Christos T. Chasapis

Research Assistant Professor
Head of Bioinformatics Laboratory
Institute of Chemical Biology (ICB/NHRF)
Vas. Constantinou 48 av, 11635 Athens, Greece

Office Phone: +302107273751
E-mail: cchasapis@eie.gr
SCOPUS, ORCID, Google Scholar, Website, Linkedin

Professional Appointments

2022-present: **Research Assistant Professor**
National Hellenic Research Foundation (NHRF), Institute of Chemical Biology (ICB)

2011-2022: **Appointed Assistant Professor**
Department of Pharmacy/Chemistry/School of Agricultural Sciences, University of Patras, Greece

2015-2022: **Post Doc Researcher**
Foundation for Research and Technology – Hellas (FORTH), Institute of Chemical Engineering Sciences (ICEHT)

2008-2015: **Post Doc Researcher**
Department of Pharmacy, University of Patras

2005-2006: **Post Doc Researcher**
CERM, University of Florence, Italy

Education

2002-2005: **PhD in Structural Biology**
CERM, University of Florence, Italy and Department of Chemistry, University of Ioannina, Greece

2000-2002: **MSc in Bioinorganic Chemistry**
Department of Chemistry, University of Ioannina, Greece

1996-2000: **BSc (Hons) in Chemistry**
Department of Chemistry, University of Ioannina, Greece

Awards/Fellowships & Distinctions

2021: Guest Editor of Special issue "Metal Intoxication: General Aspects and

Chelating Agents", Molecules, MDPI, impact factor: 4.927

2016-2017: Post Doc fellowship, "Structural Systems Biology for Metabolic Engineering Applications" by ARCHERS project Stavros Niarchos Foundation, Foundation for Research and Technology – Hellas (FORTH), Institute of Chemical Engineering Sciences (ICEHT), Greece

2014: The publication: *Zinc and human health: an update, Chasapis, C.T., Loutsidou, A.C., Spiliopoulou, C.A, Stefanidou ME., Arch Toxicol 86, 521–534, 2012, https://doi.org/10.1007/s00204-011-0775-1,* was characterized as "Review on cutting- edge topics in toxicology" and most cited and downloaded in Archives of Toxicology in 2012: https://doi.org/10.1007/s00204-014-1418-0

2003-2004: Marie Curie PhD fellow funded by EU- FP6-CITIZENS project: "Improving the Human Research Potential and Socio-Economic Knowledge Base" ID: HPMT-CT-2000-00137 CERM, University of Florence, Italy

2000-2001: Postgraduate Scholarship (12 months) by Greek State Fellowship Foundation (IKY), Dept. of Chemistry, U. of Ioannina

1999-2000: Undergraduate Scholarship (12 months) by EU INTERREG II, Dept. of Chemistry, U. of Ioannina

Participation in funded research consortia

National

2022: Bioconversion of lignite power plant emissions to fuels and fine chemicals (BIOMEK), ESPA, Role: Post Doc researcher @ FORTH/ICEHT

2021: Development of new tomato cultivars by using omics technologies (NTOMATOMICS), Role: Post Doc researcher @ FORTH/ICEHT

2018-2019: National Bioinformatics Infrastructure Project ELIXIR-GR, Role: Post Doc researcher @ FORTH/ICEHT

2016-2017: ARCHERS project Stavros Niarchos Foundation, Role: Post Doc researcher @ FORTH/ICEHT

EU funded

2015-2017: Rewiring the Streptomyces cell factory for cost-effective production of biomolecules (STREPSYNTH), EU FP7-KBBE, Role: Post Doc researcher @ FORTH/ICEHT

2012-2015: Establishment of a Centre of Excellence for Structure-based drug target characterization (SEE-DRUG), EU FP7-REGPOT, Role: Post Doc researcher @ Department of Pharmacy, University of Patras

2008-2012: Neurotransmitter Cys-loop receptors: structure, function and disease (NEUROCYPRES), EU FP7-HEALTH, Role: Post Doc researcher @ Department of Pharmacy, University of Patras

2006: An innovative Protein-Based Drug Delivery Device using Fluorescent Diamond Nano-Particles (NANO4DRUGS), EU FP6-LIFESCIHEALTH, Role: Post Doc researcher @ CERM, University of Florence, Italy

2004-2005: Structural proteomics in Europe, EU FP5-LIFE QUALITY, Role: Marie Curie PhD fellow @ CERM, University of Florence, Italy

2003-2004: Improving the Human Research Potential and Socio-Economic Knowledge Base, EU FP6-CITIZENS, Role: Marie Curie PhD fellow @ CERM, University of Florence, Italy

Teaching Experience

Undergraduate level

2019-2022: Appointed Assistant Professor-Biological Chemistry, Dept. of Agriculture, School of Agricultural Sciences, U. of Patras, Greece

