

## LAUDATIO ESA GOLD - Prof. Otto Sticher

The Egon Stahl-Award in Gold is the highest scientific honour of the Society for Medicinal Plant and Natural Product Research (GA). It was founded in 1999 and can be awarded every third year.

The Egon Stahl-Award in Gold acknowledges the outstanding scientific **lifetime work** of a research scientist who has been closely attached to Pharmaceutical Biology (Pharmacognosy, Chemistry of Natural Products), in its whole range, through his/her scientific work.

The Egon Stahl-Prize in Gold is endowed with 5.000 €, a donation from GA. The donation was made with the intention of furthering scientific aims deserving aid.

It is a pleasure and honor for GA to announce the fifth laureate of the ESA Gold: this outstanding personality with exceptional scientific achievements in the field of medicinal plants as well as of his national and international importance in the field of Pharmacognosy, Pharmaceutical Biology and Pharmacy is Prof. Dr. Otto STICHER.

Prof. Sticher studied pharmacy at the ETH Zurich, made his PhD study in pharmacognosy 1965 with the then Professor of Pharmacognosy, Hans FLÜCK.

1970 the habilitation in that field at the ETH followed. Dr. Sticher discovered a new topic: iridoids, which were originally found in insects and were now gaining increasing attention as herbal monoterpenes.

The papers made Otto Sticher one of the leading experts worldwide in the phytochemistry of iridoids and laid the foundation for his international reputation, since iridoids were studied all over the world as active substances, marker substances, plant-systematic indicators, plant and insect repellents, as well as colourants, lead compounds and synthons.

A review of the  $^{13}\text{C}$  NMR spectroscopy of iridoid glucosides in 1980 was among the one hundred most-cited papers in the field of chemistry in the years 1980-1982.

After entering the field of iridoid phytochemistry, Otto Sticher's academic career was unstoppable. In 1972, he was named *Associate Professor for Pharmacognosy* at the ETH, and in 1979 *Full Professor for Pharmacognosy and Phytochemistry*, The "Sticher" era (or even generation, one could say) in pharmacy at the ETH-Zurich began.

The groups of natural substances on which Otto Sticher has worked are numerous. They include the previously mentioned iridoids, the most diverse terpene derivatives, phenolic substances such as flavonoids, lignans, phenylpropanoids, salicin derivatives, coumarins, anthranoids, various alkaloid groups (-glutamyl peptide and derivatives and several cyclic peptides).

During his career, Otto Sticher understood the value of bringing experts in various areas from all over the world to his institute and integrating them into his working group – a situation which was to the advantage of all parties involved. Simply stated: The ETH Zurich has become a Mecca of phytochemistry.

Of major significance were the methodological papers, which were published on the basis of the named substance groups. In this way, *HPLC* methods for the separation of natural products were published very early on – the Sticher's lab was a leader in this area for several years.

He was interested in ethnopharmacology-based drug discovery and undertook several collection trips, always in the company of his wife Miriam, to remote parts of the world.

In the second half of his research activity, Otto Sticher – like many phytochemists focused more and more on testing the biological activity of his isolates.

One of the first papers from Otto Sticher's lab on biological activity demonstrated the influence of furocoumarins on prolactin release from hypophysis cells. There were other papers on antiproliferative alkaloids, on the anti-malarial activity of terpenes from coral, on the sweet-tasting diterpenes and on the antiphlogistic haem decomposition products, to mention only a few. Towards the end of his research activity at the ETH-Zurich, Sticher was interested in natural substances that bind to key enzymes or factors responsible for gene regulation, such as cytokines and transcription factors, thereby influence gene expression.

Overall Prof. Sticher has published almost 400 publications in those areas in highly respected journals, including *Planta Medica*. Given this level of competence, it is inevitable that he is invited to conferences, seminars and lectures worldwide.

Otto Sticher was entrusted with numerous honorary posts and tasks within the scientific community.

Between 1975-1996, Sticher was member of the GA Board (BoD). He served as President (1978-1984) and the vice-president (1984-1988) of the GA.

He organized two annual GA meetings in Zurich. At 40, Otto Sticher was the youngest conference president when he opened the 25th annual conference of the GA in 1977. At the conference, he was named President of the society, thus becoming the youngest President in the nearly 60-year history of our society.

The second GA conference took place a few years before his retirement, in 2000, again in Zurich.

His activities and commitment to pharmacognosy and phytochemistry have been acknowledged with honorary memberships (including GA honorary membership since 2002) and medals of merit, as well as honourable appointments to numerous pharmacopeia and food-code commissions in Switzerland, Europe and the USA.

Otto Sticher was also a great teacher and lecturer. In the 1990s, he received the teaching prize in the Department of Pharmacy at the ETH for his "outstanding teaching" as a lecturer.

When talking about Otto Sticher as lecturer, we cannot omit his collaboration on one of the best text books in the field of pharmacognosy: *Pharmakognosie – Phytopharmazie* (Pharmacognosy-Phytopharmacy). Sticher has been involved in the 6<sup>th</sup> edition of this book (Hänsel, Sticher, Steinegger) in 1999 and in 2010 published the 9th edition (Hänsel, Sticher).

In summary, Prof. Sticher is one of the most successful natural product chemists who contributed to this field in many areas in many different grounds. His research was always ahead of his time and his research lab was one of the best-equipped and organized ones worldwide. He was involved with pharmacy for 45 years, trained numerous PhD students, post-docs and senior researchers, many of whom are now following the way he previously paved and led. His scientific accomplishments have been well recognized worldwide, so GA believes there is no doubt that he deserves an Egon Stahl Medal in Gold for his achievements and contributions in natural product research.

The Gold medal (ESA GOLD) and a document which is read: *The Society for Medicinal Plant and Natural Product Research (Gesellschaft für Arzneipflanzen- und Naturstoffforschung) has pleasure in dedicating the Egon Stahl-Award 2011 with a gold medal to Prof. Dr. Otto Sticher in recognition of his outstanding contributions in the area of medicinal plant research and natural product analysis, and to*

*pharmaceutical biology as an academic discipline*, were handed over by the GA president.

Antalya, September 5<sup>th</sup>, 2011

Brigitte Kopp  
GA president

Deniz Tasdemir and Brigitte Kopp