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**Department of Chemistry,
Faculty of Pharmacy, Medical University,
2 Dunav St., Sofia 1000, Bulgaria
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EDUCATION

- received the degree in chemistry and ecology and the chemist's diploma qualification with the highest average grade from the Higher Chemical Technological University "D. I. Mendeleev", Moscow, RUSSIA;
- graduated a second specialization "Theoretical bases of medical chemistry" in Faculty of Medicine, Medical University, Sofia, Bulgaria (1998);
- **Ph.D. Thesis** in Chemistry "Synthesis and characterization of metal complexes of coumarin derivatives", awarded by Faculty of Pharmacy, Medical University, Sofia, Bulgaria;
- Habilitation in Inorganic Chemistry, Medical University, Sofia
- **D.Sc. Thesis** in Chemistry "New lanthanide(III) complex compounds with biologically active ligands", awarded by Faculty of Pharmacy, Medical University, Sofia, Bulgaria;
- Specializations in the characterization of biologically active compounds using Raman spectroscopy, in the research group of Prof. Dr. Dr.h.c. Wolfgang Kiefer, Institut für Physikalische Chemie, Universität Würzburg, Germany (September, December, 2005);
- Languages: English-fluent, Russian-fluent, French-good, Bulgarian-native

PROFESSIONAL EXPERIENCE

- after graduation appointed as a research scientist and senior researcher at **Scientific Research Centre of Ministry of Environmental of the Republic of Bulgaria**;
- Department of Chemistry, Faculty of Pharmacy, **Medical University, Sofia, Bulgaria** – teaching course "Inorganic Chemistry" (1994-present).

RESEARCH PROJECTS

- Five financial supported projects from University Grant Commission (1999, 2001, 2003, 2004, 2014)
- **Principal investigator** of two research projects 21/2003 and 21/2004 "Synthesis of metal complexes of coumarin derivatives with the purpose of anti-HIV integrase activity. Screening of the new complexes in cell cultures", awarded in 2004 and 2005, respectively;
- **Principal investigator** of the **International project №БИН-8/2007** "Synthesis and Characterization of Metal Complexes with Biologically Active Ligands: Potential Anticancer agents" under **BULGARIAN-INDIAN INTER-GOVERNMENTAL PROGRAMME OF COOPERATION IN SCIENCE AND TECHNOLOGY**
- Collaboration and participation in research project sponsored by the German Science Foundation (Sonderforschungsbereich 630, Project C1).
- **Principal investigator** of the research project 32/2014 „Лантанидни комплекси с биологично активни лиганди - синтез, охарактеризиране и фармакологична активност”, СМН, МУ-София.

SCIENTIFIC AND TEACHING ACTIVITIES AND RESPONSIBILITIES

- Referee for evaluation of **25 foreign PhD Theses** and **member of juries** for defence of Ph.D.;
- Lecturer** in Department of Chemistry and Department of Physics of **MEERUT UNIVERSITY, INDIA** (January-February, 2005);
- Lecturer** in Department of Pharmacology of **P. J. SAFARIK UNIVERSITY - KOSICE, SLOVAKIA** (June, 2009);
- Lecturer** in Institute of Pharmacology of **SAPIENZA UNIVERSITY-ROME, ITALY** (2009, 2010);
- Lecturer** in **UNIVERSITATEA DE MEDICINĂ ȘI FARMACIE "IULIU HAȚIEGANU", CLUJ-NAPOCA, ROMANIA** (2010);
- Lecturer** in Faculty of Physics of **BABES-BOLYAI UNIVERSITY, CLUJ, ROMANIA** (2010);
- Lecturer** in **MEDIZINISCHE UNIVERSITÄT WIEN, AUSTRIA** (2011);
- Lecturer** in **MLS UNIVERSITY, UDAIPUR, INDIA** (2012);
- Lecturer** in Institute of Pharmacology of **SAPIENZA UNIVERSITY - ROME, ITALY** (2012);
- Lecturer** in **MEDIZINISCHE UNIVERSITÄT WIEN, AUSTRIA** (2013);
- Lecturer** in Institute of Pharmacology of **SAPIENZA UNIVERSITY-ROME, ITALY** (2014, 2015)

- EDITOR AND MEMBER OF EDITORIAL BOARDS OF THE JOURNALS:

1. **EDITOR** of ASIAN CHEMISTRY LETTERS
2. **ASSOCIATE EDITOR** of
INTERNATIONAL JOURNAL OF DRUG DISCOVERY (IF = 4.480)
3. **EDITOR** of METAL-BASED DRUGS
4. **EDITOR** of INTERNATIONAL JOURNAL OF CURRENT CHEMISTRY
5. **REGIONAL EDITOR** of
RECENT PATENT REVIEWS ON ANTI-CANCER DRUG DISCOVERY (IF = 2.822)
6. Member of the **Editorial Advisory Board** of
ANTI-CANCER AGENTS IN MEDICINAL CHEMISTRY (IF = 3,144)
7. Member of the **Editorial Advisory Board** of
WORLD JOURNAL OF VIROLOGY
8. Member of the **Editorial Advisory Board** of
INDIAN JOURNAL OF PURE AND APPLIED PHYSICS (IF = 0.763)
9. Member of the **Editorial Advisory Board** of THE OPEN CANCER JOURNAL
10. Member of the **Editorial Advisory Board** of
RECENT PATENTS ON ANTI-INFECTIVE DRUG DISCOVERY
11. Member of the **Editorial Board** of
INFECTION & DRUG RESISTANCE
12. Member of the **Editorial Board** of
BRITISH JOURNAL OF MEDICINE AND MEDICAL RESEARCH
13. Member of the **Editorial Board** of
INTERNATIONAL JOURNAL OF CHEMISTRY
14. Member of the **Editorial Board** of
INTERNATIONAL JOURNAL OF ENVIRONMENTAL SCIENCES
15. Member of the **Editorial Board** of
DATASET PAPERS IN CHEMISTRY
16. Member of the **Editorial Board** of
MAKARA OF TECHNOLOGY SERIES
17. Member of the **Editorial Board** of
PEERTECHZ JOURNAL OF MEDICINAL CHEMISTRY AND RESEARCH

- SECTION EDITOR & GUEST EDITOR OF:

Guest Editor of Special Issues (Part I and II) “METAL-CONTAINING DRUGS AND NOVEL COORDINATION COMPLEXES IN THERAPEUTIC ANTICANCER APPLICATIONS” for “ANTI-CANCER AGENTS IN MEDICINAL CHEMISTRY”

Volume 10, Number 4, May 2010

Volume 10, Number 5, June 2010

Editor of Section: “NON-PHYSIOLOGICAL METALS: LANTHANIDES, ACTINIDES“ for „ENCYCLOPEDIA OF METALLOPROTEINS”, 2010-2012 (Springer-Verlag GmbH, Heidelberg, Germany)

- MEMBER OF ADVISORY AND ORGANIZING COMMITTEES OF SEVERAL INTERNATIONAL CONFERENCES:

