GA Society for Medicinal Plant and Natural Product Research Gesellschaft für Arzneipflanzen- und Naturstoff-Forschung e.V.



Message from the President



Daer GA-Members,

the two years of presidency passed very quickly. It was an honour to serve GA in this way and I want to thank everybody for his/her support and trust. During the member's meeting in Geneva, the BoD of GA has newly been elected. The detailed results of the elections are also published in this Newsletter. I have been reelected as president of GA, Prof. Blaschek and Prof. Hamburger have been elected as vice presidents, Dr. Benedek for secretary and Dr. Roether as treasurer. As new members of the Advisory Board I want to welcome Prof. Baser, Prof. Skaltsounis, Prof. Tasdemir and Dr. Kelber. I want to take the chance to thank my colleagues in the ExC and BoD for the good team work and for all the time they spent for GA. It has always been a pleasure to work with such a good team! Special thanks to Prof. Rudolf Bauer who acted as president for six years and the last two years as vicepresident. Especially I want to thank Dr. Renate Seitz for all her activities as GA Secretary (2001-2009), she spent a tremendous amount of time and efforts to support GA. I want to thank Prof. Arnold Vlietinck for serving in the BoD for 14 years! He always has been a reliable and knowledgeable participant of our board meetings and we will certainly miss him and his contributions, I am thankful that he will continue as chair of the PC "Regulatory Affairs on Herbal Medicinal Products" for the next two years. Moreover, I want to thank Prof. Vuorela and Prof. Hensel for their support in the BoD and Prof. Meier for his excellent job as chair of the PC "Manufacturing and Quality Control of Herbal Remedies", and I hope that they will be active for GA also in the future. I am looking forward to the next BoD period and hope that we can serve and develop our Society in an optimum way.

I want to thank the editor of the Newsletter, Prof. Hensel, very much for all his efforts; he always welcomes your feed back and contributions and wants to keep the Newsletter attractive and valuable.

As you have been informed, we succeeded to negotiate with Thieme a low rate on-line access to Planta Medica articles for members of GA. I hope that this service will intensively be used. I also invite all members to consider the official organ of our Society — Planta Medica — for the publication of their valuable results.

The last annual congress in Geneva was again very well attended and successful. You will find a special report in this Newsletter. We could attract especially many young scientists from all parts of the world. So the GA meeting became again a platform for an exchange of knowledge and ideas between scientists from different regions. We will try to intensify this exchange, and also the exchange between young and experienced scientists in future meetings and workshops. On behalf of GA, I want to thank the organizers of the congress in Geneva, Prof. Kurt Hostettmann and his team for all their work and engagement. They did an excellent job and we will keep the Geneva meeting in best remembrance.

I am also very greatful to the sponsors who allowed to keep the fees relatively small. More than 700 abstracts of the presentations have again been published in Planta Medica. I want to thank the publisher, Thieme Verlag Stuttgart, and the issue-editors Profs. Hostettmann and Wolfender very much for all their efforts and for the good collaboration. During the congress, the newly established Bionorica Phytoneering Award of GA was awarded, winner of this award is Dr. Dana Seidlova-Wuttke, University Hospital Göttingen (Germany). Dr. Prokopios Magiatis, University of Athens (Greece) has been announced as the winner of the Egon Stahl award in Silver 2009. Prof. Dr. H.R.H. Princess Chulabhorn Mahidol, Research Institute in Bangkok (Thailand) was awarded the Honorary Membership of the GA.

The attractiveness of medicinal plant research can be seen in the number of scientists attending our meetings/workshops in 2009 (exemplary Pharm-SciFair June, 2009, Nice, France; 8th Annual Oxford International Conference on the Science of Botanicals, April, 2009, Mississippi, U.S.A.; 2009 Shanghai International Conference on Traditional Chinese Medicine and Natural Medicine (S-TCM 2009), Oct, 2009, Shanghai, China). Due to the international importance of medicinal plant research, such global networking is extremely necessary and fruitful

The next and 58th annual congress of GA will be held in Berlin and will be organized by Profs. Melzig and Kolodziej and their team. Detailed information is available from our homepage and from the second circular. I hope that many of you will attend and old and new members meet again at this very attractive event. Please visit the GA homepage regularly for updated information on this congress.

Besides our annual congress, GA is again coorganizing several other symposia on medicinal plant research during the year 2010, and I hope that you



can attend some of these meetings as well. You can find the corresponding information in this Newsletter or on our web site (www.ga-online.org).

We are observing an increasing international interest in a membership in GA and have recently achieved more than 1300 members from 90 nations; I want to welcome all colleagues who have joined our Society in the last year as new and active members of the GA family.

Finally I wish you a healthy, lucky and successful year 2010 and I am looking forward to seeing many of you in Berlin.

Cordially,

Brigitte Kopp (President of GA)

The Society informs

Notes to all GA members



Note to all GA members

The GA-homepage
(www.ga-online.org)
contains a special
members area
for which an access code
is needed:
username "gamember",
password "morphine".



Editorial remark

All contributions for the GA-Newsletter are welcome.

Deadline for submission is fixed to May 20th 2010.

Please send all contributions by e-mail: Prof. Dr. A. Hensel University of Münster, Institute for Pharmaceutical Biology and Phytochemistry, Hittorfstrasse 56, D-48149 Münster, Germany ahensel@uni-muenster.de



Deceased members

(to our knowledge)

Prof. Edouard Stanislas, Toulouse, France, (Universite Paul Sabatier, Toulouse), passed away 31.10.2008 (GA member since 1981);

Dr. Johannes Lütz, Bonn, Germany, passed away 15.12.2008 (GA member since 1984)

The Society will keep commemoration and offers its sincere condolence.

Notes from the Society

Announcement for Egon Stahl-Award (ESA) in Bronce 2010





On the occasion of his 60th birthday, Professor Dr. Dr. h.c. mult. Egon Stahl donated a medal, a document and a monetary prize in order to recognize and promote young scientists working in the field of Pharmacognosy (Pharmaceutical Biology) and Analytical Phytochemistry.

As a rule, the bronze medal and an award of € 1500 will be given to young scholars

up to the age of about thirty whose theses are of outstanding quality (see also www. ga-online.org awards)

In 2010 the ESA Bronze will be given during the 58th International congress and annual meeting of GA in Berlin on Aug 29 – Sept. 2, 2010 (www.ga2010.de).

Members of the GA-Society for Medicinal Plant and Natural Product Research are invited to submit nominations for candidates together with supporting data to the GA president, Prof. Dr. Brigitte Kopp, Vienna.

A nomination for the prize has to include a curriculum vitae incorporating the candidate's scientific career, an index on her/his publications, and reprints of her/his thesis and recent publications.

All documents have to be submitted in **electronic form** (as CD in 3 copies). Deadline for submissions is **March 15, 2010**. The awardee is expected to give a lecture on his/her scientific work.

December, 2009

Prof. Dr. Brigitte Kopp, GA president

Documents to be sent to: Prof. Dr. Brigitte Kopp Department of Pharmacognosy, University of Vienna, Centre of Pharmacy, Althanstr. 14, A-1090 Vienna, Austria, brigitte.kopp@univie.ac.at



Announcement for Dr. Willmar Schwabe Award 2010

The *Dr. Willmar Schwabe Award* acknowledges outstanding results of pharmacological and/or clinical research in the field of herbal medicinal products. The award is endowed with 10000 € by the endowing sponsor Dr. Willmar Schwabe GmbH, Karlsruhe (Germany).

The aim of the award is to motivate preferentially young scientists (normally 40 years or younger) to resolve phytotherapeutical and phytopharmaceutical problems in an interdisciplinary approach, in order to support the evidence-based use of natural products.

Research groups and scientists of universities and other non-commercial scientific in-

stitutions are entitled to apply. Scientific applications to be nominated (consisting of up to three relevant scientific publications on a specific topic which have been published during the last three years, the CV(s) and the list(s) of publications) must be submitted to the president of GA – Society for Medicinal Plant and Natural Product Research, Prof. Dr. Brigitte Kopp, Vienna, in electronic form (as CD-Rs in five copies) until **April 15, 2010.**

The *Dr. Willmar Schwabe Award* will be bestowed during the annual GA congress in Berlin, Aug 29 – Sept. 2, 2010 (www. ga2010.de), the awarded scientific results shall be presented during this annual con-

gress (more and detailed information under www.ga-online.org).

December 2009

Prof. Dr. Brigitte Kopp, GA president

Documents to be sent to: Prof. Dr. Brigitte Kopp, GA president; Department of Pharmacognosy, University of Vienna, Centre of Pharmacy, Althanstr. 14, A-1090 Vienna, Austria, brigitte.kopp@univie.ac.at

Some Data from the Membership Data Base

New GA members since June 2009

The society can announce 66 new members since June 2009. The Society welcomes you all warmly and wishes that GA may get a platform for many scientific and personal contacts. We are looking forward to your active participation in many GA events! All the best for you all!

Agyare, Christian, Ghana-Germany; Omer, Elsayed, Egypt; Rao, Govind, India; Nworu, Chukwuemaka S., Nigeria; Djoumessi, Aurelie V.B., Cameroon; Obolskiy, Dmitriy, Russia; Christensen, Kathrine-Bisgaard, Denmark; Radu, Marius-Daniel, Romania; Al Moustafa, Ala-Eddin, Canada; Gorr, Gilbert, Germany; López-Moreno, Carlos Armando, Mexico; Ebrahimabadi, Abdol Rassoul, Iran; Novak, Johannes, Austria; Bonifacio, Julie Charmain, Philip-

pines; Bouhouhou, Mouloud, Algeria; Matloub, Azza, Egypt; Omara A., Enayat, Egypt; Al-Azzawi, Amad M. Jamil, UAEmirates; Hussein, Refaei, Egypt; Wongkrajang, Yuvadee, Thailand; Chung, Ha Sook, Korea; Jegede, Adeola, Nigeria; Elegami, Awatif Abed, Sudan; Jaurequi, Anboni, Spain; Bisio, Angela, Italy; Joy, Odimegwu, Nigeria; Ogbonnia, Steve, Nigeria; Halabalaki, Maria, Greece; Urbain, Aurelie, Greece; Piri, Khosro, Iran; Farzaneh, Samiee, Iran; Ibrahim, Halijah, Malaysia; El-Toumy, Sayed, Egypt; Radmehr, Behrad, Iran; Khosravi Dehag, Nafiseh, Iran; Necula, Radu, Romania; Ghitta, Gheorgina, Romania; Trifan, Adriana, Romania; Bucur, Lana, Romania; Malahi, Farrokh, Iran; Umar, Habib Danmalam, Nigeria; **Dehelean**, Christina Adriana, Romania; Peev, Camelia, Romania; Pop, Georgetta,

Romania; Ersilia, Alexa, Romania; Assimopoulou, Andreana, Greece; Osman, Che Puten Binti, Malaysia; Ahmat, Norizan, Malaysia; Ahmad, Rohaya, Malaysia; Rieder, Arno, Brazil; Dianita, Roza, Malaysia; Sahranavard, Shamim, Iran; Pavlovic, Ivan, Serbia; Okoye, Theophine, Nigeria; Melariri, Paula, South Africa; Lim, Wei-Han, Singapore; Mendel, Marta, Poland; Fialova, Silvia, Slovakia; Fiebich, Bernd, Germany; Waltenberger, Birgit, Austria; Grienke, Ulrike, Austria; Kühnl, Susanne, Austria; Gregorio, Elsa, Italy; Garo, Eliane, Switzerland; Fan, Peihong, China; Shittu, Abiodun, Nigeria; Seidlova-Wuttke, Dana, Germany; Foglio, Mary, Brazil; Kretschmar, Josef, Switzerland; Fawzy, Lamyaa, Egypt; Krummrei, Sabine Maria, Germany.

