Paul Christakopoulos works in the area of Biochemical Process Engineering focusing on the development of biochemical (Green Chemistry) processes for the production and refinement of chemicals, fuels and material from CO₂, either captured before it is emitted to the atmosphere (non biomass route) or by recovering it from the atmosphere via photosynthesis in the form of biomass (biomass route).

More specifically his research is focused on integral upstream, midstream, and downstream processing of biomass, cellulose, hemicellulose and lignin valorization, novel enzymes for modification of plant cell wall material, biocatalysis in non-conventional media, production of prebiotic oligosaccharides, production of biofuels and chemicals, biocatalytic CO₂ capture and conversion to chemicals and fuels.

Paul has been appointed Chair Professor of Biochemical Process Engineering at Luleå University of Technology, Sweden, from February 2012. He has previously served as a Professor of Industrial Biotechnology at the School of Chemical Engineering, National Technical University of Athens.

He is author of over 260 scientific publications. Current h-index is 52 with about 8300 citations

Paul had served as an Associate Editor of World Journal of Microbiology and Biotechnology, Food and Bioproducts Processing, PeerJ, Frontiers in Microbiology, FEMS Microbiology Letters.