1. International Advisory Committee of the International Conference on Spectrophysics (INCONS 2005), Chennai, India;
2. International Advisory Committee of the International Conference on Perspectives of Vibrational Spectroscopy (INCOPVS 2006), Meerut, India;
3. International Advisory Committee of the International Conference on Perspectives of Vibrational Spectroscopy (ICOPVS 2008), Trivandrum, India;
<http://www.icopvs2008.org/committees.html>

4. Member of Jury in PhD Students' Works I - Theoretical Part Session of the 1st International Student Medical Congress (ISMCK '09) Košice, Slovakia
<http://www.lf.upjs.sk/ismck/jury.html>
5. International Advisory Committee of the International Conference on Green Technologies for Greener Environment (GTGE2010), Meerut, India.
<http://www.gtge2010.com/index.php>
6. International Steering Committee of the International Conference on Molecular Spectroscopy of Advanced Materials and Biomolecules (IMSAB 2012), Mavelikara, India.
<http://imsab.in/committee.php>
7. International Scientific Committee of the 1st International Symposium on Naturals for Health and Beauty, Ankara, Turkey, 2012
<http://www.hena2012.org/scientificcommittee.html>
8. International Advisory Committee of the International Conference on Recent Advances in Physics (ICRAP 2013), Uthangarai, India.
<http://icrapsvmc.blogspot.com/p/organizing-committee.html>
9. International Scientific Committee of the 11th Annual Congress of International Ethnobotany Symposio, Antalya, Turkey, November 2013.
http://www.ethnobotany2013.com/?page=scientific_board
10. International Scientific Committee of the International Conference on Perspectives of Vibrational Spectroscopy (ICOPVS 2014), Trivandrum, India. www.icopvs.org/
11. International Advisory Committee of the International Conference on Recent Advances in Applied Sciences (ICRAAS 2016), Chennai, India. <http://icraas.org/index.php>
12. International Organizing Committee of the 2nd Spectroscopy and Spectral Analysis Conference (SSA 2016), Beijing, China. <http://www.engii.org/ws2016/OrganizingCommittee.aspx?id=683>

- CHAIRPERSON IN INTERNATIONAL CONFERENCES:

1. International Conference on Spectrophysics (INCONS 2005), Chennai, India (February 9-12, 2005);
2. 1st International Conference on Perspectives of Vibrational Spectroscopy (INCOPVS 2006), Meerut, India (February 25-28, 2006);
3. 2nd International Conference on Perspectives of Vibrational Spectroscopy (ICOPVS 2008), Trivandrum, India;
4. 12th International Symposium of Natural Product Chemistry (ISNPC-12), Karachi, Pakistan (November 22-25, 2010);
5. 8th Indo-Italian Workshop on "Chemistry and Biology of Antioxidants" Rome, Italy (November 30th - December 1st 2010);
6. International Conference on Global Trends of Pure & Applied Chemical Sciences (ICGTCS-2012), Udaipur, India (3-4 March 2012);
7. International Conference on Molecular Spectroscopy of Advanced Materials and Biomolecules, Mavelikara, India (August 7-9, 2012);
8. 13th International Symposium of Natural Product Chemistry, Karachi, Pakistan, Sept. 22-25, 2012;
9. International Conference on Biological Inorganic Chemistry- ICBIC 2013, Salem, India;
10. 5th International Conference on Perspectives of Vibrational Spectroscopy (ICOPVS 2014), Trivandrum, India;
11. 15th National Congress of Pharmacy, Romania, 24-27 September 2014, Iaş i, Romania.

SCIENTIFIC COLLABORATION AND INTERNATIONAL EXPERIENCE - Intensive fruitful collaboration with INDIA, GERMANY, AUSTRIA, ITALY, ROMANIA, SLOVAKIA etc.

PROMOTER OF AGREEMENTS OF MEDICAL UNIVERSITY-SOFIA with several EUROPEAN UNIVERSITIES:

Irena Kostova promoted and maintains the relationships with the following Universities:

1. **P. J. SAFARIK UNIVERSITY - KOSICE, SLOVAKIA** (*contract under the egis of Erasmus program*);
2. **SAPIENZA UNIVERSITY - ROME, ITALY** (*contract under the egis of Erasmus program*);
3. **UNIVERSITATEA BABEȘ-BOLYAI OF CLUJ-NAPOCA, ROMANIA** (*bilateral relationship agreement of cooperation*).
4. **MEDIZINISCHE UNIVERSITÄT WIEN, AUSTRIA** (*contract under the egis of Erasmus program*);
5. **UNIVERSITÀ DEGLI STUDI DI FIRENZE, ITALY** (*contract under the egis of Erasmus program*);
6. **COMPLUTENSE UNIVERSITY OF MADRID, SPAIN** (*contract under the egis of Erasmus program*)

REVIEWER for many high ranking journals (more than 300 papers for the last years):

APOPTOSIS;
APPLIED BIOCHEMISTRY AND BIOTECHNOLOGY;
APPLIED CLAY SCIENCE;
APPLIED ORGANOMETALLIC CHEMISTRY;
ARCHIV DER PHARMAZIE;
ASIAN CHEMISTRY LETTERS;
BIOCHIMIE;
BIOINORGANIC CHEMISTRY AND APPLICATIONS;
BIOLOGICAL TRACE ELEMENT RESEARCH;
BIOORGANIC & MEDICINAL CHEMISTRY;
BIOORGANIC & MEDICINAL CHEMISTRY LETTERS;
CANCER LETTERS;
CENTRAL EUROPEAN JOURNAL OF CHEMISTRY;
CHEMICAL PAPERS;
CHEMICAL PHYSICS;
CHEMICAL PHYSICS LETTERS;
CHEMICAL REVIEWS;
CHEMISTRY CENTRAL JOURNAL;
CHINESE OPTICS LETTERS;
COMPTES RENDUS CHIMIE;
CURRENT CANCER THERAPY REVIEWS;
CURRENT MEDICINAL CHEMISTRY;
CURRENT MEDICINAL CHEMISTRY-ANTI-CANCER AGENTS;
CURRENT MEDICINAL CHEMISTRY;
DRUG DISCOVERY TODAY;
E-BOOK SERIES BENTHAM SCIENCE PUBLISHERS;
EUROPEAN JOURNAL OF MEDICINAL CHEMISTRY;
EUROPEAN JOURNAL OF PHARMACOLOGY;
EXPERT OPINION ON DRUG DISCOVERY;
EXPERT OPINION ON THERAPEUTIC PATENTS;
INDIAN JOURNAL OF PHYSICS;
INORGANICA CHIMICA ACTA;
INORGANIC CHEMISTRY;
INORGANIC CHEMISTRY COMMUNICATIONS;
INVESTIGATIONAL NEW DRUGS;
INTERNATIONAL JOURNAL OF CURRENT CHEMISTRY;
INTERNATIONAL JOURNAL OF MEDICINE AND MEDICAL SCIENCES;
INTERNATIONAL JOURNAL OF PHYSICAL SCIENCES;
INTERNATIONAL JOURNAL OF QUANTUM CHEMISTRY;
JOURNAL MATERIALS & ENVIRONMENT SCIENCE;
JOURNAL OF BIOLOGICAL INORGANIC CHEMISTRY;