Egon Stahl Price in Silver to Dr. Prokopios Magiatis



On the occasion of his 60th birthday, Professor Dr. Egon Stahl donated a medal, a document and a monetary prize in order to recognize and promote young scientists working in the field of Pharmacognosy (Pharmaceutical Biology) and Analytical Phytochemistry.

As a rule, the silver medal and an award of \in 3.000,– should be awarded to scientists up to the age of about forty who have published outstanding scientific work during the years after their graduation.

This year the ESA Silver is bestowed on Prokopios Magiatis, University of Athens, Greece.

Dr. Magiatis is a young (37 years old) and highly dynamic researcher with a very strong track record and with significant potential for the future.

He received his training in Pharmaceutical Sciences at the University of Athens and carried out his PhD work jointly between Athens and the laboratory of Pharmacognosy of the University of Paris. He spent



some time as Postdoctoral Fellow at the Institut Curie, Paris, funded by a CNRS scholarship, was appointed Research Assistant at the University of Athens in 2000, and moved up in the ranks to become As-



sistant Professor in 2006. Today, he leads a group comprising an appreciable number of PhD students and is actively involved in the teaching activities in the undergraduate curriculum in Pharmacognosy.

Dr. Magiatis has strong expertise in natural products isolation and structure elucidation analysis, synthesis of natural products analogues, and in certain areas of molecular pharmacology. His research has led to important discoveries, such as new natural product leads with potent and selective kinase inhibitory properties. He explored the gastro-protective properties of mastic gum, and the cardioprotective activity of olive and grape constituents. The breadth of his vision of natural products research is documented by valuable archeopharmacognostic contributions (for example 6-bromoindirubin from *Hexaplext runculus*, his-

toric colorants from *Cotinush* eartwood). He has successfully integrated "classical" natural product research, medicinal chemistry and molecular approaches towards understanding and improvement of biological properties of compounds.

Dr. Magiatis has been highly successful in securing substantial competitive funding through various research projects. He has participated in several national and European research programs, two of which have received special awards for their particularly high quality.

The publication record is impressive with some 85 articles in peer reviewed journals. His bibliometric key numbers — even though one has to consider such figures with sufficient precaution — are certainly top for a 37-year old scientist in our research field. He is coinventor in 8 patents, and was

involved in the discovery and development of 4 compounds that are commercialized as research tools.

Also, we should not forget to mention his significant contribution to the organisation of the Joint Meeting in Athens, and as one of the two issue Editors of the Planta Medica Abstract volume.

In summary, Dr. Magiatis' track record is outstanding for a scientist of his age, and rather remarkable for the breadth of his expertise and achievements.

Thus, he is a worthy awardee of the Egon Stahl Award in Silver, Prokopios Magiatis is honored with the ESA Silver, which is donated with 3000 € and the ES medal in silver.

Prof. Dr. B. Kopp, GA president

Bionorica Phytoneering Award 2009 to Dr. Dana Seidlová-Wuttke

According to stated objectives, the Bionorica Phytoneering Award acknowledges outstanding research in the field of development and application of phytopharmaceutical products. The aim of the award is to motivate scientists to perform research in the following areas:

- pharmacodynamics and pharmacokinetics of herbal medicinal products and their active principles
- clinical research in the areas of respiratory tract infections, inflammation, women's health, and metabolic syndrome
- safety and pharmacovigilance studies.

It is the first time that the Bionorica Phytoneering Award will be bestowed and GA is thankful to Prof. Dr. Michael Popp as endowing sponsor.

The members of the jury unanimously decided to give the Bionorica Phytoneering Award 2009 to Dr. Dana Seidlova-Wuttke, Medical University of Göttingen, Germany. Dr. Dana Seidlová-Wuttke was born 1962 in Czechoslowakia. She studied medicine at the Charles University (1980-1986) in Prague and after promotion in 1986 she started her professional career as gynaecologist at the 2nd Gynaecologic Clinic of the Charles University in Prague. In 1992 she finished the professional education in gynaecology and obstetric. Her main topic was colposcopy and prophylaxis of cervical cancer and gynaecologic endocrinology. In 1992 she founded the Center for Contraception at the 2nd Gynaecologic and Obstetric Clinic in Prague, spent WHOsponsored fellowships at the University Women's Hospital in Bern (Switzerland) and at the Reproductive Health Care Service Center in Uppsala (Sweden) after which she was awarded with the European Certificate for Teaching and Therapy in Reproductive Health. In 1997 her book "Contraception for praxis" was published.

In the same year she was awarded with a scholarship to spend a year in the Department of Clinical and Experimental Endocrinology at the University Hospital in Göttingen (Germany) and became a staff member in 1998. In 2000 she passed the German Board examination in "Obstetrics and Gynaecology". In 2004 she finished her second doctoral thesis at the Georg-August-University in Göttingen.

In her scientific work she developed animal models for estrogen deficiency diseases for which she won an award at the 9th International Menopause Society World Congress in Yokohama, Japan. She focused on hormone replacement therapy and incorporated new aspects of phytotherapy in gynaecology; she is also active in osteoporosis research.

In her recent studies she has accomplished a number of insights into beneficial effects of *Actea (Cimicifuga) racemosa* by utilizing *in-vitro* and animal models. Her research has demonstrated that *Actea (Cimicifuga) racemosa* is devoid of adverse effects in the uterus or the mammary gland of female rats.

Her experimental results have added to the knowledge of the health promoting profile of *Actea (Cimicifuga) racemosa* not only in females but also in males.

Her contributions impressively show she and coauthors have preclinically worked on many aspects of the topic "Actea (Cimicifuga) racemosa extract" with high competence, convincing and innovative experi-



ments, continuative ideas and finally with excellent results. Their data mainly contributed to the view that today *Actea (Cimicifuga) racemosa* extracts can be regarded as effective and safe.

Dana Seidlova-Wuttke is honored with the Bionorica Phytoneering Award 2009, which is donated with 10.000 Euro.

Prof. Dr. B. Kopp, GA president



The symbol of the Bionorica Pytoneering Award "Key to Science"



Honorary Membership of GA to Prof. Dr. Her Royal Highness Princess Chulabhorn Mahidol

The Board of Directors decided unanimously to give the Honory Membership to Professor Dr. Her Royal Highness Princess Chulabhorn Mahidol.

Her Royal Highness Princess Chulabhorn Mahidol, born in 1957, is the youngest daughter of Their Majesties King Bhumibol Adulyadej and Queen Sirikit of Thailand.

She made her B.Sc in Organic Chemistry with First Class Honours, she finished her PhD at the Mahidol University in Bangkok and made a post doctoral training at the University in Ulm, Germany.

As a qualified scientist, she has always attached the greatest importance to the role of science in social and economic development, and accordingly originally conceived the idea of creating a national institute to assist in the development of Thailand.

H.R.H. Princess Chulabhorn is now Professor of Chemistry at Mahidol University where she joined the faculty in 1985. Her special research interests are in the chemistry of natural products and in Thai medicinal plant, environmental health problems of developing countries and cancer research. She was the third person in the world to be awarded UNESCO's Einstein Medal for her continuous effort in promoting scientific collaboration in Asia and the Pacific, and she was the first Asian to be in-

vited to join the Royal Society of Chemistry, in England, as an Honorary Fellow. She is also chairperson of the Working Group on the Chemistry of Natural Products collaborative programme between the Japan Society for the Promotion of Science and the National Research Council of Thailand.

H.R.H. Princess Chulabhorn has received international recognition for her scientific accomplishments in her appointment to various United Nations posts, namely special advisor to the United Nations Environment Programme and member of the Special High-Level Council for the International Decade for Natural Disaster Reduction of the United Nations. In addition, she has also been visiting professor at universities in Germany, Japan and U.S.A., and has received numerous honorary doctoral degrees from universities in U.S.A., U.K., Japan and elsewhere. Recently she has received the 2002 Environmental Mutagen Society-Hollaender International fellow Award.

In 2006 Her Royal Highness received the Nagoya Special Award Gold Medal in recognition of her vision and for her dedication and efforts in promoting science in general and organic chemistry in particular. In 2007 she was awarded the Albert Hoffmann Centennial Gold Medal from the Uni-



versity of Zurich for her outstanding contribution to the Chemistry of Natural Products. In 2008 she received Special Award in recognition of her contributions to science from the World Academy of Art and Science. Earlier this year Her Royal Highness Princess Chulabhorn was awarded the Honorary Visiting Professorships from Fudan University and Nanjing University in China. GA is awarding her the Membership in recognition of her important contributions to medicinal plant research, her continuous effort in promoting scientific collaboration, and her long and intense engagement to solve environmental health problems of developing countries.

Prof. Dr. B. Kopp, GA president

Varro E. Tyler Award for Honorary Member Adolf Nahrstedt

On occasion of the 50. annual conference of the American Society of Pharmacognosy (ASP) in Oahu, Hawai, the Varro E. Tyler price was awarded to GA honorary member Prof. A. Nahrstedt, University of Münster, Germany! The Society congratulates!



