

MOBIAK

# MOBIAK *press*



**MOBIAK at  
Interschutz**  
Photo Gallery page 14 2015

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**PUBLISHED BY**  
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# EDITORIAL

Dear Readers,

Over the last few months I had had a number of ideas in mind for the editorial in the current issue. However, all of them now seem so small by comparison with the **gathering storm of events affecting the Greek economy.**

My aim is not to refer to politicking or negotiating manoeuvres. What concerns me as a businessperson are **the structural aspects of the Greek economy**, and particularly the stability of the regulatory environment, since this directly affects the day to day operations of MOBIAK and its customers in the Greek and international markets.

Before I move on to the main points of the article, I would like to confess to you that it saddens me tremendously to have been forced to send out emails to MOBIAK's long-standing customers abroad explaining the current situation in my country, and by extension the current position of MOBIAK itself. It saddens me so greatly because for **38 consecutive years (from 1977 when the company was founded)** my family, with the support of our partners and our expert technical staff, have managed to establish a solid foundation based on strict compliance with international standards, which has enabled the company not only to meet the demands of the Greek market, but also to conquer **overseas markets of Europe, Asia, Africa, the US and the Middle East.**

We took the plunge and invested the larger part of the company's capital reserves so that we could avoid raw materials shortages. All of you will understand that the risk was great, but I take responsibility for the decision we made - that under no circumstances whatsoever should our partners be left without products. For me personally, it would be the greatest betrayal to those who have faithfully supported MOBIAK over the years. My desire was, is, and always will be that MOBIAK must stand by its partners in good times and bad, through action not just words!

Given the sacrifices that have been made to enable MOBIAK to become the organisation you know today, the efforts of my family and the staff, the time devoted, the capital invested and many other things that cannot be measured in money or time, it is without question unfair that all of this should be jeopardised by an uncertain economic environment formed in such ad hoc fashion (in my humble opinion) over the last 35-40 years.

**" MY DESIRE WAS. IS. AND ALWAYS WILL BE  
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THROUGH ACTION NOT JUST WORDS "**

MOBIAK has managed (*and this is truly a praiseworthy achievement*) to become an **exporter of industrial products to 54 countries around the world.** I do not know if it is possible for anyone outside the company to imagine how difficult this exercise has been.

We live in a country where agriculture represents 29% of the value of Greek exports (excluding petroleum-based products). **Almost one third of the top 100 Greek exportable products is directly linked to the agricultural production of the country.**



For a Greek company to manage to export industrial products it must:

- a) create the infrastructure and production processes capable of executing the project,
- b) create a reliable, properly certified industrial product that will meet the requirements of international markets and
- c) create relations of trust and convince a demanding and suspicious international buying public that **Greek products have nothing to envy in comparison with similar products manufactured in traditional industrial countries.** The third factor especially, the confidence of foreign buyers, is that which has been shaken to the core by the latest developments.

For better or worse, the developments before us have been set in motion. I repeat that it is not my intention to judge any political party or politician. In the short term, **the results will become obvious from the trends in the market and workings of wider society as a whole**, while in the long term future historians will judge their actions.

Greece, (wrongly in my view) throughout all of the previous years after the dictatorship, has failed to create an attractive economic environment for investment, and has instead now reached a point where all of the negative conditions have been created for the few remaining companies to relocate abroad (to countries where state and government offer a significant number of advantages compared to Greece).

“ IN THE SHORT TERM. THE RESULTS WILL BECOME OBVIOUS FROM THE TRENDS IN THE MARKET AND THE WORKINGS OF WIDER SOCIETY AS A WHOLE. WHILE IN THE LONG TERM FUTURE HISTORIANS WILL JUDGE THEIR ACTIONS ”

I am truly proud of what we have managed to achieve at MOBIAK. The hard work of my family and the company's employees have borne fruit, and the tree now produces first class fruit which rivals the best in the global market place. **The name MOBIAK now has a prominent reputation in international markets and is synonymous with competitive, high-quality accredited products.**

Recently, MOBIAK participated in the **largest international fire prevention exhibition in the world, INTERSCHUTZ 2015**, held in Hanover, Germany from **8 to 13 June**. We were the only Greek company that participated with its own stand at the exhibition - and the results, I can now say, were amazingly positive.

Businessmen and manufacturers from around the world expressed their admiration for Greek fire extinguishers, from a design point of view, and in terms of durability, certification standards, and competitive pricing. The comments that my associates and I (*my team*) received were flattering, to say the least.

I can not describe how proud I feel of our participation in this exhibition. I must confess that **it has been one of my dreams since I started running the company.** MOBIAK is at the highest point of its potential, which for me means the consolidation of our products in international markets, and the continued pursuit and acquisition of the largest possible market share.

**In this issue, my partners and I have the great pleasure to present photographic material documenting the highly successful showing of MOBIAK at INTERSCHUTZ 2015.**



As a businessperson, I hope that a healthy business environment can be established that will offer the right circumstances and pre-conditions for Greek business enterprises to engage in the manufacture of industrial products, ultimately providing optimal added value for the Greek economy and thereby contributing to the creation of jobs and reduction of unemployment, the cornerstone of a healthy society.

I hope with all my heart that the situation in the Greek economy will normalise, that we can relax a little and return to more peaceful times, because only with a cool, calm presence of mind can we find appropriate solutions to any problem.

**My best wishes for patience, persistence, calmness of mind & good health to all!**

# Certifications & factory tests

Written by, **Giannis Gkioumes**  
Natural Resources & Environmental Engineer

MOBIAK attaches great importance to product quality and this is clearly reflected by the many certifications our products carry. It is characteristic that these certifications are from world-renowned certification agencies, such as DNV, UL, AFNOR, BSI, etc. In order for one of our products to acquire these certifications (most models have more than one certification), they are checked and tested according to standards EN3-7 or SASO, depending on the country in which the product in question is to be promoted. These tests are conducted in internationally recognised laboratories, such as Apragaz in Belgium, EBETAM in Greece, TESI in Italy, and so on.



These laboratories test our extinguishers on the basis of the abovementioned standards, also using them to put out a fire under controlled conditions, so that our products can be certified according to their corresponding extinguishing capacity.

However, MOBIAK is not content with the abovementioned tests alone. Before sending our products to the respective laboratories for the necessary certifications, we also conduct a range of internal tests at the company's factory in Chania.

Sample tests on each batch of fire extinguishers are conducted at random, so we can be sure that the final product delivered to our customers meets the specifications that MOBIAK sets for its products.

The tests that take place at our factory are carried out in our new test laboratory, a part of the Quality Management Department, in accordance with standard EN3-7. Among other things, control checks are made of fire extinguisher charging mechanisms and discharge times, and individual components are inspected on delivery.

Since the continual improvement and ongoing development of the company are part of management's strategic plans, the Quality Management Department has, in line with this approach, added an extra range of tests that are carried out in one of the most modern controlled fire suppression facilities worldwide, at MOBIAK's manufacturing plant in China (Image 2).



Image, 2

Category A (ordinary organic solid combustibles) and category B (flammable liquid fuels) fire tests based on the abovementioned standards are conducted here in this facility. A feature of the test area is that it can be kept fully closed off even for category B materials, so that tests are not influenced by external factors (wind, humidity, temperature). This means that fire test performance depends entirely on the fire extinguisher and the operator (Image 3). As can be seen from Image 3, the fire extinguisher operator also has an assistant, to minimise human error during fire suppression testing.



Image, 3

MOBIAK carries out these additional tests of its own volition, and the costs are not passed on to customers. They are conducted solely in order to ensure that our products maintain the highest quality standards and functionality. This is clearly reflected by the certification bodies who acknowledge the first class quality of MOBIAK fire extinguishing equipment worldwide ■



# Health and safety

## in fire extinguisher maintenance

Written by, **Magda Haralambaki**  
Chemical MSc, Department of Quality Assurance

Health and safety during the maintenance work on fire extinguishers starts with the facilities themselves.

The construction of the laboratory must be based on principles of stability and durability, starting with the characteristics of building materials, and including ventilation, lighting, temperature and personnel movement. Moreover, personnel must be provided with the necessary facilities, electrical installations must be adequate and safe, work stations and means of access must also be safe, and all necessary fire protection measures and emergency exit measures must be taken.

It is one of the employer's specific obligations, according to Article 43 of Law 3850/2010 (Ratification of the Code of Laws on Health and Safety of Workers), to formulate a written occupational risk assessment, taking into account the nature of maintenance work on equipment under pressure such as fire extinguishers.

The most important factors to be taken into account in extinguisher maintenance laboratories are:

- Mental stress (noise)
- Inhalation of fire suppression powders
- Electrocutation
- Detachment of fire extinguisher parts with force
- Asphyxiation (CO<sub>2</sub>, or nitrogen)
- Explosion of the fire extinguisher due to high pressure

“ HEALTH AND SAFETY DURING THE  
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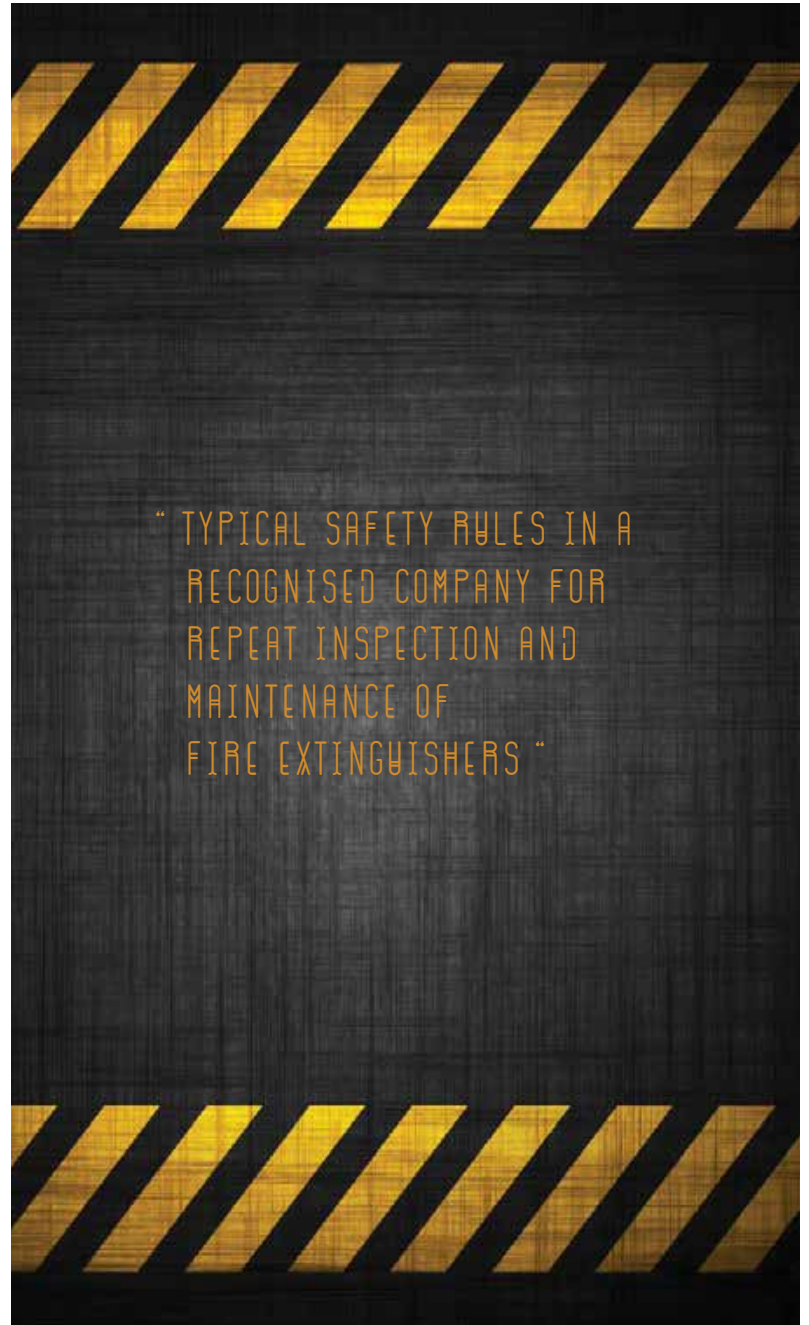
Typical safety rules in a recognised company for repeat inspection and maintenance of fire extinguishers could include the following:

1. Before using any chemical substance, read the instructions and the corresponding Material Safety Data Sheet (MSDS) carefully. Be properly informed of the hazards and necessary precautions that should be taken.
2. Before using production machinery, make sure that you have read the user manual and taken every precaution to avoid accidents.
3. Substances such as extinguishing powder and foam may not be used without the knowledge of the laboratory staff.
4. Avoid direct contact with any chemicals (extinguishing powder or foam). The use of gloves is essential when handling liquid solvents or solid substances. Gloves should be removed immediately once each respective task has been completed.
5. Smoking and consumption of food is prohibited in the production area, in the test laboratory, and throughout the factory premises.
6. Do not work alone in the laboratory or production areas. If for any reason this should be necessary, make sure you have notified a colleague.
7. Follow safe methods for manual handling of loads in the area, especially for the movement of cylinders to their point of use.
8. The assembly and use of gas cylinders for the production of fire extinguishers must be done in accordance with the specifications described in the work instructions.
9. Clothing should include overalls, gloves and safety shoes, as applicable in other areas through which loads such as compressed gas cylinders and fire extinguishers may be transported.