2017-2019: Appointed Assistant Professor – Instrumental Chemical Analysis, Dept. of Chemistry, U. of Patras, Greece

2010-2015: Appointed Lecturer – Biomolecular Simulation, Dept. of Pharmacy, U. of Patras, Greece

2010-2011: Appointed Lecturer – Biochemistry, Dept. of Pharmacy, U. of Patras, Greece

Graduate level

2018: Invited 2h lecture in the Proteomic Division, Translational Medicine Graduate Program – Current Challenges: Systems Biology and Gene network signatures in drug discovery and development, Dept. of Molecular Biology & Genetics, Democritus U. of Thrace

2018: Invited 2h lecture in the Proteomic Division, Translational Medicine Graduate Program – Construction and analysis of protein-protein interaction PPI networks and gene network signatures, Dept. of Molecular Biology & Genetics, Democritus U. of Thrace

Supervision of Junior Researchers

Participation in MSc committees

1. Mr. Charalampos Ntallis, Department of Chemistry, University of Patras, Advisory committee member (in progress)

Participation in PhD committees

1. Mrs. Maria Spiliopoulou, Department of Biology, University of Patras, (in progress)

Co-supervision:

2017-2022: 2 Master Student, Dept. of Chemistry, U. of Patras, Greece

2015-2016: 1 Undergraduate student, FORTH-ICEHT, Greece

2008-2014: 5 Master Students, Dept. of Pharmacy, U. of Patras, Greece
2008-2013: 8 Undergraduate students, Dept. of Pharmacy, U. of Patras, Greece

Research Interests

- Network-based computational methodologies for Structural Systems Biology applied to proteins and proteomics.
- Structure-based prediction of protein-protein interaction (PPI) networks.
- *In silico* prediction of Metalloproteomes/metalloproteins.
- Modeling of human disease networks.
- Structural bioinformatics: Docking and molecular dynamics simulations of dug-protein and protein-protein complexes.
- Network-based Drug repurposing.
- Biomolecular NMR.

Publications in peer-reviewed journals

**Denotes corresponding author, #Denotes equal contribution*

Research Profiles in: Scopus, ORCID, Google Scholar, ResearchGate

1. Stepan Podzimek, Lucie Himmlova, Tatjana Janatova, Geir Bjørklund, Radka Vrbova, Marketa Janovska, Massimiliano Peana, **Christos T. Chasapis**, Alex Vinsu, Jarmila Prochazkova and Jana Duskova, Metal hypersensitivity and pro-inflammatory cytokine production in patients with failed orthopedic implants: A case-control study, Clinical Immunology, 2022, 109152, https://doi.org/10.1016/j.clim.2022.109152
2. **Christos T. Chasapis*,** Spyros P. Perlepes, Geir Bjørklund and Massimiliano Peana*, Structural modeling of protein ensembles between E3 RING ligases and SARS-CoV-2: The role of zinc binding domains, J Trace Elem Med Biol. 2022, Oct 4;75:127089, https://doi.org/10.1016/j.jtemb.2022.127089
3. Christina Stamou, Zoi G. Lada, **Christos T. Chasapis**, Dionissios Papaioannou, Pierre Dechambenoit and Spyros P. Perlepes, Indium(iii)/2-benzoylpyridine chemistry: interesting indium(iii) bromide-assisted transformations of the ligand, Dalton Trans., 2022, Advance Article https://doi.org/10.1039/D2DT02851D
4. Christina D. Polyzou, Patroula Gkolfi, **Christos T. Chasapis,** Vlasoula Bekiari,c Ariadni Zianna, George Psomas, Malina Ondrej and Vassilis Tangoulis, Stimuli-responsive spin crossover nanoparticles for drug delivery and DNA-binding studies, Dalton Trans., 2022, 51, 12427-12431 https://doi.org/10.1039/D2DT01509A

