

Curriculum Vitae

Personal information **Iliana Ionkova**

Work experience

1. Employer: Faculty of Pharmacy, Medical University of Sofia

- Start date: 092015
- End date:
- Position: Head of Department of Pharmacognosy
- Activities:
- Country: Bulgaria

2. Employer: Ministry of Health

- Start date: 092015
- End date:
- Position: Head of the Bulgarian State Examination Commission in Pharmacy
- Activities: Commission "Medicinal plants and herbal medicinal products"
- Country: Bulgaria

3. Employer: Faculty of Pharmacy, Medical University_Sofia

- Start date: 052010
- End date:
- Position: Professor on Pharmacognosy and Phytochemistry, DSci, PhD
- Activities: Scientific research in Phytochemistry, Pharmacognosy and Plant Biotechnology
Pharmacognosy & Pharmaceutical Biotechnology (specializations, lecture/seminar/laboratory course)
- Country: Bulgaria

European Directorate for the Quality of Medicines (EDQM)

- Start date: 112009
- End date: 122013
- Position: Expert on phytochemistry in Group 13A
- Activities:
- Country: France

4. Employer: High Attestation Commission (Government)

- Start date: 092000
- End date: 052008
- Position: Member of Bulgarian Specialized Scientific Council on Pharmacy
- Activities: Scientific degree Awarding in Pharmaceutical science
- Country: Bulgaria

5. Employer: Faculty of Pharmacy, Medical University_Sofia

- Start date: 091999
- End date: 052010
- Position: Associate Professor
- Activities: Teaching (Lecture Courses, tutoring), scientific work and research: Pharmacognosy, Pharmaceutical Biotechnology; M.Sc. students conducting (biology/pharmacy); Guiding post graduated specialization of M.Sc. on Pharmacy; Guiding Ph. D. Students
- Country: Bulgaria

6. Employer: Faculty of Pharmacy, Medical University_Sofia

- Start date: 011999
- End date:
- Position: Head of Section and Laboratory of Pharmaceutical Biotechnology
- Activities: • Molecular and biological approaches in the development of new immunostimulating, anticancer, anti_HIV plant therapeutics, Air_lift type fermentor for biosynthesis of biological active plant substances • Development of gene_modified technology for Transgenic Plants, In vitro production and optimization biosynthesis of natural substances in plant cell cultures, Use of DNA for detection of biological active compounds, Bacterium_mediated genetic transformation, Bioconversion by recombinant human CYP450 3A4
- Country: Bulgaria

7. Employer: Faculty of Pharmacy, Medical University_Sofia

- Start date: 091983
- End date: 081999
- Position: Assistant Professor, PhD
- Activities: Phytochemical and biotechnological investigation of medicinal plants and herbal products
- Country: Bulgaria

Education and training

1. Subject: High Attestation Commission
 - Start date: 072008
 - End date:
 - Qualification: Doctor of Sciences – DSci Pharmacy
 - Organisation: Thesis title "Pharmaceutically significant biologically active compounds from sources with optimised phytochemical potential"
 - Country: Bulgaria
2. Subject: Ministry of Health
 - Start date: 091996
 - End date: 101999
 - Qualification: Specialization on "Medicinal Plants and herbal medicinal products"
 - Organisation: Postdoc degree _ Pharmacognosy and Phytochemistry
 - Country: Bulgaria
3. Subject: High Attestation Commission
 - Start date: 091980
 - End date: 121983
 - Qualification: Doctor degree – PhD Pharmacy
 - Organisation: Thesis title "Investigations for saponins, sapogenins and flavonoids of representations of genus *Astragalus*, spread in Bulgaria"
 - Country: Bulgaria
4. Subject: Faculty of Pharmacy, Medical University_Sofia
 - Start date: 091975
 - End date: 061979
 - Qualification: Master of science Pharmacy
 - Organisation:
 - Country: Bulgaria