The task of replacing powder in fire extinguishers must be done under controlled conditions in such a way as to avoid dispersal of suspended particulate matter into the ambient environment.

The necessary precautions should include the use of masks to prevent inhalation of particulate matter, gloves for the hands, and protective glasses or goggles for the eyes.

This similarly applies to the inspection and / or refilling of foam extinguishers, where masks should be used to prevent inhalation of fumes, and of course gloves and glasses should also be worn.



In all cases, adequate ventilation is needed to ensure the minimum basic working conditions.

In summary, the main pillars of proper health and safety at work are the following:

- Building installation features suitable for a laboratory include: appropriate flooring, walls, ceilings, toilets, changing rooms, canteen, temperature regulation, ventilation, lighting
- Safe equipment: appropriate tools and machinery, properly maintained and ergonomically designed
- Proper management of issues related to occupational health & safety, according to the specific activity.
- Risk assessment: safe working methods
- Properly qualified personnel ■

# The effects of noise at work

Written by, **Sakis Bodosas**  
Thessaloniki Distribution Centre Manager

**Possible** sources of noise in the workplace may be various items of machinery and all kinds of mechanical equipment, telephones, machine tools, air conditioners, and lastly, human communication. However, one thing is certain, that a relatively uncomfortable environment, will undermine not only the working capacities of employees, but also their motivation to work. It is a particularly important factor within any company, and is related to its accident rate.

The following issues should be mentioned in particular:

- 1) Noise in the workplace causes distraction of workers and thus reduces their concentration.
- 2) The chances of accidents occurring are increased.
- 3) It impairs their capacities and therefore the level of efficiency of workers in performance of their duties.
- 4) Physical fatigue is increased, as is the incidence of headaches and migraines, as well as feelings of anxiety and uncertainty.

- 5) Lastly, there is a risk of loss of hearing for workers suffering daily exposure to high levels of noise over many years.

Taking into account the last two factors, it also appears to be a reason behind frequent absenteeism from work and sick leave.



Of course, the degree of perceived risk to the individual depends on the limits for exposure to noise, where the total exposure over a 24 - hour period should not exceed an average of 80db. Moreover, it depends on the magnitude of the fluctuations and the frequency of the sounds. The frequency affects not only the intelligibility of sound, but also its intensity and capacity to cause damage. As already mentioned, the human ear is most sensitive to frequencies between 500-5000 Hz. They are less sensitive at higher and lower frequencies ■

# Maintenance instructions for fire station equipment

Written by, **Giorgos Theodorakis**  
Mechanical Engineer

**Fire** suppression complexes must be inspected at regular intervals. The need for trouble-free operation in an emergency situation means that regular checks must be conducted to ensure that equipment is in good working order.

We recommend that the annual maintenance plan for fire suppression complexes should include at least one check per month, and one full preventive maintenance inspection should be undertaken per year.

Batteries in internal combustion generators that are part of a fire suppression complex should be replaced as necessary.

Indicatively, the minimum set of maintenance tasks that should be carried for preventive maintenance of fire suppression assemblies would include:

A. Inspection of good operating condition once per month in accordance with the requirements of the specific installation and manufacturer.

- Network pressure test
- Generator diesel oil level check
- Start-up test of diesel generators
- Start-up test of electrical generators
- Check for combustion gas or oil leaks when diesel generators are running
- Check for leaks in pump shaft seals

- Check for water leaks from valves or connection points
- Check pressure switch indicators and operation
- Check battery fluid level
- Check battery charge
- Check pressure tank
- Check indicators on the automated control panel



## B. Annual Maintenance of Fire Suppression Assembly

During the annual maintenance of fire suppression complexes the above mentioned checks and the following tasks should be performed:

- Replacement of diesel engine oil with new, type as per manufacturer's requirements
- Check of cooling system for leaks, and cleaning if there is one
- Check for combustion gas or oil leaks when diesel generators are running
- Check for leaks in pump shaft seals and replace seals if necessary
- Clean air filter and replace if necessary
- Replace fuel filter
- Replace oil filter
- Check for water leaks from connection points
- General inspection of all automated panel board switches and subsidiary circuits
- Test operation of the full installation

On completion of these checks and test measures, the results should be presented in a technical report with respective observations, if any, and it should be signed by the electrical engineer responsible.

The fire suppression system inspection and maintenance report should be kept on record in the company's Equipment Maintenance File ■



# PYROMEDICAL LTD

Written by, Pyromedical team

**PYROMEDICAL LTD** is MOBIAK's retail store in Chania, located in the city centre at 96-98, M. Botsari Street.

The store is divided into two separate exhibition spaces, one with fire fighting equipment sorted by category for easy selection of products by the customer, and a similar space organised along the same lines for the sale of medical and orthopedic items.

Warehouse storage and the oxygen concentrator maintenance workshop are in store, and are equipped with the necessary stock to meet retail needs.

The products are safely and promptly delivered to customers by the store's two drivers with respect and courtesy.

Today, PYROMEDICAL operates under an ISO 9000 quality management system, and is also certified by EKAPTY (the National Evaluation Centre of Quality & Technology in Health) for the commercial sale of medical equipment and home health care supplies. Since 2010, it has been the holder of EKEVYL (now EKAPTY) certification for maintenance of O2 oxygen concentrators.

The following people make up the **PYROMEDICAL** team:

**Emmanouil Svorakis**

The Chairman and owner of MOBIAK SA  
PYROMEDICAL LTD

**Rena Svoraki**

Foreman and founding member of  
MOBIAK SA - PYROMEDICAL LTD

**Vasileios Pentaris**

Customer Service - Fire Extinguisher  
Distribution & Sales

**Dimitra Markaki**

Medical Sales Manager - Accounting Department

**Georgios Droseropoulos**

Sales & Accounting Executive  
Personnel Manager

**Emmanouil Kotronakis**

Accounting Executive

**Valeria Katsoni**

External Sales Representative  
Medical Supplies

**Edward Xhangolli**

Anastasia Xeroyiannakis  
Drivers

Regardless of the type of business enterprise, sales are what count. Sales are the oxygen that our company breathes. They feed the business and provide the opportunity for profit. Despite the fact that they are so important, sales often take a back seat compared to other more "interesting" issues. Innovation, the culture within the organisation, and its efficiency are the keys to success.

To make a sale of a product or a service, the product must first of all be what the customer wants, that is, it must satisfy their needs and desires, and of course, the customer must be willing to pay the asking price.

The sales relationship is expressed by the equation: **Sale = Logical + Emotional Values & Costs**, where the logical value relates to functional benefits and the emotional value is associated with how the customer feels about the relationship with the company and the products or services they offer. Customers have now changed, become more demanding, seeking logical and emotional reassurance in their purchasing decisions. So, to develop and grow a business, you must have customers - but not just any customers. We need customers who will appreciate what the company sells.

The whole team at PYROMEDICAL has invested a great deal of effort to provide the best possible coverage of the needs of a large and very demanding list of customers. Over the last two months, in collaboration with MOBIAK, the company has proceeded with replacement of its entire fleet of oxygen concentrators with new technology, energy saving, quiet running, energy class A units, upgrading our product quality and improving our customer relations in the process.



**The aim of the team is to create a relationship of trust and respect with the customer, as well as providing direct servicing of their needs with high quality products and services.**

On behalf of the PYROMEDICAL team, we promise continuous improvement of our products and services with the strongest focus on the best direct service of our customers and all our associates ■

## ΗΜΕΡΙΔΑ ΣΚΟΛΙΩΣΗ ΣΤΑ ΠΑΙΔΙΑ & ΣΤΟΥΣ ΕΦΗΒΟΥΣ

Η Ορθοπαιδική κλινική του Γ.Ν.Χ σε συνεργασία με την Ιατρική Εταιρεία Χανίων - τον Ιατρικό Σύλλογο Χανίων & την Παγκρήτια Παιδιατρική Εταιρεία διοργανώνουν ΗΜΕΡΙΔΑ με θέμα την Σκολίωση στα παιδιά & στους εφήβους στις **28 Μαρτίου 2015** και ώρα έναρξης **10:00 π.μ.** στον συνεδριακό χώρο του ξενοδοχείου "ΑΚΑΛΙ HOTEL" στην οδό Κισσάμου 55.

**ΟΜΙΛΗΤΕΣ:**

κ. ΑΝΑΣΤΑΣΟΠΟΥΛΟΣ ΙΩΑΝΝΗΣ:  
ΣΥΝΤΟΝΙΣΤΗΣ ΔΙΝΤΗΣ ΕΣΥ Β' ΟΡΘΟΠΕΔΙΚΗΣ ΚΛΙΝΙΚΗΣ Γ.Ν. ΠΑΙΔΩΝ "Η ΑΓΙΑ ΣΟΦΙΑ"

κ. ΚΡΑΛΛΗΣ ΠΑΝΑΓΙΩΤΗΣ ΧΕΙΡΟΥΡΓΟΣ:  
ΔΙΝΤΗΣ ΕΣΥ Β' ΟΡΘΟΠΕΔΙΚΗΣ ΚΛΙΝΙΚΗΣ "Η ΑΓΙΑ ΣΟΦΙΑ"

**ΣΥΝΤΟΝΙΣΤΗΣ:**

κ. Χαράλαμπος Κωνσταντουλάκης  
ΕΠΙΜΕΛΗΤΗΣ Α' ΟΡΘΟΠΕΔΙΚΗΣ ΚΛΙΝΙΚΗΣ Γ.Ν.Χ

**ΧΟΡΗΓΟΣ ΕΠΙΚΟΙΝΩΝΙΑΣ: MOBIAK A.E.**



ΟΡΘΟΠΕΔΙΚΗ  
ΚΛΙΝΙΚΗ Γ.Ν.Χ.

ΙΑΤΡΙΚΟΣ ΣΥΛΛΟΓΟΣ  
ΧΑΝΙΩΝ

ΙΑΤΡΙΚΗ ΕΤΑΙΡΕΙΑ  
ΧΑΝΙΩΝ

ΠΑΓΚΡΗΤΙΑ  
ΠΑΙΔΙΑΤΡΙΚΗ  
ΕΤΑΙΡΕΙΑ

The Chania General Hospital Orthopaedic Clinic, in cooperation with the Medical Society of Chania, the Medical Association of Chania and the Pan-Cretan Paediatric Society, organised a day workshop on scoliosis in children & adolescents, starting at 10:00 am, on March 28, 2015. The conference was held at the AKALI HOTEL, 55, Kissamou Street.

**SPEAKERS:**

MR IOANNIS ANASTASOPOULOS:  
NHS COORDINATOR AND DIRECTOR OF THE 2nd ORTHOPAEDIC CLINIC AT AGIA SOFIA CHILDREN'S HOSPITAL

MR PANAGIOTIS KRALLIS SURGEON  
& NHS DIRECTOR OF THE 2nd ORTHOPAEDIC CLINIC AT AGIA SOFIA CHILDREN'S HOSPITAL

**COORDINATOR:**

Mr Haralambos Konstantoulakis  
ORGANISED BY THE CHANIA GENERAL HOSPITAL  
1st ORTHOPAEDIC CLINIC  
MEDIA SPONSOR: MOBIAK SA

CHANIA GENERAL HOSPITAL ORTHOPAEDIC CLINIC  
CHANIA MEDICAL ASSOCIATION  
CHANIA MEDICAL SOCIETY  
PAN-CRETAN PAEDIATRIC SOCIETY

# Some advice from the fire service

**Written by, Stratos Koronis**  
Mechatronics Engineer MSc, Exports Department, Mobiak Fire

- Do not run power cables under rugs, carpets, etc. They can become worn without your noticing or create a short circuit fire hazard.
- Do not hammer nails into a wall anywhere without being sure where the electrical cables are routed. There is a danger of electrocution.
- Be careful when you disconnect a device from the power supply! Do not touch the bare pins of the plug, because there is the possibility that current may accumulate in the device, and could even prove fatal.
- Avoid hanging mirrors over fireplaces, or near heaters, etc. They act as points of attraction to people, so that they may get too close without noticing. As a result, clothing could catch fire.
- Do not put wire or aluminium foil on electrical fuses because it is potentially dangerous.
- When using cleaning fluids on clothes, floors, devices, you should be aware that they may be flammable. Do not use matches, cigarette lighters or power switches if there may still be fumes from these fluids in the atmosphere.
- Remember that children are excited and impressed by a lighted fire, and may find it attractive as something to play with without being aware of the dangers.
- Do not let children play with matches or cigarette lighters, or play with toys that run on electricity without supervision.
- Before leaving home, check to make sure that no electrical appliances have been left on, and no pots or pans have been left forgotten on an open hot plate.
- Place rubbish in the specially designed containers on the pavement and make sure the lid is properly shut. It is very important that they are placed far away from fire hydrants.
- At the moment, there are no regulations requiring you to keep a fire extinguisher in the house. But it might well prove very useful in a difficult moment. If you buy one, read the instructions and follow them carefully. If you do not understand how to operate it, ask for information at the nearest fire department or contact MOBIAK.