5. Graham J. Moore, Harry Ridgway, Konstantinos Kelaidonis, **Christos T. Chasapis**, Irene Ligielli, Thomas Mavromoustakos, Joanna Bojarska and John M. Matsoukas, Actions of Novel Angiotensin Receptor Blocking Drugs, Bisartans, Relevant for COVID-19 Therapy: Biased Agonism at Angiotensin Receptors and the Beneficial Effects of Neprilysin in the Renin Angiotensin System, Molecules 2022, 27(15), 4854; https://doi.org/10.3390/molecules27154854
6. Geir Bjørklund, Md. Shiblur Rahaman, Mariia Shanaida, Roman Lysiuk, Petro Oliynyk, Larysa Lenchyk, Salvatore Chirumbolo, **Christos T. Chasapis** and Massimiliano Peana, Natural Dietary Compounds in the Treatment of Arsenic Toxicity, Molecules 2022, 27(15), 4871; https://doi.org/10.3390/molecules27154871
7. John M Matsoukas, Laura Kate Gadanec, Anthony Zulli, Vasso Apostolopoulos, Konstantinos Kelaidonis, Irene Ligielli, Kalliopi Moschovou, Nikitas Georgiou, Panagiotis Plotas, **Christos T Chasapis**, Graham Moore, Harry Ridgway, Thomas Mavromoustakos, Diminazene Aceturate Reduces Angiotensin II Constriction and Interacts with the Spike Protein of Severe Acute Respiratory Syndrome Coronavirus 2, Biomedicines 2022 10(7):1731, 2022, doi: https://doi.org/10.3390/biomedicines10071731
8. Harry Ridgway, **Christos T. Chasapis**, Konstantinos Kelaidonis, Irene Ligielli, Graham J. Moore, Laura Kate Gadanec, Anthony Zulli, Vasso Apostolopoulos, Thomas Mavromoustakos and John M. Matsoukas, Understanding the Driving Forces That Trigger Mutations in SARS-CoV-2: Mutational Energetics and the Role of Arginine Blockers in COVID-19 Therapy, Viruses 2022, 14(5), 1029; https://doi.org/10.3390/v14051029
9. Harry Ridgway, Graham J Moore, Thomas Mavromoustakos, Sotiris Tsiodras, Irene Ligielli, Konstantinos Kelaidonis, **Christos T Chasapis**, Laura Kate Gadanec, Anthony Zulli, Vasso Apostolopoulos, Russell Petty, Ioannis Karakasiliotis, Vassilis G Gorgoulis, John M Matsoukas, Discovery of a new generation of angiotensin receptor blocking drugs: receptor mechanisms and in silico binding to enzymes relevant to covid-19, Comput Struct Biotechnol J. Vol. 20, 2091-2111, 2022, https://doi.org/10.1016/j.csbj.2022.04.010
10. **Chasapis, C.T.*,** Kelaidonis, K., Ridgway, H., Apostolopoulos, V., Matsoukas, J.M., The Human Myelin Proteome and Sub-Metalloproteome Interaction Map: Relevance to Myelin-Related Neurological Diseases Brain Sciences, 12(4), 434, 2022, https://doi.org/10.3390/brainsci12040434
11. Anastasia Routzomani, Zoi G Lada, Varvara Angelidou, Catherine P Raptopoulou, Vassilis Psycharis, Konstantis F Konidaris, **Christos T Chasapis,** Spyros P Perlepes, Confirming the Molecular Basis of the Solvent Extraction of Cadmium(II) Using 2-Pyridyl Oximes through a Synthetic Inorganic Chemistry

Approach and a Proposal for More Efficient Extractants, Molecules MDPI, 27(5), 1619; 2022, https://doi.org/10.3390/molecules27051619

12. **Christos T. Chasapis**, Massimiliano Peana and Vlasoula Bekiari, Structural Identification of Metalloproteomes in Marine Diatoms, an Efficient Algae Model in Toxic Metals Bioremediation Molecules MDPI, 27(2), 378; 2022, https://doi.org/10.3390/molecules27020378
13. John M. Matsoukas, Irene Ligielli, **Christos T. Chasapis**, Konstantinos Kelaidonis, Vasso Apostolopoulos, and Thomas Mavromoustakos, Novel Approaches in the Immunotherapy of Multiple Sclerosis: Cyclization of myelin epitope peptides and conjugation with mannan, Brain Sciences, MDPI, 11(12), 1583; 2021, https://doi.org/10.3390/brainsci11121583
14. Anastasis Oulas, Margarita Zachariou, **Christos T Chasapis**, Marios Tomazou, Umer Zeeshan Ijaz, Georges Pierre Schmartz, George Spyrou, Alexios Vlamis, Putative antimicrobial peptides within bacterial proteomes affect bacterial predominance: a network analysis perspective, Frontiers in Microbiology, section Systems Microbiology, Volume 12 | Article 752674, 2021, https://doi.org/10.3389/fmicb.2021.752674
15. Patroula Gkolfi, Dimitra Tsivaka, Ioannis Tsougos, Katerina Vassiou, Ondřej Malina, Michaela Polaskova, Christina D. Polyzou, **Christos T. Chasapis** and Vassilis Tangoulis, A facile approach to prepare silica hybrid, spin-crossover water-soluble nanoparticles as potential candidates for thermally responsive MRI agents, Dalton Transactions, Advance article, Dalton Trans., 2021, 50, 13227-13231, 2021, https://doi.org/10.1039/D1DT02479E
16. Spyros Perontsis, **Christos T. Chasapis,** Antonios G. Hatzidimitriou, George Psomas, Synthesis, characterization and (in vitro and in silico) biological activity of a series of dioxouranium(VI) complexes with non-steroidal anti-inflammatory drugs, Journal of Inorganic Biochemistry, Volume 223, 111534, 2021, https://doi.org/10.1016/j.jinorgbio.2021.111534
17. Geir Bjørklund, Lili Zou, Jun Wang, **Christos T Chasapis,** Massimiliano Peana, Thioredoxin Reductase as a Pharmacological Target Pharmacol Res, Aug 26;105854. 2021, https://doi.org/10.1016/j.phrs.2021.105854
18. Monica Butnariu, Massimiliano Peana, Ioan Sarac, Salvatore Chirumbolo, Haralampos Tzoupis, **Christos T. Chasapis** & Geir Bjørklund, Analytical and in silico study of the inclusion complexes between tropane alkaloids atropine and scopolamine with cyclodextrins, Chem. Pap. 75, 5523–5533, 2021, https://doi.org/10.1007/s11696-021-01742-4
19. M. Spiliopoulou, A. Valmas, D. Triandafillidis, S. Fili, M. Christopoulou, A. J. Filopoulou, A. Piskopou, P. Papadea, A. N. Fitch, D. Beckers, T. Degen, F. Gozzo, M. Morin, M. L. ReinleSchmitt, F. Karavassili, E. Rosmaraki, **C. T.**