Retirement of Prof. Dr. Kurt Hostettmann

One of Europe's most distinguished phytochemists, Professor Kurt Hostettmann, retired on 30. September 2009 from his position as director of the Institute of Pharmacognosy and Phytochemistry at the University of Geneva.

After studies of chemistry at the University of Neuchâtel, Switzerland, and a PhD from the same University, he joined the lab of Prof. Nakanishi at Columbia University as a postdoctoral fellow. He was a senior research associate at the ETH Zurich before

being appointed in 1981 as Full Professor at the University of Lausanne, Switzerland. In 2004, he transferred with his group to the University of Geneva.

Prof. Hostettmann is known for his pioneering studies on the use of liquid-liquid partition chromatography for natural products isolation. He was actively involved in the development and implementation of simple bioassays, such as bioautographic tests, to guide isolation of bioactive molecules. In the early 1990s he was among the very first



chemists to recognize the potential of hyphenated techniques for natural product analysis, and his group subsequently demonstrated the usefulness LC-MS and LC-NMR in numerous elegant applications. Prolific author of nearly 500 publications including a significant number of books, he has also extensively published and lectured for lay audiences. Over 60 PhD students carried out their dissertation in his lab, and numerous visiting scientists from all over the world received training in modern phytochemistry. The extensive cooperation with scientists from developing countries has been a mark of his lab.

Prof. Hostettmann organized numerous international symposia, in Switzerland and abroad, for various societies and organisations, the latest being the Annual Congress of GA in Geneva in August 2009. During his career, he received several international distinctions, such as the Tate and Lyle Award as well as the Silver Medal of the Phytochemical Society of Europe, Honorary Professorships at the Chinese Academy of Sciences Shanghai, Nanjing University, the University of Panama, and Doctor Honoris Causa from the Universities of lasi, Romania, and Toulouse, France.

After his retirement from official duty at the University of Geneva, Prof. Hostettmann maintains a busy working and travelling schedule, as chairman of the IOCD Working Group on Plant Chemistry, as Professor and Guest Lecturer around the globe, and as author of books. There is no doubt that he will continue to eloquently and convincingly plead the cause of pharmacognosy and phytochemistry.

Matthias Hamburger, University of Basel, Switzerland

Minutes of the GA Members' Meeting 2009 in Geneva, Switzerland

The annual Member's Meeting was held on 18 Aug 2009 during the Geneva annual congress. President Prof. Kopp welcomed the 112 participants.

1. Passing of the agenda

The agenda sent out to all members with the invitation in GA NL 1-2009 in June 09 was approved unanimously.

2. Approval of the minutes of the annual Members' Meeting 2008 in Athens, Greece The minutes of the Members' Meeting in Athens, Greece, in 2008 were published in the GA-NL 2/Dec 2008. They were accepted from the assembly unanimously with no remarks.

3. Annual reports

3.1 Report of the President Prof. Brigitte Kopp

- The Varro Tyler award of ASP was awarded to GA Honorary Member Prof. A. Nahrstedt during the ASP 50th anniversary meeting in Honolulu. Congratulations to A. Nahrstedt!
- After Kopp's request for better paying moral in the last Newsletter invoice reminders were sent out to non-paying members.
- The TG rules were changed: Applicants have to be at least in their 2nd year of regular student membership (with paid membership fees)
- PM Online subscriptions
 In June GA and Thieme Publ. presented a new offer to all GA members with a second PM online access per year also in July. In 2009 38 + 4 (in July) PM 60 € and 39 + 6 (in July) PM 100 € subscriptions were ordered (in total 87 subscriptions).
 - GA members are requested to make use of this special offer! (more information under www.gaonline.org)
- The ExC met twice on 26 Jan. and 7 Aug. 2009 in Vienna, the

- BoD on 27 Febr. 2009 in Duesseldorf and on 15 Aug. 2009 in Geneva, Switzerland.
- 2 issues of the Newsletter have been prepared and sent out by Prof. Hensel in Jan. and June 2009, many thanks!
- Cooperation with the Geneva organizers 2009 (Prof. Hostettmann, Prof. JL Wolfender and Ms. K. Megzari) was very good, many thanks!
- A warning announcement concerning the New Flu was added to the congress materials.
- All honorary members were invited to Geneva by the congress president Hostettmann and the GA president. HMs Franz, Nahrstedt, Sticher, Scheffer and Schilcher participated at the congress, HMs Friedrich, Hänsel, Menssen, Sprecher and Wichtl could not attend.
- On Sept. 4, 2009, Prof Hostettmann will celebrate his farewell symposium, GA will be represented by M. Hamburger with a book present.
- Pres. Kopp chaired the juries of the Egon Stahl Award in silver and Bionorica Phytoneering Award 2009 and informed and invited the winners Dr. Prokopios Magiatis, Athens-Greece, for ESA silver, and Dr. med. Dana Seidlova-Wuttke, Goettingen-Germany, for the BPA (see laudations).
- Pres. Kopp got various offers for a cooperation with GA (see top 8)
- Prof. P. Houghton had thanked the president for her participation and present at his retirement symposium.
- Prof. Kopp was informed of a Thai initiative to found a new society focussed on Herbal medicinal products and neutraceuticals.
- Prof. Kopp coordinates the GA website and delivered contributions for homepage and NL (messages, laudations etc.).

- GA participated/cooperated and/ or supported a series of Symposia and workshops:
 - 2008, 10-12 October Shanghai: International Conference on TCM and Natural Medicine; Pres. Kopp gave a welcome address and a plenary lecture.
 - 2008, 9–14 Nov., World congress on Medicinal and Aromatic Plants (WOCMAP 4), in Capetown, SA (GA was represented by vice-president Bauer, who gave a plenary lecture)
 - 2009, 6 March, London workshop on traditional HMPs with a welcome of the GA president Kopp
 - 2009, April 6–9: 8th Oxford meeting in Oxford, USA; GA was represented by vice-president Bauer
 - 2009, May 17; TCM workshop in Graz, organized by Prof. Bauer
 - A GA workshop at PharmSci Nice on 12 June 09 was quite successful and of high niveau (50 participants), Pres. Kopp gave an introduction lecture, PLs by Michael Heinrich, Matthias Hamburger, Rob Verpoorte and Peter Imming;
 - 2009, 17–19 June 2009 Plant Breeding Ljubljana with Prof. J. Novak and Prof. Franz, Vienna, as GA representatives

3.2 Reports of the Vice-Presidents Report of Vice president Prof. R. Bauer:

- He represented GA at the 8th Annual Oxford International conference on the Science of Botanicals 6 9 Sept. 2009 and gave a plenary lecture;
- He organized an international TCM symposium in Graz on May 14–16, 2009, with GA as co-organizing Society. Title: Modernisation of TCM. The participants agreed to the Graz Declaration



- on the Modernization of TCM. 100 participants from 16 countries; report under http://tcmgraz.at/english%20version/einde x.html
- He represented GA at the ASP 50th Anniversary Meeting 27 June - 1 Jul. 2009 in Honolulu and delivered a congratulation address and a flag as a present to ASP
- Since he will retire from the ExC he thanked all colleagues for their good collaboration during the last 12 years.

Report of Vice president Prof. W. Blaschek

- · He represented GA and gave a plenary lecture at Phytopharm 2009 in Bonn (29–31 Jul 2009)
- and will represent GA also at the Phytotherapy congress in Berlin (10-12 Sept. 09)
- · He is a steady member of the German committee of associations interested in Herbal medicinal products ("Verbände übergreifende Gespräche");
- He is vice delegate of the commission E at the German ministry of Health;

3.3 Secretary Dr. Renate Seitz

- · She presented some statistics: On Aug 1, 2009, GA had 1371 members from 90 countries, with 12 honorary members, 35 company members (2 new companies Merck and Vitakraft, Hungary), 550 members pay the reduced fees. Since last Sept. GA had 246 new applications (compared to 161 for the same period in 2008), 32 cancellations and 161 exclusions of non paying members. The number of members without e-mail address is steadily going down and is now 110.
- Dr. Seitz will retire from the GA secretariat and thanked for the good collaboration in the past 8 years.

3.4 Report of the Treasurer and report of the auditors Treasurer Dr. Bernd Roether

- · GA was only slightly affected by the financial crisis due to some rearrangements.
- · ESA account is in good condition, the 2009 silver award (3000 €) could be paid by dividend payout.
- GA budgets:
 - Total revenues till Aug 2009: 65079 € (incl. Geneva sponsoring) (Budget 2009 60 270 €) Total expenses till Aug 2009: 43500 € (budget 2009 69 150 €) Budget 2010: 75270 total revenues, 76 150 total expenses
- The sponsoring for Geneva was quite high, thanks to all sponsors
- On 1 Aug. 2009 20000 € mem-

- bership fees were still open. The bad paying moral of the last year seriously affected the TG budget (but the treasurer's cash counter at the congress was very well accepted, thanks to all paying members)
- · GA acts at the financial limit for the moment: A future rise of membership fees might be necessary in the coming years.
- Report of the auditors Profs. Stahl-Biskup and Schilcher: No complaints nor a single mistake in the books, many thanks to treasurer Dr. Roether and his assistant. Ms. Lahse.

3.5 Discharge of the ExC

Auditor Prof. Schilcher asked for the discharge of the treasurer and the whole ExC, that was accepted unanimously by the assembly.

4. Report of the Editor-in-Chief of Planta Medica Prof. L. Pieters, presented by Prof. M. Hamburger

- · The number of submissions is increasing (almost 1100), the number of accepted papers is stable (ca. 200)
- Main focus remains on Pharmacology/clinical studies, followed by Natural products chemistry
- · China, Korea, Germany and USA are the leading countries
- Total of citations is increasing (8700)
- IF is increasing (1,960 in 2008) (but IFs of most journals in the field are increasing, especially of journals edited by Elsevier and Wiley)
- · PM has been surpassed by JEP and Phytomedicine, others close
- · Good reviews on topical subjects in PM and special issues of PM draw considerable interest in the scientific community and enhanced the visibility of PM

Prof. M. Heinrich, London, presented a draft declaration on the "Visibility and international standing of PM" (see below) and asked the audience for their agreement to authorize the GA president to go into discussion with Thieme publishers: The audience agreed unanimously (no abstentions and no one against). The results will be reported next year.