## For residences in or near forested areas

### Choosing the 'right' location from a fire safety point of view

Before you go ahead with buying land to build your home, consult your local authorities about the fire protection measures in place in the area that interests you.

Check that street names are clearly signposted and that house numbers can be easily seen from the street, so that firefighters can locate your house.

Bear in mind that where trees, grasses and shrubs in the surrounding grounds are very close to the house, the building is in much greater danger from the start, and it will be much more difficult for firefighters to protect it in case of a forest fire.

Check your land from the point of view of fire safety. Your house should be located on the flattest part. This is because a flat location is always safer than one on an incline.

## Design and construction of fireproof buildings

Houses with wooden roofs are more likely to be destroyed in a forest fire, because they are more easily ignited. Roofs should be made of non-combustible or fire resistant materials.

In preparing the plans for your home, take steps to ensure that sparks from a fire breaking out in adjacent forestland cannot penetrate the inside of the house, and vice versa, that a spark from the inside cannot reach any wooded areas.

Outer walls should be constructed entirely of fire resistant materials. It is also very important to keep any kind of flammable vegetation, wood piles and building debris away from walls.

For greater safety, cover all the chimneys, the outer surface of lofts and attics, and basement ventilation ducts with special non-combustible wire mesh.

You can also protect the outside of windows and glass doors by installing shutters or balconies from non-flammable materials, and curtains made of fire resistant materials can strengthen protection indoors.

## Landscaping according to fire safety rules

Create a fire break around your home and minimise the quantities of combustible materials in direct proximity to the building. This does not mean that the landscape around the house needs to be completely barren. Some plants are known to be more resistant to fire than others.



If there is grass around the house it should be kept short, and flower beds can be created to plant flowers and vegetables.

In most areas, it is advisable that the fire protection zone around the house should be at least 10 meters wide. However, when the ground is sloping, depending on the steepness of the incline, the width of the fire protection zone should be extended.

Stacks of firewood should be positioned at a safe distance from the house, outbuildings, and generally well away from anything flammable. Sparks from a forest fire can ignite the wood, resulting in the whole house going up in flames.

Avoid burning rubbish in incineration furnaces or drums in the countryside, especially in the summer months, because this could create sparks that can be carried by the wind, causing forest fires.

Your home should be equipped with smoke detectors, and a number of alternative exit routes on all levels, in order to avoid being trapped in case of fire ■



# How can the public be protected against fire

Written by, **Stratos Koronis**  
Mechatronics Engineer MSc, Exports Department, Mubiak Fire

**Fires** cause enormous damage, human and material, spreading disaster not only to individuals and families but to entire communities. Fires cause property damage the actual costs of which are very difficult to measure accurately, but the primary concerns are the casualties (injuries and death).

Despite the development of mechanical means and the establishment of more fire service departments in our country, the risks from fires persist, creating an obligation to learn how to deal with them, or even better, to know what to do to prevent them. It's easier to prevent a fire than to put one out.

According to the Fire Service statistics, the main causes in our country over the last decade are the following:

- Cigarette butts
- Naked flames
- Incandescent surfaces
- Electrical power sources
- Sparks
- Natural phenomena/chemical reactions
- Explosions/combustible gases
- Acts of terrorism
- Liquid fuels

From this data it is clear that a tiny percentage are due to unforeseen events, while all other incidents were caused by human actions or negligence.

" IT'S EASIER TO PREVENT A  
FIRE THAN TO PUT ONE OUT "

## Direct actions if a fire breaks out

You should be aware that fire spreads rapidly, multiplying itself 50 times over for every 8 minutes it carries on burning. It is therefore important that if a fire breaks out, you should keep calm and immediately take action to fight it before it spreads.

The most important stage in a fire is the first few minutes after the event. It is therefore of critical importance that the Fire Department or the Fire Safety Team are notified right away and are able to intervene as soon as possible. Actions to take when a fire breaks out involve, in order of priority, the following:

- Rescue of people who are trapped or otherwise in danger
- Protection of adjacent installations, buildings or objects which are not affected by the fire
- Attempt to stop fire spreading from material already on fire and preserve as much as possible.

## Actions to take as soon as you become aware of a fire in the vicinity.

1. Keep calm and look for a way to put out the fire as quickly as possible. Use the right method to put the fire out, that is, the correct means of intervention and a suitable extinguishing agent, which everyone should be properly trained to use:

- In the case of an LPG (liquid gas) fire, turn off the stopcock immediately
- In case of a liquid fuel fire, foam should be used to put it out, not water
- In case of fire in an area supplied with electrical power, carbon dioxide or powder should be used to extinguish it, not water, and the electricity supply should be cut immediately.
- Remove flammable materials from the site of the fire.

2. Immediately notify the fire prevention team and/or the Fire Department by calling 199, telling them the exact location of the fire, the type of combustible materials if known, and whether any people are trapped or in danger.

3. Leave the building, closing but not locking doors and windows as you go in order to restrict the flow of incoming fresh air and slow down burning.
4. Wait for the fire team and tell the person in charge anything you know that might be relevant.
5. Follow the instructions given to you by the fire prevention officer.



## If you are trapped by fire do not panic

1. Close the doors and windows of any room where fire has broken out, and seal the cracks with sheets, curtains or other similar fabric items (if possible, dampened), to reduce the inflow of fresh air.
2. Move to a room on the outer side of the building, go to the window and try to attract attention by calling for help.
3. If the room is filled with smoke, lean out of the window, unless smoke and flames are coming from the floor below. In this case, lie on the floor as far away from the flames as possible and try to move out by crawling towards a safe exit or a safe location where you can wait for help from outside.
4. If you are forced to try to escape before help arrives from outside, make a rope from bedding, curtains, sheets or any other such relatively strong materials, tie one end to a fixed point or a heavy piece of furniture and try to climb down, or move to an area where you can be rescued, taking care to avoid any power lines.
5. If your clothes catch fire, do not start running. Fall to the ground, and start rolling over and over to put out the flames, taking care to cover your face with your arms for protection.
6. If you burn yourself anywhere on your body run the area under cold water for 5-10 minutes as soon as possible in order to absorb part of the heat and ease the pain. In the case of more serious burns you should see a doctor ■

# Sales in times of recession

Written by, **Manolis Stavroulakis**  
Sales Department, MOBIAK fire

**The** most important question in any business is how to win sales in a recession.

In addition to the dynamic strength of the products sold by the business, an important role is clearly played by price, by the personnel involved in marketing the product, and also by other means of promotion with indirect impact such as advertising. Staff involved in sales promotion need special individual techniques and skills to cope with their role during a time of economic crisis.

Talent, honesty, risk assessment and problem solving skills, ability to create a comfortable climate for open communication and development of creative proposals for customers all form part of these techniques.

At the same time, during a recession, many companies prefer to cut areas such as advertising to reduce their costs. But strong promotion of products aimed at establishing the brand (always in combination with quality of materials) may lead to increased sales and market share, as history has often demonstrated worldwide.

Brands which are regularly advertised or brands which have been used before in the past are an important factor for consumers seeking to reduce the risks of purchase. Furthermore, studies have shown that advertising gives meaning and quality to the product name and increases its value, in a manner understood by consumers.

The reason why a strong brand can be judged by its market share is that there is a close correlation between market share and profits. Of course, there are always exceptions.

The above factors combined with the quality, price and reliability of the product can lead to a certain sale on the part of the business and provide the final recipient of the product with security.

Those who choose not to make cuts in advertising or even increase their advertising spending, either aggressively or more prudently, may acquire greater market share and enjoy greater profitability in periods following an economic recession.

Lastly, marketers who choose to increase advertising expenditure sensibly do not create greater losses for their businesses than those who choose to cut their advertising budgets.

It can be concluded therefore that a prudent or aggressive advertising strategy may indeed increase market share and produce greater profits for the company in times of economic crisis ■

## Logic puzzles

Written by, **Ioannis Bastakos**  
Sales Department, MOBIAK fire

The aim is to find out the date of Cheryl's birthday.

The problem: Albert and Bernard have just become friends with Cheryl, and want to know when her birthday is. Cheryl gives them a list of ten possible dates:

15th May, 16th May, 19th May  
17th June, 18th June  
14th July, 16th July  
14th August, 15th August, 17th August

She then tells Albert and Bernard separately the month and day of her birthday, respectively.

Albert says:  
I don't know when Cheryl's birthday is, but neither does Bernard.

Bernard says:  
At first I didn't know when Cheryl's birthday was, but now I do.

Albert carries on:  
Then I know when Cheryl's birthday is too.

Can you work out when Cheryl's birthday is?

## EINSTEIN'S RIDDLE

Legend has it that this riddle was solved by Einstein in 90 minutes, but 98% of the population can't solve it.

There are 5 houses, painted five different colors. In each house lives a person with a different nationality. These five owners drink a certain type of beverage, smoke a certain brand of cigar and keep a certain pet. No owners have the same pet, smoke the same brand of cigar or drink the same beverage.

THE QUESTION IS: WHO OWNS THE FISH?

Hints:

1. The Englishman lives in the red house
2. The Swede keeps a dog
3. The Dane drinks tea
4. The green house is on the left of the white house
5. The green house's owner drinks coffee
6. The person who smokes Pall Mall rears birds
7. The owner of the yellow house smokes Dunhill
8. The man living in the middle house drinks milk
9. The Norwegian lives in the first house
10. The man who smokes Blends lives next to the one who keeps cats
11. The man who keeps a horse lives next to the man who smokes Dunhill
12. The owner who smokes Bluemasters drinks beer
13. The German smokes Prince
14. The Norwegian lives next to the blue house
15. The man who smokes Blends has a neighbour who drinks water.



# 3 ways to increase business revenue

Written by, **Sophia Psilaki**  
Sales Department, MOBIAK fire

If we examine any business, there are essentially only three ways to increase its revenues. Let's look at the 3 possible ways to increase our business revenues:

## 1. Increase the number of customers

This is where most of us would focus our attention. It is the most obvious, but also the most difficult way to raise revenue, because we are talking about new customers. It is much more difficult to acquire a new customer than to make a repeat sale to an existing one.

We can bring new customers to our company through advertising. There are several means of advertising available: press, radio, TV, the internet. It is necessary to reach out to a professional advertiser, although the costs may be a prohibitive factor acting against this choice of method.

Collaboration is a powerful tool. If one person has a DVD to sell and another has books, then they may be able to sell to each other's customers. Or they may consider putting together a joint product (book + DVD) and promoting it to their combined list of customers. A civil engineer can work with a mechanical engineer, an accountant with a lawyer and so on. To increase your conversion rate, it is necessary to engage in continuous testing of the techniques you use to attract new customers in order to achieve optimal results. And once we bring in the customer, this is not the time to disappear. It is good to remind our presence at regular (or better yet at irregular) intervals, so that when the customer needs similar goods or services in the future they will come to us and not go to a competitor. Somewhere here the need to create the list is born.

## 2. Increasing the volume of transactions per customer

We can make the effort to ensure that the customer spends more money with us every time they come to our office or store.

The most obvious way to increase the volume of sales transaction is to increase prices. Yes, you heard correctly, increase prices. I understand that in the year 2015 it is not that easy to raise prices. Furthermore, I believe that most services are undervalued. If the service offers significant added value to the customer and they are aware of it (or if you remind them of the fact often) then they will usually have no problem paying more not to lose this value. We can, where feasible, run a test to see if indeed there is an overall profit to be gained from an increase in prices. The same applies to products where it is much easier to test a range of prices to find the optimum level.

There is also the up-selling technique. That is, we can offer the customer greater value for a proportionately higher price. Something extra could be added to a basic service to justify increasing the price.



