



2nd International Conference on Natural Products Utilization: From Plants to Pharmacy Shelf

ICNPU 2015, 14-17 October 2015
Plovdiv, BULGARIA

PROGRAM

(as of 18.09.2015)

Tuesday, October 13, 2015

15:00 – 19:00 Registration

Wednesday, October 14, 2015

08:30 – 18:30 Registration

08:30 – 18:30 Exhibition opening

09:00 – 09:30 **Official opening ceremony of ICNPU-2015**

Session I Chairs: Strnad (Czech Republic), Bankova (Bulgaria)

09:30 – 10:15 **KL1: Bharat B. Aggarwal** (USA): Targeting inflammatory pathways by agents designed by Mother Nature for prevention and treatment of cancer

10:15 – 11:00 **KL2: Alisdair Fernie** (Germany): Metabolic profiling for crop improvement

11:00 – 11:30 *Coffee break*

Session II Chairs: Skaltsounis (Greece), Alipieva (Bulgaria)

11:30 – 12:15 **KL3: Robert Verpoorte** (The Netherlands): The 4 dimensions of plant secondary metabolism. The role of metabolomics

12:15 – 12:40 **IL1: Albena T. Dinkova-Kostova** (UK and USA): Using natural products from plants to understand mammalian

cytoprotective mechanisms

12:40 – 12:55 **SL1: Martin R. Berger** (Germany): The type II ribosome inactivating protein ripoxin modulates multiple signaling cascades leading to cytostatic and apoptotic effects in cancer cells

12:55 – 13:10 ICNPU-2015 group photo

13:10 – 14:25 *Lunch*

Session III Chairs: Aggarwal (USA), Konstantinov (Bulgaria)

14:25 – 15:00 **PL1: Alexander George Panossian** (Sweden): Trends in phytomedicine and phytotherapy research: from traditional herbal medicine to novel pharmaceuticals based on the synergy concept

15:00 – 15:25 **IL2: Ning-Sun Yang** (ROC): Mammalian target of rapamycin complex 2 (mTORC2) regulates LPS-induced expression of IL-12 and IL-23 in human dendritic cells

15:25 – 15:40 **SL2: Petya Dimitrova** (Bulgaria): Regulation of neutrophil functions by verbascoside and isoverbascoside

15:40 – 15:55 **SL3: Lucie Rárová** (Czech Republic): Brassinosteroids: antiproliferative and antiangiogenic activities

15:55 – 16:10 **SL4: Kaloyan Kaloyanov** (Bulgaria): Experimental antineoplastic activity of curcumin and curcumin loaded nanocarriers

16:10 – 16:40 *Coffee break*

Session IV Chairs: Atanasov (Austria), Dimitrova (Bulgaria)

16:40 – 17:05 **IL3: Leandros A. Skaltsounis** (Greece): Olive bioactives: possibilities and applications

17:05 – 17:30 **IL4: Ilkay Erdogan Orhan** (Turkey): Insight into computational and experimental evidence on enzyme inhibitory effect of natural compounds

- 17:30 – 17:45 **SL5: Suheyła Kirmizigul** (Turkey): Glycosides and their biological importance
- 17:45 – 18:00 **SL6: Johana Rondevaldova** (Czech Republic): Evaluation of plant quinones for their *in vitro* anti-staphylococcal synergistic effect

18:00 – 19:30 **Poster session I (PP1 to 130)**

20:00 – 22:30 ***Get-together party***

Thursday, October 15, 2015

08:30 – 18:30 Registration

08:30 – 18:30 Exhibition opening

Session V Chairs: Dinkova-Kostova (UK and USA), Yang (ROC)

08:30 – 08:55 **IL5: Atanas G. Atanasov** (Austria): Identification and mechanistic characterization of plant-derived natural products with anti-atherosclerotic potential

08:55 – 09:20 **IL6: Alvaro M. Viljoen** (South Africa): Innovative analytical methods in the quality control of raw plant material and herbal products

09:20 – 09:35 **SL7: Srijit Das** (Malaysia): Light microscopy findings in the liver tissue of experimental rats fed with *Mitragyna speciosa* extract and treated with *Piper betle* extract

09:35 – 09:50 **SL8: Constant R.A. Ahoua** (Switzerland): *Beilschmiedia mannii*, a plant consumed by chimpanzees (*Pan troglodytes verus*) in Cote d'Ivoire, inhibits NF- κ B

09:50 – 10:05 **SL9: Merilin Al Sharif** (Bulgaria): *In silico* screening approach to predict liver toxicity of potential PPAR γ agonists

10:05 – 10:20 **SL10: Mara Doljak** (Croatia): Restoring women's vaginal health with simple use of essential oils and vegetable oils

10:20 – 10:35 **SL11: Luísa Custódio** (Portugal): Unlocking the antileishmanial

potential of halophyte plants from the Algarve coast, Portugal

10:35 – 11:05 *Coffee break*

Session VI Chairs: Fernie (Germany), Skalicka-Wozniak (Poland)

