

an analytical quality control laboratory by setting up new labs and by retraining some of the staff.

### Activities

The day-to-day work of *Pharmanalytica* includes primarily the quality control of pharmaceutical chemicals and products of the *Sandoz-Wander* group according to internal *Sandoz* control procedures and various pharmacopoeias for both release analyses and stability studies (annually ca. 6000 batch samples are analysed). The activities extend to updating of *Sandoz* control procedures, training of personnel from other *Sandoz* affiliates and carrying out analytical work for third parties.

### Organisation

The firm is technically divided into three groups:

- Starting material section where raw materials, excipients and active substances are analysed.
- Dosage forms section where semi-finished and finished products are analysed.
- An automation group conducting content uniformity and dissolution tests.

An internal metrology group is in charge of the maintenance of the equipments and calibration of instruments and a

service team including an electrician and a mechanic carry out the repairs. The results of analysis of the samples received daily from Basel are transmitted from our client personal computers to the server computer in *Sandoz* Basel.

### Personnel and Training Programmes

Presently the company has a work force of ca. 60 people. All lab technicians (37) hold qualifications obtained either from a Swiss apprenticeship or from an Italian technical school; 20 of them have more than 20 years of experience in the quality control of *Sandoz-Wander* products; five employees hold university degrees and one an engineering diploma. All staff members are required to update their technical know-how by attending seminars, expos, refresher courses and various vocational training programmes in addition to job rotations within the *Sandoz* group and language courses.

### Equipment

As a result of the technical progress and the stricter requirements of health authorities, there has been lately a trend away from conventional time-consuming manual methods towards instrumental and automated ones enabling more reliable analyses. At the same time the job of the lab technician has become more special-

ised and requires instrumental skill and knowledge of electronic data processing as well.

*Pharmanalytica* is equipped with modern analytical instruments including 35 high performance liquid chromatographs, six gas chromatographs, a robot linked to a liquid chromatograph (shown in the *Fig.*) and 15 baths for dissolution tests, one of which is fully automated.

### Compliance

As an analytical centre for pharmaceutical chemicals and products, *Pharmanalytica* adheres strictly to the requirements of 'Good Control Laboratory Practice' as is certified by the 'Intercantonal Office for the Control of Medicines' (IKS) in Bern. *Pharmanalytica* also passed a recent inspection carried out by the 'U.S. Food & Drug Administration (FDA)'.

*Pharmanalytica SA* is an excellent example of how control laboratories on different locations (Locarno and Basel, distance more than 200 km) can be integrated, using up-to-date client-server-based information technology with a software (Q-DIS®: trademark of CREON Company, Bad Honeff, Germany) specifically designed for pharmaceutical quality assurance. Benefits of different locations (*e.g.* availability of work force, education, experience) are thus made available to support the success of the group.

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## Pharmaton SA\*

### Pharmaton Takes Its Pharmaceuticals from Nature

There is nothing new about medicinal plants. Their therapeutic and prophylactic properties have been known and applied since the earliest days of mankind. What is relatively new, is the ability to determine

scientifically what gives the plants these attributes, to isolate the corresponding active agents, to find the most effective, pharmaceutical and galenic form for their administration and to subject the resultant products to clinical testing.

*Pharmaton SA* has made its name in this field of phyto-pharmaceuticals. With a comprehensive programme of over-the-counter (OTC) specialities based on natu-

ral substances, *Pharmaton* has built up annual sales of almost 220 Mio. CHF in some 75 national markets. Though its head offices are in Lugano suburb of Bioggio, *Pharmaton's* products are also manufactured or packed under licence in 14 further countries.

### Focused on Phytotherapy

Phytotherapy means the treatment of pathological symptoms with plant-based drugs. Phytotherapy is today the most widely used form of drug therapy within the field of plant medicine, which is becoming ever more important.

The experience gained from centuries of herbal medicine is today taken just as seriously as conventional medicine. Many people in fact have more confidence in the effectiveness of natural medicines. This is

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a worldwide trend and is partly responsible for the success of *Pharmaton*.

### It Started with a Dentist

The company was originally formed in Lugano in 1942 by a dentist interested in new developments in local anaesthetics. As successful as the dental sector proved, *Pharmaton*, at the early sixties started to move into a totally new sector: the field of self-medication.