## 3. Increasing the number of transactions per customer

We can try to bring our customers into the business as often as possible. If we provide products that are consumable, they will therefore need replacement. For example, if we sell barbecues, then we can also sell charcoal. The same thing applies to services. If the service you offer is a one-time occurrence as it stands, it may in fact be possible to reorganise it so that a repeat service can be offered in some form. Instead of a company selling an online service or programme as a one-off product, access could be granted on a renewable annual or six-monthly basis. This could be done either by selling user licenses or by providing access to a site where the programme is uploaded.

Of course, there is no need to let the customer disappear. It is wise to keep in touch with customers and to remind them of your presence at regular intervals, for example, by sending informational material about your business. That is, providing you do not become an annoyance.

These are just a few ideas on how you can increase the revenue of your business. Think creatively, and take risks. Theories have their place, but action has to be taken. Trying one of the above techniques, or even implementing another technique you believe in, may bring about positive results ■

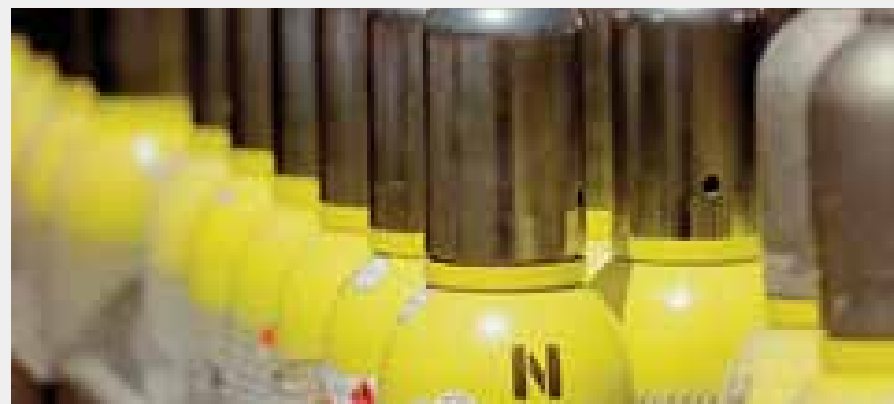
# Distribution centres & transportation costs

Written by, **Tasos Tzagaridis**  
Distribution Centre Manager (Central & Eastern Crete)

The greatest part of the costs associated with compressed gas cylinders is not their market price per se, but the cost of transport. The logic is simple, the more a cylinder moves around, the more money it earns for the business. Unfortunately, increased movement is tantamount to an automatic increase in transport costs. The right balance of the above can contribute significantly to the profitability of a compressed gas cylinder.



MOBIAK, after 38 years of experience in the medical and industrial gases industry, with the aim as always of providing the best service possible for its partners, has established another **distribution centre in Heraklion, Crete**. Its aim is delivery to and collection from the premises of its partners in Central and Eastern Crete of all types of equipment, firefighting or medical, including compressed liquids and gases, thus eliminating transport costs for its customers.



Especially in the case of pressurized gas cylinders, which apart from anything else are considered to be a particularly hazardous load, deliveries and collections are made at no charge to the company's partner organisations ■

# MOBIAK'S business activities in the Balkans

Written by, **Giannis Christakis**  
Mechanical Engineer, Balkan Area Manager

**MOBIAK** in cooperation with the headquarters of Albania's Fire Brigade Service, organised a training seminar on the subject of: Fire suppression systems and new types of fire extinguishers.

The seminar was held on **17 March 2015 in Tirana**, and was supported by training material and video presentations by MOBIAK's team of engineers.



The seminar attracted a great deal of interest, and was very well-attended. It was attended by the regional chiefs of Albania's Fire Service, as well as fire inspectors and all the staff at the Albanian Fire Service Headquarters. Representatives of Albania firefighting equipment companies, and security managers from the Albanian banks.

## MOBIAK attends international exhibition in Kosovo.

MOBIAK, in cooperation with its representative in Kosovo, took part in an international exhibition held on **6 - 9 May, 2015 in Pristina**. The exhibition was a success, and there was a great deal of interest shown by companies visiting the stand. There was also great interest in MOBIAK's fire suppression systems, primarily CO<sub>2</sub> systems, ZEUS kitchen systems, petrol filling station systems and Aerosol generators.

During the exhibition, MOBIAK closed an agreement with a chain of supermarkets worldwide for the marketing and sales of specific MOBIAK products.

Whilst the exhibition was in progress, a seminar was organised at the University of Pristina Fire Safety Engineering Department ■



# MOBIAK attends sector exhibition in Sofia

Written by, **Panos Krikos**  
Production & Administration Engineer MSc, Exports Department, MOBIAK Fire

**MOBIAK** being a well-established force in the fire protection sector in neighboring **Bulgaria**, participated with great success, in collaboration with its exclusive distributor and representative, in the largest fire safety and security exhibition in the country. The **SECURITY EXPO** exhibition was held over the period **19 March 2015 to 22 March 2015** at the Inter Expo Center in Sofia.

Great interest was shown by visitors in MOBIAK's new range of environmentally-friendly foam fire extinguishers, while the new certified fire suppression systems attracted a lot of attention.

Contacts were made with MOBIAK's wholesale representatives from all over Bulgaria, and fruitful discussions were held regarding specific projects with engineering contracting companies regarding coverage of their needs for fire suppression equipment, primarily permanent water systems, CO<sub>2</sub> or IG-541 (Inergen), as well as ZEUS Kitchen Systems.



" PARTICIPATED WITH GREAT SUCCESS  
IN COLLABORATION WITH ITS  
EXCLUSIVE DISTRIBUTOR AND  
REPRESENTATIVE "

In recent years MOBIAK has consolidated its position in the Balkan peninsula, and now covers the larger part of the market and the corresponding demand for fire fighting equipment. The effort to maintain its leading position continues unabated, and the company's sights are now set on west European countries and the Middle East ■



# MOBIAK attends an exhibition in Iran



Written by, **Michalis Kapetanakis**  
Electrical Engineer & Computer Engineer, Exports Department, Mobiak Fire

For the first time in its history, MOBIAK had its own 30 m2 stand at the world's largest exhibition in the oil industry, the Iran International Oil, Gas, Refining and Petrochemical Exhibition 2015, held in Tehran, Iran, from 6 to 9 May 2015. The participation of the company in the exhibition and the many visitors to the stand confirm MOBIAK's successfully established presence in a difficult and demanding market such as Iran.

The exclusion of Iran commercially and otherwise by the US and a number of other countries, makes the Iranian market very fertile ground for a Greek company such as MOBIAK with great advantages due to competitive pricing, prompt delivery time, product quality and certifications.

The exhibition included new products from MOBIAK's catalogue, and presentations of its new permanent firefighting systems, in which visitors showed particular interest. During the exhibition, educational seminars were held, mainly on HFC-227 systems, fixed CO2 or IG-541 systems with pneumatic tube type detection for a variety of applications, and UL/FM certified fire suppression complexes represented by MOBIAK.

The outcome of the exhibition was undoubtedly a successful one, and represents a significant investment in the future presence of MOBIAK in Middle Eastern countries, and particularly the Iranian market ■



Written by, **Panos Krikos**  
Production & Administration Engineer MSc, Exports Department, MOBIAK Fire

I would like to thank MOBIAK for providing our NGO with the opportunity to use Smoke Detectors approved for distribution in France (NF EN 14 604) equipped with a 9V battery, free of charge.

## Smoke Detector



Donation by MOBIAK of autonomous smoke detectors to the Volunteer Fire Association of France "Firefighters Without Borders"



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Association régie par la loi du 1<sup>er</sup> juillet 1901 J.O n°7 du 13 février 1901 • N° Siret 421 447 065 00108 / APE 9499Z  
Agréée Sécurité Civile Internationale et Service Civique • Médaille d'Ordonnance des Affaires Étrangères





# MOBIAK at Interschutz 2015 Hanover, Germany

Written by, **Motaxas Drakopoulos**

Production & Administration Engineer MSc, Exports Department, MOBIAK Fire





**BIAK**®  
S.A.  
FIGHTING EQUIPMENT  
INDUSTRIAL AND MEDICAL GASES  
FIRE FIGHTING EQUIPMENT - HOME CARE





The event of the year in the fire protection sector could not be other than this year's Interschutz. The exhibition we were waiting for with such anticipation for the last five years was held in **Hanover, Germany from 8 to 13 June**, and was acknowledged to be an unprecedented success. More than **1,500 exhibitors from 51 countries**, and **approximately 157,000 visitors** make this year's Interschutz the most successful firefighting equipment exhibition worldwide.

Our successful presence demonstrated the forward dynamic of our the company once again, and further consolidated MOBIAK as a leading fire-fighting equipment manufacturer on a global scale. The exhibition itself and our interaction with so many thousands of people filled us with fresh ideas, and you will soon find a lot of new and innovative products in our catalogue enriching our product range significantly.



MOBIAK certainly could not have missed this exhibition. Our impressive presence attracted thousands of visitors to our stand and it was a great pleasure to talk to them. We saw many old and new friends, associates and partners. It made us very proud of what we have been able to accomplish so far, and armed us with even more determination to continue to build on our success in the future. **It is worthy of note that MOBIAK was the only Greek company to participate in the exhibition as an exhibitor with its own stand.**



“ MOBIAK WAS THE ONLY GREEK COMPANY TO PARTICIPATE IN THE EXHIBITION AS AN EXHIBITOR WITH ITS OWN STAND ”





“ OUR STAND ATTRACTED THE ATTENTION OF THOUSANDS OF VISITORS AND IT WAS A GREAT PLEASURE TO TALK TO THEM “

In conclusion, for all of us were fortunate enough to enjoy the exhibition experience, our anticipation is building for the next Interschutz and we are already envisaging of our next presentation which we hope will be even more impressive.



Apart from the next Interschutz, it is already a foregone decision that we should participate in many more exhibitions worldwide in the coming months, signaling a new outward looking era that will promote the further development of our company. See you next time... ■











# M OLIVE OIL BY MOBIAK S.A.

Written by, **Kelly Leousi**  
Marketing Department - Agricultural Products

**MOBIAK** adds another building block to its business activities. We are pleased to present you our new activity which has its focus on quality traditional Cretan products.

We have actively entered the export market for extra virgin olive oil & organic extra virgin olive oil in specific countries including Sweden, Turkey, Qatar, and Belgium. At the same time actions are underway with a number of our partners who are actively involved in the representation of MOBIAK in the firefighting and medical products sectors.

Our company gives you an opportunity to taste the quality and flavours of the Cretan land through its exceptional olive oil.

“M” Olive Oil BY MOBIAK is produced in western Crete from varieties rich in organic nutrients cultivated on land belonging to the Svorakis family. Based in Crete, we specialise in the marketing of high quality olive oil products. In Crete, the intensive sunshine, fertile soil and general climatic and soil conditions favor the production of the most famous olive oil in the world. Meanwhile, generations of knowledge and passion devotion by the Cretan people for olive oil have contributed to its excellent quality.

We aim to continue our efforts, take you into a world of diverse traditional Cretan flavours, with an emphasis on quality and authenticity

MOBIAK gives you the opportunity to taste the true tradition of Crete, of varieties delivered from Creta Land.

- Organic Extra Virgin Olive Oil 250ml / 500ml / 5Lt
- Extra Virgin Olive Oil 250ml / 1Lt
- Balsamic Vinegar



Email: [mproducts@mobiak.gr](mailto:mproducts@mobiak.gr) & [info@m-greekproducts.gr](mailto:info@m-greekproducts.gr) - Website: [www.m-greekproducts.gr](http://www.m-greekproducts.gr) - Tel: +302821063222, + 302821066281

## The History of the Olive

The history of the olive and its oil goes back centuries. The olive tree reflects thousands of years of Greek history and tradition. According to mythology, the goddess Athena gave two gifts to the ancient Greeks. She gave him wisdom, and the olive tree as source of wealth. The story begins in prehistoric times, as evidenced by the excavation of three-legged clay cooking pots dating back 4,000 years.

The winners of the Olympic Games received a wild olive branch. For the Greeks, the olive was inextricably entwined with social and economic life. It had an immediate connection with the culture, art, poetry, habits, manners and customs, tradition and religion. It was connected with life and death. The tree was considered to be sacred and was carefully protected. The olive branch is a symbol of peace, victory, friendship between peoples and wisdom.