Chasapis and I. Margiolaki, High throughput macromolecular polymorph screening via NMR and X-ray powder diffraction synergistic approach: The case of human insulin co-crystallized with resorcinol derivatives, 2021, J. Appl. Cryst. 54, 963-975 https://doi.org/10.1107/S160057672100426X

20. M.Peana, S. Medici, M.Dadar, M.A. Zoroddu, A.Pelucelli, **C. T. Chasapis** , G. Bjørklund, Environmental barium: potential exposure and health-hazards. Arch Toxicol (8):2605-2612., 2021, https://doi.org/10.1007/s00204-021-03049-5
21. **C.T.Chasapis*,** and A. Vlamis-Gardikas, Probing conformational dynamics by Protein Contact Networks: comparison with NMR relaxation studies and molecular dynamics simulations Biophysica, MDPI 1(2), 157-167, 2021, https://doi.org/10.3390/biophysica1020012
22. **C.T. Chasapis*,** A. K.Georgiopoulou, S. P.Perlepes, G.Bjørklund, M. Peana, A SARS-CoV-2–human metalloproteome interaction map, Journal of Inorganic Biochemistry, Article number 111423, 2021, https://doi.org/10.1016/j.jinorgbio.2021.111423
23. Lagoumintzis, G., **Chasapis, C.T.,** Alexandris, N., Kouretas, D., Tzartos, S., Eliopoulos, Nicotinic cholinergic system and COVID-19: In silico identification of interactions between α7 nicotinic acetylcholine receptor and the cryptic epitopes of SARS-Co-V and SARSCoV-2 Spike glycoproteins, Food and Chemical Toxicology, Volume 149, Article number 112009, 2021, https://doi.org/10.1016/j.fct.2021.112009
24. Alexandris, N., Lagoumintzis, G., **Chasapis, C.T.,** Leonidas, D.D., Papadopoulos, G.E., Tzartos, S.J., Tsatsakis, A., Eliopoulos, E., Poulas, K. Nicotinic cholinergic system and COVID-19: In silico evaluation of nicotinic acetylcholine receptor agonists as potential therapeutic interventions, 2021, Toxicology Volume 8, Pages 73-83 https://doi.org/10.1016/j.toxrep.2020.12.013
25. D. G Mintis , A. Chasapi, K. Poulas, G. Lagoumintzis, **C. T. Chasapis***, Assessing the Direct Binding of Ark-Like E3 RING Ligases to Ubiquitin and Its Implication on Their Protein Interaction Network, Molecules, MDPI, 25(20):4787, 2020, https://doi.org/10.3390/molecules25204787
26. **C. T. Chasapis**, P. A. Ntoupa, C. A. Spiliopoulou, M. E. Stefanidou, Recent aspects of the effects of zinc on human health, Arch Toxicol, 94(5):1443-1460, 2020, https://doi.org/10.1007/s00204-020-02702-9
27. **C. T. Chasapis***, G. Konstantinoudis, Protein isoelectric point distribution in the interactomes across the domains of life, Biophys Chem, 256:106269, 2020, https://doi.org/10.1016/j.bpc.2019.106269
28. **C. T. Chasapis**, Makridakis M, Damdimopoulos AE, Zoidakis J, Lygirou V, Mavroidis M, Vlahou A, Miranda-Vizuete A, Spyrou G, Vlamis-Gardikas, Implications of the mitochondrial interactome of mammalian thioredoxin 2 for

normal cellular function and disease Free Radic Biol Med.;137:59-73, 2019, https://doi.org/10.1016/j.freeradbiomed.2019.04.018