Additional information

Publications

• Scientific Papers: more than 190, Impact factor over 60, more than 2000 citations • Books: 10 (monographies and books, 4 published by Springer Verlag) • Reports and published contributions to international congresses: 70 • Textbooks and teaching materials – 8 SELECTED PUBLICATIONS Nikolov St., I. Ionkova, D. Panova, H. Budzikiewicz. E. Schroder (1985) Soyasapogenol B from *Astragalus angustifolius* lam. Comptes rendus de l'Academie Bulgare des Science, 38(7), 875_879 Ionkova I., L. Witte, A. W. Alfermann (1989) Production of alkaloids in transformed root cultures of *Datura innoxia*, *Planta Medica*, 55:229 Doerk.K., I. Ionkova, L. Witte, A. W. Alfermann (1989) Synthesis of tropane alkaloids in hairy root cultures of *Datura* and *Hyoscyamus* species, *Planta Medica*, 55:688 Ionkova I. (1990), Isolation and HPLC/TLC analyses of major flavonoids from *Astragalus aitosensis* MB (Fabaceae), *Planta Medica*, 56: 581 Ionkova I., A. W. Alfermann (1990), Transformation of *Astragalus* species by *Agrobacterium rhizogenes* and their saponin production, *Planta Medica*, 56: 634 Ionkova I., St. Ninov, D. Kolev, A. W. Alfermann (1991) Secondary constituents of *in vitro* cell and transformed root cultures of *Althaea officinalis* L., var *Russalka*, Malvaceae, *Planta Medica*, 57(8): A41_42 Ionkova I. (1992) Potential of transformed root cultures from *Hyoscyamus aureus*, for biosynthesis of tropane alkaloids, *Biotechnology and Bioeng.*, Sofia, Vol 6(3), 41_43 Ionkova I. (1992) Alkaloid production of *Hyoscyamus reticulatus* plant and transformed root cultures, *Biotechnology and bioeng.*, Sofia, vol.6(2), 50_53 Ninov St., I. Ionkova, D. Kolev, (1992) Constituents from roots of *Althaea officinalis*, var. *Russalka*, Malvaceae, *Fitoterapia*, Ital LXIII, N5: 474 Ionkova I., L. Witte, A. W. Alfermann (1994) Spectrum of tropane alkaloids in transformed roots of *Datura innoxia* and *Hyoscyamus gyoeffii*, cultivated *in vitro*, *Planta Medica*, 60 (4): 382_384 Ionkova I. (1992) Alternative sources of biological active substances from *Althaea officinalis*, var. *Russalka*, *Comptes rendus de l'Academie Bulgare des Science*, vol. 45, N:9, 137_140 Ionkova I., Z. Hu, A. W. Alfermann, (1993) Polysaccharide Production by Hairy Root Cultures of Some Higher Medicinal Plants, *Planta Medica*, 59(7): A 658 Ionkova I., H. Budzikiewicz, A. W. Alfermann, (1993) Cycloartane Derived Saponin from Transformed Root Cultures of *Astragalus mongholicus*, *Planta Medica*, 59(7): A66 Tape R., H. Budzikiewicz, Ionkova I., A. W. Alfermann (1994) Triterpene glycosides from transformed root cultures of *Astragalus mongholicus* Bge, *Spectroscopy* (IOS Press, USA), 12 (1):1_8 Ionkova I., T. Kartnig (1997) Densitometric determination of cycloartane triterpene saponins from the transformed root cultures of *Astragalus mongholicus* Bge., *Die Pharmazie*, vol. 52 (3): 218_220 Ionkova I., T. Kartnig, A. W. Alfermann (1997), Cycloartane saponin production in hairy root cultures of *Astragalus mongholicus* Bge., *Phytochemistry*, vol. 45, N 8, 1597_1600 Bugar, S. Ninov, I. Ionkova, T. Kartnig, M. Schubert_Zsilavec, I. Asenov, B. Konuklugil (1998), Flavonoids from *Phlomis nissolii*, *Phytochemistry*, vol. 48 (3): 573_575 Ionkova I., A. W. Alfermann (2000), Use of DNA for detection and isolation of Potential Anticancer Agents From Plants, *Pharmacy*, Sofia, 1_2:10_16 Vasilev N., P. Nedialkov, I. Ionkova and S. Ninov (2004) HPTLC densitometric determination of justicidin B in *Linum* cultures *in vitro*, *Die Pharmazie*, Vol. 59(7), p. 528_529 Vasilev N. and I. Ionkova (2004) Lignan accumulation in cell cultures of *Linum strictum* ssp. *strictum* L. *Acta Pharmaceutica* 54, 347_351 N. Vasilev and I. Ionkova (2005) Cytotoxic activity of extracts from *Linum* cell cultures. *Fitoterapia* 76, 50_53 Vasilev N., G. Momekov, M. Zaharieva, S. Konstantinov, P. Bremner, M. Heinrich, I. Ionkova, (2005), Cytotoxic activity of a podophyllotoxin like lignan from *Linum tauricum* Willd, *Neoplasma*, 5, 425_429 Vasilev N. and I. Ionkova (2005) Lignan production by cell cultures of *Linum setaceum* and *Linum campanulatum*. *Pharmaceutical Biology*, Vol. 43, No. 6, 1_3 Vasilev N., Elfahmi, R. Boss, O. Kaiser, G. Momekov, S. Konstantinov, Iliana Ionkova (2006), Production of Justicidin B, a Cytotoxic Arylnaphthalene Lignan from Genetically Transformed Root Cultures of *Linum leonii* JNP, vol. 69 Iss. 7, pp 1014_1017 Nikolay P. Vasilev, Iliana I. Ionkova, (2006), Isolation and Structure Elucidation of Aryltetralin Lignans from *Linum tauricum* ssp. *bulgaricum*, *Pharmacognosy Magazine*, vol. 2., Iss. 7, pp. 172_177 Konuklugil B., I. Ionkova, N. Vasilev, T. Schmidt, J. Windhövec, E. Fuss, and A. Alfermann, (2007), Lignans from *Linum* species of sections *Sylinum* and *Linum*, *Nat. Prod. Research* 21, 1_6 Vasilev N., M. Julsing, A. Koulman, C. Clarkson, H. Woenderbag, I. Ionkova, R. Boss, J. Jaroszewski, O. Kaiser, (2006) Bioconversion of deoxypodophyllotoxin into epipodophyllotoxin in *E. coli* using human cytochrome P450 3A4, *J. of Biotechnology*, 126, 383_393 Ionkova, I. Antonova, G. Momekov, E. Fuss (2007) Cytotoxic activity of extracts from Bulgarian *Linum* species, *Pharmacognosy Magazine*, vol. 3, Issue 1: 192_195 