“ OIL WITH EXCELLENT FLAVOUR AND HIGH NUTRITIONAL VALUE. IT IS A KEY INGREDIENT IN ALL THE BEST DIETARY PLANS ”

## The Mediterranean Diet

The Mediterranean diet is a recommended daily diet, irrespective of sex or age, and includes olive oil, red meat, plenty of fish, a lot of pulses, cereals, vegetables and fruit, as well as potatoes, bread, cheese and yoghurt. Olive oil is very healthy, it can be used in all foods and is recommended by all nutritionists. It is no more fattening than other oils, since it has the same number of calories (9 calories per gram). For a healthier dish, oil should be added towards the end of cooking.



## Organic Produce

Organic farming is an environment and human-friendly alternative, which respects nature and makes a positive contribution to the quality of life.

It helps to “detoxify” the environment from toxic substances by which conventional agriculture has burdened ecosystem. It relies on the exploitation of natural resources and agricultural production through natural processes that maintain soil fertility. The use of natural fertilizers with careful selection of appropriate plant and animal material, the use of renewable energy and the combating of diseases by biological methods, are elements that contribute to environmental protection.

Undoubtedly, organic products have a higher nutritional value than conventional since they have a higher content of natural sugars, minerals, trace elements and lower water content. They also have a higher concentration of vitamins and antioxidants. The taste is more complete and full-bodied and largely maintain their aroma.

**In order for a product to be classified as organic it must satisfy very specific conditions, both at the farming and cultivation stage, and at the stage of processing and standardising production.**

## Extra Virgin Olive Oil

Oil with exceptional flavour, high nutritional and dietary value, it is a key element of human nutrition since the fatty acid composition of olive oil is 70-80% monounsaturated, and only 10% polyunsaturated, a relationship resembling that of breast milk.

Paediatric medicine considers olive oil to be a factor capable of promoting a balanced metabolism, as well as brain and bone development.

Gerontologists consider it a necessary ingredient in the diet of older people because of its vitamin E content which slows the aging process.

- It helps reduce “bad cholesterol” (LDL) and helps maintain the level of “good cholesterol” (HDL) in the blood.
- It has a positive effect in preventing blocking of the arteries and therefore in preventing cardiovascular disease.
- It eases digestion and helps in the treatment of duodenal ulcers.
- It contributes to a healthy diet for diabetics and therefore helps balance sugar levels.
- It strengthens the immune system, and helps the proper functioning of the central nervous system.
- It is thought to be beneficial in preventing cancer ■

### POEM BY ODYSSEUS ELYTIS

You rocks and seas I vines and  
golden olives hear what I know  
from all my afternoons.

If I were to travel over every  
land this would still be the only  
one I love.

Extra Virgin Olive Oil  
Golden Choice by MOBIAC SA

M



# Special protective welding gases

## carbon & low carbon steels

Written by, **Marios Lolis**

Chemist MSc, Liquid-Gas Sales Department, Mobiak Gas

**Steel** is the largest, most widely used group of building materials. It accounts for the vast majority of all metals and alloys used in construction.

The term "steel" is used to describe a broad range of iron-carbon alloys. The carbon content can be up to 2%, while the majority of the steel contains less than 1%.

Plain steel with carbon, silicon and manganese as the main interstitial alloying constituents are often called carbon steel or carbon - manganese steel. Steels with small amounts of additional alloying such as chromium, nickel and lead are called low alloy steels. Low-alloy steels are used in a wide range of applications, in low or high temperatures, as well as to withstand friction and wear.

### Welding gas mixture 92% argon - 8% carbon dioxide (CORGON 8)

A good general-purpose shielding gas used as a supplement in arc welding for short-circuit or pulsed spray transfer (thickness range 1-8mm). Quantities of spatter and slag produced from this mixture is low, making it ideal for applications that require minimal post-weld cleaning, saving time and reducing manufacturing costs. The low surface oxidation is also ideal for applications which require painting after welding.

Although suitable for a wide range of thicknesses, caution is required when welding thicknesses over 8mm with arc spray transfer as imperfect sidewall fusion may be a problem. It is used in a wide range of industries, from truck manufacturing to shipbuilding and has proven ideal for applications where the final weld components are powder coat painted.



" THE HIGHER THE CARBON DIOXIDE CONTENT THE MORE SPATTER AND SLAG IS PRODUCED "

MAG welding is the most common welding method for carbon and low alloy steel. The high productivity achieved by this process makes it ideal for construction and production of metal structures and components.



**Welding gas mixture 82% argon - 18% carbon dioxide (CORGON 18)**

CORGON 18 produces welds with very good penetration and sidewall fusion, especially when welding thicker materials (thickness range 4-12+mm).

This reduces the number of defects in the weld, and therefore the number of rejects. It performs extremely well in both short arc and spray welding, and also contains sufficient carbon dioxide for pulse welding.

The high carbon dioxide content helps to address surface contamination such as oil, moisture or rust, reducing the need for pre-weld cleaning, and therefore keeping costs of manufacture down. However, if clean, smooth weld surfaces are required, this mixture may not be appropriate. The higher carbon dioxide content produces more spatter and slag islands, and cleaning adds costs to the manufacturing process. Welding sheet material is also more difficult with this mixture, since the more fluid weld pool creates a danger of perforation.

**Carbon dioxide**

It is suitable for use with various types of flux cored wire. It is often recommended by flux cored wire manufacturers because of its lower price. It provides good penetration even when welding out of position. However, it also produces a less stable welding arc, which can increase the amount of spatter and welding fume. This can lead to an increase in the costs of post-weld cleaning. TIG (Tungsten Inert Gas) welding is less frequently used with carbon steels, and is more often used to weld low-alloy steels where high precision joints and excellent surface finish are more important than high productivity. Since the TIG process uses a non-consumable tungsten electrode, which is susceptible to damage from oxidising gases and is especially sensitive to hydrogen, the gases used for TIG welding these steels are usually limited to inert mixtures.



**Argon**

Argon is the most common gas for TIG welding of both carbon and low-alloy steel because of its versatility (0-5mm thickness range). The welding arc is very easy to ignite, making it ideal for any type of arc ignition system.



**Welding gas mixture 70% argon - 30% helium (VARIGON He30)**

The addition of helium to argon creates a more fluid weld pool which reduces porosity (thickness range 1.6-10+mm). The extra energy provided by the helium also produces deeper penetration and better fusion, improving weld quality and reducing the incidence of defects. Having a more fluid weld pool also helps to achieve faster welding speeds, so that productivity is higher by comparison with pure argon.

**Welding gas mixture 50% argon - 50% helium (VARIGON He50)**

This mixture with an even higher helium content is most suitable for use on materials with greater thicknesses in order to take advantage of the greater amount of energy provided (thickness range 3-10+mm). This improves penetration and fusion, producing welds with fewer defects and is widely used in automatic welding where high welding speeds are the primary concern ■

# Emergency situations in the workplace

**Written by, Antonia Mousouraki**  
 Chemist MSc, Plant Manager, MBK Crete Liquid & Gas Department, Mubiak Gas

**MOBIAK** has always put employee safety first, and its accident prevention policy remains intact, based on the company's successful implementation of the ELOT 1801 Health and Safety at Work Management System for many years now.

At the same time, the workforce and the fire and rescue teams at the factory attend in-house training seminars in first aid, emergency exercises and evacuation, as well seminars organised by the Fire Department. Compliance with health and safety rules by the company's employees is the alpha and omega for uninterrupted problem-free operation over time.

Whilst the company is in operation, it is possible that an emergency situation may arise that requires special handling to ensure the safety of staff and the integrity of the company's facilities.

Such emergency situations might be:

- Fire
- Flood
- Earthquake
- Terrorist attack



Usually, a direct consequence of such emergencies is evacuation of the building.

To handle such incidents safely, it is necessary to have an organised team of employees.

The members of this team must know what to do in such circumstances in order to properly guide their colleagues and as far as possible to avoid any dangers present.

For this reason, the company set up the "Fire Safety Teams" at the plant (the title being based on the fact that the most likely danger is fire), which operate generally as 'emergency incident teams'.

The fire safety team intervenes as necessary in all emergency situations. Its responsibilities are not insured or transferable ■

# New cylinders

Written by, **Marios Lolis**  
 Chemist MSc, Liquid-Gas Sales Department, Mobiak Gas



Factory:  
 Kathiana Akrotiri  
 Chania - Crete  
 phn: 28210 63222  
 fax: 28210 66405

**Aluminium and steel cylinders** for gas and gas mixtures available for sale in a variety of volume sizes. They are compliant with the labelling requirements of current Greek and European legislation, manufactured during 2015, and can be used for the bottling of any gas or gas mixture

Μειωτήρες Πίεσης

**Nitrogen 50lt cylinder**  
200 Bar

Ready for use

**Medical Oxygen 50lt cylinder**  
200 Bar

**Argon/Argon - Dioxide Mixture 50lt cylinder**  
200 Bar

**Industrial Oxygen 50lt cylinder**  
200 Bar

**Nitrogen 10lt cylinder**  
200 Bar

**Argon/Argon - Dioxide Mixture 10lt cylinder**  
200 Bar

**Argon/Argon - Dioxide Mixture 5lt cylinder**  
200 bar with plastic handle

**Nitrogen 5lt cylinder**  
200 bar with plastic handle or metal cap (by arrangement)





# Pharmaco vigilance systems

## for medical gases



Written by, **Antonia Mousouraki**  
Chemist MSc, Plant Manager, MBK Crete Liquid & Gas Department, Mobiak Gas

In this article, we would like to provide you with a little information about pharmacovigilance procedures, focusing on the proper education of our associates (petrol stations, resellers, contractors and transportation companies), which serves to strengthen the effectiveness of the pharmacovigilance system implemented by MOBIAK for all medical gases/gas mixtures that it distributes. All persons handling medical gases are obliged to report any adverse reactions arising in relation to the items they produce or distribute.

The medical gases and gas mixtures produced and/or distributed by MOBIAK are the following:

- Medical oxygen in liquid form - LOX med
- Medical oxygen in gaseous form - GOX med
- Compressed air for medical use
- Nitrogen for medical use
- Nitrous oxide for medical use
- Helium
- Carbon dioxide

Any deleterious or unintended response temporarily associated with the use of the abovementioned medical gases/admixtures is defined as an side effect, which must be reported.

Pharmacovigilance is defined as the procedure for reporting, assessment, understanding and prevention of adverse events.

An example of adverse side effects would be if, after administering medical gases to a patient, he/she presents unpleasant symptoms e.g. feeling generally unwell, dizziness or headache. Other actions that may be reported in the context of pharmacovigilance, although there are no harmful effects on the user, are the following:

- Exposure to medical gases/admixtures during pregnancy/breastfeeding
- Complaints about the product, including complications from use of the medical device
- Medication error or overdose, either accidental or deliberate.
- Incorrect use
- Abuse
- Exposure to medical gas/admixtures in the workplace
- Non-authorized use for the specific symptom

The contribution of our partner/representatives to the reporting of all reactions that come our attention, helps identify the dangers arising from use of medical gases/admixtures so that any faults that may cause harm to patients can be avoided or minimised ■

# Glass Cooler Device

Written by, **Marios Lolis**  
Chemist MSc, Liquid-Gas Sales Department, Mobiak Gas

The Glass Cooler Device uses Liquid Carbon Dioxide suitable for food industry in order to cool instantly a glass with beer or a glass with wine or whatever placed on the cooler.

“ SUITABLE FOR FOOD INDUSTRY IN ORDER TO COOL INSTANTLY A GLASS WITH BEER OR A GLASS WITH WINE OR WHATEVER PLACED ON THE COOLER ”

It can also be used to cool salads and other cold dishes without alter the flavors.

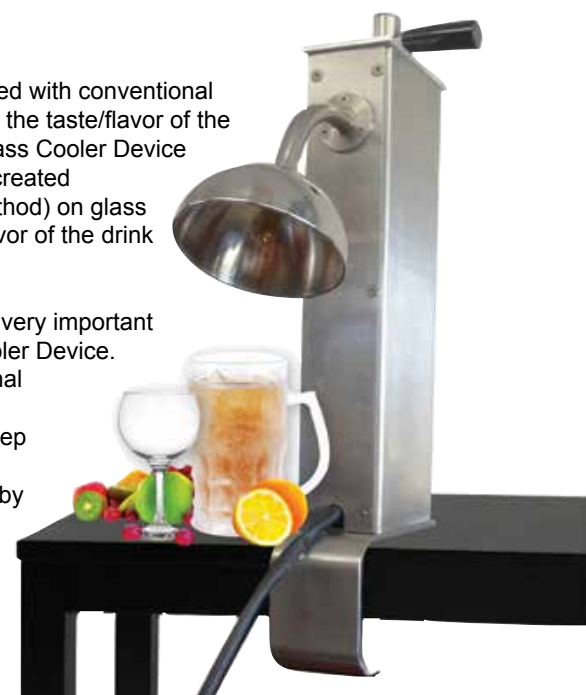
It is very easy to use and its requirements are quite limited. The “eye - catching sleek design” is one of the reasons that allows the product to enter in domestic and professional market (easy mounting on table and bar). Impressive Liquid Carbon Dioxide “Fog Effect” diffused every time someone pulls the release lever of the Cooler.

