

Dedicated to Modern Hellenism & in Honor of Nobel Laureate in Chemistry, Prof. Avram Hershko



The image is a promotional banner for the SIPS 2024 symposium. It features a background of a coastal resort with buildings and a blue sea. On the left, the year '2024' is written vertically in white. In the center, the letters 'SIPS' are rendered in large, bold, red 3D font. To the right of the 'SIPS' text is a portrait of an older man with glasses, identified as Hans Leuenberger. To the right of the portrait, the text 'LEUENBERGER INTERNATIONAL SYMPOSIUM on Pharmaceutical Sciences and Applications' is written in white. At the bottom, the dates and location '20-24 October 2024, Out of the Blue Resort, Crete, Greece' are displayed in white.

Biography of Hans Leuenberger

Biography Hans Leuenberger, 80, was educated at the University of Basel as nuclear (experimental) physicist with his master thesis «¹Intensity measurements at the source of polarized deuterons» in 1967. In 1971 he completed his PhD thesis «²Effect of an External Electric Field on the Decay Constant of ⁹⁹Tc^m Halogen Complexes» under the guidance of Prof. Paul Huber. Paul Huber was interested in changing the half-life of radioactive waste. At that time, Hans enjoyed lectures of Prof. Paul Scherrer at the University of Basel. Both professors promoted nuclear power plants, and that Switzerland to become a nuclear power. The latter idea was later abandoned. As PhD student Hans acted as part-time teacher in physics, as Paul Huber's lecture assistant, respectively, as head of his α -radiation laboratory to be involved in the evaluation of samples from the reactor «Lucens» (https://en.wikipedia.org/wiki/Lucens_reactor, https://de.wikipedia.org/wiki/Reaktor_Lucens) being automatically shut down as a result of a partial core melt. As PhD student in nuclear physics, he was called up for his Swiss military service for delivering lectures in nuclear science for training Swiss Army AC specialists. He succeeded Dr Simon Aegerter (<https://www.quora.com/profile/Simon-Aegerter>) as President of AGAS (working party of AC-specialists). In 1969 Hans married Adriana Rusu, physicist, educated in Romania, in Switzerland after their request was refused to get married in Bucharest. Prof. Huber being hospitalized reviewed the PhD thesis of Hans Leuenberger in 1971. Thus, Hans was deeply impressed by his diligence and support. Paul Huber, who adopted in 1953 a young refugee from Hungary, understood that Hans was searching a job for his father in law in 1969. Paul Huber passed away too early on February 5, 1971 (<https://doi.org/10.1063/1.3022827>). Inspired by Dr. Stephan Gagneux, Hans joined the pharmaceutical company SANDOZ as head of the «Drug-Excipient Compatibility Lab» in 1971. He introduced DoE (Design of Experiments) for efficiently testing ³H labeled drugs directly in a tableting mixture³. After two years he was promoted as research group leader in the SANDOZ formulation department. Hans developed a device⁴ to determine the correct amount of granulating liquid needed for the size enlargement of pharmaceutical powders. Thus, SANDOZ introduced worldwide in all companies this granulation procedure for low soluble drug substances to avoid batches to be rejected due to poor quality. In 1979 Hans Leuenberger spent a sabbatical at the University of Michigan in Ann Arbor to collaborate with William I. Higuchi, Norman F. Ho and Everett N. Hiestand. In 1980 he was asked by SANDOZ to evaluate as Section Head of Pharmaceutical R&D SANDOZ Spain ad interim to commission this section to be not only involved in the development for new formulations for Spain, but also for the rest of the world. Hans was impressed by the high quality of his collaborators in Spain. However, this result seemed not to be expected by everybody at the SANDOZ headquarter. Thus, rumors started, whether Hans Leuenberger better assumes another position in an affiliated company abroad. At the same time, the Basel government decided to strengthen the Institute of Pharmacy at the University of Basel by offering industrial pharmacists such as Hans Leuenberger to be involved as part-time lecturers. Thus, Hans wrote his habilitation thesis in Pharmaceutics «Zur Theorie der Pulverkompression», a physical model⁵. As President (1973-1982) of Genealogical-Heraldic Society of Basel,