29. **C. T. Chasapis***, Building computational bridges between structural and network-based systems biology data Mol Biotechnol., Vol 61, Issue 3, pp221-229, 2019, https://doi.org/10.1007/s12033-018-0146-8
30. **C. T. Chasapis***, Preliminary results from structural systems biology approach in Tetrahymena thermophila reveal novel perspectives for this toxicological mode, Arch Microbiol. Volume 201, Issue 1, pp 51–59, 2019, https://doi.org/10.1007/s00203-018-1571-6
31. **C. T. Chasapis***, Shared gene-network signatures between human heavy metal proteome, neurological disorders and cancer types Metallomics, 10, 1678-1686, 2018, https://doi.org/10.1039/c8mt00271a
32. **C. T. Chasapis***, Hierarchical core decomposition of RING structures as a method to capture novel functional residues within RING-type E3 ligases: a structural systems biology approach, Comput Biol Med., Volume 100, Pages 86–91, 2018, https://doi.org/10.1016/j.compbiomed.2018.06.033
33. **C. T. Chasapis***, Interactions between metal binding viral proteins and human targets as revealed by network-based bioinformatics, Journal of Inorganic Biochemistry, Vol 186:157–161, 2018, https://doi.org/10.1016/j.jinorgbio.2018.06.012
34. M. Peana*, **C.T. Chasapis***, G. Simula, S. Medici, M.A. Zoroddu, A Model for Manganese interaction with Deinococcus radiodurans proteome network involved in ROS response and defense Journal of Trace Elements in Medicine and Biology, 2018 Feb 7. pii: S0946-672X(17)30966-5, 2018, https://doi.org/10.1016/j.jtemb.2018.02.001
35. M Birkou, **C.T. Chasapis,** K.D. Marousis, A.K. Loutsidou, D. Bentrop, M. Lelli, T. Herrmann, J.M. Carthy, V. Episkopou, G.A. Spyroulias, A residue-specific insight into the Arkadia E3 ubiquitin ligase activity and conformational plasticity. J Mol Biol. 2017 Jun 21. pii: S0022-2836(17)30313-3, 2017, https://doi.org/10.1016/j.jmb.2017.06.012
36. **C. T. Chasapis***, C. Andreini, A. Georgiopolou, A. Vlamis-Gardikas, M. Stefanidou, Identification of novel binding proteins to zinc, copper or cadmium in the protozoon *T. thermophila* by a computational approach, Arch Microbiol. 199(8):1141-1149, 2017, https://doi.org/10.1007/s00203-017-1385-y
37. **C. T. Chasapis*** and M. Stefanidou, What we know currently about the Metalloproteins in the protozoa *Tetrahymena pyriformis* and *thermophila*, International Journal of Environmental & Agriculture Research, 2016, Vol-2, Issue-11: 91-99, 2016

38. **C.T. Chasapis#**, A.I. Argyriou#, M. Apostolidi, P. Konstantinidou, C. Stathopoulos, D. Bentrop, G.A. Spyroulias, 1H, 13C and 15N Backbone and side-chain resonance assignment of the LAM-RRM1 N-terminal module of La protein from *Dictyostelium discoideum*, Biomol NMR Assign., 9(2):303-7, 2015, https://doi.org/10.1007/s12104-015-9597-z

39. A.I. Argyriou#, **C.T. Chasapis#**, M. Apostolidi, P. Konstantinidou, C. Stathopoulos, D. Bentrop, G.A. Spyroulias, Backbone and side chain NMR assignment, along with the secondary structure prediction of RRM2 domain of La protein from a lower eukaryote exhibiting identical structural organization with its human homolog, Biomol NMR Assign. 9(1):219–222, 2015, https://doi.org/10.1007/s12104-014-9578-7

40. E. Melekis, A.C. Tsika, **C.T. Chasapis**, I.Mariolaki, N.Papageorgiou, B.Coutard, D.Bentrop, G.A.Spyroulias, NMR study of non-structural proteins - Part I: 1H, 13C, 15N resonance assignment of macro domain from Mayaro virus (MAYV), Biomol NMR Assign., 9(1): 191-195, 2015, https://doi.org/10.1007/s12104-014-9572-0

41. D.J.Vourtsis, **C.T.Chasapis**, G.Pairas, D. Bentrop, G.A Spyroulias, NMR conformational properties of an Anthrax Lethal Factor domain studied by multiple amino acid-selective labeling Biochem. Biophys. Res. Commun, Vol 450, Issue 1, pp. 335-340, 2014, https://doi.org/10.1016/j.bbrc.2014.05.123