MOTION - Members' Meeting 2009

We, the members of the GA assembled in Geneva during the 57th Congress of our Society, have serious concerns about the overall performance and standing of Planta

The field of Medicinal Plant Research is thriving and for decades our Society has played a leading role in its development. According to the recent published IFs Planta Medica has dramatically lost ground compared to other leading journals in the field.

The general assembly of GA requests that the ExC takes all necessary measures to advance the international standing of PM to adequately reflect the Society's importance and the scientific quality of the articles published in PM. Specifically, we the members authorize the ExC to initiate discussions with the publisher about ways forward to achieve these goals.

5. Reports of the Permanent Committees

Biological and Pharmacological Activity of Natural Products (Report Prof. V. Butterweck)

The Topic of her Geneva workshop was "Phytoestrogens: risks and benefits" with speakers A. Vlietinck, H. Jarry, and G. Vollmer Next year's workshop: Use of polyphenols on cardiovascular diseases

Breeding and Cultivation of Medicinal Plants

(Report Prof. Ch. Franz)

Topic of his Geneva workshop will be "Genetic resources, Conservation and Breeding" with Ch. Franz, Dr. C. Carlen, CH, and Dr. Baricevic, Slovenia, as panellists Next year's workshop will focus on plant biotechnology with O. Kayser (NL) and J. Novak (Austria)

Manufacturing and Quality **Control of HMPs**

(Report Prof. Meier)

Meier's 2009 workshop was combined with Vlietinck's workshop to a 3h pre-symposium;

his special focus was "Herbal remedies, quality aspects of herbal extracts" with himself and B. Heneka, Swissmedic-Bern, as speakers.

Meier will retire as PC chair and gave a short overview on his activities in the past 9 years.

Dr. C. Erdelmeier will succeed as PC chair, the 2010 topic will be: Use of hyphenated techniques for the analysis of HMPs: Are these always necessary?

Regulatory Affairs on HMPs (Report Prof. Vlietinck)

The combined workshop "Are European Ph.Eur. monographs on extracts a useful basis for the development of HMPs?" was quite successful. His panellists were M. Wierer, Strasbourg, R. Laenger, Vienna, and K. Helliwell, UK. For 2010 half day workshop (together with Prof. S. Alban) is planed

Young researchers workshop (report Profs. AR Bilia and A. Hensel)

A. Hensel: His session of the YRW "Modern methods in Cell culture" (together with D. Tasdemir and T. Efferth) was opened by a lecture of A. Deters, Muenster; out of 30 contributions 9 presentations were se-

A.R. Bilia: In her session "Validation of analytical methods", together with J. Rollinger and JL Wolfender,



the key lecture was given by S. Rudaz, Geneva. 30 abstracts were submitted, 9 presentations were chosen.

3 best presentations of both sessions were rewarded with 300 € (sponsored by Bionorica).

6. Election of the Board of Directors

Profs. Stahl-Biskup and Schilcher as returning officers presented the results out of 112 votes (inclusive 3 company members' authorizations):

President

Prof. Dr Brigitte Kopp (votes: 104 yes)

Vice-Presidents

Prof. Dr Wolfgang Blaschek (100 votes) Prof. Dr. Matthias Hamburger (101 votes)

Treasurer

Dr. Bernd Roether: (103 votes)

Secretary:

Dr. Birgit Benedek (105 votes)

The Advisory Board

The following 8 candidates were elected:

Prof. Dr. Rudolf Bauer, Austria 76 votes

Prof. Dr. Anna Rita Bilia, Italy 71
Prof. Dr. Veronika Butterweck LIS

Prof. Dr. Veronika Butterweck, USA 63

Prof. Dr. Dean Guo, China 49

Prof. Dr. Michael Heinrich, U.K. 48

Prof. Dr. Deniz Tasdemir, U.K. 45

Prof. Dr. Susanne Alban, Germany 43

Prof. Dr. KHC Baser, Turkey 43

All candidates accepted.

Two additional members of the advisory board will be coopted by the new ExC.

7. Future congresses, symposia and workshops

GA congresses

GA conferences in the next years

2011 Antalya, Turkey, 4–9 Sept., organizer Prof. Baser, Turkey (www.ga2011. org)

2012 New York, USA, joint meeting, organized by ASP

2013 Münster, Germany, 1–6 Sept., organized by Prof. Hensel (www.ga2013. org)

2014 Portugal, University of Minho-Braga, organized by Prof. Alberto Diaz, University of Minho-Braga

Symposia and workshops

(more details under www.ga-online.org/ events)

2009

- 2009, 10–12 Sept.: Phytotherapy congress in Berlin
- 2009, 25 Sept., Vienna: workshop with EDQM on "Herbal drugs & herbal preparations"
- 2009, 8–10 Oct., 2nd Ibero-American conference in Lisbon, Portugal
- 2009, 17–18 Oct., Shanghai, TCM meeting
- 2009, Dec. 2–4, Kuching, Sarawak, Malaysia: 4th Global Summit on Medicinal and Aromatic plants
- 2009, 4 Dec., London: "The role of natural products in drug discovery and development in the new millennium".

2010

- April, Innsbruck: NFN symposium "Drug discovery from nature"
- April 9. Oxford symposium, University of Oxford, USA
- July 1–3, Phytopharm 2010 in St. Petersburg (www.adaptogen.ru/ phyto2010.html)
- July (mid), Vienna, Symposium on "Green Plant breeding technologies"
- Sept. 20–25, Castilla la Mancha, Spain: ISE and Spanish-Portuguese co-meeting

2011

 2011, Nov. Mistletoe symposium (organizer Dr. Scheer)

8. Miscellaneous

The Berlin organizers gave a presentation of the GA annual meeting 2010 in Berlin.

President Kopp thanked Board and GA members for the good cooperation during the past period, especially all retiring BoD members and PC chair Prof. B. Meier.

GA president Prof. B. Kopp GA secretary Dr. R. Seitz

Meeting reports







GENEVA, 16-20 AUGUST 2009

57th International Congress and Annual Meeting of the Society for Medicinal Plant and Natural Product Research

The 57th Congress of the Society of Medicinal Plant and Natural Product Research chaired by Prof. Kurt Hostettmann took place in Geneva from 16 to 20 August 2009. The congress venue was held at the CICG (Centre International des Conférences Genève) which is very well equipped to host such an important scientific event. The scientific programme attracted about 700 researchers from 71 different countries who submitted more than 900 abstracts for posters or oral presentations. Fourteen distinguished scientists from both academia and industry involved in various field of natural product research were invited for plenary and keynote lec-

tures. All the abstracts were published in issue 9 of volume 75 of Planta Medica dedicated to the congress.

The main scientific topics of the congress were the following: lead finding from nature, conservation and biodiversity issues, plants and aging of the population, natural products and neglected diseases, anti-cancer agents, HIV and viral diseases, quality control and safety assessments of phytomedicines, prevention of metabolic diseases by medicinal plants and nutraceuticals cosmetics, flavours and aromas.

The opening lecture was given by HRH Princess Chulabhorn Mahidol, President of the Chulabhorn Research Institute in

Bangkok who gave an overview of the recent investigations of diverse cytotoxic natural products from Thai bioresources. At end of her presentation, HRH Princess Chulabhorn Mahidol performed 'Gu Zeng' music for the whole assembly in honour of Prof. Kurt Hostettmann who was about to retire of his activities as head of the Laboratory of Pharmacognosy and Phytochemistry of the School of Pharmaceutical Sciences of Geneva.

Prof. B. Kopp president of the GA introduced the award lectures. The Egon Stahl award (Silver Medal) was given to Dr. Prokopios Magiatis (Department of Pharmacognosy and Natural Products Chem-



istry of the University of Athens) in recognition of his highly valuable contributions to pharmacognosy, pharmaceutical biology and analytical phytochemistry, in particular by his outstanding contributions to natural lead compounds and their synthesis and aspects of molecular pharmacology, he give a talk on ancient medical texts as a valuable source of knowledge for drug discovery. Dr. Dana Seidlová-Wuttke from the Division of Endocrinology of the University Medical Center of Göttingen obtained the Bionorica Phytoneering award for her scientific work in investigating pharmacological mechanisms and effects of Cimicifuga racemosa in the treatment of menopausal symptoms, she delivered a lecture on phytotherapy for the aged.

During the scientific sessions, Prof. M.J. Garson (University of Queensland) gave an insight into the chemistry from South East Asian medicinal plants. Prof. O. Sterner (Lund University) had a talk on novel GABAa ligands, inspired by nature. Prof. M.S.J. Simmonds from the Kew Royal Botanic Gardens discussed about the opportunities and challenges that face projects that link natural product chemistry, plant uses and conservation. The issue of neglected diseases was treated by Prof. D Tasdemir (London School of Pharmacy) who spoke about the treatment of infectious neglected diseases. Prof. A. Matter from the Esperanza Medicines Foundation presented the potential of natural products for the treatment of HIV and AIDS while the topic of anti-cancer agents from plants, was

treated by Dr. P.G Grothaus from the NCI. Prof. H.Lou (Jinan University) focused his talk on the potential and the biological role of chemical constituents from Chinese liverworts and their biological significances. The issue of safety and pharmacovigilance for phytomedicines was presented by Prof. S.A. Khalid from Khartoum University. Two talks were dedicated to plants and aging of the population, one on phytopharmaceuticals for dementia therapy by Prof. E Perry (University of Newcastle) and another on the clinical development of a new Huperzine A derivative by Dr. Tamchès from Debiopharm SA. Two other lectures from scientists from the industry covering the screening of botanicals for new taste and flavor compounds (Dr. C Starkenmann, Firmenich SA) and nutraceutical discovery (Dr. B Böhlendorf, DSM Nutritional Products Ltd) closed the program of the symposium.

In addition to these invited lectures, 70 short lectures were given in two parallel sessions and lead to stimulating discussions with scientists from all continents. Two posters sessions featuring each ca. 350 posters were also organised.

