

Prof. RNDr. Vojtěch Adam, Ph.D. is currently Professor and Head of the Department of Chemistry and Biochemistry and Vice-Rector for Science and Development at Mendel University in Brno. Master's degree received in Analytical Chemistry and Ph.D. in the field of Cellular and Molecular Biology at Masaryk University in Brno. He coordinated more than dozens of national projects, one FP7 project and two H2020 projects. Nowadays is an Editor-in-Chief of *Acta Universitatis Agriculturae and Silviculturae Mendelianae Brunensis*. From scientometry perspective, he has published more than four hundred ISI indexed papers with more than 7700 citations and h-index 43 by the Web of Science Core Collection. From a professional perspective, he is an expert in the application of advanced materials in biology. Among the prestigious awards of prof. Adam can be ranked International Society for Electrochemistry Prize for Environmental Electrochemistry.

The most important scientific publications

- Blazkova, I., Nguyen, H. V., Dostalova, S., Kopel, P., Stanisavljevic, M., Vaculovicova, M., Stiborova, M., Eckschlager, T., Kizek, R., **Adam, V.** Apoferritin modified magnetic particles as doxorubicin carriers for anticancer drug delivery. *Int. J. Mol. Sci.*, 2013, roč. 14, č. 7, s. 13391-13402. ISSN 1422-0067. IF 2.339. Cited: 19
- Ryvolova, M., Chomoucka, J., Drbohlavova, J., Kopel, P., Babula, P., Hynek, D., **Adam, V.**, Eckschlager, T., Hubalek, J., Stiborova, M., Kaiser, J., Kizek, R. Modern Micro and Nanoparticle-Based Imaging Techniques. *Sensors*, 2012, roč. 12, č. 11, s. 14792-14820. ISSN 1424-8220. IF 1.953. Cited: 31.
- Drbohlavova, J., Chomoucka, J., **Adam, V.**, Ryvolova, M., Eckschlager, T., Hubalek, J., Kizek, R. Nanocarriers for Anticancer Drugs – New Trends in Nanomedicine. *Current Drug Metabolism*, 2013, roč. 14, č. 5, s. 547-564. ISSN 1389-2002. IF 3.487. Cited: 35.
- Heger, Z., Skalickova, S., Zitka, O., **Adam, V.**, Kizek, R. Apoferritin applications in nanomedicine. *Nanomedicine*, 2014, roč. 9, č. 14, s. 2233-2245. ISSN 1743-5889. IF 5.413. Cited: 17.
- Heger, Z., Cernei, N., Kudr, J., Gumulec, J., Blazkova, I., Zitka, O., Eckschlager, T., Stiborova, M., **Adam, V.**, Kizek, R. A Novel Insight into the Cardiotoxicity of Antineoplastic Drug Doxorubicin. *International Journal of Molecular Sciences*, 2013, vol. 14, issue 11, p. 21629 – 21646. IF 2.862. Cited: 12.

Patents/Utility designs

- Hubalek, J., Kizek, R., **Adam, V.**, Ryvolova, M., Provaznik, I.: Two-dimensional separation of biologically important compounds and their rapid identification. 2012/108, national patent (2012).
- Kizek, R., **Adam, V.**, Huska, D., Ryvolova, M., Hubalek, J., Provaznik, I. Vysoké učení technické v Brně, Brno, CZ: Assembly for the selective isolation and analysis of substances from biological samples. 23748, utility model (2012).
- Kopel, P., **Adam, V.**, Hubalek, J., Kizek, R. Process for the preparation of apoferritin nanoparticles able to encapsulate anticancer drug, 2012-956, national patent (2012)
- Kopel, P., **Adam, V.**, Kizek, R. Method of detection of biological material using inorganic particles anchored onto chromatographic paper, 2013-412, national patent (2012)
- **Adam, V.**, Chudobova, D., Cihalova, K., Kizek, R., Kopel, P., Melichar, L., Ruttkay-Nedecky, B.: Preparing nanocomposite selenium nanoparticles anchored in biopolymer substance such as hyaluronic acid, collagen or chitosan to improve antimicrobial and biocompatible properties and healthcare used in modified medical material. 2015-62937U, national patent (2015).

Grants

- 2014-2016: GAČR, Development of nanoparticle-based cytostatics and enzymes for enhanced chemotherapy of human neuroblastomas and study of mechanisms of their action, GAČR 14-18344S
- 2017-2019: GAČR, Construction of modified apoferritin nanocarriers bearing anticancer drugs and study of mechanisms enhancing their efficiency in anticancer therapy, GAČR 17-12816S
- 2015-2016: H2020-JTI-IMI2-2014-02-single, Ultra-Fast Molecular Filovirus Diagnostics „FILODIAG“, IMI2-2014-02-05
- 2012-2014: OPVK, Partner network of the centre of excellent bionanotechnological research, NanoBioMetalNet CZ.1.07/2.4.00/31.0023
- 2015-2019: AZV, Influence of metallothionein on binding of platinum cytostatics to DNA in cancer cells, AZV 15-28334A

Awards:

- The Mostly Cited Paper Prize, Biomed. Pap-Olomouc 2016, „Hrabeta, J., Stiborova, M., Adam, V., Kizek, R. and Eckschlager, T. (2014) Histone deacetylase inhibitors in cancer therapy. A review. Biomed. Pap-Olomouc, 158, 161-169.“ (2016)
- ISE Prize for Environmental Electrochemistry (2012)
- 2nd Prize, Sensors Best Paper Award 2012, „Supalkova, V., Huska, D., Diopan, V., Hanustiak, P., Zitka, O., Stejskal, K., Baloun, J., Pikula, J., Havel, L., Zehnalek, J., Adam, V., Trnkova, L., Beklova, M. and Kizek, R. (2007) Electroanalysis of plant thiols. Sensors, 7, 932-959. (2012)
- 2nd Prize, Sensors Best Paper Award 2011, „Adam, V., Zehnalek, J., Petrlova, J., Potesil, D., Sures, B., Trnkova, L., Jelen, F., Vitecek, J. and Kizek, R. (2005) Phytochelatin modified electrode surface as a sensitive heavy metal ion biosensor. Sensors, 5, 70-84.“ (2011)
- The price for scientific activity, Faculty of Agronomy, Mendel University of Agriculture and Forestry, Brno (2009)
- Price of Liga proti rakovina Prague (2008)
- Rector Price, Masaryk University, Czech Republic (2008)
- Rector Price, Masaryk University, Czech Republic (2006)
- 2nd place, 9. Competition for the best student scientific work in the field of analytical chemistry, "the price of Merck". (2006)
- Dean Price, Faculty of Science, Masaryk University, Czech Republic (2005)
- 1st place, MendelNET 2004. V. Adam, J. Petrlová, D. Potesil, J. Zehnalek, B. Sures, L. Trnková a R. Kizek, Using of metallothionein modified electrode surface as a sensitive metal ions biosensor for an evaluation of beverages duality, Section: Food Technology (2004)