

Arkadiusz CHWOROS

CURRICULUM VITAE

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Education:

D. Sc.	2014 Centre of Molecular and Macromolecular Studies	Chemistry
Ph.D.	2001 Bioorganic Chemistry, CMMS PAS	Biochemistry
M.S.	1996 Institute of Organic Chemistry, UŁ	Bioorganic Chemistry
T.Ch.	1991 Technical High School of Chemistry	Analytical Chemistry

Research Interests:

- Rational design of tecto-RNA structures, implementation of RNA bionanotechnology for gene expression regulation.
- Design, synthesis and visualization of RNA supramolecular assemblies. Thermodynamic analysis and theoretical analysis of RNA folding, RNA-RNA and RNA-protein interactions.
- Application of Scanning Probe Microscopy for biomaterial visualization (DNA/RNA scaffolds, DNA - proteins interactions, lipid bilayers, peptide amphiphiles). Nucleic acids based materials (fabrication and characterization). Image processing analysis and bioinformatics.
- Bioanalysis using conjugated oligoelectrolyte – DNA/protein biosensors for microbial cell differentiation. Bioorganic molecules for molecular biology.
- Theoretical analysis and mechanistic studies for DNA degradation (natural/phosphorothioate). Enzymatic stability of P-chiral phosphorothioate analogs, DNA oxidation with chemical nucleases.

Appointments:

2016-present	Associate Professor at the Centre of Molecular and Macromolecular Studies, Polish Academy of Sciences in Lodz
2016-2019	Deputy Director for Science
2010-2016	Adjunct at the CMMS, Polish Academy of Sciences in Lodz
2008-2009	Senior Researcher at the Department of Chemistry and Biochemistry and Institute for Collaborative Biotechnologies at UC Santa Barbara
2006-2008	Project Scientist and Principle Investigator at Physics Department, UC Santa Barbara.
2003-2006	Post-graduate Researcher (Level IX) at the Department of Chemistry and Biochemistry and Materials Research Laboratory, UC Santa Barbara with Prof. Luc Jaeger.
2001-2002	Post-doctoral associate at Laboratoire de Chimie de Coordination du CNRS, Toulouse, France with Dr. Bernard Meunier.