JOURNAL OF BIOMEDICAL SCIENCE;
 JOURNAL OF BIOPHYSICS AND STRUCTURAL BIOLOGY;
 JOURNAL OF CHEMISTRY AND MATERIAL SCIENCE;
 JOURNAL OF COORDINATION CHEMISTRY;
 JOURNAL OF INORGANIC BIOCHEMISTRY;
 JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS;
 JOURNAL OF MOLECULAR STRUCTURE;
 JOURNAL OF PHARMACY AND PHARMACOLOGY;
 JOURNAL OF PHOTOCHEM. & PHOTOBIOLOG. A: CHEMISTRY;
 JOURNAL OF RAMAN SPECTROSCOPY;
 JOURNAL OF STRUCTURAL CHEMISTRY;
 JOURNAL OF TRACE ELEMENTS IN MEDICINE AND BIOLOGY;
 LIFE SCIENCES AND MEDICINE RESEARCH;
 MEDICINAL CHEMISTRY;
 METAL-BASED DRUGS;
 MOLECULAR SIMULATION;
 MOLECULES;
 OPEN BIOTECHNOLOGY JOURNAL;
 PHYSICS ESSAYS;
 PHYTOCHEMISTRY;
 RECENT PATENTS ON ANTI-CANCER DRUG DISCOVERY;
 SCIENCE JOURNAL OF PURE AND APPLIED CHEMISTRY;
 SOLID STATE SCIENCES;
 SPECTROCHIMICA ACTA;
 SPECTROSCOPY LETTERS;
 STRUCTURAL CHEMISTRY;
 THE OPEN CANCER JOURNAL;
 THE PROTEIN JOURNAL;
 VIBRATIONAL SPECTROSCOPY; etc.

REVIEWER ACTIVITY FOR INTERNATIONAL APPLICATIONS:

- FWF (**Austrian Science Fund**) Division for Natural and Technical Sciences;
- INCA (**French National Cancer Institute**);
- FHB (**Food and Health Bureau**) of the Hong Kong SAR Government;
- FWF (**Austrian Science Fund**) "Hertha Firnberg-Program";
- SNSF (**Swiss National Science Foundation**) Div. Math., Phys. Eng. Sci.;
- **СЪВЕТ ПО МЕДИЦИНСКА НАУКА** при МУ-София;
- **ФОНД „НАУЧНИ ИЗСЛЕДВАНИЯ“** при МОН;
- **Scientific Grant Agency of the Ministry of Education of the Slovak Republic**

Bio-data published in:

- "Who's Who in Science and Engineering 2006-2007", (9th Edition);
- "Who's Who in Science and Engineering 2007-2008", (10th Edition);
- "Who's Who in the World", 2008-2009 (26th Edition).
- "Strathmore's Who's Who", 2010 edition

PUBLICATIONS:

- Corresponding author of about **130 full length papers** in peer refereed international journals;
- More than **3000 citations**;
- Co-author in writing of several books for students;
- More than 50 published abstracts of oral and poster presentations at international scientific meetings; **Invited lecturer** at over 25 international conferences

SCIENTIFIC PUBLICATIONS

1. Kostova I., I. Manolov, S. Konstantinov, M. Karaivanova: Synthesis, physicochemical characterization and cytotoxic screening of new complexes of Ce, La and Nd with Warfarin and Coumachlor sodium salts. *Eur. J. Med. Chem.*, 34(1), 63-68, 1999.
IF(1999) = 1.074
Cited: 41
2. Manolov I., I. Kostova, S. Konstantinov, M. Karaivanova: Synthesis, physicochemical characterization and cytotoxic screening of new complexes of Ce, La and Nd with Nifflcoumar sodium salt. *Eur. J. Med. Chem.*, 34(11), 853-858, 1999.
IF(1999) = 1.074
Cited: 14
3. Manolov I., I. Kostova, T. Netzeva, S. Konstantinov, M. Karaivanova: Cytotoxic activity of Cerium complexes with coumarin derivatives. Molecular modeling of the ligands. *Arch. Pharm. Pharm. Med. Chem.*, 333(4), 93-98, 2000.
IF(2000) = 0.923
Cited: 31
4. Kostova I., I. Manolov, I. Nicolova, N. Danchev: New metal complexes of 4-methyl-7-hydroxycoumarin sodium salt and their pharmacological activity. *Chem. Med. Chem (Formerly Il Farmaco)*, 56, 707-713, 2001.
IF(2001) = 0.539
Cited: 57
5. Kostova I., I. Manolov, I. Nicolova, S. Konstantinov, M. Karaivanova: New lanthanide complexes of 4-methyl-7-hydroxycoumarin and their pharmacological activity. *Eur. J. Med. Chem.*, 36, 339-347, 2001.
IF(2001) = 1.770
Cited: 100
6. Kostova I., L. Changov, E. Keuleyan, R. Gergova, I. Manolov: Synthesis, analysis and in vitro antibacterial activity of new metal complexes of Sulbactam. *Chem. Med. Chem. (Formerly Il Farmaco)*, 53, 737-740, 1998.
IF(1998) = 0.512
Cited: 6
7. Pencheva I., I. Kostova, S. Konstantinov, M. Karaivanova, I. Manolov: Cardioprotective efficacy of new Esculin metal complexes. *Acta Pharm.*, 48(2), 127-131, 1998.
Cited: 6
8. Kostova I., I. Manolov, M. Karaivanova: Synthesis, physicochemical characterization, and cytotoxic screening of new zirconium complexes with coumarin derivatives. *Arch. Pharm. Pharm. Med. Chem.*, 334(5), 157-162, 2001.
IF(2001) = 0.891
Cited: 51
9. Trendafilova N., I. Kostova I. Manolov, G. Bauer, T. Mihaylov, I. Georgieva: Synthesis and Spectroscopic Study of New Lanthanum (III) Complex of 3,3'-Benzylidenedi-4-hydroxycoumarin. *Synth. React. Inorg. Met.-Org. Chem.*, 34(9), 1635-1650, 2004.
IF(2004) = 0.715
Cited: 1