At the same time, a comprehensive investigation of the medicinal plant *Panax ginseng* C.A. Meyer was started, resulting in the recovery of the standardised ginseng-extract G115. A series of products resulted, among them two are still of the firm's leading products. Aimed at 'restoring the physical and mental powers', one of the most successful products of *Pharmaton* incorporates a combination of over twenty active ingredients – including G115, vitamins, minerals, and trace elements.

*Pharmaton* investigated the curative powers also of other medicinal plants as ginger, *ginkgo biloba*, the nettle *urtica dioica* and the tree bark *pygeum africanum*. The result was the current product range, which apart from the dental line (discontinued at the beginning of 1994)

comprises standardised vegetal products for self-medication, an area, which has become more and more important in the past years due to an increasing health-consciousness among the consumers.

Thus, a product for the improvement of concentration and intellectual vitality is based on *ginkgo biloba*, while *pygeum africanum* and *urtica* provide active agents for a newly-introduced product for the symptomatic treatment of prostatic complaints and miction disturbances.

Elsewhere, a combination of vitamins and minerals go into a children's 'body-building' syrup and vitamins, minerals and trace elements into capsules used to counter mineral deficiency. A specific trace element, selenium, is the basis for a food supplement to protect the cells from free radicals.

### Quality of Life

The basic aim of the company is to maintain and improve the individuals' quality of life. This is proving a timely strategy, given the growing emphasis on 'wellness' – the prevention of sickness rather than its cure – and on a 'green' preference for natural products. At the same time, public-health reform in many countries, leading to rising contributions

to the cost of prescription medicine and general restrictions on doctor's prescribing, has accelerated the trend towards self-medication.

This is one of the facts which led the German pharmaceutical group *Boehringer Ingelheim* to acquire the *Pharmaton* shares in 1991. *Boehringer Ingelheim* was already active in the self-medication business, though not primarily in phyto-pharmaceuticals. *Pharmaton* continues to operate as an autonomous unit though benefits from the existing international organisation of the considerably bigger parent.

### International Scope

*Pharmaton*, which began exporting back in 1945, today sells over 90% of its products on foreign markets. Some 42% of all exports go to European countries, 44% to the America's and the remainder to Africa, Asia, and Australasia. Some of the most important markets are not the most usual, with Spain, Sweden, Greece, Poland, Mexico, Argentina, and the Philippines numbering among the biggest.

Although *Pharmaton* is based in Switzerland, a part of the decentralised production and labeling or packaging is in the hands of licensees and sub-contractors worldwide. An important reason lies in

