

Concept Techniki SA, as founded with central aim the technology transfer to private third parties, historically is focused and engaged in R&D activities. The company has established a solid and concrete R&D unit, specially dedicated to this purpose, which is staffed with researchers holding vast experience and knowledge. The department utilizes suitable per project personnel of the firm, which supports and contributes on demand to the yield of the set research goal.

The core staff of the unit consists of five (5) PhD holders, which coordinate sufficiently each assignment, fully supported by state of the art equipment and other research means. Concept Techniki SA involves in innovation and research activities by undertaking assignments by its clients on demand, by participating in national and international R&D consortia or by developing internal initiatives and projects. To this purpose, the company deploys yearly a significant budget, which varies from 6% up to 9% of its annual revenues. The research topics of the companies can be classified in three (3) thematic areas, i.e.:

## **a. Energy and Power**

Having a full monitoring and physical access to hundreds of energy projects, the company has been involved in several research activities on this topic. More specifically, the research unit develops excellent platforms to scientifically assess the monitoring parameters of installations and to correlate them with production expectation models for new projects. Moreover, systematic research work is accomplished in the fields of energy storage and saving, applicable to large scale hotel infrastructures. Finally, the development and optimization of special thermography sensors and sophisticated algorithms to extend the maintenance operations is an area of great interest and effort by the company.

## **b. Products and devices development**

Concept Techniki SA, traditionally has an excellent collaboration level with academic institutes and technology oriented companies dealing with industrial products development and optimization. Through the special tools of the company and by having access to state of the art equipment, the research unit undertakes the design and prototyping innovative products and devices for several applications. Advanced CAE tools, reverse engineering equipment and design optimization platforms, are some of the means that are utilized to designing, optimizing, prototyping, testing and delivering complex parts or functional assemblies, which meet state of the art standards.

## **c. Biomechanics**

Last but not least, since 2007 the company has been engaged to biomechanics development through a long term and steady state collaboration with the biggest private hospital of Crete, the [Creta Interclinic](#). Especially in the field of orthopedics surgery and microsurgery, the company has jointly developed and exploited two international patents in knee's crucial ligaments reconstruction and has optimized dozens of biocompatible special surgery tools, which support

successfully micro-operations in knees and shoulders. Several non confidential research findings of these activities have been published in (peer review) scientific journals and magazines.