10. Kostova I., I. Manolov, M. Radulova: Stability of the complexes of some lanthanides with coumarin derivatives. I. Cerium (III)-4-methyl-7-hydroxycoumarin. *Acta Pharm.*, 54(1), 37-47, 2004.
Cited: 20
11. Kostova I., I. Manolov, G. Momekov: Cytotoxic activity of new neodymium (III) complexes of bis-coumarins. *Eur. J. Med. Chem.*, 39, 765-775, 2004.
IF(2004) = 1.673
Cited: 33
12. Traykova M., I. Kostova: Coumarin Derivatives and Oxidative Stress. *Int. J. Pharmacol.*, 1(1), 29-32, 2005.
Cited: 20
13. Kostova I., N. Trendafilova, T. Mihailov: Theoretical and spectroscopic studies of pyridyl substituted bis-coumarins and their new neodymium (III) complexes. *Chem. Phys.*, 314, 73-84, 2005.
IF(2005) = 1.934
Cited: 15
14. Kostova I., S. Raleva, P. Genova, R. Argirova: Recent advances in the discovery and development of plant-derived natural coumarins and their analogues as anti-human immunodeficiency virus – type 1 (HIV-1) agents. *Biotechn. Biotechn. Eq.*, 19 (1), 16-22, 2005.
IF(2005) = 0.060
Cited: 4
15. Kostova I., I. Manolov, G. Momekov, T. Tzanova, S. Konstantinov, M. Karaivanova: Cytotoxic activity of new cerium (III) complexes of bis-coumarins. *Eur. J. Med. Chem.*, 40(12), 1246-1254, 2005.
IF(2005) = 2.022
Cited: 25
16. Kostova I., M. Radulova: Studies on the stability of lanthanide(III) complexes with 4-hydroxy-3-(3-oxo-1-phenylbutyl)-2H-1-benzopyran-2-one. Part III. Neodymium (III) complex. *Asian Chem. Lett.*, 9(3-4), 109-116, 2005.
17. Kostova I., S. Raleva, P. Genova, R. Argirova: Structure-activity relationships of synthetic coumarins as HIV-1 inhibitors. *Bioinorg. Chem. Appl.*, 2006, Article ID 68274-68283, 2006.
IF(2006) = 0.767
Cited: 105
18. Mihaylov T., I. Georgieva, G. Bauer, I. Kostova, I. Manolov, N. Trendafilova: Theoretical Study of the Substituent Effect on the Intramolecular Hydrogen Bonds in Di-(4-hydroxycoumarin) Derivatives. *Int. J. Quant. Chem.*, 106, 1304–1315, 2006.
IF(2006) = 1.182
Cited: 8
19. Kostova I.: Platinum Complexes as Anticancer Agents, *Recent Pat. Rev. Anti –Canc. Drug Disc.*, 1(1), 1-22, 2006.
Cited: 354
20. Kostova I.: Gold Coordination Complexes as Anticancer Agents. *Anti-Canc. Ag. Med. Chem. (Form. Curr. Med. Chem. - Anti-Canc. Ag.)*, 6(1), 19-32, 2006.
Cited: 99

21. Georgieva I., I. Kostova, N. Trendafilova, V. K. Rastogi, G. Bauer, W. Kiefer: Raman, FT-IR and DFT study of ortho-, meta- and para pyridinomethylene substituted di-4-hydroxycoumarin and their Ln(III) complexes. *J. Raman Spectrosc.*, 37(7), 742-754, 2006.
IF(2006) = 2.133
Cited: 7
22. Kostova I., V. K. Rastogi, W. Kiefer, A. Kostovski: New cerium (III) and neodymium (III) complexes as cytotoxic agents. *Appl. Organometal. Chem.*, 20(8), 483-493, 2006.
IF (2006) = 1.233
Cited: 8
23. Kostova I., V. K. Rastogi, W. Kiefer, A. Kostovski: New Lanthanum(III) Complex - Synthesis, Characterization and Cytotoxic Activity. *Arch. Pharm. Pharm. Med. Chem.*, 339(11), 598-607, 2006.
IF(2006) = 1.076
Cited: 1
24. Trendafilova N., I. Kostova, V. K. Rastogi, I. Georgieva, G. Bauer, W. Kiefer: Characteristic Raman and IR bands of 3,3'-benzylidenebis(4-hydroxycoumarin) and its La(III), Ce (III) and Nd(III) complexes. *J. Raman Spectrosc.*, 37(8), 808-815, 2006.
IF(2006) = 2.133
Cited: 7
25. Kostova I.: Ruthenium Complexes as Anticancer Agents. *Curr. Med. Chem.*, 13(9), 1085-1107, 2006.
IF(2006) = 5.207
Cited: 303
26. Kostova I.: Coumarins as Inhibitors of HIV Reverse Transcriptase. *Curr. HIV Res.*, 4(3), 347-363, 2006.
IF(2006) = 3.687
Cited: 76
27. Mihaylov T, N. Trendafilova, I. Kostova, I. Georgieva, G. Bauer: DFT modeling and spectroscopic study of metal-ligand bonding in La(III) complex of coumarin-3-carboxylic acid. *Chem. Phys.*, 327, 209-219, 2006.
IF(2006) = 1.984
Cited: 28
28. Georgieva I., N. Trendafilova, W. Kiefer, V. K. Rastogi, I. Kostova: Vibrational and theoretical study of coumarin-3-carboxylic acid binding mode in Ce(III) and Nd(III) complexes. *Vibr. Spectrosc.*, 44(1), 78-88, 2007.
IF(2007) = 1.780
Cited: 9
29. Mojzis J., L. Varinska, G. Mojzisova, I. Kostova, L. Mirossay: Antiangiogenic effects of flavonoids and chalcones. *Pharmacol. Res.*, 57(4), 259-265, 2008.
IF(2008) = 3.287
Cited: 159
30. Kostova I., N. Peica, R. Lodhi, V. K. Rastogi: Theoretical and spectroscopic studies of 3, 5-pyrazoledicarboxylic acid and its new La(III) complex. *Asian J. Phys.*, 15(2), 287-296, 2006.

31. Kostova I., I. Manolov, N. Danchev, S. Samurova: Synthesis, toxicological and hematological study of metal complexes of Dicynone. *Farmacia*, XLIV(3-4), 6-8, 1997.
32. Kostova, I., I. Manolov, S. Konstantinov, T. Netzeva, and M. H. Karaivanova. "Computer-aided study on complexation of coumarine derivatives with Lanthanides-cytotoxic profiles of the complexes." *ACTA PHARMACEUTICA TURCICA* 40 (1998): 55-55.
33. Kostova I., I. Manolov, I. Nicolova, M. Karaivanova: New lanthanide complexes of Mendiaxon and their toxicological and pharmacological activity. *Proceedings* 1st International Pharmaceutical Congress, 10th Panhellenic pharmaceutical congress, Athens, Greece, 27-30 April 2001, P-005. (available on CD-ROM).
34. Kostova I., I. Manolov, M. Radulova. Studies on the complexation reaction of Neodymium (III) with Acenocoumarol. *Proceedings* 11th Panhellenic Pharmaceutical Congress, Athens – Greece, March 29 – 31, 2003, Eur. J. Drug Metabol. Pharmacokinetics, 28(1), 19, 2003 (available on CD-ROM).

IF(2003) = 0.474

35. Kostova I., S. Raleva, Z. Mladenova, L. Froloshka, D. Dundarova, R. Argirova: A novel synthesis of metalorganic complexes of warfarin (1) and 3,3'-benzylidenebis[4-hydroxycoumarin] (4) and their anti-HIV activity in cell culture. XV International AIDS Conference, Bangkok Thailand, 11–16 July, 2004. *International Proceedings XV International AIDS Conference*, 137-141, 2004.