Ionkova (2007), Biotechnological Approaches for the Production of lignans, *Pharmacognosy Reviews*, Vol. 1, Issue 1, 57_68 Nikolov St., G. Momekov, G. Kitanov, I. Ionkova, I. Krasteva, R. Toshkova, S. Konstantinov, P. Nedialkov, M. Karaivanova, (2007), Exploitation of the Bulgarian flora's biodiversity as a source of antineoplastic agents: current challenges and perspectives, *Biotechnology & Biotechnol. Equipment*, vol. 21, 4: 471_477 Vasilev Nikolay, Rainer Ebel, RuAngelie Edrada, A. Wilhelm Alfermann, Elisabeth Fuss, Iliana Ionkova, Ana Petrova, and Thomas J. Schmidt, (2008), Lignan variability in *Linum* species of section *Sylinum* occurring in Bulgaria, *Planta Medica*, 74: 273_280 Kaiser O., M. Julsing, N. Vasilev, Schneidman_Duhovny, A. Koulman, C. Clarkson, H. Woenderbag, I. Ionkova, H. Wolfson, R. Bos, R. Muntendam, J. Jaroszewski, W. Quax, (2008), Bioconversion of deoxypodophyllotoxin into epipodophyllotoxin in *E. coli* using human cytochrome P450 3A4, *Planta Medica*, SL74: 31 Mattijs Julsing, Nikolay Vasilev, Dina Schneidmann_Duhovny, Remco Muntendam, Herman Woerdenbag, Wim Quax, Haim Wolfson, Iliana Ionkova, Oliver Kayser (2008) Metabolic Stereoselectivity of Cytochrome P450 3A4 towards Deoxypodophyllotoxin: *in Silico* Predictions and Experimental Validation, *Eur J Med Chem.*, 43(6): 1171_1179 Vasilev Nikolay, Rainer Ebel, RuAngelie Edrada, A. Wilhelm Alfermann, Elisabeth Fuss, Iliana Ionkova, Ana Petrova, and Thomas J. Schmidt, (2008), "Metabolic Profiling of Lignan Variability in *Linum* species of Section *Sylinum* native to Bulgaria", *Planta Medica*, 74: 273_280 Ionkova I., I. Antonova, G. Momekov, (2008), Aryltetralin lignan from *in vitro* cultures of *Linum elegans* and their cytotoxic activity, *Pharmacy*, Sofia, 1_4, vol. LV: 18_21 Ionkova I., St. Ninov, I. Antonova, D. Moyankova, T. Georgieva, D. Djilianov (2008), DPPH radical scavenging activity of *in vitro* regenerated *Haberlea rhodopensis* Friv. Plants, *Pharmacy*, Sofia, 1_4, vol. LV: 22_25 Ionkova I., E. Fuss, (2009), Influence of different strains of *Agrobacterium rhizogenes* on induction of hairy roots and lignan production in *Linum tauricum* ssp. *tauricum*, *Pharmacognosy Magazine*, vol. 4, 17: 14_18 Ionkova I., (2009), Optimization of flavonoid production in cell cultures of *Astragalus missouriensis* Nutt. (Fabaceae) *Pharmacognosy Magazine*, vol. 4, Issue 18: 92_97 Ionkova I., (2009), Anticancer compounds from *in vitro* cultures of rare medicinal plants, *Pharmacognosy Reviews*, Vol. 2, Issue 4: 206_218 Ionkova I., (2009), Effect of methyl jasmonate on production of aryltetralin lignans in hairy root cultures of

