

PERSONAL INFORMATION

First Name: Panagiotis Last Name: Christakopoulos

E-mail address: christakopop@ornl.gov

Oak Ridge National Laboratory

Physical Science Directorate

Center for Nanophase Materials Science

1 Bethel Valley Rd, Oak Ridge, Roane, TN, 37830

EDUCATION AND TRAINING

2016–2021 PhD in Chemistry [EQF level 8](#)

National and Kapodistrian University of Athens, Athens, Greece

PhD Thesis:

"Synthesis of Amphiphilic Copolymers Based on Polypeptides with Groups for Cancer Targeting"

2014–2015 MsC in Polymers Science and Applications [EQF level 7](#)

National and Kapodistrian University of Athens, Athens, Greece

Diploma Thesis:

"Synthesis and Characterization of Hybrid Diblock Copolymers poly(ethylenoxide)-poly(L-Histidine) Bearing a Terminal Folic Acid Molecule"

2007–2014 Materials Science and Engineering Diploma [EQF level 6](#)

University of Ioannina, Ioannina, Greece

Diploma Thesis:

"Synthesis and Molecular Characterization of Linear Triblock Copolymers of the General Type BAB, A: Polystyrene and B: Poly(tert-butyl (Meth)Acrylate)"

PROFESSIONAL EXPERIENCE

2023–present R&D Associate - Polymer Synthesis and Characterization

Oak Ridge National Laboratory, Center for Nanophase Materials Sciences, Oak Ridge, TN, USA

2022–2023 Postdoctoral Research Associate

Oak Ridge National Laboratory, Center for Nanophase Materials Sciences, Oak Ridge, TN, USA

07/2012–09/2012 Internship

NCSR Demokritos, Athens, Greece

PERSONAL SKILLS

Mother tongue(s) Greek

Foreign language(s) English

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Spoken production	
C1	C1	C1	C1	C1
Advanced Level Certificate in English (ALCE™), Hellenic American Union				

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user

Job-related skills

- Mentoring skills (As a PhD student, I was responsible for the training and induction of 5 undergraduate students and 6 MSc's)
- Management of Quality Control Techniques
 - ✓ HPLC/GPC (High-Performance Liquid Chromatography/Gel-Permeation Chromatography)
 - ✓ NMR (Nuclear Magnetic Resonance)
 - ✓ FT-IR spectroscopy
 - ✓ DSC (Differential Scanning Calorimetry)
 - ✓ UV-Vis Spectroscopy
 - ✓ Circular Dichroism
 - ✓ DLS, SLS (Dynamic Light Scattering, Static Light Scattering)
 - ✓ ELS, PALS (Electrophoretic Light Scattering, Phase Analysis Light Scattering)
 - ✓ MALDI (Matrix-Assisted Laser Desorption/Ionization)
- Scientific Glassblowing
- Continuous Flow Chemistry

Digital skills

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem-solving
Proficient user	Proficient user	Proficient user	Proficient user	Proficient user

Proficient in using Microsoft Office

Advanced user of ChemDraw, MestreNova and OriginLab

ADDITIONAL INFORMATION

Publications

V.Athanasiou, P.Thimi, M.Liakopoulou, F.Arfa, D.Stavroulaki, I.Kyroglou, D.Skourtis, I.Stavropoulou, P.Christakopoulos, M.Kasimatis, P.G.Fragouli, H.Iatrou "Synthesis and

Characterization of the Novel N ϵ -9-Fluorenylmethoxycarbonyl-L-Lysine N-Carboxy Anhydride. Synthesis of Well-Defined Linear and Branched Polypeptides”, *Polymers*, **2020**, 12,12, 2819

P.G. Fragkouli*, D. Stavroulaki, P. Christakopoulos, V. Athanasiou, M. Kasimati, K. Mathianaki, H. Iatrou “Responsive polymeric micelles for drug delivery applications/cancer therapy”, *Stimuli Responsive Polymeric Nanocarriers for Drug Delivery Applications*, **2019**, Volume 2: Advanced Nanocarriers for Therapeutics, 439-460