Prior to the symposium, three workshops were organised on sunday afternoon at the University of Geneva. The workshops for young researchers was divided in two parts one dedicated to the validation of analytical methods (Chair: Prof. A.R. Bilia) and the other by to cell cultures (Chair: Prof. A. Hensel). The Permanent Committee on Regulatory Affairs of Herbal Medicinal

Products (Chairs: Prof. A. Vlietinck and B. Meier) also had his workshop on 'Regulatory Affairs of Herbal Medicinal Products' the same afternoon. During the symposium the Permanent Committee on Biological and Pharmacological Activity of Natural Products (Chair: Prof. V. Butterweck) organised a workshop on 'Phytoestrogens – Risks and Benefits for Human Health' and the Permanent Committee on Breeding and Cultivation of Medicinal (Chair: Prof. C. Franz) treated the topic of 'Genetic Resources, Conservation and Breeding'. All these workshops had a very good attendance and stimulating discussions took

Finally the congress was closed by Prof. Kurt Hostettmann and Prof. B Kopp who gave the best poster awards as well as the travel grants. The symposium ended with a very nice and sunny excursion to the Chillon castle and the 'Medicinal Plant Garden of Leysin' created by Prof. Hostettmann (Gentiana Foundation) where the participants could admire medicinal plants sorted by therapeutic indications in a magnificent surrounding. 200 participants took part to the excursion, this medicinal plant garden (www.gentiana-online.ch) serves as a pedagogic support for explain the use of medicinal plants to pharmacists, health professionals and public at large and it hold an important and unique collection Gentian.

Prof. Kurt Hostettmann and Prof. Jean-Luc Wolfender

The 5th GA Young Researcher Workshop YRW

The 5th Young Researchers' took place on Sunday 16th August 2009, on the occasion of the 57th International Congress and Annual Meeting of the Society for Medicinal Plant and Natural Product Research in Geneva. Switzerland.

This year, for the first time two workshops were organised: "Validation of analytical methods" (WS1) chaired by Prof. Anna Rita Bilia (University of Florence, Italy) and "Cell cultures-Practice and Problems" (WS2) chaired by Prof. Andreas Hensel (University of Münster, Germany).

Co-chairs of WS1 were Prof. Jean Luc Wolfender (University of Geneva, Switzerland) and Dr. Judith Rollinger (University of Innsbruck, Austria). Co-chairs of WS2 were Dr. Thomas Efferth (German Cancer Research Centre, Heidelberg, Germany), and Dr. Deniz Tasdemir (University of London, UK).

This year, for the first time, two invited keynotes opened the two workshops: Dr. Serge Rudaz (University of Geneva, Switzerland) gave a lecture entitled "Guidelines and Validation Issues for Method Validation", an outstanding and very comprehensive speech on the difficulties related to the validation of the analytical procedures of plant extracts according to ICH guidelines. He clarified the terms specificity, selectivity, linearity, accuracy, repeatability, re-

producibility, range, LOD, LOQ and ruggedness according to the European and USA requirements.

More than 100 participants attended the workshops, and about 50 abstracts were submitted from young researchers from countries worldwide. The scientific program of each workshop included 9 lectures of se-

lected young scientists. The students who presented their work at WS1 were Serhat Cicek (University of Innsbruck, Austria), Marco Christen (Universitry of Basel, Switzeralnd), Liene Dhooghe (University of Antwerp, Belgium), Salomé Gachet (University of Graz, Austria) Benedetta Isacchi (University of Florence, Italy), Kerstin Kainz



Some of the highly motivated speakers and participants of 5th Young Researcher Workshop 2009, Topic Cell Culture Testing.



(University of Vienna, Austria), Filis Kazazi (University of Utrecht, The Netherlands), Jan Kusterer (University of Marburg, Germany), Janine Zaugg (University of Basel, Switzerland).

The students who presented their work at WS2 were N. Kretschmer (University of Graz, Austria), M.R. Ursino (University of Messina, Italy), R. Popescu (University of Vienna, Austria), P. Jungke (University of Florida, U.S.A.), S. Krasteva (University of Vienna, Austria), F. Berger (University of Vienna, Austria), F. Berger (University of Lausanne, Switzerland), O. Hendrawati (University of Groningen, Netherland), A.A. Ahmadu (Niger-Delta University, Nigeria).

The communications were of high scientific level and well-presented. The participation of the audience was intense and enthusias-

tic. In most cases, the panellists were limited solely to the coordination of the discussion between the students, making this workshop a unique opportunity for the participants to expand their own studies by acquiring new ideas knowledge in a most constructive, friendly, and international atmosphere.

The three award-winning presentations of WS1 were Marco Christen for "HPLC based activity profiling of *Ganoderma lucidum* extract or antiplasmodial activity and isolation of new active lanostane triterpenoids"; Benedetta Isacchi "Problematics for the validation of analyses of TCM herbal drugs and herbal drug preparations; the case of *Fructus gardeniae* (Zhizi) and its preparata"; Kerstin Kainz for "New compounds from *Metaxya rostrata* (Kunth C. Presl)".

For the parallel workshop WS2 on in vitro testing Dr. Alexandra Deters (University of Münster, Germany) gave a key note lecture entitled "Common practice of animal cell culture: requirements, problems and answers" in which the actual standards for in vitro testing were described and evaluated. 7 further short lectures of young scientists proved the very high standard of the future scientist in GA. Content, science and also the way of presentation was world-class type science and the auditorium and the organizers were impressed from the talks presented by P. Jungke, S. Krasteva, N. Kretschmer, G. Glauser, M.R. Ursino, R. Popescu and F. Berger.

All awards have been sponsored by Bionorica AG, and were given on Monday, August 17th, 2008.

Anna Rita Billia and Andreas Hensel

Symposium "Modernization of Traditional Chinese Medicine – Acupuncture and Herbal Medicine Research", Graz, Austria, 14.–16.5.2009

The symposium was organized at University of Graz by Univ.-Prof. Dr. Rudolf Bauer and Univ.-Prof. Dipl.-Ing. DDr. Gerhard Litscher, TCM Research Center Graz, in collaboration with the Society for Medicinal Plant Research and the Eurasia Pacific Uninet, and was supported by the Future Fonds Styria, and the Austrian Federal Ministries of Health and of Science and Research.

More than 100 experts and scientists in TCM research from 16 countries and four continents presented the current scientific trends and recent research results in 25 key note lectures and 35 poster presentations. The two main topics were research on acupuncture and research on Chinese herbal medicine, covering the aspects of quality control, synergistic activities, and systems biology. The symposium was used as an opportunity to present and discuss the state of the art of multidisciplinary ap-

proaches to TCM research, which can lead to modernization of TCM.

The participants finally agreed on the "Graz Declaration on the Modernization of Traditional Chinese Medicine" which states the following premisses:

- Modernization should lead to a global acceptance and integration of TCM within conventional medicine
- 2. Modernization of TCM should consider and respect the holistic approach
- Modernization of TCM should comply with the concepts of evidence-based medicine and should include the proof of efficacy, safety and quality
- Modernization of TCM should include the standardization of materials and methods respecting personalized medicine
- Modernization of TCM should integrate modern methods of quality control and quality assurance

- 6. Modernization of TCM should take care of the availability of herbal resources
- Modernization of TCM should include the approach of innovative high-tech acupuncture
- Modernization of TCM should consider the elucidation of the mechanisms of action using the most advanced scientific methods, including the approach of systems biology

The detailed programme and impressions of the symposium can be downloaded from the following web sites:

http://tcm-

graz.at/download/Final%20Program%20on ly_300409.pdf

http://tcm-

graz.at/Impressionen%20TCM2009.htm

R. Bauer



Prof. Bauer and Prof. Litscher with speakers of the symposium.



GA side symposium at the PharmSciFair 2009 in Nice, France

As an EUFEPS initiative an international committee of organizers under the chair of Prof. Pia Vuorela, University of Turku, Finland, had organized PharmSciFair 2009 in Nice from 8-12 June 2009, a novel meeting concept titled as "Premier European Platform for Advancing Pharmaceutical Sciences". All categories of pharmaceutical sciences and 40 national and international organisations and networks were represented at this huge congress with over 800 participants; each strand of pharmaceutical science had its own programme summing up in 700 scientific contributions. Among them, GA - Society for Medicinal Plant and Natural Product Research was invited to organize a workshop of its general topic "Medicinal Plant and Natural Product Research", that took place on Fri morning, 12 June 2009.

President Brigitte Kopp gave a general introduction for the audience with not only experts of our field. She emphasized, that almost half of the worldwide used medicines still are of plant and natural origin (Herbal Medicinal Products – HMPs), but that as well natural products play a dominant role in the discovery of leads for the development of drugs for the treatment of human diseases.

The four GA speakers presented the wide range of most modern Medicinal Plant and

Natural product research: Prof. Michael Heinrich, London (UK), could answer the opening question "Well known European Herbal Medicinal Products – still a pharmaceutical treasure trove?" with a clear yes and impressing examples such as the galanthamin story, the actual cannabis research, or the very new and very promising substance peplin with antikeratogenic and anti-skin-cancer activity, that is now in the stage of clinical development.

Prof. Matthias Hamburger, Basel (CH), followed with "Discovery of new pharmaceutical leads from TCM drugs" and gave at the same time an overview on the recent developments of an ultra modern analytical instrumentarium – a technology platform for miniaturized activity-based assays for natural product discovery. Thus important compounds with antiplasmodial and angiogenesis-inhibitory properties were identified in TCM drugs among many others.

Prof. Robert Verpoorte, Leiden (NL), showed the advantages of systems biology in his lecture "Medicinal plants and systems biology: a perfect holistic match" and demanded an urgent change of the actual paradigm "single compound, single target". Systems biology with the methods of metabolomics, proteomics and transcriptomics as well as physiological measurements might revolutionize drug developments in the coming years.

Prof. Peter Imming, Halle (D), gave an analysis of molecular targets and a survey of molecular target families that are addressed or not addressed by marketed natural product drugs. The reasons for the differentiation are various, connected with the history of drug discovery, typical chemical features (e.g. peptidomimetic alkaloids; hydrophilic protein-binders) of natural products, and other rationalisations. They appear to be well suited for mimetic, ideally "prosthetic" drug therapy.

In sum a multidisciplinary approach to drug discovery, involving the generation of truly novel molecular diversity from natural product sources, combined with total and combinatorial synthetic methodologies, and including the manipulation of biosynthetic pathways provides the best solution to the current productivity in drug discovery and development. European or Chinese herbal medicinal products can be regarded as excellent sources in the discovery of new pharmaceutical leads. Another aspect is that the interconnectivity of the herbal products with the physiological and biological systems combined in systems biology gives the possibility to control the quality for Herbal Medicinal Products in a novel way.