11:05 – 11:40 **PL2: Luc Pieters** (Belgium): LC-SPE-NMR as a tool for the metabolic profiling of herbal medicinal products

11:40 – 12:05 **IL7: Jean-Luc Wolfender** (Switzerland): Issues and prospects in the efficient dereplication of natural products

12:05 – 12:20 **SL12: Mohamed A. Farag** (Egypt): Comparative mass spectrometry & 1D, 2D-nuclear magnetic resonance metabolomic approaches for nutraceuticals quality control analysis

12:20 – 12:35 **SL13: Serge A.F. Tanemossu** (Germany): Metabolomic profile directed isolation of bioactive compounds from *Hypericum species*

12:35 – 12:50 **SL14: Reneta Gevrenova** (Bulgaria): Profiling of GOTCAB triterpenoid saponins in *Gypsophila trichotoma* Wend. by LC-ESI/MS

12:50 – 13:05 **SL15: Anca Miron** (Romania): Phenolic profile, antioxidant and antitumor activities of conifer bark extractives

13:05 – 14:30 *Lunch*

Session VII Chairs: Pieters (Belgium), Wolfender (Switzerland)

14:30 – 14:55 **IL8: Vassya Bankova** (Bulgaria): A two-level dereplication strategy for propolis research, based on GC-MS

14:55 – 15:20 **IL9: Krystyna Skalicka-Wozniak** (Poland): Coumarins – from counter-current chromatography isolation to central nervous system activity

15:20 – 15:35 **SL16: Ann Louw** (South Africa): Divide and conquer may not be the optimal approach to retain the desirable estrogenic attributes of the *Cyclopia* nutraceutical extract, SM6MET

15:35 – 15:50 **SL17: Sylwia Zielinska** (Poland): Composition of polyphenols in *Agastache rugosa* characterized by UPLC-qTOF-MS-MS supported by FCPC separation

15:50 – 16:05 **SL18: Niko S. Radulović** (Serbia): Allyl hexyl sulfide and allyl octyl sulfide are new bioactive compounds from wild garlic (*Allium ursinum* L., Liliaceae). Identification of additional new sulfur-containing volatiles through simple QSPR modeling of GC retention data

16:05 – 16:20 **SL19: Jiří Grúz** (Czech Republic): Oxidation of common phenolic compounds in plants

16:20 – 16:50 *Coffee break*

Session VIII Chairs: Dimitrov (Bulgaria), Matkowski (Poland)

16:50 – 17:15 **IL10: Ionna Chinou** (Greece): The regulatory framework for the use of essential oils, as herbal medicinal products in EU. Quality & safety of use

17:15 – 17:30 **SL20: Paula C. Castilho** (Portugal): Composition and bioactivity of Laurel oil: what we know and what is still to be found

17:30 – 17:45 **SL21: Ivan Atanassov** (Bulgaria): An integrated approach toward remediation and valorization of rose oil distillation wastewater

17:45 – 18:00 **SL22: Polina D. Blagojević** (Serbia): Something old, something new: bioactive *trans*-sabinyl esters from *Achillea falcata* L. (Asteraceae)

18:00 – 18:15 **SL23: Antoaneta Trendafilova** (Bulgaria): Secondary metabolites from wild and *in vitro* grown *Artemisia alba* and *Inula britannica*

18:15 – 18:30 **SL24: Dimitrina Zheleva-Dimitrova** (Bulgaria): *Geigeria alata* (DC.) – a new source of bioactive compounds

18:30 – 18:45 **SL25: Miora Ralambondrainy** (La Réunion): *Cymbopogon citratus* essential oil from Reunion Island exerts antiviral effect

against alphavirus

18:45 – 19:00 **SL26: Jianbo Xiao** (PR China): Polyphenol-plasma protein interaction

19:00 – 19:15 **SL27: Paramita Bera** (India): Molecular oscillations of scent volatiles emission in *Jasminum sambac* flowers

19:15 – 20:45 **Poster session II (PP131 to 260)**

Friday, October 16, 2015

08:30 – 18:30 Registration

08:30 – 18:30 Exhibition opening

Session IX Chairs: Chinou (Greece), Panossian (Sweden)

08:30 – 08:55 **IL11: Günter Vollmer** (Germany): Developmental windows of disease and disease prevention – lessons from a study on soy isoflavones and experimental breast cancer

08:55 – 09:10 **SL28: Mahmoud F. Elsebai** (Egypt): Potent and broad spectrum natural products against all genotypes of hepatitis C virus (HCV)

09:10 – 09:25 **SL29: Liliya Vinarova** (Bulgaria): Lowering of serum cholesterol by saponin extracts: *in vitro* and *in vivo* studies

09:25 – 09:40 **SL30: Priyanka K. Mathur** (USA): Spice extracts prevent methionine oxidation of the hormone glucagon