Cited: 1

36. Mladenova, Z., S. Raleva, I. Kostova, L. Froloshka, D. Dundarova, and R. Argirova: Metalorganic complexes of 4-hydroxycoumarin (4-HC) and 4-methyl-7-hydroxycoumarin (4-methyl-7-HC) with anti-HIV activity in cell culture/GV-P-19. *Biotechnol. Biotechnol. Equipm.* 18(3), 31, 2004.
37. Kostova I., S. Raleva, Z. Mladenova, L. Froloshka, S. Totkova, A. Savov, P. Genova, D. Dundarova, R. Argirova: Anti-HIV effect in cell culture of newly synthesized cerium(III) and neodymium(III) complexes with some bis-coumarins. *Proceedings* 22nd Workshop: Essentiality and Toxicity of Macro, Trace and Ultratrace Elements, Jena, Germany, 24-25 September, 2004, Schubert-Verlag, Leipzig, Germany, 480-491, 2004.
38. Kostova I., S. Raleva, Z. Mladenova, L. Froloshka, D. Dundarova, R. Argirova: New complexes of lanthanum La (III) and Cerium Ce (III) with bis-coumarins. Synthesis, characterization and cytotoxicity for human lymphoblastoid cells (MT-2). *Proceedings* 22nd Workshop: Essentiality and Toxicity of Macro, Trace and Ultratrace Elements Jena, Germany, 24-25 Sept., 2004, Schubert-Verlag, Leipzig, Germany, 492-499, 2004.
39. Kostova, I., I. Manolov, S. Konstantinov, and M. Karaivanova: Cytotoxic activity of zirconium complexes with coumarin derivatives. *Acta Pharm. Turc.* 42, 53, 2000.
40. Kostova I., I. Manolov, M. Radulova: Stability of the complexes of some lanthanides with coumarin derivatives. II. Neodymium (III)-4-hydroxy-3-[1-(4-nitrophenyl)-3-oxobutyl]-2H-1-benzopyran-2-one. *Acta Pharm.*, 54(2), 119-131, 2004.

Cited: 8

41. Kostova I., N. Trendafilova, G. Momekov: Theoretical and spectroscopic evidence for coordination ability of 3,3'-benzylidenedi-4-hydroxycoumarin. New neodymium (III) complexes and its cytotoxic effect. *J. Inorg. Biochem.*, 99(2), 477-487, 2005.

IF(2005) = 2.423

Cited: 21

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 9. **Kostova I.**: Spectroscopic evidence of Ce(III) and La(III) complex compounds with antitumor activity, INCPVS, Meerut, India, 2006. **Invited lecture.**
 10. N. Trendafilova and **I. Kostova** Application of density functional approximation for investigation of reactive sites, molecular and electronic structure of coumarins, INCPVS, Meerut, India, 2006. **Invited lecture.**
 11. **Kostova I.**, N. Trendafilova, W. Kiefer, G. Momekov. Spectroscopic evidence of La(III) complex of coumarin-3-carboxylic acid with cytotoxic activity. 2-nd Conference on Advanced Spectroscopies on Biomedical and Nanostructured Systems (NANOSPEC 2), Cluj, Rumania, Sept. 3-8, 2006, **Invited lecture.**
 12. **Kostova I.**, Experimental (FTIR and FTRaman) and theoretical (DFT) studies on the vibrational spectra of biologically active lanthanide(III) complexes. 2-nd International Conference on Perspectives of Vibrational Spectroscopy (ICOPVS 2008), Trivandrum, India, Feb. 24-28, 2008; **Invited lecture.**
 13. **Kostova I.**, Maria Traikova, V. K. Rastogi. New Ln(III) complexes with antioxidant and antitumor activity. 5th Indo-Italian Workshop on Chemistry and Biology of Antioxidants, Sapienza University, Rome, Italy, July 5-9, 2009; **Invited lecture.** <http://www.antiox.it/>
 14. **Kostova I.**, M. Amalanathan, I. Hubert Joe: Molecular first order hyperpolarizability and vibrational spectral investigation of warfarin sodium, *3rd International Conference on Perspectives in Vibrational Spectroscopy* (ICOPVS2010), Feb. 21-24, 2010, Varanasi, India; **Invited lecture.**
 15. **Kostova I.**, Ts. Stefanova, N. Kostov, V. K. Rastogi: Synthesis, spectroscopic characterization and cytotoxicity of new Ho(III) and Pr(III) complexes, *6th International Conference on Rare Earth Development and Application* (ICRE2010), Aug. 2-6, 2010, Beijing, China; **Invited lecture.**
 16. **Kostova I.**: Theoretical and spectroscopic characterization of 4-hydroxycoumarins and their cytotoxic lanthanide(III) complexes. *12th International Symposium of Natural Product Chemistry* (ISNPC-12), Karachi, Pakistan (November 22 - 25, 2010); **Invited lecture.**
 17. **Kostova I.**, Vinod K. Rastogi: 4-Hydroxycoumarins and their cytotoxic and antioxidant lanthanide(III) complexes, *8th Indo-Italian Workshop on “Chemistry and Biology of Antioxidants”* Rome, Italy (November 30th - December 1st 2010); **Invited lecture.**

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19. **Kostova I.**, R. K. Soni and R. D Kaushik: Biologically active coumarins and their lanthanide(III) complexes. *International Conference on Green Technologies for Environmental Rehabilitation*, Gurukul Kangri University, Haridwar, India, Feb. 11-13, 2012. *E-book*, IL-33: p. 24. **Invited lecture.**
20. **Kostova I.**, N. Trendafilova: Application of Density Functional Approximation for Investigation of Reactive Sites, Molecular and Electronic Structure of Coumarins and Their Lanthanide(III) Complexes. *International Conference on Global Trends of Pure & Applied Chemical Sciences (ICGTCS-2012)*, Udaipur, India (3-4 March 2012). *Proceedings of ICGTCS-2012*, IT-10: p. 12. **Invited lecture.**
21. **Kostova I.**, V. K. Rastogi: Theoretical and spectral investigations on lanthanide(III) complexes of biologically active ligands. *International Conference on Molecular Spectroscopy of Advanced Materials and Biomolecules (IMSAB 2012)*, Bishop Moore College, Mavelikara, India (August 7-9, 2012). *Proceedings of IMSAB 2012*, **Invited lecture.** <http://www.imsab.in>
22. **Kostova I.**: Theoretical and spectral characterization of biologically active ligands and their metal complexes. *31st European Congress on Molecular Spectroscopy (EUCMOS 2012)*, Cluj-Napoca, Romania (August 26-31, 2012). *Proceedings of EUCMOS 2012*, **Invited lecture.** <http://www.phys.ubbcluj.ro/eucmos2012>
23. **Kostova I.**: Synthesis, theoretical, structural and spectroscopic properties of biologically active coumarins and their cytotoxic lanthanide(III) complexes. *13th International Symposium of Natural Product Chemistry - ISNPC-13*, Karachi, Pakistan, Sept. 22 - 25, 2012. *Proceedings of ISNPC-13*, **Invited lecture.** <http://www.iccs.edu/isnpc/sProgram.php>
24. **Kostova I.**: Synthesis, spectral investigations, quantum chemical calculations and biological activity of novel Ln(III) complexes. *International Conference on Biological Inorganic Chemistry - ICBIC 2013*, Salem, India, Feb. 20-22, 2013. **Plenary lecture.** <http://icbic-2013.thamizhagam.net/>
25. **Kostova I.**: Spectrophysical investigations on Lanthanide(III) complexes of biologically active ligands. *5th International Conference on Perspectives of Vibrational Spectroscopy (ICOPVS 2014)*, Trivandrum, India, July 8-12, 2014; **Invited lecture.**
26. **Kostova I.**: Theoretical and spectral characterization of biologically active coumarins and their lanthanide complexes. *15th National Congress of Pharmacy*, Romania, 24-27 September 2014, Iaş i, Romania; **Invited lecture.**
27. **Kostova I.**: Theoretical and spectroscopic investigations on lanthanide(III) complexes with antioxidant activity. *Spectroscopy and Spectral Analysis Conference (SSA2015)*, Jan. 31 – Feb. 2, 2015, Shanghai, China; **Invited plenary lecture.**
28. **Kostova I.**: Synthesis and characterization of biologically active lanthanide(III) complexes. *International Conference on Recent Advances in Applied Sciences (ICRAAS 2016)*, Feb. 11-13, 2016, Chennai, India; **Invited lecture.**