Linum tauricum, Pharmacognosy Research, vol. 2, Issue 2: 102_105 Djiljanov D., S. Ivanov, T. Georgiev, D. Moyankova, Berkov S., G. Petrova, P. Mladenov, N. Christov, N. Hristosova, D. Peshev, M. Tchobadjieva, V. Aleksieva, A. Tosheva, M. Nikolova, I. Ionkova, W. Van den Ende, (2009) A holistic approach to resurrection plants. *Haberlea rhodopensis* – a case study, Biotechnol. & Biotechnol. Eq. 23(4): 1414_1416 Ionkova, P. Proksch, (2009), From planta to pharmaca: anticancer agents, Farmacia, vol. LIV, (1_4): 45_56 Ionkova I., I. Antonova, G. Momekov, (2010), Effect of methyl jasmonate on production of ariltetralin lignans in hairy root cultures of *Linum thracicum* ssp. *thracicum*, Proceedings of 6th Conference on Aromatic and Medicinal Plants _ CMAPSEEC, Antalya April 18_22, Turkey, 536_543 Ionkova I., I. Antonova, G. Momekov, E. Fuss (2010), Production of Podophyllotoxin in *Linum linearifolium* in vitro cultures, Pharmacognosy Magazine, vol.6 (23): 178_183 Ionkova, G. Momekov, P. Proksch, (2010), Effects of cycloartane saponins from hairy roots of *Astragalus membranaceus* Bge., cultivated in bioreactor with respect to human tumor cell targets, Fitoterapia (Ital), 81: 447_451 Schmidt T., S. Hemmati, M. Klaes, B. Konuklugil, A. Mohagheghzadeh, I. Ionkova, E. Fuss, A.W. Alfermann, (2010), Lignans in *Linum* species – Chemodiversity in the light of systematics and phylogeny, Phytochemistry, 71(14_15): 1714_1728 Berkov S., S. Romanic, M. Herrerad, F. Viladomata, C. Codina, G. Momekov, I. Ionkova, J. Bastida, (2010), Antiproliferative and apoptotic alkaloids from *Crinum zeylanicum*, Phytotherapy Research, vol.25 (11): 1686_1692 Berkov S., M. Nikolova, N. Hristosova, G. Momekov, I. Ionkova, and D. Djiljanov, (2010), GC_MS Profiling of Bioactive Extracts from *Haberlea rhodopensis*: An Endemic Resurrection Plant, J. of Serbian Chemical Society, Vol. 76, No. 2, p. 211_220 (2011). Ionkova I., I. Antonova, G. Momekov, (2010), Cytotoxic effects of lignans from in vitro cultures of *Linum serbicum* on human tumor cell lines, IJCuch on Cancer, 1.Vol. 1, No. 4: 211_216 Karamalakova Y., I. Ionkova, G. Nikolova, P. Hadjibojeva, A. Tolekova, V. Gadjeva, R. Arora, R. K. Sharma and A. Zheleva, (2010), Comparative err in vitro and ex vitro spectroscopy study of the levels of lipid peroxidation processes in livers and kidneys of mice after treatment by naturallyisolated antioxidants, Trakia J. of science, vol. 8, suppl.2: 137_143 Ionkova (2010), Biotechnology and modern production of plant made pharmaceuticals: anticancer compounds, IJCuch on Cancer, vol. 1 (4): 237_247 Momekov G., S. Konstantinov, I. Dineva, I. Ionkova, (2011), Justicidin B _ a potent arylnaphtalene lignan on human breast cancer derived cell lines, Neoplasma, 58, 4: 320_325 Ionkova (2010), Biotechnological production of valuable plant pharmaceuticals: anticancer agents, "Advances in Bulgarian Science", vol.1 p5 Ionkova, F. Bucar, E. Knauder, D. Milanova, I. Antonova, (2010), C glycosylflavones from *Linum thracicum* and their DPPH radical_scavenging activity, Proceeding of 25 International Conference on Polyphenols, Montpellier, France. Ionkova I., (2011) Anticancer lignans _ from discovery to biotechnology, Mini_Reviews in Medicinal Chemistry, vol 11, 10: 1_14, IF2011 2.622 Ionkov T., I. Ionkova, G. Momekov, P. Sasheva, (2012) Improvement bioreactor production of cytotoxic saponins in *Astragalus membranaceus* by combined control of the bioprocesses, Comptes rendus de l'Academie bulgare des Science, 65 (10): 1447_1454 Ionkov T., I. Ionkova, P. Sasheva (2012), Strategy to control the production of rare anticancer substances in the endangered plant *Linum linearifolium* in bioreactor, Indian Journal