Prof. Dr. B. Kopp Renate Seitz

2009 Shanghai International Conference on TCM and Natural Medicine

On 17 and 18 October 09 leading Chinese and Western Scientists met in Shanghai for the 2009 Shanghai International Conference on Traditional Chinese Medicine and Natural Medicine. Hosted by Biotechnology & Pharmaceutical Industry Office of Shanghai Municipality the meeting was organized by Prof. Dean Guo of the Shanghai Research Center for Modernization of Traditional Chinese Medicine in cooperation with GA as well as ASP and some Chinese universities. This meeting was the second in a planned series that aims to provide a platform for the communication and cooperation among foreign and domestic experts in the field of TCM and natural medicine, with a main focus on the cooperation and innovation in TCM and Natural Medicine (NM).

As GA president Brigitte Kopp mentioned in her welcome address, there are strong and long lasting connections between Chinese and Western TCM research and GA and the exchange between international and Chinese experts on TCM is increasing (see also the Graz TCM symposium).

The new 9th edition of the Chinese Pharmacopoeia is considered as an important step forward in the modernization and adaption to worldwide standards and regulatory is-

sues. It will be published in July 2010. The amendments and improvements of the new edition were introduced at the symposium by the director of the Chinese Pharmacopoeia commission, Z. Qian. The new edition provides more plant species (769), clearer and more scientific criteria defini-

tions for products and preparations (e.g. decoctions), almost doubled new control standards (e.g. 1869 new impurity standards) and extended quality control trials (e.g. in vivo trials, clear microscopy descriptions), introduction of lots of new technologies such as HPLC, LC+MS, PCR, fin-



Shangai meeting: TCM and Natural Medicine.



gerprints, testings for active ingredients, etc.

These Chinese developments were compared with the European achievements in the "European Pharmacopoeia Monographs on herbal drugs used in TCM" (M. Wierer, Strasbourg), that set up standards which can accommodate the major countries. W. Knoess, Bonn, gave an overview on the "Regulation of traditional Herbal Medicinal Products in Europe: Current status and options for traditional medicines" and M. Popp, Neumarkt, explained "How to make a successful registration for herbal products from Asia to Europe" (explained by the phytoneering concept).

As interesting and potential tools for the isolation of active principles and bioactive

compounds from herbals in general and TCM drugs in special many new analytical technologies were introduced such as $\mu\text{-LC}$ (G. Bonn, Innsbruck), HPCCC (S. Ignatova, London), UPLC/oa-TOF (K.Yu, Milford, N.J.,USA) or hyphenated techniques (P. Li, Beijing) as well as "Metabonomics based biomarker discovery for the therapeutics of Chinese medical formula with LC-MS" (X. Wang, Heilongjiang).

Furthermore a wide range of lectures was offered dealing on one hand with the most recent results of Western research (by V. Dirsch, Vienna; K. Hostettmann, Geneva, WEG Mueller and HC Schroeder, Mainz, S. Gibbons, London). On the other hand Chinese experts provided insights in the latest developments of TCM novelties, e.g. the

application of patent information on TCM innovations or the new "Herbalome method", proposed to make clear the composition, structures and function of TCM and to establish a resource library of TCM and interpret the mechanism of regulation of multi-components on multi-targets.

A poster session completed the successful, lively symposium, that gave an impression, how impulses were given and received on both sides, West and East, and that could show what happens in the different areas of TCM, Herbal Chemistry and new drug development.

(more information and programme under http://www.s-tcm.com/english.html).

Renate Seitz

Next Annual GA Meeting









58th International Congress and Annual Meeting of the Society for Medicinal Plant and Natural Product Research Gesellschaft für Arzneipflanzenforschung – GA

Dear colleagues.

We are pleased to inform you about the upcoming 58th International Congress and Annual Meeting of the Society for Medicinal Plant and Natural Product Research as well as the 7th Tannin Conference offered as presymposium in Berlin, Germany from August 29th to September 2nd 2010.

We encourage you to take part with contributions to the conference topics:

 Authentification of plants and drugs/DNA-Barcoding/PCR profiling

- New analytical methods
- New targets for herbal medicines
- Proteases in plants
- Enzyme inhibitors from plants
- Aphrodisiaca from plants
- Fertility management by natural products
- Natural products for the treatment of infectious diseases
- Indigenous knowledge of traditional medicine and evidence based herbal medicine
- Biopiracy and bioprospecting
- Biodiversity

For conference details, including preliminary programme, registration and abstract submission information, please visit our website www.ga2010.de/.

We look forward to meeting with you in Berlin 2010.

Best regards,

Herbert Kolodziej & Matthias F. Melzig Presidents of the Organising Committee



A Glance to the Neighbors Society: American Society of Pharmacognosy ASP

Congratulations to ASP on occasion of its Golden Anniversary

With excitement ASP's Golden Anniversary celebration and 50th annual congress on June 27 - July 1, 2009 was expected. For this occasion a special location was chosen: Waikiki Beach in Honolulu, Hawai. No wonder, that it was the greatest annual meeting of ASP ever: with 681 participants of 37 countries - members with their whole families (as it is use in ASP), friends, congratulators and speakers from all over the world. The GA delegation had an additional reason for coming: GA honorary member, Prof. Adolf Nahrstedt, University of Muenster, Germany, was awarded with the Tyler prize, the highest scientific honour of ASP for an outstanding lifework on botanicals.

On Saturday afternoon the meeting started with a multimedia show "50 years of history of the ASP" and reflections on the past of ASP. Five former presidents represented the decade of their presidency respectively, starting with Norman Farnsworth, the 2nd president of the society:

The American Society of Pharmacognosy was founded in 1959 as an outgrowth of the Plant Science Seminar which itself was established in 1923. The first president was Varro E. "Tip" Tyler (later also awarded Honorary Membership of GA). The Society nowadays is international in scope and brings together researchers dedicated to the promotion, growth, and development not only of pharmacognosy but all aspects of those sciences related to and dealing in natural products. ASP currently has over 1100 members, in the categories of active and associate membership. Approximately 40 percent of the active members of the Society reside outside of the U.S. and Canada and represent more than 60 countries throughout the world. The society's "flagship journal" is the Journal of Natural products (currently in volume 72 with D. Kinghorn as editor) deriving from the former journal Lloydia and since 1996 copublished by ASP and ACS (American Chemical Society).

Every 4 or 5 years ASP and GA organize joint meetings together with other sister societies such as the French AFERP, the host of the 2008 joint meeting in Athens, PSE – Phytochemical Society of Europe, and SIP, the Italian Society of Phytochemistry. The next joint meeting is planned for 2012 in New York, organized again by ASP.

With an Hawaiian welcoming reception at the pool garden next to the Pacific beach the meeting officially was opened on Saturday evening. The scientific programme started on Sunday and was of an outstanding niveau and with famous international speakers (detailed program under www. phcog.org).

At the congress banquet on Wednesday (with the dress code "Hawaian shirt") again



some history floated by still with some restrospectives but now more prospectives and outlooks in the future of ASP. The delegates of 7 related societies used the opportunity to address their congratulations and good wishes for the ASP. GA vice president Prof. Bauer presented as a token of friendship a little GA flag together with the best wishes of GA President B. Kopp and emphasized, that both societies are some kind of sister societies and developed almost at the same time in Europe (GA in 1953) and in North-America. "In 1970 they found together and organized the first joint meeting in Vienna. That was under the presidents Heber Youngken jr. (ASP) and Hilmar Friedrich (GA). The local organizer was Prof. Jentzsch with Prof. Tip Tyler as co-organizer. The first joint meeting in North America was held five years later in Storrs, CT, with lectures from GA side by late Prof. Mothes and Dr. Albert Hofmann. "In my opinion" he closed, "these meetings are extremely important, because they bring not only together European and American scientists, but they have become global gatherings of natural product researchers from all over the world and demonstrate the importance of the field! All these meetings should help to practise the friendship of our Societies! In conclusion, I want to congratulate the organizers again to this wonderful meeting and their great hospitality, and ASP to its 50th anniversary. Thank you very much - Mahalo!" GA in general and GA president Brigitte Kopp in particular want to join these congratulations and good wishes!

The final talk and certainly one of the highlights of the scientific program of the 50th ASP congress was the award lecture of the 2009 ASP Varro Tyler prize winner A. Nahrstedt with the title "Lessons learned from Herbal Medicinal Products – The example of St. John's wort".

In a charming and humerous laudation he was introduced by his former student Prof. Veronika Butterweck, University of Gainesville, FL. Prof. Butterweck highlighted his many significant contributions to the field of phytochemistry, pharmacognosy, and pharmacology of medicinal plants. His research covered the biochemistry and physiology of secondary metabolites, particularly cyanogenic glyco-sides in plants and insects, as well as the phytochemistry of traditional herbal drugs. He is well known for his major contributions on St. John's wort and its active constituents, demonstrating that the coeffectors procyanidin B2 and hyperoside influence the biopharmaceutical properties of hypericin. He has published over 200 papers and chapters, and delivered more than 200 lectures worldwide, and has devoted over 25 years to editorial duties with Planta Medica, including over 10 years as Editor-in Chief and now Senior Editor. His honors include Hon. Membership of the European Academy of Natural Medicine, the Rudolf Fritz Weiss Award of the German Soc. of Phytotherapy, and an honorary doctorate from Ovidius Univ. Constanta, Romania. He is a member of many societies, including ASP and GA (Hon. Member since 2005), and has served on various boards and commisions, including Commission E, making a significant contribution to the standardization and control of herbal medicines. "Through his example, not only the ASP and GA have all gained tremendously from Prof. Nahrstedt's dedication to his research. He clearly is an excellent role model for younger scientists working in the field of pharmacognosy and phytotherapy", Butterweck concluded, congratulating Prof. Nahrstedt to this prestigious award and wishing him all the best for many years to come. GA president Brigitte Kopp and GA join these congratulations and good wishes!

V. Butterweck R. Seitz

On the occasion of its 50th anniversary ASP had published: The American Society of Pharmacognosy: 50 Years of Progress in Natural Products Research (1959–2009), ed. by Gordon M. Cragg, John A. Beutler, William P. Jones, Omnipress, Madison-Wisconsin (or www.phcog.org)



Handbook of Chinese Medicinal Plants

Synergizing herbal medicine with clinical science, this two-volume guide combines the medicinal applications of a comprehensive range of herbs from traditional Chinese medicine with modern day scientific information. In a rapid access, A-Z format, this ready reference contains more than 300 chemical structures of active ingredients, supported by chemical, pharmacological and toxicological data, and backed by some 8,000 literature citations. With its listing of the complete Materia Medica of plant origin from the Chinese Pharmacopoeia, this work is highly relevant to experimental practitioners in the medicinal and pharmaceutical fields and the only one to provide such a wealth of chemical data. The book is divided into 231 monographs describing ca. 300 significant Chinese Medicinal Plants, in alphabetical order.