The benefits of using Carbon Dioxide have to do mainly with quality. Unlike the use of conventional cooling, the absence of water prevents the growth of microorganisms. In this manner, a glass which comes to 40 - 50°C by the dishwasher machine may be cooled and used immediately.

Conversely, the use of conventional cooling requires the glass to be cooled in the freezer for at least 2 hours. These 2 hours in combination with the humidity of cooling chamber in the freezer allows the development and growth of microorganisms.

Another advantage compared with conventional cooling is the zero-effect on the taste/ flavor of the cooling items. Using the Glass Cooler Device avoids water layers of ice (created by conventional cooling method) on glass surface and so the taste/ flavor of the drink (or food) is not influenced.

Economic benefits are also very important by the use of the Glass Cooler Device. The operation of conventional cooling chambers is limited since there is no need to keep the glasses “icy”. Glasses can be made instantly “icy” by the Glass Cooler Device even under the warmest environmental conditions.



# SLEEP APNEA

## Enemy of sleep, destroyer of the waking

Written by, **Charalabos Tsirakis**  
Sales Department, **MobiakCare**

The disorder "sleep apnea" did not officially exist until half a century ago. It was in November 1956 when Dr Sidney Burwell published the findings of the first study of patients with symptoms of excessive and unexplained sleepiness in the American Journal of Medicine. More specifically, he recorded the case of an obsessive gambler who, after abruptly gaining weight, began to fall asleep while playing poker. He went to see a doctor in desperation when happened to have been dealt a full house of two kings and three aces, but fell asleep before he could place his bet!

In the beginning this syndrome was called the "Pickwick Syndrome", after a character in Charles Dickens' novel "The Pickwick Papers" in which the fat boy, Joe, was always falling asleep.

The first explanations of the mechanism behind sleep disorders due to disrupted breathing were provided by a group of French and German doctors in 1965. They identified three types of "obstructive sleep apnea". The causes they identified were thickness of the tongue and throat, and deformities of the nasal septum. The predisposition to sleep apnea increases over the years. Muscle tone is proportionally lost with age, and muscles relax during sleep forming an "obstacle" to breathing.

There followed 15 years of searching for a solution to the problem through surgery, or by the manufacture of some kind of gasket for the mouth or nose. In 1981, however, the Australian doctor Collin Sullivan had a technologically brilliant idea: what if he could help the patient breathe with an "air compressor"? All you needed to do was to reverse the function of a ... vacuum cleaner! Thus, the first "continuous positive airway pressure" device was born, known to us as CPAP. Initially, doctors looked at it with much scepticism, but its technological fine tuning with the use of sensors to identify the beginning of an apnea episode, and the mechanism for progressive air pressure increase, plus the addition of filters and air humidifiers over the last decade, have turned it into the dominant solution to the problem.

" INDIVIDUALS MOST AT RISK OF DEVELOPING THE SYNDROME INCLUDE THOSE WHO ARE SERIOUSLY OVERWEIGHT, AS WELL AS PEOPLE WITH CRANIOFACIAL ANOMALIES "

### Symptoms and Diagnosis

Enough of the history! What might make you suspect you have sleep apnea and lead you to visit a 'Sleep Clinic'? The main symptoms of the syndrome are:

- Snoring
- Drowning sensation during sleep
- Headaches (mainly in the morning)
- Nocturia (nighttime urination)
- Tiredness or sleepiness during the day, often causing much distress, to the point that the patient may be prevented from living a normal life
- Sexual dysfunction, which may culminate in total incapacity
- Cognitive disorders (loss of concentration)
- Psychological disorders, depression, etc.

Individuals at risk of developing the syndrome include those who are seriously overweight, as well as people with craniofacial anomalies (macroglossia (enlarged tongue), reversed bite micrognathia (small jaw), enlarged tonsils, etc.).

The syndrome is more common in men and is adversely affected by the use of alcohol and sedatives, and by body position during sleep. Diseases such as hypothyroidism, myopathies, heart failure, stroke and other neurological syndromes can cause or worsen apnea.

Proper diagnosis of the disease is only made after a 'sleep study' (polysomnogram), where a doctor will connect the patient to ECG and EEG machines, record limb, diaphragm and chest movements, as well as eye movement, oxygen flow, and inhalation and exhalation. If apnea is found, then it is back to the sleep laboratory. This time the patient is asked to wear a special mask and breath through a CPAP device to record the degree of assistance necessary and establish the airway pressure limits. The whole procedure has become common practice worldwide after the publication of the apnea treatment protocol by the American Sleep Disorders Association (ASDS), in July 1995.

Today, of course, there are devices that simplify this process, the so-called pre-sleep lab testing devices, that offer an easy and fast preliminary examination and recording of sleep disorders, and according to the degree of seriousness of the indications, it can be then be determined whether the patient needs to visit a sleep lab for more comprehensive study.





## Complications from sleep apnea

The predominant complications of the disease are:

- Cardiovascular problems
- Respiratory problems
- Accidents
- Neurological & psychological problems

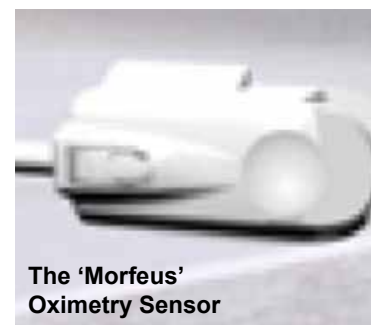
With regard to cardiovascular disease, there is no doubt that it is directly related to sleep apnea syndrome. Many epidemiological studies have confirmed the close relationship between the existence of hypertension, stroke and myocardial infarction. Another extremely dangerous consequence of the disease is the substantial number of often fatal road accidents. It would not be an exaggeration to say that a patient suffering from obstructive sleep apnea, is subject to a recurring barrage of disorders, both hormonal (reduced ACTH and testosterone, increased cortisol, catecholamines, hyperinsulinemia) and neurological (increased sympathetic tone), which can result in complete disruption of mental, spiritual and physical health

## Conclusions

We now know that sleep apnea syndrome has moved from being a rare occurrence, to become a new scourge of our times, affecting a larger and larger percentage of the population. Typically, studies have shown that sleep apnea syndrome plagues 24% of men and 9% of women, aged between 30 and 65 years. The percentages continue to climb, and it has now been determined that 70% of those suffering from obesity also suffer from obstructive sleep apnea, while 35% of the total population snores every night, and 18% suffer from excessive daytime sleepiness. Smoking, alcohol and nasal congestion are aggravating factors. Even more alarming is the finding that apnea is rapidly increasing among children and adolescents, some put the percentage as high as 40% of children!

MOBIACARE offers a complete range of CPAP devices, the **CPAP Morfeus** range, which are automatic and easy to use, ideal for any condition. The new and improved **Morfeus Auto II** which was released recently, provides the user with optional recording and memory storage of nighttime oximetry and pulse rate readings (with the use of optional accessories). This option gives the attending physician a more complete picture of the patient's progress. You can obtain MOBIACARE's respiratory devices from any of our specially-trained partner representatives ■

“ THE MORFEUS AUTO II ENABLES USERS TO RECORD AND SAVE NIGHTTIME OXYMETRIC DATA AND HEART RATE DURING SLEEP ”



The 'Morfeus' Oximetry Sensor



Device type	CPAP		AUTO CPAP	
	Morfeus	Morfeus Soft	Morfeus Auto	Morfeus II Auto
Model				
Data Recording	X	X	X	X
Power cut alarm	X	X	X	X
Leak alarm	X	X	X	X
Ramp	X	X	X	X
Automatic start up/shut down	X	X	X	X
Built-in humidifier	X	X	X	X
Automatic flow adjustment	X	X	X	X
Automatic altitude adjustment	X	X	X	X
Clock & alarm	X	X	X	X

Device type	CPAP		AUTO CPAP	
	Morfeus	Morfeus Soft	Morfeus Auto	Morfeus II Auto
Model				
EPS function (SOFT)		X	X	X
AHI on-screen display		X	X	X
Correct mask placement function		X	X	X
2.8" colour screen		X		X
Service reminder		X		X
Oximetry (provided with optional accessory)			X	X

# Walking in Chania

## Breathing and Athletic Performance

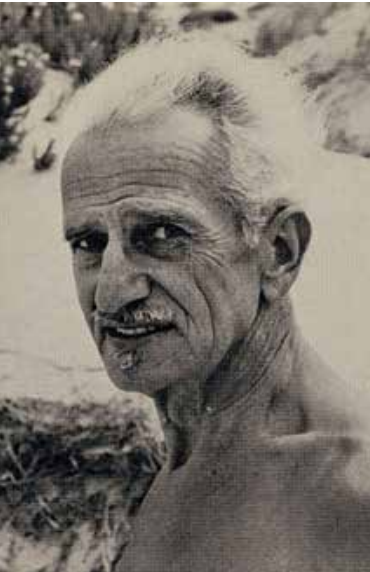
Written by, **Vassilis Binakis**  
Service Department Manager MobiaCare

**Technique** will never replace the importance of workouts and practical training, but all other things being equal, the runner with the best technique will always win. It is necessary to be aware that there are two parameters when we discuss technique, technique in movement, and breathing techniques.

It is not uncommon for coaches and athletes to ignore the need for runners to practice breathing when training, or to say that it is a waste of time because it is something that happens naturally.

The well-known coach Percy Cerutti believed that most athletes do not breathe effectively and that if a well-trained athlete could become accomplished in this, i.e. learn to breathe effectively (in combination with the proper movement technique) they could achieve performances of 10 km in close to 24 minutes.

And you might be surprised to learn that, when he said it in 1958, the 10 km record was 28:30, and it is now 26:17.



We need to breathe properly, because otherwise the lack of proper technique, characteristic of which is shallow breathing and bad posture, means that the amount of oxygen is able to pass into the bloodstream and feed the working muscles is restricted.

Through training you can hope to accomplish three things. The first is to steadily improve your cardio-respiratory system with longer periods of aerobic training than in the past. Then you will be ready to deal more efficiently with the training load at the anaerobic threshold.

Lastly, if you are not in peak training condition, and you work on your breathing, you will have greater endurance under anaerobic stresses.

The effectiveness of your workout will decrease if you limit the amount of air inhaled into the lungs, and this happens if your breathing is shallow.

Shallow breathing leaves an accumulated amount of carbon dioxide in the lungs, and thus limits the amount of oxygen which passes into the bloodstream with each subsequent inhalation. This means that anaerobic processes occur even before it is necessary for the body, so depending on how well-trained you are, you may fail to achieve the result that you potentially could have achieved.

Cerutti told athletes that proper breathing comes from finding the right pace. To better explain this he used the example of swimmers, who use arm strokes to establish rhythmic breathing, given that the liquid element prevents them from taking a breath whenever they want. Cerutti pushed athletes to aim for maximum ventilation of their lungs. Athletes need to concentrate in order to breathe rhythmically and at the same time fully exhale the air from their lungs. During an aerobic run breathing should be in six stride cycles ■

# Orthopedics or orthopaedics?

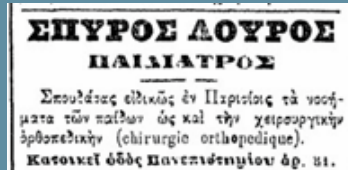
Written by, **Vasileios Simandirakis**  
Sales Manager, MobiaCare



The war between 'Ορθοπεδικός' and 'Ορθοπαιδικός' (the Greek equivalent of 'orthopedic' versus 'orthopaedic' specialist) broke out late last century. Until then, there was no intense controversy, since most doctors put 'Ορθοπεδικός' (Orthopedic Surgeon) on their name plates, dictionaries used 'ε' only, university professors taught 'Ορθοπεδική' (Orthopedics) and so on. However, some lecturers attending international conferences noticed that some of their Anglo-Saxon colleagues not only preferred the diphthong in the English form of the word (a majority favouring 'orthopaedics' and not 'orthopedics'), but some Anglo-Saxon orthopaedic doctors' associations alluded to the Greek words, "orthos" and "paidion" from which, as we shall see below, the name of their specialty had been coined in the 18th century.