of Fundamental and Applied Life Sciences (JLS), ISSN: 2231_6345, vol. 2(1): 170_176 Ionkov T., Ionkova I., Sasheva P., (2012), Lignan production by cell suspension of *Linum tauricum*, Proceeding of the 7th CMAPSEEC, 27_31 May 2012, Subotica, R.Serbia, 338_344 Ionkova I., P. Sasheva, T. Ionkov, G. Momekov, (2013), *Linum narbonense*: a new valuable tool for biotechnological production of a potent anticancer lignan Justicidine B, Pharmacog. mag. Vol.9 (33), 39_44, Ionkov Todor, Sasheva Pavlina, Ionkova Iliana, F. Bucar, D. Milanova, (2013) Model based Combined control of the bioprocess for production of C_glycosylflavones from *Linum thracicum* in bioreactor, Comptes rendus de l'Academie bulgare des Science, vol. 66, No 1, 139_146, Momekov G., I. Ionkova, P. Nedialkov, D. Zheleva_Dimitrova, I. Krasteva, G. Kitanov, S. Nikolov, S. Konstantinov, (2013), Overview of the oncopharmacological studies of plant_derived natural products conducted at the Faculty of Pharmacy (MU_Sofia), Pharmacia, vol 60, 1: 60_70 Sasheva Pavlina, Gergana Letkarska, Iliana Ionkova, (2013) Biotechnological production of podophyllotoxin and podophyllotoxin_related lignans in cultures of *Linum thracicum* Degen, Compt. Rendus de l'Academie bulgare des Sciences, vol.66, 10: 1445_1450, Ilieva Y, Sasheva P, Zhelezova I, Dineva I, Atanasova T, Zaharieva M, Momekov G, Ionkova I, Konstantinov S., (2013) Justicidin B – a potential antineoplastic drug of plant biotechnological origin, Proceeding of AvH, Resources of Danubian region&The possibility of cooperation and utilization, Belgrade, June 12_15, 2013, 154_1162 Ionkova Iliana, Aleksandar Shkondrov, Krasteva Iliana, Todor Ionkov, (2013), Recent progress in phytochemistry, Pharmacology and biotechnology of *Astragalus* saponins, Phytochemistry Reviews (Springer), 13:343–374, Phytochem Rev (2014) 13:343–374 Zdraveva P., I. Pencheva, I. Krasteva, I. Ionkova (2014) Development and Validation of HPLC Method for Quantitative Estimation of Saponarin in Endangered Species *Gypsophila trichotoma*, Int. J. of Pharm. Analysis, vol.39 (1):1181_1184 Ilieva Y, Zhelezova I, Atanasova T, Zaharieva M, Sasheva P, Ionkova I, Konstantinov S., (2015) Cytotoxic effect of the biotechnologicallyderived justicidin B on human lymphoma cells, Biotechnology Letters (Elsevier), 36, 2177_2183 Momekov G., D. Yossifov, M.L. Guenova, A. Michova, N. Stoyanov, S. Konstantinov, T. Ionkov, P. Sasheva, I. Ionkova, (2014), Apoptotic mechanisms of the biotechnologically produced arylnaphtalene lignan justicidin B in the acute myeloid leukemia_derived cell line HL_60, Pharmacological Reports (Elsevier), 66: 1073_1076 Sasheva P, Ionkova I, Stoilova N. (2015), Methyl jasmonate induces enhanced podophyllotoxin production in cell cultures of thracian flax (*Linum thracicum* ssp. *thracicum* Degen). Natural Product Communications 10(7): 1225_1228. Iliana Krasteva, Viktor Bratkov, Franz Bucar, Olaf Kunert, Manfred Kollroser, Magdalena Kondeva_Burdina, Iliana Ionkova, (2015), Flavoalkaloids and Flavonoids in *Astragalus monspessulanus*, Journal of Natural Products, 78, 2565_2571 Krasteva I., A. Shkondrov, I. Ionkova, P. Zdraveva (2016), "Advances in phytochemistry, pharmacology and biotechnology of Bulgarian *Astragalus* species" Phytochemistry Reviews, 15(4), 567_5906. Simeonova Romyana, Vessela Vitcheva, Iliana Krasteva, Petranka Zdraveva, Spiro Konstantinov, Iliana Ionkova, (2016), Antidiabetic and antioxidant effects of saponarin from *Gypsophila trichotoma* on streptozotocin_induced diabetic normotensive and hypertensive rats, Phytomedicine, 23, 483_490. Yancho Zarev, Kenn Foubert, Vera Lucia de Almeida, Roel Anthonissen, Esameldin Elgorashi, Sandra Apers, Iliana Ionkova, Luc