42. Asimakopoulou , P. Panopoulos , **C.T. Chasapis** , C. Coletta , Z. Zhou, G. Cirino , A. Giannis , C. Szabo , G.A. Spyroulias , A. Papapetropoulos, Selectivity of commonly used pharmacological inhibitors for cystathionine beta synthase (CBS) and cystathionine gamma lyase (CSE), Br J Pharmacol. 169: 922-932, 2013, https://doi.org/10.1111/bph.12171

43. M. Apostolidi, D.J. Vourtsis, **C.T. Chasapis**, C. Stathopoulos, D. Bentrop, G.A. Spyroulias, 1H, 15N, 13C assignment and secondary structure determination of two domains of La protein from D. discoideum, Biomol NMR Assign. 1: 47-51, 2012, https://doi.org/10.1007/s12104-012-9450-6

44. A.C. Loutsidou, V.I. Hatzi, **C.T. Chasapis,** G.I. Terzoudi, C.A. Spiliopoulou, M. Stefanidou, DNA content alterations in Tetrahymena pyriformis macronucleus after exposure to food preservatives sodium nitrate and sodium benzoate, Acta Biol Hung. 63(4):483-9, 2012, https://doi.org/10.1556/abiol.63.2012.4.7

45. **C.T. Chasapis**, N.G. Kandias , V. Episkopou, D. Bentrop, G.A. Spyroulias NMR-based insights into the Conformational & Interaction properties of Arkadia RING-H2 E3 Ub Ligase, PROTEINS: Structure Notes, 80(5):1484-9, 2012, https://doi.org/10.1002/prot.24048

46. **C.T. Chasapis**, A.C. Loutsidou, C.A. Spiliopoulou, M. Stefanidou, Zinc and human health: an update, Arch Toxicol. 86(4):521-34, 2012, https://doi.org/10.1007/s00204-011-0775-1
47. **C.T. Chasapis**, A.I. Argyriou , PJ Corringer , D Bentrop , GA Spyroulias, Unravelling the conformational plasticity of the extracellular domain of a prokaryotic nAChR homologue in solution by NMR, Biochemistry ACS; 50(45): 9681–9683, 2011, https://doi.org/10.1021/bi201223u
48. V. I. Hatzi,, G. I. Terzoudi, A. C. Loutsidou, **C. T. Chasapis,** and M. E. Stefanidou, Proliferative and aneugenic effects of butylated hydroxytoluene (BHT) and sodium nitrate in Tetrahymena pyriformis macronuclei using DNA image analysis, Current Topics in Toxicology,7:99-103, 2011, http://www.researchtrends.net/tia/abstract.asp?in=0&vn=7&tid=50&aid=3386&pub=2011&type=3
49. M. Stefanidou, A.C. Loutsidou, **C. T. Chasapis**, C.A. Spiliopoulou, Immunotoxicity of Cocaine and Crack Curr Drug Abuse Rev, 4(2):95-97, 2011, DOI: 10.2174/1874473711104020095
50. G.A. Dalkas#, **C.T. Chasapis#**, P.V. Gkazonis, D. Bentrop and G.A. Spyroulias, The NMR Conformational Dynamics of the Anthrax Lethal Factor (LF) Catalytic Center, Biochemistry ACS, Vol 49, pp. 10767-10769, 2010, https://doi.org/10.1021/bi1017792
51. N. Dimitropoulos, A. Papakyriakou, G.A. Dalkas, **C.T. Chasapis**, K. Poulas and G.A. Spyroulias, A computational investigation on the role of glycosylation in the binding of alpha1 nicotinic acetylcholine receptor with two alpha-neurotoxins PROTEINS: Structure Function and Bioinformatics, 79(1):142-52, 2010, https://doi.org/10.1002/prot.22867
52. P.V. Gkazonis, G.A. Dalkas, **C.T. Chasapis**, A.V. Gardikas, D. Bentrop and G.A. Spyroulias, Purification and biophysical characterization of the core protease domain of anthrax lethal factor Biochem. Biophys. Res. Commun, Vol 396, Issue 3, pp. 643-647, 2010, https://doi.org/10.1016/j.bbrc.2010.04.144
53. **C.T. Chasapis***, A.K. Loutsidou, M.G. Orkoula and G.A. Spyroulias, Zinc Binding Properties of Engineered RING Finger Domain of Arkadia E3 Ubiquitin Ligase, Bioinorganic Chemistry and Applications Vol. 2, Nos.1-2, 2009, https://doi.org/10.1155/2010/323152
54. **C.T. Chasapis*** and G.A. Spyroulias*, Ring Finger E3 ubiquitin ligases: Structure and Drug discovery Current Pharmaceutical Design, 31, pp.3716-3731, 2009, https://pubmed.ncbi.nlm.nih.gov/19925422/
55. N.G. Kandias, **C.T. Chasapis**, V. Episkopou, D. Bentrop, G.A. Spyroulias, High yield expression and NMR characterization of Arkadia E3 ubiquitin ligase RING-