Moreover, it seems that there were some suggestions from Anglo-Saxon orthopaedic specialists that the hard-to-understand word of Greek origin - 'orthopaedics' be replaced with something more precise and easily understood by the average English-speaking Anglo-Saxon person, such as 'bone surgery', in the manner seen or proposed in other fields from time to time, (e.g. water science, instead hydrology). Accordingly, certain "nationally minded" orthopaedic specialists felt that in the Greek language "ορθοπαιδικός" should be used so as not to be seen to be conceding the argument to those foreign language speakers seeking the de-Hellenisation of the international term. They put the proposition to the Hellenic Association of Orthopaedic Surgery & Traumatology (HAOST). The HAOST sought the opinion of three eminent linguists (Bambiniotis, Christidis, Petrounias). The first two were in favor of using 'αι', the third in favor of writing with 'ε' alone, so by a vote of 2-1 the Hellenic Association's title (in Greek) is now formally the "Ελληνική Εταιρεία Χειρουργικής Ορθοπαιδικής & Τραυματολογίας" and it uses writing 'αι' in all of its written texts. Thus about half the doctors embraced the new proposal, and rushed to change their name plates, either because they were persuaded by the arguments of the supporters of 'Ορθοπαιδική' or because they were indifferent to secondary issues such as spelling.

However, not everyone was convinced by the arguments of the supporters of 'αι' (faithful to the older spelling). The supporters of 'ε' put up fierce resistance, with the result that the war between 'Ορθοπεδικός' and 'Ορθοπαιδικός' has not ended with the easily-won predominance of the 'αι' supporters, who had institutional weapons on their side, but it is still carrying on today.



The word created in French was Orthopédie, the invention of physician Nicolas Andry (1658-1742), professor at the University of Paris, who in 1741 used it as the title of his treatise on the prevention and treatment of physical malformations in children, coining the term to describe attempts to correct physical deformities, especially in children. As Andry himself says in his prologue "As for the title, I have created it from two Greek words, 'ορθός' (orthos, correct) and 'παιδίον' (paidi, child)." This is why it uses é (with an acute accent) which French language gives to words of Greek origin in place of 'αι', e.g. pédagogie (fr) = παιδαγωγική (gr) = pedagogy (en). Similar thinking lies behind the English language term orthopaedics (although the simplified US English form 'orthopedics' is as strong or maybe stronger), and also the German 'Orthopädie'.

As far as the Greek language is concerned, the term arrived in the 19th century and in the beginning there was the usual awkwardness, and various alternatives were tested. In the end, however, the term 'Orthopedikos' firmly established itself, and the prevalent written form was with an 'ε' from the early 20th century until the last decade. All these years, writing the word with 'ε' remained overwhelming predominant and helped consolidation of the paronymological connection of the word with either pes, pedis 'leg' in Latin, or the Greek 'πέδη' (restraint) e.g. (χειροπέδη (handcuff), τροχοπέδη (wheel brake)), so 'orthopedics' was conceived of as the medical science of "correcting (bones) using restraints".

Ultimately, both written forms, 'αι' and 'ε' stand linguistically, so that the decision as to which form should prevail must take into account other factors: social, political, and so on. Of course, the 'national' argument provoked in 1995 by the supporters of 'αι' does not seem so serious, since it is trying to force one language to change its spelling according to the spelling of the word in another language, and secondly, because the diphthong ae appears only in (UK) English and may indeed in ten years have been abandoned there, given the global trend towards simplification ■



# What causes lack of oxygen in the human body

Written by, **Vassilis Binakis**  
Service Department Manager MobiakCare

The average human body can survive without food for up to four weeks, without water for 10 days, but without oxygen it can last only 2-5 minutes! Breathing is one of the most important functions of the body. It is supported by the respiratory system, the aim of which is to maintain normal levels of oxygen, carbon dioxide and balanced pH in arterial blood. It is regulated by the respiratory center located in the medulla oblongata.

The normal respiratory rate in an adult is 14-18 breaths per minute, and in newborns it is about 40 per minute. Breathing permits an oxygen (O<sub>2</sub>) intake of approximately 21.7%, and the exhalation of carbon dioxide (CO<sub>2</sub>). Disorders in the balance between O<sub>2</sub> and CO<sub>2</sub> disrupt the functioning of the body and can even prove fatal.

The content of pure oxygen produced by an oxygen concentrator is approximately <95%, and from a cylinder up to 99.9%. The human body requires O<sub>2</sub> to produce energy via combustion and for production of the essential amino acids needed to function properly.

The concentration of O<sub>2</sub> in human blood is around 98.5% and the human body consumes about 550 liters of pure O<sub>2</sub> per day. Deficiency results in:

- Disorders of the circulatory system. Tachycardia and raised blood pressure.
- If cardiocirculatory instability occurs, it may be accompanied by brachycardia and hypotension. In severe hypoxemia, hypotension, ventricular fibrillation, or asystole can be expected.
- Respiratory system disorders. Tachypnea, laboured breathing and hyperventilation. In severe hypoxemia, apnea may sometimes be present.
- Disturbances in the blood supply to organs. Vasoconstriction of blood vessels of the lung (pulmonary hypertension), skin (pale), muscles, and the peritoneal cavity. Vasodilation and increased perfusion of the coronary arteries and the brain
- Central nervous system (CNS) disorders. Anxiety, confusion, disorientation and decision-making impairment, drowsiness
- Cyanosis (provided that there is no coexisting anemia or CO poisoning), damp or cold skin.

## How to measure oxygen deficiency in the blood;

Respiratory failure is a condition in which the body cannot adequately meet organ and tissue oxygen requirements. Measuring the levels of oxygen in the body, involves arterial blood gas testing. If the level of oxygen in arterial blood is between 60 and 85 mm-Hg (columns mercury) then hypoxia is present. If it is below 60 mm-Hg, this is equivalent to respiratory failure. Note that the normal value of oxygen is above 85 mm-Hg.

## Respiratory failure is divided into two categories:

- Acute
- Chronic
- Type I (with normal levels of carbon dioxide)
- Type II (when accompanied with elevated levels of carbon dioxide, otherwise hypercapnia)

Note that the normal value of carbon dioxide is between 35 and 45 mm-Hg.

## What are the symptoms of respiratory failure?

- Anxiety
- Tachycardia
- Shortness of breath

- Tachypnea (abnormally rapid breathing)
- Headaches
- Cyanosis
- Mental confusion
- Sweating
- Feelings of dread, etc.

## The causes of respiratory failure include:

- Chronic obstructive pulmonary disease
- Acute or chronic bronchitis
- Bronchial asthma
- Obstructive sleep apnea
- Obesity
- Pulmonary problems (pneumonia, pleurisy, pneumothorax, etc.)
- Thoracic cavity defects (kyphoscoliosis etc.)
- Muscle wall defects
- Nervous system defects
- Various pharmaceuticals
- Pulmonary embolism
- Pulmonary edema, etc.



## When is it necessary to administer oxygen?

- Acute and chronic respiratory diseases (respiratory failure, pulmonary embolism, lung cancer)
- Cardiovascular diseases (acute myocardial infarction, cardiogenic shock, heart failure)
- Neurological disorders (anaesthesia, head trauma)
- Shock of any etiology
- Postoperative complications
- Hypercatabolism (burns, multiple injuries, severe infections)
- Choking, carbon monoxide poisoning, the bends (decompression illness)
- Accelerated pneumothorax absorption and subcutaneous emphysema



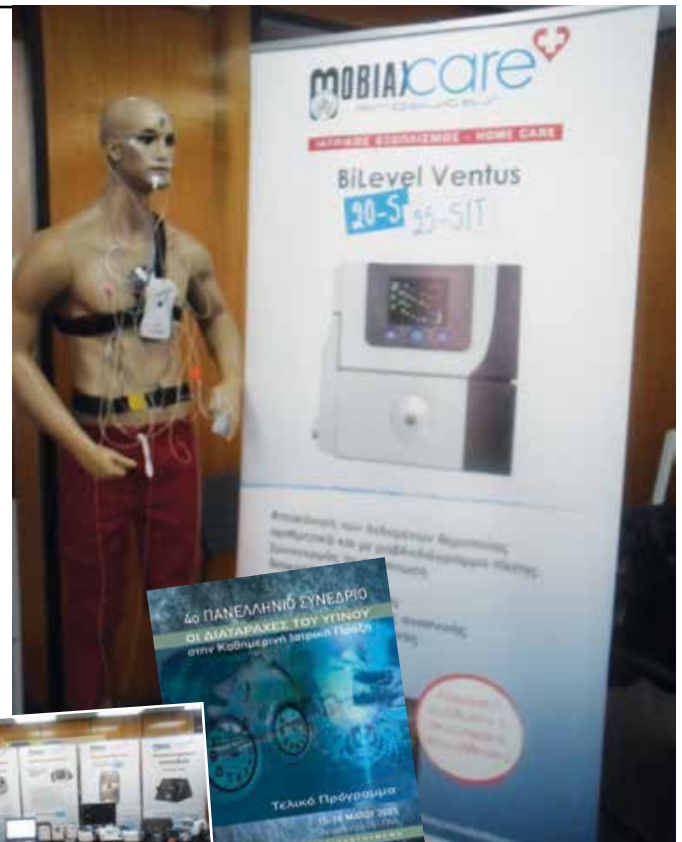
## Oxygen administration methods (subject to medical recommendation)

1. Medical oxygen cylinders
2. Portable medical oxygen tanks
3. Oxygen concentrators

- Accelerated pneumothorax absorption and subcutaneous emphysema ■

# 4th National Conference • Athens

## Sleep disorders in everyday medical practice



**Written by, Chrysa Kozonaki**  
Business Administration, Sales Department, MobiakCare

**The** MobiakCare staff participated in the 4th National Conference "Sleep Disorders in Everyday Medical Practice" held on 15-16 May 2015, at the 251 Air Force General Hospital. It was organised by the 1st Pulmonary Treatment Clinic, University of Athens, in cooperation with the Intensive Care Unit at the 251 Air Force General Hospital. Participants included distinguished pulmonary and critical care specialists, cardiologists, psychiatrists and neurologists, and discussion

topics included all types of sleep disorders and the problems they create for patients who are seen by doctors in their daily medical practice.

MobiakCare was actively involved in the event, presenting its respiratory devices Morfeus, Ventus, Irene, & Gem, as well as respiratory devices produced by WEINMANN. The stand was visited by a number of doctors who were positively impressed by MobiakCare's range of respiratory equipment ■



# Participation in Pneumonology Conference • Cyprus

## Respiratory Diseases in General Practice

**Written by, Filippos Christodoulakis**  
Business Administration, Exports Department, MobiakCare

**The** Cyprus Respiratory Society (CRS) in collaboration with the Cyprus Medical Association (CMA), organised a two-day conference entitled: "Diseases of the Respiratory System in General Practice - The Expert's View", held 6-7 June 2015, at the Mediterranean Hotel in Limassol, Cyprus.

The themes of the conference covered the greater part of the range of respiratory system diseases treated by doctors working in primary care, as well as hospital doctors specialising in pathology, pulmonology, cardiology and intensive care.

The conference was attended by distinguished speakers from Cyprus and abroad with specialised knowledge of the issues under discussion. In addition to lectures, clinical cases were presented and the management of specific cases encountered in everyday practice was discussed at a practical level.



MobiakCare took an active part in the conference, exhibiting its range of respiratory devices Morfeus, Ventus, Irene, & Gem ■



# Concentrator Service Training

## by MOBIAKCARE

Written by, **Vassilis Binakis**  
Service Department, MobiakCare

The purpose of the visit was to able to cover the needs for damage repair under warranty products, and to clarify multiple queries we receive every day at our service department on the refitting of oxygen concentrators.

Special attention was given to protection of our associates with respect to irregularities and to emphasize the dangers of such actions:

- For the health of patients, since there is no guarantee of quality

**FOR SAFE & PROPER REPAIRS WE RECOMMEND YOU SEND YOUR CONCENTRATORS FOR SERVICE TO OFFICIALLY CERTIFIED REPRESENTATIVES/IMPORTERS DISTRIBUTING GENUINE PARTS, OR TO ACCREDITED PROFESSIONALS, OR OFFICIALLY TRAINED PARTNERS.**

MOBIAK will continue to inform and protect their partner representatives ■

### Invitation

We are sending an open invitation to all of our struggling representatives, an invitation concerning the service and maintenance of respiratory devices. Every Thursday or Friday, together we can look at the needs of an up-to-date branch, one that must be familiar with all the respiratory devices it is marketing. The reasons we are doing this are the following:

- This way we can protect you from the difficulties that you may experience in smooth functioning due to the demands of everyday operation.
- Upgrade your business directly, when you establish your own "local technical support service"
- We provide training certification
- Demonstrating and advertising your technical know-how will win the trust of your associates and customers.
- We protect you not only from worries of poor maintenance, but also from any unscrupulous attempts to take over maintenance from you.
- Once you have all the knowledge you need, with our 24/7 round the clock support on mobile number 6972660969, you can multiply the effective operation of your business.