Verschaeve and Luc Pieters, 2017, Antigenotoxic prenilated flavonoids from stem bark of *Erythrina latissima*, Phytochemistry 141, 140_146 Zdraveva P., P. Popova, A. Shkondrov, I. Krasteva, I. Ionkova. Investigation of in vitro cultures of *Astragalus monspessulanus* L. Comptes rendus de l'Academie bulgare des Sciences, 2017, 79(8), 1181_1136. Shkondrov A., I. Krasteva, F.Bucar, O. Kunert, M. Kondeva_Burdina, I. Ionkova. A new tetracyclic saponin from *Astragalus glycyphyllos* L. and its neuroprotective and hMAO_B inhibiting activity. Natural Product Research, 2018 Shkondrov A., I. Krasteva, F.Bucar, O. Kunert, M. Kondeva_Burdina, I. Ionkova. Flavonoids and saponins from two Bulgarian *Astragalus* species and their neuroprotective activity. Phytochemistry letters, 2018 26: 44_49 Krasteva I, Shkondrov A, Ionkova I, Zdraveva P. Advances in phytochemistry, pharmacology and biotechnology of Bulgarian *Astragalus* species. Phytochemistry Reviews. 2016; 15(4): 567–590. Yancho Zarev, Kenn Foubert, Iliana Ionkova, Sandra Apers, and Luc Pieters, 2017, Isolation and structure elucidation of glycosylated colchicinoids from the seeds of *Gloriosa superba* by LC_DAD_SPE_NMR, JNat.Prod., 80: 1187_1191 Zdraveva P, Popova P, Shkondrov A, Krasteva I, Ionkova I. Production of Δ^7 sterols from in vitro root cultures of endangered *Gypsophila trichotoma*. Natural Products Communications. 2017; 12(2): 155–156. Zdraveva P, Popova P, Shkondrov A, Krasteva I, Ionkova I. Investigation of in vitro cultures of *Astragalus monspessulanus* L. Comptes Rendus de l'Academie Bulgare des Sciences. 2017; 70(8): 1131–1136. Shkondrov A., I. Krasteva, F.Bucar, O. Kunert, M. Kondeva_Burdina, I. Ionkova, A new tetracyclic saponin from *Astragalus glycyphyllos* L. and its neuroprotective and hMAO_B inhibiting activity. Natural Product Research, 2020; 34(4): 511_517 Kondeva_Burdina, M., Shkondrov, A., Simeonova, R., Vitcheva, V., Krasteva, I., & Ionkova, I. (2018). In vitro/in vivo antioxidant and hepatoprotective potential of defatted extract and flavonoids isolated from *Astragalus spruneri* Boiss. (Fabaceae). Food and Chemical Toxicology, 111, 631_640. Yancho Zarev, Kenn Foubert, Paul Cos, Louis Maes, Esameldin Elgorashi, Sandra Apers, Iliana Ionkova, Luc Pieters, 2019, HPLC_DAD_SPE_NMR isolation of tetracyclic spiro_alkaloids with antiplasmodial activity from the seeds of *Erythrina latissima*. Nat. Prod. Res., pp. 1_4. Mincheva I. M. Zaharieva, D. Batovska, H. Najdenski, I. Ionkova, E. Kozuharova, 2019, Antibacterial activity of extracts from *Potentilla reptans* L., Pharmazie 66(1): 7_11. Yancho Zarev, Pavlinka Popovaa, Kenn Foubert, Sandra Apers, Arnold Vlietinck, Luc Pieters and Iliana Ionkova, 2019, Biotransformation to Produce the Anticancer Compound Colchicoside using cell suspension cultures of *Astragalus vesicarius* plant species, Natural Product Communications, Vol. 14, No. 1, 27_29 Kozuharova E., Ionkova I. & Raimondo F. M. (2019). Invasive alien species: potential cheap resources of plant substances for medicinal use. *Flora Mediterranea* 29: 13_25 Kozuharova E., Ionkova I. & Spadaro V. (2019). *Xanthium strumarium* L. – a potential cheap resource of plant substances for medicinal use. *Flora Mediterranea* 29: 93_102. Shkondrov, A., Krasteva, I., Ionkova, I., Popova, P., Zarev, Y., Mihaylova, R., & Konstantinov, S. Production of saponins from in vitro cultures of *Astragalus glycyphyllos* and their antineoplastic activity. *Biotechnology & Biotechnological Equipment*, 2019; 33(1): 1413_1418. Kondeva_Burdina M, Doytchinova I, Krasteva I, Manov V, Ionkova I. Hepato_, neuroprotective effects and QSAR studies on flavoalkaloids and flavonoids from *Astragalus monspessulanus*.