SELECTED SCIENTIFIC PRESENTATIONS:

1. **Kostova I.**, I. Manolov, N. Danchev, S. Samurova, TZ. Kovachev, Synthesis, analysis, toxicological and pharmacological investigations of metal complexes of Dicynon. Third national pharmaceutical congress of the Republic of Bulgaria, Panichishte, Bulgaria, October 17-19, 1996, Book of abstracts, Abstr. p. 35.
2. **Kostova I.**, G. Gergov, L. Antonov Spectrophotometric investigation of the complex formation of sulbactam with some metal cations. VIII Symposium on instrumental and analytical spectrometry and chromatography, Varna, Bulgaria, Sept. 17-19, 1997, MOL-34.
3. **Kostova I.**, G. Gergov, L. Antonov Complexation of diethylammonium salt of 2,5-dihydrobenzenesulfonic acid (dicynon) investigated by means of UV-vis spectroscopy. VIII Symposium on instrumental and analytical spectrometry and chromatography, Varna, Bulgaria, September 17-19, 1997, MOL-35.

4. **Kostova I.**, I. Manolov, S. Konstantinov, et al. Cytotoxic screening of new complexes of lanthanides. XXVth Balkan medical week, Jannina, Greece, July 1-4, 1998, Abstr. p. 50. Official Journal of the Athens medical Society, V. 15, Suppl. A, 1998, A282, P50.
5. **Kostova I.**, I. Manolov, T. Netzeva, S. Konstantinov, M. Karaivanova Computeraided study on complexation of coumarin derivatives with lanthanides. First International postgraduate research symposium on pharmaceutics, Istanbul, Turkey, July 24-25, 1998, Abstr. p. 55. Acta Pharm. Turcica, Suppl., 1998, P55.
6. **Kostova I.**, I. Manolov, S. Konstantinov, M. Karaivanova Cytotoxic screening of new lanthanide complexes with Acenocoumarol and Mendiixon. Second International meeting on pharmacy and pharmaceutical sciences, Istanbul, Turkey, September 6-9, 1998, Abstr. p. 130.
7. Karaivanova M. C., I. Pencheva, **I. Kostova**, S. Konstantinov, E. Naidenova Pharmacological and analytical study of Esculin and its new metal complexes with Cu, Zn and Ag. 46th Annual congress society for medicinal plant research, Vienna, Austria, August 31st- September 4th, 1998, Abstr. p. 64.
8. **Kostova I.**, I. Pencheva, I. Manolov Spectrophotometrical investigation of metal complexes of coumarin derivatives. Third international workshop on application of instrumental methods in bioorganic chemistry and ecology, Blagoevgrad, Bulgaria, September 18-21, 1999, Abstr. p. 14.
9. **Kostova I.**, I. Manolov, I. Nicolova, I. Pencheva, Metal complexes of 4-methyl-7-hydroxycoumarin sodium salt and their toxicological and pharmacological properties. Second pharmaceutical congress of the Republic of Macedonia, Struga, Macedonia, October 13-16, 1999, Bulletin of the Macedonian pharmaceutical association, 45, 1999, №1-2, Abstr. p.110.
10. **Kostova I.**, L. Changov, E. Keuleyan, I. Manolov Synthesis, analysis and in vitro antibacterial activity of new metal complexes of Sulbactam. Second pharmaceutical congress of the Republic of Macedonia, Struga, Macedonia, October 13-16, 1999, Bulletin of the Macedonian pharmaceutical association, 45, 1999, №1-2, Abstr. p.111.
11. Karaivanova M. C., **I. Kostova**, I. Manolov, I. Nicolova New lanthanide complexes of coumarins and their pharmacological activity. The 6th European congress of pharmaceutical sciences, Budapest, Hungary, September 16-19, 2000, Eur. J. Pharm. Sci., 11, 2000, Suppl.1, Abstr. p. 112.
12. **Kostova I.**, I. Manolov, S. Konstantinov, M. Karaivanova Cytotoxic activity of Zirconium complexes with coumarin derivatives. The second International postgraduate research symposium on pharmaceutics, Istanbul, Turkey, September 6-8, 2000, Acta Pharm. Turcica, XLII, 2000, Suppl. 1, Abstr. p. 53.
13. **Kostova I.**, I. Manolov, I. Nicolova, M. Karaivanova New lanthanide complexes of coumarins and their pharmacological activity. National research conference with international participation and round table discussion "From basic pharmacology to pharmaceutical industry", Sofia, Bulgaria, Oct. 26-27, 2000, Farmacia, V. XLVII, 2000, №1, p. 47.
14. **Kostova I.**, I. Manolov, I. Nicolova, M. Karaivanova. New lanthanide complexes of Mendiixon and their toxicological and pharmacological activity. 1st International Pharmaceutical Congress, 10th Panhellenic pharmaceutical congress, Athens, Greece, 27-30 April 2001, P-005, p. 105
15. **Kostova I.**, I. Manolov, I. Nicolova Lanthanide complexes of coumarin derivatives and their anticoagulant activity. XVIII Scientific congress of the Polish pharmaceutical society "Pharmacy in the 21 century", Poznan, Poland, September 20-22, 2001, V. 2, S.13s., P-49, Abstr. p. 656.
16. **Kostova I.**, I. Manolov, Radulova M. Studies on the complexation reaction of Cerium (III) with 4-methyl-7-hydroxycoumarin. AL XII^{LEA} Congres National de Farmacie cu Participare Internationala, 17-19 Octombrie 2002, Bucuresti, Romania. V.1, p. 282.
17. Radulova, M., **I. Kostova**, I. Manolov. Chromatographic HPLC analysis of Warfarin and its metal complex with Neodimium. AL XII^{LEA} Congres National de Farmacie cu Participare Internationala, 17-19 Octombrie 2002, Bucuresti, Romania. V.1, p. 295.
18. Kostova R., G. Momekov, **I. Kostova**, S. Konstantinov, M. Karaivanova. Antineoplastic activity of new lanthanide (Ce, La and Nd) complex compounds. 14-th Assembly of International Medical Association "Bulgaria", 26-30 May, 2004, Varna, Bulgaria, poster.

