital system proposes a modern solution to help people with disabilities spend less effort in facilitating their movement. The system requires only 2-5% additional cost to the original cost of the electrical wheel chair.

ECO Car Vacuum Cleaner

Participant:

Awni Hasan

The Eco vacuum cleaner washes, polishes, and cleans the car using minimal amount of water which contributes to saving a very limited resource water. The ordinary car cleaners for example use over 160 Liters of water to wash one car. This cleaner, however, presents a practical solution that offers high quality service using very small amount of water.

In addition, this vacuum is economical lowering the water usage up to 90% and disregarding the usage of wax and polish that pollute the environment. It, further, could be easily moved and is fit to be used everywhere.



A Guard in your Pocket

Participant:

Awni Hasan

This project presents a device that sends automatic alert in the case of wallet robberies. This guarded wallet gives you the ability to move anywhere with your money and important documents without fear of being robbed. The wallet is also light and stylish.

Your Archive at Your Service

Participant:

Nour Edkeidek

A lot of people suffer the problem of accumulated papers on their offices. This problem makes it difficult for them to find important documents within the needed time. It also makes it difficult to file important papers according to different criteria proposed by the work requirements. Thus, Nour developed an electronic



archiving and file management program that enables users to archive and file documents and recover them easily.

The system receives incoming mail through several intake ways, then it stores the information into a database and passes it over to the related department or employee so he/she can accomplish the requested task. Other operations could be performed also through this system like: search, retrieval, modification, printing, report writing, sending faxes and messages, and other operations that are appropriated to the needs of the user regardless of the size and type of the document (picture, written documents, maps, fax letters, audio...etc). The program uses an online based interface that enjoys safety and security.

Vertical Electricity Generating Turbine

Participants:

Ashraf Rammouni, Khalil Sawwan

Jerusalem's neighborhoods suffer constant electricity cuts especially in winter, in addition to the constant rise in electricity bills that is caused by the rise in oil prices. These problems urged the participants to produce a wind turbine. This device uses clean and available energy source to generate electricity. The device's work mechanism depends on the movement of blades which, in turn, move the dynamo that feeds and charges the attached battery. The battery then transports the energy into an attached device that turns it into electricity that could be used in homes.



Improved Thermal Piston

Participants:

Jamil Juneidi, Jenan Njoum, Tamara Halseh

The Improved thermal piston is used in material engineering laboratories to produce samples from polymer including home utilities, water bottles, food storing containers and other. The traditional devices melt the raw material and form composite material only in limited quality and efficiency because it lacks proper isolation and cooling systems. Those systems are crucial in formulating composite material and they affect the outcoming product. Thus, producing high quality products is almost impossible.



Therefore, a group of students from Al Quds University-Material Engineering Department designed a device that produces high quality composite materials that outrun the material the traditional piston produces. The project's idea involves developing a device that accomplishes the functions of five devices through adding several systems most important of which are: a heating system that heats up to 1800 degree Celsius within previously determined mixing and pressure conditions, and a cooling system that helps in strengthening the mechanical characteristics of the product. This device's importance appears greatly in the field of scientific researches and engineering specializations specially chemistry, mechanics, and other scientific fields.

Distance Crossing Device

Participants:

Saleh Kurdi, Ahmad Mleitat

Private properties, including cars, always suffer the danger of robberies which constantly worries car owners. Those car owners are always on the look for security devices to protect their cars. However, what is the best way for a car owner to ensure the safety and security of his/her car? And what is the method that enables tracking stolen cars?

Out of those questions, the participants brought about the idea of an alarm that works through transmitting a signal (which is a beep) to the user's cell phone in case of a car robbery attempt through opening any of its doors, or in case the car is hit while parking. This device could be accustomed as well to any other type of property like a safe, office, or a house.



The Names of Participating Companies in Made in Jerusalem Exhibition 2012

- Yabous Tours and Travel Services
- Saiph wear
- ICT Manufacturing
- Hygel Activa
- Siniora Food Industries P.L.C
- Al Quds Al Sharif Luggage and School Bags
- Brothers Co. for Detergents
- AlEizareyeh Cooperative Association for Development
- Body candy
- Jerusalem Heritage
- Jerusalem Traditional Food



مؤسسة النيزك للتعليم المساند والإبداع العلمي
Al Nayzak For Supportive Education & Scientific innovation

هاتف: +972 2 2985885

www.alnayzak.org