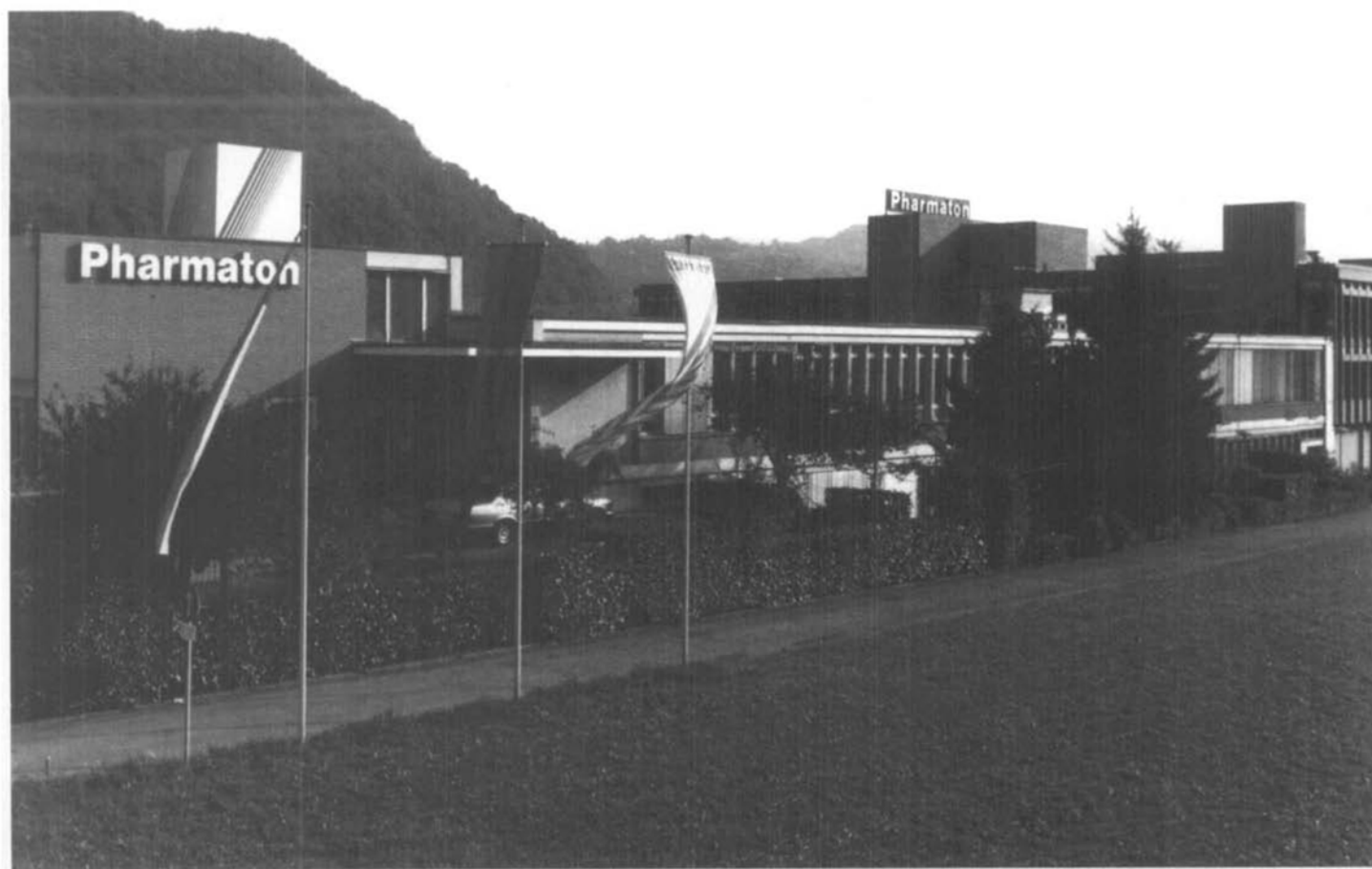


Fig. 1. Pharmaton SA in Lugano-Bioggio

national regulations that health-care products must be made or at least prepared for market on the spot.

The bulk of activity is centred at the 175-employee Bioggio plant, however, which is also responsible for the most important overall quality assurance worldwide.

### Good Prospects

The prospects for 1995 are seen as good, disappointments on some markets having been offset by good growth on others. There are still countries enough which *Pharmaton* sees as offering plenty of potential. Germany, France, Italy are three of them without excluding China, Japan, other Far Eastern countries, the USA, and the Middle East.

*Pharmaton* will continue to devote its attention in the future to the development of plant based drugs for prophylactic use in the interest of maintaining and improving the quality of life.

### Key Data on the Company

- *Pharmaton SA* was founded in 1942 in Lugano
- Since 1962, the headquarters are situated in Bioggio
- Since 1991, *Pharmaton* belongs to the *Boehringer Ingelheim Group*
- *Pharmaton's* share capital amounts to 2 000 000.- CHF
- *Pharmaton* employs ca. 175 persons at its headquarters in Bioggio
- *Pharmaton* has a broad international experience in the field of self-medication as well as extensive scientific and technical expertise in the field of phytopharmacy and is worldwide leading in the Ginseng research
- *Pharmaton* products are marketed worldwide in more than 75 countries

### The Corner-stones of the Company Philosophy

#### - Purposes and aims of the company:

*Pharmaton* develops, produces, markets and offers suitable products and services for the human health care.

It pays due attention to the international developments: growing prevention awareness, increasing trend to self-medication, rising recourse to phytotherapy, desire for better quality of life.



Fig. 2. *Pharmaton's* products are known for their high level of quality and reliability proven through scientific research



Fig. 3. One of *Pharmaton's* prime concerns is to meet the increased demand for scientifically proven herbal medicines

#### - Quality:

*Pharmaton's* products are distinguished throughout the world by their high quality and reliability. This does not only apply to the material goodness of the products but also particularly to their efficacy, safety, and environmental manufacture.

#### - Internationality:

*Pharmaton* offers its products and serv-

ices in Switzerland, the country of origin, as well as on the international market, adapting them to the requirements and peculiarities of the individual market.

#### - Ethics:

All *Pharmaton's* activities and initiatives rest on loyalty, fairness, awareness of its responsibilities, and transparent information.