<https://www.ghgrb.ch/index.php/de/>) Hans initiated the collection of Coat of Arms of 69 GHGRB members⁶. From 1977-1984 he served as Vice President (VP) of Swiss Society for Genealogical Studies (<https://www.sgffweb.ch/en/>). In 1982, after his nomination as professor in Pharmaceutical Technology, he received as a gift from his predecessor his gown, his gas-mask and a rope for quickly escaping the Institute of Pharmacy, an obsolete, unsafe building with student laboratories close to the site, where Paracelsus (<https://en.wikipedia.org/wiki/Paracelsus>) cured Johann Froben at his printing office (https://en.wikipedia.org/wiki/Johann_Froben). Thus, Hans planned since 1982 with Dr Georgios Imanidis (<https://www.fhnw.ch/de/personen/georgios-imanidis>), his former PhD student, the Pharmacenter (<https://pharma.unibas.ch/en/about-us/locations-directions/>) at the University of Basel being ready for occupation in 2000. Thus, due to the high number of students, he was thankful that many of his PhD students could do their research work in laboratories at the Pharmaceutical Industry in Basel. From 1982 -2006 he supervised 133 PhD students. He also provided research guidance to PhD students or postdocs from the University of Seville (Spain), from Mahidol University (Thailand) and from the Mendeleev University of Chemical Technology of Russia. Among other he served as Dean of the Science Faculty and he received numerous awards (https://www.ifiip.ch/awards_gallery). He was Visiting Professor of the Grand Ecole des Mines, Albi, France.). From 1992-1996, he served as president of the scientific Council of the Swiss Academy of Engineering Sciences SATW. From 1993 – 2001, he served as Vice President (VP) of SATW (1993 – 2001). From 1999 – 2001, he served as member of the Scientific Council of CASS, today Swiss academies (<https://akademien-schweiz.ch/en>). He received in 2001 the SATW Honorary Membership (www.satw.ch). He is Honorary Member of the Society of the Swiss Industrial Pharmacists (SSIP) (www.gsia.ch), since 1990 Fellow of the American Association of Pharmaceutical Scientists (AAPS), since 1998 C In 1984 he stepped down as Vice President (VP) of Swiss Society for Genealogical Studies (<https://www.sgffweb.ch/en/orresponding> Member of the Royal Academy of Pharmacy of Spain; since 1998 Foreign Member of the Russian Academy of Engineering. From 2001 he served as President of the Swiss Society of Pharmaceutical Sciences, SSPhS, and created in 2007 its Scientific Council adopting the name Swiss Academy of Pharmaceutical Sciences asking Prof. Ruedi Brenneisen (University of Bern) to be its head by organizing the annual Swiss Pharma Science Days and Dr Felix Wuest as editor of SWISS PHARMA for his support(<https://www.ifiip.ch/index.php/downloads/swiss-pharma>, Issue 7-8, year 2018). With the blessing of Tadeusz Reichstein (https://en.wikipedia.org/wiki/Tadeusz_Reichstein, Hans Leuenberger, as SSPhS member had the permission to propose top scientists to be awarded with the Reichstein Medal. Thus, Prof. William I Higuchi was awarded in 1994, one year after the foundation of SSPhS. In 2021 Prof Katalin Kariko (Nobel Laureate 2023) was awarded by SSPhS, today SAPHW (<https://www.saphw.ch/en>). After stepping down as President of SSPhS he was asked to serve as President of the Society for Research in reference to Frontier areas of Biology GFBG (<https://www.gfbg.ch/gesellschaft>), which was founded by Dr Paul Rhyner, Chief Scientist of the pharmaceutical company CIBA in 1977. Thus, Hans had an opportunity to meet Dr. Angelo Comunetti, nuclear physicist, as an active member of GFBG. After moving to Florida Hans Leuenberger is member of the Adjunct Faculty of College of Pharmacy of the University of Florida. Lake Nona Campus, Orlando. He is CEO and owns the company Hans Leuenberger PhD-IFIIP, Institute for Innovation in Industrial Pharmacy (<https://www.ifiip.ch>). In 2006 before stepping down from the position as chairman of the Institute of Pharmaceutical Technology at the University of Basel and starting the company, CINCAP, with his postdoc *Maxim Puchkov* (<https://pharma.unibas.ch/de/personen/maxim-puchkov/>), Hans and his wife Adriana were consulting the companies GLATT AG & PHARMATRONICS, Pratteln, Switzerland, and the company PHARMATRANS-SANAQ in Allschwil, Switzerland as member of the Board of Directors (BOD). Hans is listed as inventor and/or co-inventor of 12 patent families. In this context, he is especially thankful to the patent attorney Dr. Paul Zbinden, Physicist, who studied at the University of Bern. After moving

to Florida, Hans sold his shares of CINCAP and stepped down as a member of BODs. Many of his former PhD students successfully started their career as industrial pharmacists in the pharmaceutical industry in Basel hosting the headquarters of NOVARTIS, ROCHE, etc (<https://pharmaoffer.com/blog/how-did-a-small-country-like-switzerland-become-a-pharma-giant/>). His former PhD student *Bernhard Luy* stepped down as CEO of the GLATT group and founded the company MERIDION-TECHNOLOGIE (<http://meridion-technologies.de/en/index.php>), *Andreas Schade*, Site Quality Head of NOVARTIS, Stein, Switzerland, *Dana Daneshvari*, General Manager, Janssen, Ireland (<https://www.sbs.edu/news/guest-speaker-dr-daneshvari/>), and many others in different positions in Basel, *Go Kimura*, Head of Formulation Group at SHIONOGI, Japan, *Christoph Haas*, (<https://www.linkedin.com/in/christophhaas/>). Other PhD students accepted positions in academia such. *B.D. Rohera*, (<https://www.stjohns.edu/academics/faculty/bhagwan-rohera-phd>), *Georgios Imanidis* (<https://www.fhnw.ch/en/people/georgios-imanidis>), *Martin Kuentz* (<https://www.fhnw.ch/en/people/martin-kuentz>) *Isidoro Caraballo Rodriguez* (<https://www.us.es/trabaja-en-la-us/directorio/isidoro-caraballo-rodriguez>),

¹Leuenberger H, 1967, Intensitätsmessungen an der Quelle polarisierter Deuteronen mit einem Quadrupolmagneten von 10mm und 6 mm Polschuhabstand, Diplomarbeit.

²Leuenberger H, Veraenderung der Halbwertszeit von ⁹⁹Tc^m in verschiedenen chemischen Komplexen durch ein elektrisches Feld, Inauguraldissertation, 1971, Universitaet Basel.

³Leuenberger H, Becher W, 1975, A factorial design for compatibility studies in preformulation work, Pharm Acta Helv Vol 50, p.88-91.

⁴Leuenberger H, 1982, Granulation, new techniques, Pharm Acta Helv Vol.57, p.72-82.

⁵Leuenberger H., Sucker H and Hiestand E.N, 1981, Ein Beitrag zur Pulverkompression, Chem-Ing Tech., Vol. 53, p. 45-47.

⁶GHRGB, 1987, Genealogisch – Heraldische Gesellschaft der Regio Basel 1937-1987.