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Projects

Work research experience abroad (DAAD, UNESCO, NATO, OAD, etc): Germany _ University of Düsseldorf, Belgium _ Free University of Brussels, Austria _ University of Graz _ 1987_1989, 1992,1995, 1996, 1999, 2003, 2006, 2009. Project management _ director of International and national research projects: • 1991 _ 1993 "Natural products of medicinal importance from plant cell and organ cultures of families Solanaceae and Fabaceae", financed by Kernforschungszentrum, Karlsruhe, Project N: X214.2, Germany • 1996 _ Research Project "Use of DNA as affinity probe for detection and isolation of biological substances", financed by Konferenz der Deutschen Akademien der Wissenschaften, Mainz, Aktenzeichen: 960.4_129 Universität Düsseldorf, Germany • 1996 _ Project N: HTECH.CRG 960358/1232(96)JARC_411 "Extraction of toxic metals from contaminated soils by tolerant *Datura stramonium* plants", financed by Scientific and Environmental Affairs Division of NATO, Belgium • 1995 _ 1996 Project BG/1 "Modern Teaching and training in pharmacognosy and chemotherapeutic pharmacology for under and postgraduate students" (contemporary teaching methodologies), financed by CEEPUS, Wien, Austria • 1993 _ Project N: MU 11/Med "Molecular_biologic approach for discovery of plant immunostimulatig and anticancer drugs", financed by Ministry of Education Technology and Science, Bulgaria • 1999 – Project N° VRP_L_8 "Model systems for ecotoxicological evaluation of heavy metals in plants" financed by Ministry of Education Technology and Science, Bulgaria • 1994 _ 1996 Project N: L 409 "Use of DNA as affinity probe for detection and isolation of biological substances", financed by Ministry of Education Technology and Science, Bulgaria • 2007_2009 Project N°: TK_L_1607/06 "Production of anticancer lignans in in vitro cultures of bulgarien *Linum* species" financed by Ministry of Education Technology and Science, Bulgaria

Memberships

• Membership of international professional societies: American Society of Pharmacognosy; International Society for Medicinal Plant Research; AMAPSEEC; Bulgarian Union of Pharmacy • Member of Editorial Board of International scientific journals: *Pharmacognosy Magazine* (Shivananda B. G. ed); *Pharmacognosy Review* (Shivananda B. G. ed); *Pharmacy* (Sofia) • Member of Expert commission within the Sixth Framework Program of the European Union _ SEE_ERA.NET _ Invited reviewer of the projects in the field of Biotechnology and Phytochemistry • Invited reviewer of scientific projects at international level (EU) • Invited reviewer in international and national scientific journals: *J. of Botany* (Belgium); *J. of Ethnopharmacology*_Elsevier, (Verpoorte Ed.); *J. of Biochemistry and Molecular Biology* (Z. Dong Ed.); *Pharmacognosy Magazine* (Shivananda B. G. ed); *J. of Biotech&Bioeng.*; *J. Pharmacy* etc. • Member of National Pharmacopoeia Committee, Herbal Drugs • Member of Commission Herbal Drugs, Bulgarian Drug Agency

Other Relevant Information

HONOURS AND AWARDS • 2006 _ Badge of Honour "Signum Laudis pro scientiae meritis" for the best research work in the field of Pharmacy • 2011 _ "Panacea_gold" for special contributions to the realization of teaching, research and expert work in medical and biological field