09:40 – 09:55 **SL31: Zahari Vinarov** (Bulgaria): Saponins as novel solubilizing agents for hydrophobic drugs

09:55 – 10:10 **SL32: Georgia Papadi** (Greece): Study of the beneficial health effect of botanicals native to Greece through EpRE reporter gene assay

10:10 – 10:25 **SL 33: Antoaneta Georgieva** (Bulgaria): Effects of chlorogenic acid and ferulic acid on learning and memory in rats

10:25 – 10:55 *Coffee break*

Session X Chairs: Verpoorte (The Netherlands), Palazon (Spain)

10:55 – 11:30 **PL3: Miroslav Strnad** (Czech Republic): Plant hormonomics on the cell level

11:30 – 11:55 **IL12: Jutta Ludwig-Müller** (Germany): Overexpression of bacterial halogenases in Brassicaceae plants to search for secondary plant metabolites with novel bioactive features

11:55 – 12:10 **SL34: Stefan Martens** (Germany): From bench to application: ANTHOPLUS – anthocyanin production platform using plant suspension cultures as green factories (ERA-IB)

12:10 – 12:25 **SL35: Yoann Brison** (France): α -Glucosylation of flavonoids using libraries of engineered glucansucrases

12:25 – 12:40 **SL36: Nikolay Vasilev** (Germany): Simultaneous factors treatment reveals elicitor-metabolite networks

12:40 – 12:55 **SL37: Karla Ramirez-Estrada** (Spain): A new gene encoding a β -phenylalanine-CoA ligase involved in taxane biosynthesis has been discovered in jasmonate-elicited *Taxus* cell cultures

12:55 – 13:10 **SL38: Mohammad H. Mirjalili** (Iran): Overproduction of valuable medicinal triterpenoids in *in vitro* induced polyploids of *Thymus persicus*

13:10 – 14:30 *Lunch*

Session XI Chairs: Ludwig-Müller (Germany), Cusido (Spain)

14:30 – 14:55 **IL13: Zora Dajić Stevanović** (Serbia): Treasury of the Balkan's medicinal flora: from biodiversity to bioactivity

14:55 – 15:10 **SL39: Elvira Gille** (Romania): The biostimulatory potential of complex plant extracts on organically grown medicinal species – the phytobiological test

15:10 – 15:25 **SL40: Andreas G. Tzakos** (Greece): Enzymatic tuning of natural product scaffolds to enhance their biological activity

- 15:25 – 15:40 **SL41: Ali Sharafi** (Iran): *Plumbago europea* genetic transformation via *Agrobacterium rhizogenes*
- 15:40 – 15:55 **SL42: Sibylle Kümmritz** (Germany): A simple solution for cryopreservation of *Salvia* suspensions
- 15:55 – 16:10 **SL43: Vessela I. Balabanova** (Bulgaria): Flower yield of *Arnica* species grown in Bulgaria under different ecological conditions
- 16:10 – 16:40 *Coffee break*

Session XII Chairs: Dajić Stevanović (Serbia), Vasilev (Germany)

- 16:40 – 16:55 **SL44: Alfred Maroyi** (South Africa): Does ethnomedicinal use patterns of herbal plants correlate with their ethnopharmacological properties? The case of *Ximenia caffra*
- 16:55 – 17:10 **SL45: Jason Irving** (UK): Kew's medicinal plant names services (MPNS) enabling effective natural product research
- 17:10 – 17:25 **SL46: Irina Lazarova** (Bulgaria): Hepatotoxicity or hepatoprotection? Bidirectional potential of Bulgarian *Asphodeline lutea* (L.) RCHB. root extract
- 17:25 – 17:40 **SL47: Hera Nurhayati** (Indonesia): Yield, quality and nutrient uptake of medicinal plant *Blumea balsamifera* on several fertilizer dosages
- 17:40 – 17:55 **SL48: Mayuri T. Napagoda** (Sri Lanka): *Leucas zeylanica*: a source of pharmaceuticals from the tropical forests
- 17:55 – 18:10 **SL49: Blaga Mutafova** (Bulgaria): Microbial transformations of biologically active compounds of plant origin as a step in preparation of highly valuable pharmaceuticals
- 18:10 – 18:25 **SL50: Saber F. Hendawy** (Egypt): *Tagetes lucida*: a new medicinal plant in the Egyptian cultivation
- 18:25 – 18:40 **SL51: Jorge M. David** (Brazil): Antinoceptive activities of extract and flavones from *Mimosa hostilis* (Leguminosae)
- 18:40 – 18:55 **ICNPU-2015 closing ceremony and awards**

19:30 – 23:30 *Conference gala dinner*

Saturday, October 17, 2015

09:00 – 15:00 *Conference excursion*

KL – key-note lecture (40 min + 5 min Q&A)

PL – plenary lecture (30 min + 5 min Q&A)

IL – invited lecture (20 min + 5 min Q&A)

SL – short lecture (10 min + 5 min Q&A)