With the proper accredited support, regular updates and specialist knowledge of the subject, we are standing by to help in any way you need.

## New Arrivals

Written by, **Filippos Christodoulakis**  
Business Administration, Exports Department, MobiakCare

The Research and Development Department (R&D) of MOBIAKCARE is happy to present our new range of lifting equipment, produced with the signature guarantee of our company.



**150 Kg**

Ref. **0808038**

- 3-year warranty
- 6-month battery guarantee
- Hydraulic - Electrical Motor
- Steel frame
- On wheels, with brake on the rear wheels
- Includes travel bag
- Rechargeable battery



**180 Kg**

Ref. **0804902**



### Reversible Seat

Mini Scooter

- Raisable armrest
- Comfortable seat
- Height Adjustable rotating seat
- 1 motor and 1 battery
- Speed 1 - 10 Km/h
- Range 8km
- Movement capability on incline 8-10°

**WHEELCHAIR MINI SCOOTER (RED)**

Ref. **0810094**

**0806203**

**WHEELCHAIR CUSHION WITH HOLE**

- Comfortable cushion, specially designed for wheelchairs with under-seat container.
- L:47 x W:44 x H:7,5cm ■



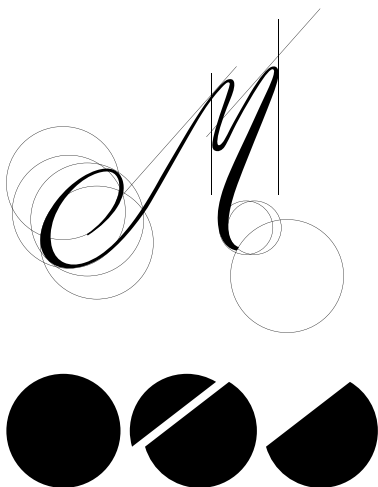
# Design & Balance

Written by, **Myrto Koumi**  
Creative Department

MOBIAK'S graphic design department is happy to announce the launch of a new brand identity for the company, which has the objective of promoting the land of Crete. As is well known, Cretan soil is blessed with characteristics that allow it to produce exceptional quality olive oil. And this is why the MOBIAK decided to make use of the abundant fruits of the Cretan land.



After many months of thought and thorough market research, the idea came to fruition, and the logo we chose to bring this new project to life was the capital letter "M", which is the initial letter of MOBIAK, as well as the initial letter of the first name of the chairman, the vice chairman, and the eldest son of the company's vice chairman. It is designed to draw attention to the color and shape.



To achieve its objective, any project needs a logo, brochure, a catalogue, and its ultimately successful promotion of the product or service relies on the design work being directly identifiable, balanced, and of itself it has to represent a well-integrated complete composition.

The purpose of this process is to make the lives of customers and partner representatives easier. For this reason, a well-designed mock-up should have clearly defined borders, and involve distinct shapes without unnecessary information or detail.

One way to achieve balance, well-integrated composition and satisfactory overall design, is to use a grid (e-graph paper). It is an essential tool for any design. If the above principles are not followed, the lack of visual harmony will be noticeable, as will anything else devoid of clear structure or a strong foundation, which will ultimately create confusion for the viewer.

It is no coincidence that many artists and architects of the 20th century adapted their works to approximate the golden ratio defined by the Fibonacci sequence.

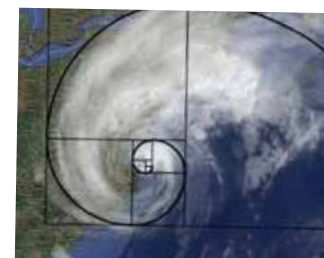
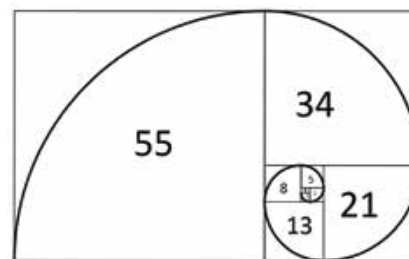
Leonardo Pisano (1170-1240) was an Italian mathematician who coined the sequence and introduced the Arabic decimal numbering system to Europe, as well as other mathematical innovations during a generally difficult time for science. He was the son of Guglielmo Bonacci (Bonacci meaning simple), and hence his name Fibonacci (figlio di Bonacci = son of Bonacci). The sequence hides the secrets of nature within it.

It is worth noting that the ratio (i.e. the quotient) of two consecutive numbers in the sequence as the numbers increase approaches the famous "golden ratio" which is equal to the irrational number  $\phi = 1.61803$  ( $\phi$  in honour of the Greek sculptor Phidias).

*"The Fibonacci numbers are nature's numbering system. They appear everywhere in nature, from the leaf arrangement in plants, to the pattern of the florets of a flower, the bracts of a pinecone, or the scales of a pineapple. The Fibonacci numbers are therefore applicable to the growth of every living thing, including a single cell, a grain of wheat, a hive of bees, and even all of mankind."* Stan Grist.

" IT IS NO COINCIDENCE THAT  
MANY ARTISTS AND ARCHITECTS  
OF THE 20TH CENTURY ADAPTED  
THEIR WORKS TO APPROXIMATE  
THE GOLDEN RATIO DEFINED BY  
THE FIBONACCI SEQUENCE "

The golden mean is usually denoted by the Greek letter phi ( $\phi$ ). In fact the Greek mathematicians of Plato's era (400 BC) and Greek architects incorporated the ratio  $1 = \phi$  as an integral part of their designs, the most famous of which is the Parthenon in Athens.



Although there is a mathematical logic to the Fibonacci numbers, their importance for artists and designers is the aesthetic relationships created within a composition. The use of these relationships can be considered a quick and almost surefire path to a balanced design ■



# CORPORATE SOCIAL RESPONSIBILITY

Written by, **Ioannis Basiakos**  
Sales Department, MOBIAK fire

A big THANK YOU to the management and employees of "MOBIAK SA" who have supported our efforts to give to children with disabilities and their families a "Right to Life". President, Paul Simantirakis; Treasurer, Georgios Damianakis.



Our thanks go to the management of MOBIAK for the sensitivity they have shown to the elderly, and the gifts that they have provided. It is very important in the difficult times we are going through, to show love for our neighbours, particularly vulnerable groups. Sincerely,  
**Argiro Bailaki - AKROTIRI KAPI (Elderly Open Care Centre)**

The Volunteer Samaritans, Rescuers and Lifeguards Corps of the Chania regional section of the Greek Red Cross is pleased to thank MOBIAK SA for providing basic firefighting materials for use in fighting forest fires. Such actions must be acknowledged. With their generous sponsorship, we have the opportunity to continue providing support to our fellow human beings when they most need it. We look forward to further collaboration in the future

The Nautical Club of Chania thanked MOBIAK SA for providing free hydrostatic inspections for cylinders used by athletes in competition. Such actions encourage and strengthen the resolve of the Board of Directors of the Club to redouble its efforts with even greater enthusiasm to promote water sport activities in Chania.

The Parents' Association of the 16th Intercultural Elementary School of Chania thanked MOBIAK SA and its chairman Mr Emmanouil Svorakis for the free re-charging of 10 portable extinguishers, a donation that was extremely important to our school and to our children's safety.  
**The president, Eleni Tsotsorou**

The Municipality of Chania and the Office of Sports warmly thanked the company MOBIAK SA and its chairman Mr Emmanouil Svorakis for sponsoring the maintenance of oxygen cylinders in the indoor sports facilities of Kladissos and Kampaniou.  
**MANOLIS ADONTAKIS, DEPUTY MAYOR OF CHANIA**

The Volunteer Samaritans, Rescuers and Lifeguards Corps of the Greek Red Cross at Mires warmly thanks MOBIAK SA for their generous donation of fire fighting equipment (4 6kg fire extinguishers, and one 3kg fire extinguisher) for use by the local G.R.C. The Mires Red Cross Department has been operating since 1999 in premises which have been allocated to it by the Holy Monastery of Kalyviani and has no regular income to enable to purchase the equipment needed. It relies solely on donations from businesses and residents in the wider region who thankfully, recognising the work you are doing, have embraced our efforts. With our best Red Cross greetings,  
**MANOLIS MARKAKIS**  
**Chief of the Mires Volunteer Samaritans, Rescuers and Lifeguards Corps**

Thank you for the gifts you have donated to us for the lottery to be held during at our New Year's cake cutting ceremony on 18/1/15. Thank you and we wish you the best of everything and a creative future for you and your business.  
**The President of the Chania PPC Staff Club, S. Angelioudakis**

The administration and the Teachers Association of the 1st General Lyceum High School of Chania warmly thanks the company MOBIAK SA, and especially Mrs Irene Svorakis for her kind support of a student at our school. The donation of a disabled person's wheelchair has solved everyday problems and significantly improved her quality of life.  
**On behalf of the Teacher's Association**  
**The Principal ■**

# MOBIAK & Sports

Written by, **Apostolos Diamadopoulos**  
Economics MSc, Exports Department, Mobsiak Fire

**Driving Skills Demo Race on Sunday, June 21 at Maleme Airport.** Car and motorcycle races were held on Sunday, June 21 at Maleme Airport with unprecedented success, by the **Chania Motor Sports Club**.

Crowds of spectators thronged the sites set up for safe viewing of the events, and all competitors were early on the field to prepare and find out about the program of the day. The business community also supported the efforts of the "new" motor sports club, and showed up in force to enjoy a day full of adrenaline and spectacle.



The day's program included a Drift Race (the 2nd friendly race in Crete in cooperation with FIMA), & Drag Day racing for cars and motorcycles.

MOBIAK showed its support for motor sports with the donation of firefighting equipment for the safe conduct of the race day ■

## Partner Representative Award

Written by, **Sophia Psilaki**  
Electrical Engineer & Computer Engineer, Sales Department

In these most difficult times, our strongest, most reliable partnerships are worthy of recognition and reward.

The company **PYRODYNAMIKI - MARIA KEFALOUDI** has been active in the field of firefighting products for **more than 25 years now**, continuing to meet its customers' demands consistently and reliably.

This is a recognised company with registered offices at 4, **Maniakiou Street**, Acharnes, undertaking the supply, installation and maintenance of all types of fire extinguishers in any type of workplace.

Dear Colleagues, On behalf of the management and staff at MOBIAK, we thank you for your trust and the incredible zeal with which you have marketed our products over the years. The gifts we are offering you are worth a total of €500, in honour of our excellent cooperation.

Our warmest thanks! ■



# Poems

Emmanouil E. Svourakis,  
Senior

Written by, **Emmanouil E. Svourakis**  
Chairman & founder of MOBIAK SA

## CHRIST AND CRETE

Many have said that Christ left his mark in Crete  
making it a special place on this planet,  
but the first and best of those to say so  
was the old Bishop of Kissamos, even in his youth.  
He wrote a book, to document those words of wisdom  
so that others could learn them,  
saying that the signs of Christ on the island  
are to be found nowhere else, East or West.  
Its location between Africa and Europe  
was the ideal place for people to live.  
The sun and the sea and the mountains  
and the landscape altogether make it special.  
Its temperate climate is a great advantage  
that is the envy of many in our rotten world.  
In its soil an infinite number of plants thrive;  
it is a true paradise, as any foreign visitor will tell you.  
Since ancient times, many have tried to enslave it,  
but try as they might none will succeed.  
The unconquerable Cretan spirit will stay free and  
unfettered in the global maelstrom of events.  
Its people have a sense of honour,  
they will always do the right thing,  
no one is above the law here no matter  
how powerful they think they are.  
These values we keep to the end of time,  
to foreigners and infidels we do not bend the knee.  
We must all take responsibility for this land,  
Christ has marked the fate of its people,  
and our motto will be "Peace on Earth"  
just as he taught us, giving us all hope.

## MY CRETE

My Crete,  
you are not just  
a dot in the infinite,  
you are the cradle  
of ancient civilisation.  
Crete, you have the powers  
to save yourself;  
you may not have a Parthenon,  
but you have your  
Palace of Knossos.  
Crete, Arkadi is your vigil flame  
of freedom lit;  
the words of Kazantakis  
are the oil and the wick.  
Rethymnos, Kastro and  
Chania; Sfakia, Lasithi, Zakros;  
a thing of beauty you are,  
my Crete, everywhere  
from end to end. My Crete,  
if I were king in Crete  
my throne would be the sun that shines  
and the steadfast hearts that beat year  
round. My Crete, if it were needed  
I would raise concrete and  
stand shoulder to shoulder,  
to the devil with the  
Memoranda and the laws.  
As long as the Omalos Plateau remains  
and the Psiloritis Mountain still stands tall,  
the traditions of Crete will never fall ■