D.Skoulas, P. Christakopoulos, D. Stavroulaki, K. Santorinaios, V. Athanasiou, H. Iatrou “Micelles Formed by Polypeptide Containing Polymers Synthesized Via N-Carboxy Anhydrides and Their Application for Cancer Treatment”, *Polymers* **2017**, 9, 6, 208

G. Polymeropoulos, D. Moschovas, A. Kati, A. Karanastasis, S. Pelekanou, P. Christakopoulos, G. Sakellariou, A. Avgeropoulos “Synthesis via ATRP, kinetics study and characterization (molecularmorphological) of 3-Arm star diblock copolymers of the (PS-*b*-P2VP)₃ type”, *Journal of Polymer Science: Part A Polymer Chemistry* **2015**, 53, 1, 23-32

Conferences

11th Annual ORPA Research Symposium, **2023**, “Thin films of ionic polymers in applied electric fields” P. Christakopoulos

Athens Conference on Advances in Chemistry, **2021**, “Amphiphilic Block Copolymers with Terminal Moieties for Effective Targeting and Drug Release Against Tumor Cells” P. Christakopoulos, H. Iatrou

12th Hellenic Polymer Society Conference, **2018**, “Synthesis of Polypeptide-Based Nanocarriers Featuring Surface Marker for Targeted Drug Delivery to Cancer Cells” P. Christakopoulos, B. Athanasiou, D. Kazaryan, H. Iatrou

12th Hellenic Polymer Society Conference, **2018**, “Synthesis and Characterization of Novel Polypeptides Based on Arginine and Glutamic Acid for Drug Delivery Applications” F. Arfara, P. Christakopoulos, M. Kasimati, H. Iatrou

12th Hellenic Polymer Society Conference, **2018**, “Synthesis, Characterization and Self-Assembly of Responsive Poly (Ethylene Oxide)-*b*-Poly(L-Histidine) Copolymers for Drug Encapsulation and Controlled Drug Release” V. Athanasiou, P. Christakopoulos, D. Stavroulaki, N. Roumelioti, H. Iatrou

12th Hellenic Polymer Society Conference, **2018**, “Synthesis and Characterization of Hybrid Copolymers Containing Tryptophan and Study of their Applications for Cancer Treatment” M. Kasimati, K. Mathianaki, P. Christakopoulos, D. Kazaryan, H. Iatrou

12th Hellenic Polymer Society Conference, **2018**, “Synthesis and Characterization of Grafted Polymers Based on Polypeptides Using poly(ethylene Oxide) as Macroinitiator” D. Kazaryan, P. Christakopoulos, K. Mathianaki, H. Iatrou

12th Hellenic Polymer Society Conference, **2018**, “Double Responsive Cross-Linked Hybrid Copolymers Based on poly(Cysteine) and poly(Histidine)” K. Mathianaki, M. Kasimati, D. Stavroulaki, P. Christakopoulos, H. Iatrou

12th Hellenic Polymer Society Conference, **2018**, “Synthesis and Characterization of Stimuli-Responsive Polypeptides Based on Phenylalanine and Histidine for Drug Delivery Applications” N. Roumelioti, P. Christakopoulos, V. Athanasiou, H. Iatrou

12th Hellenic Polymer Society Conference, **2018**, “Synthesis of Stimuli-Responsive Polypeptides

for Drug Delivery Applications” D. Stavroulaki, F.Arfa, P.Christakopoulos, P.Fragouli, H.Iatrou
10th Hellenic Polymer Society Conference, 2014, “Synthesis of diblock copolymers PEO-b-
poly(L-histidine) bearing a terminal azide group” A.Karatzas, P.Christakopoulos, H.Iatrou,
P.Bilalis