

János was born in Szeged in 1993, in the south-east region of Hungary. In 2012 he was enrolled at the University of Szeged. In 2015 he received the B.Sc. degree in Chemistry followed by the M.Sc. degree in 2017 and the doctoral degree in 2021. From 2021 until 2023 he was a postdoctoral researcher in the MTA-SZTE “Momentum” Functional Metal Complexes Research Group.

He started his research in the Department of Inorganic and Analytical Chemistry in 2013 by joining the Bioinorganic Chemistry Research Group, under the supervision of Dr. Éva Anna Enyedy. His topic was the synthesis and characterization of anticancer half-sandwich rhodium and ruthenium complexes and the study of their behaviour in aqueous solution. He managed the isolation, crystallization and characterization of numerous complexes during his short research visits in the University of Vienna and the University of Lisbon. For the solution speciation studies, he carried out mainly pH-potentiometric, UV-visible spectrophotometric, ^1H NMR spectroscopic studies. Moreover, fluorometry, ultrafiltration and NMR techniques were used for the investigations of the reactions between the metal complexes and biomacromolecules.

His results were published in 14 peer-reviewed papers (summa impact factor: 58.0, citations: 129, h-index: 7); he is the first author of 8 of these papers and in 3 he is also corresponding author. He presented 11 poster and oral presentations in international conferences as well. His achievements have been recognized by various awards, among which the most important one is the international Fernando Pulidori Prize awarded by the International Group for the Thermodynamics of Complexes in 2021. At national level he received the Pro Scientia Golden Medal in 2017 and the Pro Laudanda Promotio Award in 2022. His research was funded by the New National Excellence Program throughout his master and doctorate years.

In parallel with the research he also participated in the teaching of undergraduate students having inorganic and analytical chemistry laboratories and calculation seminars for 10 semesters. Moreover, he was the co-supervisor of 3 B.Sc. and 1 M.Sc. students with Dr. Enyedy.

He joined to the NCN OPUS 20 project, entitled: “Tryptophan metabolites and their metal complexes as new drugs for colorectal cancer treatment and human gut microbiota regulation” this October. He will study the complex formation and deprotonation processes of 8-hydroxyquinoline derivatives by spectrofluorimetric measurements, and he will also carry out experiments to study their interaction with DNA and with human serum albumin.