H2 finger domain Biochem. Biophys. Res. Commun, Vol 378, Issue 3, pp. 498-502, 2005, https://doi.org/10.1016/j.bbrc.2008.11.055

56. **C.T. Chasapis**, S.K. Hadjikakou, A. Garoufis, N. Hadjiliadis, T. Bakas, M. Kubicki, Y. Ming, Organtin(IV) derivatives of L-Cysteine and their in vitro Anti-Tumor Propertie, Bioinorganic Chemistry and Applications Vol. 2, Nos.1-2, 2004, https://doi.org/10.1155/S1565363304000044
57. L.Banci, I. Bertini, **C.T.Chasapis**, A. Rosato, L. Tenori Interaction of the two soluble metal- binding domains of yeast Ccc2 with copper(I)-Atx 1, Biochem. Biophys. Res. Commun., Vol 364, Issue 3, pp. 645-649, 2005, https://doi.org/10.1016/j.bbrc.2007.10.045
58. L. Banci, I. Bertini, F. Cantini, **C.T. Chasapis**, N. Hadjiliadis, A. Rosato, A NMR study of the interaction of a three-domain construct of ATP7a with copper(I) and copper(I)-HAH1: the interplay of domains, Journal of Biological Chemistry. vol. 280, no. 46, pp. 38259–38263, 2005, https://doi.org/10.1074/jbc.M506219200
59. L. Banci, I. Bertini, S.C. Bafoni, **C.T. Chasapis,** N. Hadjiliadis, A. Rosato, An NMR study of the interaction between the human copper(I) chaperone and the second and fifth metal-binding domains of the Menkes protein, FEBS Journal Vol 272, Issue 3, 865-871, 2005, https://doi.org/10.1111/j.1742-4658.2004.04526.x

Research monographs

1. *Building Bridges Between Structural and Network-Based Systems Biology*, Chasapis, C. T.*, Molecular Biotechnology, 61(3), 221-229, 2019, https://doi.org/10.1007/s12033-018-0146-8 (IF: 2,860)
2. *Preliminary results from structural systems biology approach in Tetrahymena thermophila reveal novel perspectives for this toxicological model*, Chasapis, C. T.*, Archives of Microbiology, 201(1), 51-59, 2019, https://doi.org/10.1007/s00203-018-1571-6 (IF:2.667)
3. *Interactions between metal binding viral proteins and human targets as revealed by network- based bioinformatics*, Chasapis, C. T.*, Journal of Inorganic Biochemistry, 186, 157-161, 2018, doi: https://doi.org/10.1016/j.jinorgbio.2018.06.012 (IF: 4.336)
4. *Shared gene-network signatures between the human heavy metal proteome and neurological disorders and cancer types*, Chasapis, C. T.*, Metallomics, 10(11), 1678-1686, 2018, https://doi.org/10.1039/c8mt00271a (IF:4.636)
5. *Hierarchical core decomposition of RING structure as a method to capture novel functional residues within RING-type E3 ligases: a structural systems biology approach*, Chasapis, C.T.*, Computers in Biology and Medicine, 100, 86-91, 2018, https://doi.org/10.1016/j.compbiomed.2018.06.033 (IF: 6.698)