19. **Kostova I.**, S. Raleva, Z. Mladenova, L. Froloshka, D. Dundarova and R. Argirova. A novel synthesis of metalorganic complexes of warfarin (1) and 3,3'-benzylidenebis[4-hydroxycoumarin] (4) and their anti-HIV activity in cell culture (Preliminary report). XV International AIDS Conf., Bangkok Thailand, 11 – 16 July, 2004, poster.
20. Mihaylov Tz., I. Georgieva, N. Trendafilova, I. Manolov and **I. Kostova**. Estimation of the electron density distribution and O-H...O hydrogen bond strength in benzylidene- and pyridinomethylene substituted di-4-hydroxycoumarins. DFT study. Second Humboldt conference on computational chemistry, Nessebar, Bulgaria, 1-5 September, 2004, poster.
21. **Kostova I.**, I.I. Manolov and G. Tzachev. Synthesis, analysis and cytotoxic activity of new neodymium (III) complexes of bis-coumarins. Book of the XVIII Congress of Chemists and Technologists of Macedonia, Ohrid, Republic of Macedonia, 23 - 25 September, 2004, poster.
22. **Kostova I.**, I.I. Manolov and G. Momekov Synthesis, analysis and cytotoxic activity of new cerium and neodymium complexes of coumarins-3-carboxylic acid. Book of the XVIII Congress of Chemists and Technologists of Macedonia, Ohrid, Republic of Macedonia, 23 - 25 September, 2004.
23. **Kostova I.**, S. Raleva, Z. Mladenova, L. Froloshka, D. Dundarova and R. Argirova. New complexes of lanthanum La (III) and Cerium Ce (III) with bis-coumarins. Synthesis, characterization and cytotoxicity for human lymphoblastoid cells (MT-2). Proceedings of 22nd Workshop in Jena. Essentiality and Toxicity of Macro, Trace and Ultratrace Elements, Jena, Germany, 24 - 25 September, 2004, poster.
24. Mihaylov T., **I. Kostova**, I. Manolov, N. Trendafilova. Novel neodymium (III) complex with 3,3'-(orthopyridinomethylene)di-(4-hydroxycoumarin), Scientific Conference of Chemical Faculty of University-Sofia, IV Scientific Seminar "New materials of industry", 23 Nov., 2004, poster, p. 47.
25. Rastogi V. K., M. A. Palafox, P. Garg, **I. Kostova**, W. Kiefer, FTIR, FTRaman spectra, ab initio and density functional computations of the vibration spectra, molecular geometry, atomic charges and some molecular properties of biomolecule: 5-iodouracil. International conference on spectrophysics - INCONS 2005, Chennai, India, February 9-12, 2005, poster 30, p. 58.
26. **Kostova I.**, G. Momekov, M. Karaibanova, Synthesis, characterization and cytotoxic activity of new lanthanum and neodymium complexes of coumarin-3-carboxylic acid., 12th Panhellenic Pharmaceutical Congress, Athens – Greece, May 14-16, 2005, poster.
27. S. Raleva, P. Genova, D. Dundarova, L. Froloshka, **I. Kostova**, I. Manolov, R. Argirova. Lowered fitness for replication of HIV-1 in the presence of increasing concentrations of synthetic complexes of lanthanides with 4-hydroxycoumarins in cell culture., 3rd IAS Conference on HIV pathogenesis and treatment, Rio, 25 – 28 July, 2005, Poster, TuPe6.1B03.
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29. **Kostova I.**, Niculina Peica, Wolfgang Kiefer, P. Stancheva, I. Kuleff, V. K. Rastogi. FT-Raman and FT-IR spectra, assignments and ab initio calculations of dysprosium(III) complex of 3,5-pyrazoledicarboxylic acid. International Conference on Perspectives in Vibrational Spectroscopy, Meerut, India, Feb. 25-28, 2006; Proceedings ICOPVS, p. 13.
30. **Kostova I.**, V. K. Rastogi, Maria Traikova, Wolfgang Kiefer. An approach to the structure and vibrational analysis of lanthanum(III) complex of 5-aminoorotic acid from IR and Raman spectroscopies and theoretical calculations. International Conference on Perspectives in Vibrational Spectroscopy, Meerut, India, February 25-28, 2006; Proceedings ICOPVS, p. 13.
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32. Latil Mittal, V. K. Rastogi, M. A. Palafox, **I. Kostova**. Synthesis and characterization of biologically active complexes of Cu(II) and Zn(II) with 5-chlorouracil. International Conference on Perspectives in Vibrational Spectroscopy, Meerut, India, February 25-28, 2006; Proc. ICOPVS, p. 46.
33. M. A Palafox, Satendra Kumar, Rajive Lodhi, SP Ojha, **I. Kostova**, and VK Rastogi FT- Raman spectrum of biomolecule: 2-Thiouracil. XVI National Conference on Atomic and Molecular Physics, Tata Institute of Fundamental Research, Mumbai, India, January 8-11, 2007; P1/16
34. P. Stancheva, N. Peica, W. Kiefer, G. Momekov, **I. Kostova**. Synthesis, Characterization and Cytotoxic Screening of New Dy(III) Complex of 3,5-Pyrazoledicarboxylic Acid. International Symposium on Organic Chemistry, December 9-12, 2006 Sofia, Bulgaria
35. Tz. Mihaylov, N. Trendafilova, I. Georgieva and **I. Kostova**. Molecular Modeling of Lanthanum Complex with Coumarin-3-Carboxylic Acid. Third Humboldt Conference on Computational Chemistry. June 24-28, 2006, Varna, Bulgaria, P32.
36. L. Mittal, V. K. Rastogi, M. A. Palafox, **I. Kostova**. Synthesis and characterisation of biologically active complexes of Cu(II) and Zn(II) with 5-chlorouracil. 2-nd Conference on Advanced Spectroscopies on Biomedical and Nanostructured Systems (NANOSPEC 2), Cluj, Rumania, Sept. 3-8, 2006, poster.
37. Niculina Peica, **I. Kostova**, Wolfgang Kiefer. Theoretical and experimental studies on binding mode of 3,5-pyrazoledicarboxylic acid in its new La(III) complex. 20th International Conference on Raman Spectroscopy: ICORS 2006, Japan, August 20-25, 2006, poster.
38. Niculina Peica, **I. Kostova**, Wolfgang Kiefer. DFT modeling of orotic acid and vibrational study of the metal–ligand binding mode of its Ce(III) complex. 20th International Conference on Raman Spectroscopy: ICORS 2006, Japan, August 20-25, 2006, poster.
39. **Kostova I.**, Niculina Peica, V. K. Rastogi, Wolfgang Kiefer. DFT modeling of 3,5-pyrazoledicarboxylic acid and vibrational study of the metal–ligand binding mode of its Ce(III) complex. 2-nd International Conference on Perspectives of Vibrational Spectroscopy (ICOPVS 2008), Trivandrum, India, Feb. 24-28, 2008; poster.
40. **Kostova I.**, V. K. Rastogi, Wolfgang Kiefer, G. Momekov. Synthesis and vibrational characterization of biologically active complexes of La(III) and Nd(III) with orotic acid. 2-nd International Conference on Perspectives of Vibrational Spectroscopy (ICOPVS 2008), Trivandrum, India, Feb. 24-28, 2008; poster.
41. **Kostova I.**, N. Peica, V.K. Rastogi. Vibrational spectroscopy investigation using ab initio and density functional theory analysis on the structure of lanthanide(III) complexes of orotic acid. 38th International Conference on Coordination Chemistry (ICCC 2008) Jerusalem, Israel, July 20-24, 2008; poster 47.
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43. V.K. Rastogi, M.A. Palafox, V. Kumar, R. Tomar, S.P. Ojha, **I. Kostova**. Prediction of tautomers and dipole moments of anticarcinogenic drug: 5-fluorouracil. 21st International Conference on Raman Spectroscopy (ICORS 2008) Brunel University, Uxbridge, London, UK, 17th to 22nd August 2008; Abstract Number: 265
44. **Kostova I.**, Rastogi V.K., Trendafilova N., Momekov G., Ojha S.P. Comparative cytotoxicity evaluation of new Ce(III), La(III), Nd(III), Sm(III), Gd(III) and Dy(III) biologically active complexes. Bulgarian-Indian Workshop on Medical Sciences in Conference Hall “Europe 1”, Hotel ‘Princess’, Sofia, 16 October 2008; under the official visit of Indian scientists to Bulgaria – October 2008.
45. **Kostova I.**, Ts. Stefanova, N. Kostov, V. K. Rastogi: Synthesis, characterization and cytotoxic/cytostatic activity of Dy(III) and Gd(III) complexes, *6th International Conference on Rare Earth Development and Application* (ICRE2010), Aug. 2-6, 2010, Beijing, China.