Each monograph contains: botanical information, medicinal application, chemistry, incl. chemical structures of chemical constituents, pharmacology, toxicology, references, including previously untapped chinese sources.

Contains an appendix with a listing of the complete Materia Medica of plant origin from the Chinese Pharmacopoeia.

Handbook of Chinese Medicinal Plants: Chemistry, Pharmacology, Toxicology. W. Tang, Technical University of Kaiserslautern, Germany; G. Eisenbrand, Technical University of Kaiserslautern, Germany. 2010. Wiley (Wiley-VCH), XIV, 1242 pages in 2 volumes, hardcover. ISBN 9798-3-527-32226-8.

Handbook of Pharmaceutical Natural Products

In a classical alphabetical format, this twovolume reference covers more than 100 painstakingly screened natural product structures. For each compound or compound class, a basic chemical characterization is given, followed by a description of the biological source and a discussion of their pharmaceutical potential as lead molecules for new drugs. The latter takes into account the documented uses of many of these compounds in Asian traditional medicine. By way of its clearly structured, single-page articles, and with the aid of classification tables in the appendix, this dictionary is easy to use and provides quick and reliable information researchers as well for scholars and students.

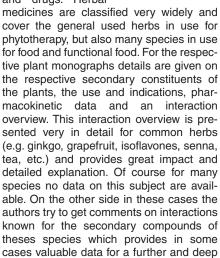
The dictionary contains an alphabetical listing of more than 1000 natural products for which a pharmaceutical use is known or has been suggested. Compounds have been selected from the following chemical classes: Flavonoids, Xanthonoids, Alkaloids, Terpenoids, Stereoids, Coumarins,

Chalcones, Polyketides, Phenolics, Carbohydrates, Pepitdes, Proteins, Antibiotics. Each compound is described on about one full page in terms of molecular formula, chemical structure, natural source(s), natural derivatives, pharmaceutical potential. An appendix contains extensive tables of substances classified by compound class, by origin, and by pharmaceutical use.

Handbook of Pharmaceutical Natural Products. Goutam Brahmachari, Visva-Bharati University, Santiniketan, India, 2010. Wiley (Wiley-VDH), 984 pages in 2 volumes, hardcover. ISBN 978-3-527-32148-3. Will appear March 2010.

Herbal Medicines Interaction

The book assesses the importance of interactions between herbal medicines and drugs. Herbal



Stockley's Herbal Medicines Interactions. Williamson E., Driver S., Baxter K (eds.), ISBN 978 0 85369 760 2, Pharmaceutical Press, U.K., 412 pages, English language, 77 €

Pulver-Atlas der Drogen

discussion.

This standard book for pharmacognostic identification and purity testing of 196 herbal materials by microscopic investigation provides a perfect and efficient



way to enshure quality. The coloured paintings have been revised in the newest edition to get unambigious identification properties. Also often occuring impurities are



described for the respective plant species. A quick and most efficient way to get a fats and reliable information.

Pulver-Atlas der Drogen. W. Eschrisch, in cooperation with E. Scholz. 2009. 9. ed. Deutscher Apotheker Verlag, Stuttgart, ISBN 978-3-7692-4733-6. 350 pages, colouedr illustrations, German language. 28,90 €.

Arzneibuch der chinesischen Medizin

Traditional chinese medicine is getting more and more popular in western countries and TCM herbs



Arzneibuch

and mixtures are coming more and more into the daily work of western pharmacognosists. Identification, purity status and content determinatio of the herbal materials used are often problematic. The german translation of the chinese pharmacopoeias 2000 and 2005 was ammended strongly by detailed comments to the official monographs and macroscopic and microscopic pictures for unambigious determination of the raw material provide a good way for enshuring high quality. TLC procedures accpording the chinese pharmacopoeia are additionally described for efficient fingerprinting of the herbs. A quick and efficient way to get started with quality control of TCM herbs. Perfectly for scientists, for industry and for official pharmacy stores.

Arzneibuch der chinesischen Medizin. Monographs of the pharmacopoeia of PRC 2000 and 2005 with ammendments and comments by E.A. Stöger. ISBN 978 3 7692 4914 9. German language. 2. ed. 2009, 2 folders, 1726 pages. Continous actualization. 128 €.



GA worldwide

and their Institutes of Pharmacognosy: International, Interesting and Cooperative

We introduce and present major research groups working in the field of medicinal plants and natural products with their special characteristics. In this Newsletter: Thailand.

GA has 43 regular members from India. 4 working groups have prepared a short presentation of the group and the acticities.



Thailand is located between the 6th and 20th degree of latitude with a difference in altitude from about sea level in the South to more than 2000 m in the Northwest and North. Almost one third of the country belongs to the Khorat Plateau (Isan Province) in the Northeast with a mean level of 200 m. Accordingly, the climate changes from tropical-humid to warm-humid and sometimes even to arid conditions. Correspondingly, Thailand's flora is rich and diversified. Nowadays practised traditional medicine is a mixture of Thai traditional and ayurvedic medicine from India; it has developed numerous recipies using many different indigeneous plants collected in the book of Thai Traditional Medicine (TTM). In TTM, plant-derived remedies play a major role; they are available in most public pharmacies. Their common contribution to therapy, their active constituents and their rational therapeutical use are investigated in governmental and private universities in their Faculties of Pharmacy, Medicine and Biology. Some of these institutions will be introduced below.

Prof. Dr. A. Nahrstedt



Department of Pharmacognosy, Faculty of Pharmacy, Mahidol University, 447 Sri-Ayudthaya Road, Ratchatewi, Bangkok 10400, Thailand

pywgs@mahidol.ac.th Email:

http://www.pharmacy.mahidol.ac.th/eng/department.php Homepage:

Head of Research Group:

Associate Professor Dr. Wandee Gritsanapan

Working area: Separation, identification and biological activity determination of chemical components

from Thai medicnal plants. Standardization of medicinal plants, herbal extracts and Thai traditional herbal preparations. Development of medicinal plants as drugs, functional foods

and herbal cosmetics.

2 publications, representing the institution:

1. Prasarn Tangyuenyongwatana, Wandee Gritsanapan "A study on artifacts formation in Thai traditional medicine Prasaplai" Planta Med 2008; 74: 1403-1405.

2. Werayut Pothitirat, Mullika Traidej Chomnawang and Wandee Gritsanapan "Comparison of bioactive compounds content, free radical scavenging and anti-acne inducing bacteria activities of extracts from the mango-

steen fruit rind at two stages of maturity" Fitoterapia 80 (2009) 442-447.

Coworkers: PhD: 11, Postdocs: -

The "speciality" or the unique selling

proposition of institution: Herbal cosmetics e.g. herbal soap bar, anti-aging turmeric night cream, herbal anti-acne preparations

Running projects with industrial partners?

Standardized herbal extracts for using in herbal preparations of dietary supplements and herbal cosmetics e.g. Curcuma longa, Garcinia mangostana, Senna alata, Cassia fistula extracts



Faculty of Pharmaceutical Sciences, Khon Kaen University, Khon Kaen, Thailand, 4000, Assoc. Prof. Dr. Chantana Aromdee.

chaaro@kku.ac.th Email:

Homepage: www.kku.ac.th

Head of institution: **Professor Sumon Sakolchai**

Working area: 1. Analytical Method development, either herbal drug or modern drug

2. Semisynthesis of natural products (Nonbitter andrographolide)

3. Pharmacokinetics

2 publications, representing the institution:

1. Supawadee Suebsasana, Panicha Pongnaratorn, Jintana Sattayasai, Tarinee Arkaravichien, Siriporn Tiamkao and Chantana Aromdee*. Analgesic, Anti-Inflammatory and Toxic Effects of Andrographolide Derivatives in Experimental Animals. Arch. Pharm. Res. 2009 (in press) (correspondence author)

2. Kesarin Lakkham, Preeya Wangsomnuk and Chantana Aromdee* (2009) Identification and guality of four varieties of adlay. Songklanakarin J. Sci. Technol. 31 (4), (in press) (correspondence author)

Coworkers: PhD: 5; Postdocs: -

The "speciality" or the unique selling

1. Test Kit for determination of active constituents in herbal medicine.

2. Analytical method development. proposition of institution:

Running projects with industrial partners?

Together with herbal tea companies.



With my undergraduate student under an Industrial project "Establishment of standard and specifications of Aquillaria Herbal Tea"

Applied Thai Traditional Medicine Center, Faculty of Medicine, Thammasart University, Rungsit Campus, Klongluang, Pathumtani, Thailand, 12120

Email: iarunporn@yahoo.com

Homepage: www.medtu.ac.th

Head of institution: Associate Professor Dr. Arunporn Itharat

Working area: Ethnopharmacological study, biological screening of Thai medicinal plants from

ethnomedical used especially cancer and AIDS, standardization of herbal products,

formulation and clinical trials of Thai traditional medicine.

3 publications, representing the institution:

1. Itharat, A et al. Selective cytotoxicity and antioxidant effect of compounds from Dioscorea membranacea rhizomes J. Natural product communication. 2007, 2, 643-648.

2. Pureestein, O et al. Quantitative HPLC Determination and Stability Studies of pyridostemine in extract and water dispersible granule formulation of Stemona curtisii. Chromatographia 2008, 67,551-557.

3. Sakpakdeejaroen I and Itharat A Cytotoxic compounds against breast adenocarcinoma cells (MCF-7) from

Benjakul. J. Health Res. 2009, 23, 71-76.

Coworkers: 10 academic staff members, 20 guest faculty members, 4 PhD, 8 master students, 4 assistant researchers

The "speciality" or the unique selling

The institute is committed to provide Thai traditional medicine knowledge and research base on Pharmacognosy, modern pharmaceutical sciences and modern medicine. The research is established from knowledge proposition of institution: of ethnomedical use, standardization, bioassay, isolated active compounds, formulation, pharmacology and toxicology test of herbal product .The clinical trial of Thai traditional medicine is emphasized specially for research on herbal products because modern medical doctors are staffs in our Faculty. The lecturer on Thai Traditional Medicine are modern medical doctors and pharmacists. Thus herbal products must be based on scientific research.