Oral presentations to international conferences and/or advanced schools

1. Invited 2h lecture in the Proteomic Division, Translational Medicine Graduate Program – Current Challenges: Systems Biology and Gene network signatures in drug discovery and development, Dept. of Molecular Biology & Genetics, Democritus U. of Thrace, 2018
2. Invited 2h lecture in the Proteomic Division, Translational Medicine Graduate Program – Construction and analysis of protein-protein interaction PPI networks and gene network signatures, Dept. of Molecular Biology & Genetics, Democritus U. of Thrace, 2018
3. 2th Panhellenic Scientific Conference in Chemical Engineering, 29-31, 2019, Eugenides Foundation, Athens, Greece
4. 2th FORTH Scientific Retreat, 15-16 October 2019, FORTH/ICE-HT, Patras, Greece
5. 5th STREPSYNTH Workshop, 19-20/01/2018, KU Leuven, Leuven, Belgium
6. 3rd Workshop of Graduates & Post-Docs in Chemical Engineering Sciences, 04-10-2017, FORTH/ICE-HT, Patras, Greece
7. 4th STREPSYNTH Workshop, 28-29/09/2017, Pharmacy Centre, Vienna, Austria
8. 3rd STREPSYNTH Workshop, 20-21/04/2016, Leuven, Belgium
9. 11th Foundation for Research and Technology, Hellas (FORTH), October 13-14, 2017, Heraklion,GR
10. The International Conference HeCrA-HSCBB16, 7-9 October, 2016, Agricultural University of Athens, Greece
11. 2nd STREPSYNTH Workshop on Metabolomics and Fluxomics, 23-25/09/2015, KU Leuven, Leuven, Belgium
12. 4th SEE-DRUG Workshop GREEK-TURKISH meeting: NMR in Life sciences, 13th September 2014, University of Patras, Greece.
13. 4th Annual User group Meeting of Bio-NMR, 5-8 May 2014, Warwaw, Poland
14. Trends in Drug Research, 18-22 May 2014, Limassol, Cyprus
15. EU, SEE- DRUG Twining Activities, , 19 June, Imperial College, Faculty of Medicine, Hammersmith Hospital Campus 2013, London, UK.
16. EUROMAR 2013, 30 June-5 July 2013, Heraklion-Crete, Greece.
17. 3rd Bio-NMR Annual User Meeting, June 10-13, 2013, Budapest, Hungary,
18. 1st SEE-DRUG Workshop, From Chemical to Systems Biology: Peptide Synthesis and Protein Production, 9-10 May, 2012, Patras, Greece.
19. 2nd SEE-DRUG Workshop NMR basics and applications in Life sciences, 13-15 May 2013, Patras, Greece
20. FP7 EAST-NMR Project-Turkish NMR Meeting, December 5-7, 2012, Istanbul: TUBITAK, Istanbul, Turkey

21. 3rd Annual East-NMR User Meeting, 13-16 November 2012, Lasko, Slovenia.
22. 1st EAST-NMR Annual User Meeting, 18-21 January 2010, Egmond aan Zee, The Netherlands,
23. EAST-NMR Satellite Meeting, 24-25 September 2010, Rhodos, Greece.
24. 1st Young Investigators Meeting, 29 September-1 October, 2010, Istanbul, Turkey.
25. 3rd Annual Meeting of EU FP7 Neurocypres, 27-29 May 2010, Seminario Vescovile, Bergamo, Italy.
26. 3rd EU-NMR Annual User Meeting, 26-29 January 2009, Autrans, France,
27. Workshop of EU FP7 Neurocypres, Netherlands Cancer Institute, 1-2 September 2008, Amsterdam, Netherland

Memberships

2009-2022: Member of Hellenic Society for Computational Biology and Bioinformatics
2014-2022: Member of European Peptide Society, EPS
2002- 2022: Member of the Union of Greek Chemists

Collaborations

International academic

- Associate Prof., Massimiliano Peana, Department of Chemical, Physics, Mathematics and Natural Sciences, University of Sassari, Italy, peana@uniss.it
- Dr. Geir Bjørklund, President of the Council for Nutritional and Environmental Medicine (CONEM), Mo i Rana, Norway, bjorklund@conem.org
- Dr. Harry Ridgway, AquaMem Scientific Consultants, Rodeo, NM 88056, USA, ridgway@vtc.net
- Prof. Vasso Apostolopoulos, Institute for Health and Sport, Victoria University, Melbourne, VIC 3030, Australia, Vasso.Apostolopoulos@vu.edu.au
- Associate Prof. Antonio Rosato, NMR center, CERM, University of Florence, rosato@cerm.unifi.it
- Associate Prof. Ioannis Gelis, Department of Chemistry, University of South Florida, Tampa USA, igelis@usf.edu

Domestic academic

- Principal Researcher Maria Klapa, FORTH/ICE-HT, Patras, Greece, mklapa@iceht.forth.gr
- Associate Prof. Irene Margiolaki, Department of Biology, University of Patras, Greece, imargiola@upatras.gr
- Assistant Prof. Alexios Vlamis, Department of Chemistry, University of Patras, Greece, avlamis@upatras.gr
- Prof. Ioannis Matsoukas, NewDrug PC, Patras Science Park, 265 04 Platani, Greece, imats1953@gmail.com

- Prof. Thomas Mavromoustakos, Department of Chemistry, National and Kapodistrian University of Athens, Greece, tmavrom@chem.uoa.gr
- Prof. Spyros Perlepes, Department of Chemistry, University of Patras, Greece, perlepes@upatras.gr
- Prof. Sotirios Tsiodras, National and Kapodistrian University of Athens Medical School, Greece, sotirios.tsiodras@gmail.com
- Prof. Maria Stefanidou, National and Kapodistrian University of Athens Medical School, mstefan@med.uoa.gr