46. **Kostova I.**, Kiefer W., Momekov G.: Vibrational Characterization of a New Complex of Gadolinium(III) with Cytotoxic Activity, *XXII International Conference on Raman Spectroscopy (ICORS2010)*, Aug. 08-13, 2010, Boston, Massachusetts, USA.
47. L. Andronie, S. C. Pînzaru, **I. Kostova**, O. Cozar: SERS of the New Rare-Earth-Acenocoumarol Complexes, *XXII International Conference on Raman Spectroscopy (ICORS2010)*, Aug. 08-13, 2010, Boston, Massachusetts, USA.
48. I. Georgieva, N. Trendafilova, **I. Kostova**, Tz. Mihaylov: FTIR, Raman, NMR and theoretical studies of lanthanide complexes with coumarin-3-carboxylic acid, *30th European Congress of Molecular Spectroscopy (EUCMOS 2010)*, 29 Aug.-3 Sept. 2010, Florence, Italy. PS2-69
49. **Kostova I.**, V. K. Rastogi, and W. Kiefer: Application of FT-IR/FT-Raman spectral investigations and quantum chemical calculations on Ln(III) complexes. *XXIII International Conference on Raman Spectroscopy (ICORS 2012)*, Bangalore, India (August 12-17, 2012). *Proceedings of ICORS 2012*, poster. <http://www.icors2012.org>
50. **Kostova I.**, Raluca Luchian, Simona Cinta-Pinzaru, Vasile Chiş: Vibrational and theoretical studies of Ce(III) and Ne(III) complexes with orotic acid. *31st European Congress on Molecular Spectroscopy (EUCMOS 2012)*, Cluj-Napoca, Romania (August 26-31, 2012). *Proceedings of EUCMOS 2012*, poster. <http://www.phys.ubbcluj.ro/eucmos2012>

FINANCIAL SUPPORTS AND AGREEMENTS:

1. Research project № 16, Grant № 10 - financial supports from University Grant Commission "Investigation of the pharmacological effects of the new coumarin derivatives", 1999, Leading scientist: M. Karaivanova; I. Manolov, **Irena Kostova**, et al. **MEDICAL UNIVERSITY GRANT COMMISSION** awarded the Project.
2. Contract № 1 on the Research project № 16, Grant № 10 - financial supports from University Grant Commission "Investigation of the pharmacological effects of the new coumarin derivatives", 2001, Leading scientist: M. Karaivanova; I. Manolov, **Irena Kostova**, et al.
3. Research project № 21, Grant № 21 - financial supports from University Grant Commission "Synthesis of metal complexes of coumarin derivatives with the purpose of anti-HIV integrase activity. Screening of the new complexes in cell cultures", 2003, **Principal investigator: Irena Kostova**; R. Argirova, I. Manolov, N. Trendafilova, Tz. Mihaylov, I. Georgieva. **MEDICAL UNIVERSITY GRANT COMMISSION** awarded the Project.
4. Contract № 4 on the Research project № 21, Grant № 21 - financial supports from University Grant Commission "Synthesis of metal complexes of coumarin derivatives with the purpose of anti-HIV integrase activity. Screening of the new complexes in cell cultures", 2003, **Principal investigator: Irena Kostova**; R. Argirova, I. Manolov, N. Trendafilova, Tz. Mihaylov. **MEDICAL UNIVERSITY GRANT COMMISSION** awarded the Project.
5. Contract №БИН-8/2007 of the Research project №БИН-8/2007 "Synthesis and Characterization of metal Complexes with Biologically Active Ligands: Potential Anticancer agents" 2007, **Principal investigator: Irena Kostova**; N. Trendafilova, Tz. Mihaylov. Ministry of Education and Science under **BULGARIAN-INDIAN INTER-GOVERNMENTAL PROGRAMME OF COOPERATION IN SCIENCE AND TECHNOLOGY**, 2008-present.
6. International agreement between the Faculty of Physics of the BABES-BOLYAI UNIVERSITY, CLUJ-NAPOCA, ROMANIA and the Faculty of Pharmacy of Medical University-Sofia **Principal investigator: Irena Kostova** and S. C. Pînzaru, 2010.
7. International Memorandum for cooperation between CCS University-Meerut, India and Medical University-Sofia, Bulgaria. **Principal investigator: Irena Kostova** and R. S. Soni, 2013.
8. Research project 32/2014 „Лантанидни комплекси с биологично активни лиганди - синтез, охарактеризиране и фармакологична активност”, СМН, МУ-София.