Running projects with industrial partners?

4 formulations were patented and produced as commercial produces for health. 2 industrial health companies are co-researchers



Chulabhorn Research Institute, Vibhavadi-Rangsit Road, Laksi, Bangkok 10210, Thailand

Email: somsak@cri.or.th

Homepage: http://www.cri.or.th

Head of institution: Professor Dr. Her Royal Highness Princess Chulabhorn Mahidol

Working area: Our focus is on anticancer drug development from both natural and synthetic compounds.

We are also interested in cancer chemopreventive and antidiabetic compounds.

2 publications, representing the institution:

1. Ploypradith P et al. Angew. Chem. Int. Ed. Engl. 2004, 43, 866-8.

2. Chomcheon, P. et al. Phytochem. 2009, 70, 407-13.

Coworkers: About 20 Ph.D. scientists of the total 45 in the Institute are working in the group

The "speciality" or the unique selling proposition of institution:

The chemistry and biological activities of natural products from Thai bioresources.



Recent thesis (2009) on Medicinal Plant Research

(Notices of Ph.D. and diploma theses to the editor are welcome any time!)

Ph.D. thesis (2009) Phytochemischer und immunologischer Hintergrund der Compositen-Kontatallergie. By: Mathias Jacob; Promotor: Prof. Dr. Thomas J. Schmidt, Institut für Pharmazeutische Biologie und Phytochemie, Westfälische Wilhelms-Universität Münster, Germany.

Ph.D. thesis (2009) Stimulation of menthol production in cell culture of *Mentha piperita*. By: Amrita Chakraborty; Promotor: Dr. Sharmila Chattopadhyay, Indian Institute of Chemical Biology (A Unit of Council of Scientific & Industrial Research), Jadaypur University, Kolkata, India.

Ph.D. thesis (2009) Standardization and development of anti-acne preparation of Garcinia mangostana fruit rind extract. By: Werayut Pothitirat; Promotor: Assoc. Prof. W. Gritsanapan, Assoc. Prof. P. Pithayanukul, Assist. Prof. M. Chomnawang, Faculty of Pharmacy, Mahidol University, Bangkok, Thailand, and Assist. Prof. Roongtawan Supabphol, Faculty of Medicine, Srinakarinwirot University, Bangkok, Thailand.

PhD Thesis (2009) Studies on some pharmacological properties of curcuminoids useful in Alzheimer's disease. By: Touqeer Ahmed; Promoter: Prof. A. H. Gilani and Dr S.A. Enam, The Aga Khan University, Karachi, Pakistan.

Ph.D. thesis (2009) Die antagonistische Wirkung von Zingiber officinale Rosc. und Mentha x piperita L. und einiger ihrer Inhaltsstoffe am 5-HT3-Rezeptorkanalkomplex: Bedeutung für Antiemesis, Reizdarmsyndrom-Therapie und Insulinausschüttung. By: Katharina Heimes; Promoter: Prof. Dr. Eugen J. Verspohl, Institut für Pharmazeutische und Medizinische Chemie, Abt. Pharmakologie, University of Münster, Germany.

Ph.D. thesis (2009) Effects of Roscovitine and Indirubin-Derivatives on Platelet Derived Growth Factor Signalling in Vascular Smooth Muscle Cells. By: Irene Sroka; Promotor: Prof. V. Dirsch, Department of Pharmacognosy, University of Vienna, Austria. Ph.D. thesis (2009) The role of resveratrol on growth factor-induced signalling events in vascular smooth muscle cells. By: Mario Kumerz; Promotor: Prof. V. Dirsch, Department of Pharmacognosy, University of Vienna, Austria.

Ph.D. thesis (2009) Mechanistic studies on resveratrol and its influence on angiotensin II- and epidermal growth factor-induced signaling pathways in vascular smooth muscle cells. By: Cornelia Schreiner; Promotor: Prof. V. Dirsch, Department of Pharmacognosy, University of Vienna, Austria.

Ph.D. thesis (2008) Evaluation of antioxidant potential of *Mentha* spp. with special reference to the genetic improvement of *Mentha arvensis*. By: Akhilesh Kumar; Promotor: Dr. Sharmila Chattopadhyay, Indian Institute of Chemical Biology (A Unit of Council of Scientific & Industrial Research), Jadavpur University, Kolkata, India.

Diploma thesis (2009) Phytochemical investigations of *Manglietia garrettii* (Magnoliaceae) and isolation of Ioliolide from *Calendula officinalis* (Asteraceae) (in German) By: Wolfgang Voith; Promotor: Prof. R. Bauer, Institute of Pharmaceutical Sciences, University of Graz, Austria.

Diploma thesis (2009) Phytochemical investigations on the bitter principle of *Leonurus japonicus*. (in German) By: Gabriele Hödl; Promotor: Prof. R. Bauer, Institute of Pharmaceutical Sciences, University of Graz, Austria.

Diploma thesis (2009) Phytochemical and pharmacological investigations of *Echinacea pallida*. (in German) By: Ingrid Stinglmayr; Promotor: Prof. R. Bauer, Institute of Pharmaceutical Sciences, University of Graz, Austria.

Diploma thesis (2009) Chinese herbal drugs against cardiovascular inflammation. (in German) By: Caroline Smole; Promotor: Prof. R. Bauer, Institute of Pharmaceutical Sciences, University of Graz, Austria.

Diploma thesis (2009) Development of a method for extraction and analysis of drugs in rat plasma for drug interaction studies with Echinacea products. (in German) By: Julia Straußberger; Promotor: Prof. R. Bauer, Institute of Pharmaceutical Sciences, University of Graz, Austria.

Diploma thesis (2009) Pharmacokinetics and metabolism of the C-glycosyl-flavone Vitexin. By: Barbara Schorr; Promotor: Prof. B. Kopp and Prof. H. Derendorf, Department of Pharmacognosy, University of Vienna, Austria.

Diploma thesis (2009) Chemische Untersuchung eines Passionsblumenextraktes. By: Nina Mayer; Promotor: a.o.Prof. L. Krenn, Department of Pharmacognosy, University of Vienna, Austria.

Diploma thesis (2009) Chemotaxonomische Untersuchungen an österreichischen Farnen. By: A. Wendelin Rauch; Promotor: a.o.Prof. L. Krenn, Department of Pharmacognosy, University of Vienna, Austria.

Diploma thesis (2009) Phytochemische Untersuchungen an einem Dichlormethanextrakt der mongolischen Arzneipflanze *Euphorbia pallasii* Turcz.. By: Anna Sigmund; Promotor: Ao. Univ.-Prof. Dr. S. Glasl-Tazreiter, Dept. f. Pharmakognosie, Universität Wien, Austria.



Diploma thesis (2009) Charakterisierung phenolischer Inhaltsstoffe in *Lilium pumilum* Dc. (Liliaceae). By: Ines Offenmüller; Promotor: Ao. Univ.-Prof. Dr. S. Glasl-Tazreiter, Dept. f. Pharmakognosie, Universität Wien, Austria.

Diploma thesis (2009) Beiträge zur Pytochemie von *Dianthus versicolor* Fisch. (Caryophyllaceae) einer Heilpflanze der traditionellen mongolischen Medizin. By: Zita Swoboda; Promotor: Ao. Univ.-Prof. Dr. S. Glasl-Tazreiter, Dept. f. Pharmakognosie, Universität Wien, Austria.

Diploma thesis (2009) Effect of St. John's wort (Hypericum perforatum L.) on gene expression in stressed rat brain samples using microarray analysis. By: Peggy Jungke; Promotor: Prof. V. Butterweck, College of Pharmacy, University of Florida, Gainesville, USA and Prof. K. Nieber, Department of Biosciences, Pharmaceutics and Psychology, University of Leipzig, Germany.

Diploma thesis (2009) Phytochemical investigations of Stachys recta: a plant of traditional use in folk medicine. By: Letizia Bolognesi; Promotors: Prof. Anna Rita Bilia and Dr. Anastasia Karioti, Faculty of Pharmacy, University of Florence, Italy.

Diploma thesis (2009) Effect of STW5, STW6 and Cucurbitacin E and I on the viability of Caco-2 cells. By: Michael Schwalbe; Promotor: Prof. K. Nieber, Department of Pharmacy, University of Leipzig, Germany.

Diploma thesis (2009) Ex-vivo absorption of STW5, STW6 and Cucurbitacin E and I on isolated preparations of the rat small intestine. By: Stefanie Hoser; Promotor: Prof. K. Nieber, Department of Pharmacy, University of Leipzig, Germany.

Diploma thesis (2009) Efffect of STW5 and STW6 on electrophysiological parameters of human macrophages. By: Juliane König; Promotor: Prof. K. Nieber, Department of Pharmacy, University of Leipzig, Germany.

Master thesis (2009) Screening of different Artemisia dracunculus L. extracts for antidiabetic effects in rats. By: Daniela Felder; Promotor: Prof. V. Butterweck, College of Pharmacy, University of Florida, Gainesville, USA and Prof. M. Hamburger, Department of Pharmaceutical Sciences, University of Basel, Switzerland.

Master thesis (2009) Effects of a Valeriana officinalis L. extract and single constituents on sleep, measured by locomotor activity and body temperature in mice using telemetry. By: Michael Fretz; Promotor: Prof. V. Butterweck, College of Pharmacy, University of Florida, Gainesville, USA and Prof. M. Hamburger, Department of Pharmaceutical Sciences, University of Basel, Switzerland.

Master thesis (2009) Pharmacokinetics of $\alpha\text{-mangostin}$ from Garcinia mangostana L. after oral and intravenous administration in rats using liquid chromatography tandem mass spectrometry. By: Isabelle Brunner; Promotor: Prof. V. Butterweck, College of Pharmacy, University of Florida, Gainesville, USA and Prof. M. Hamburger, Department of Pharmaceutical Sciences, University of Basel, Switzerland.

Editorial remark

All contributions for the GA-Newsletter are welcome. Deadline for submission for the next edition is fixed to May 20th 2010. Please send all contributions to: Prof. Dr. A. Hensel, University of Münster, Institute for Pharmaceutical Biology and Phytochemistry, Hittorfstrase 56, D-48149 Münster, Germany; ahensel@uni-muenster.de

