

**UNIVERSITY „POLITEHNICA” OF BUCHAREST  
FACULTY OF CHEMICAL ENGINEERING AND BIOTECHNOLOGY  
DEPARTMENT OF CHEMICAL AND BIOCHEMICAL ENGINEERING**



**Metodologie de elaborare a modelelor cinetice complexe, structurate pe mai multe niveluri de detaliere (hibride), folosite in calcule de inginerie (bio)chimica privind optimizarea unor reactoare industriale biochimice sau biologice**

Methodology for elaborating complex kinetic models, structured on several levels of detail (hybrids), used in (bio)chemical engineering calculations regarding the optimization of some biochemical or biological industrial reactors

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## PAPERS LIST

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No.	paper	IF	SRI
<a href="#"><b>1</b></a>	Maria, G., <b>Renea, L.</b> , Peptănar, I.M., Maria, C. In-silico optimization of a bi-enzymatic batch reactor for mannitol production with continuous regeneration of nadh cofactor, <i>Revue Roumaine de Chimie</i> , 2021, IF= 0.4, <b>accepted</b> .	<b>0.4</b>	<b>0.189</b>
<a href="#"><b>2</b></a>	Renea, L., Maria, G., Gijiu, L.C., Maria, C., A multi-objective optimization of the bi-enzymatic batch reactor used for mannitol production, <i>Bulletin Inst. Politechn. Bucharest (Ser. Chimie)</i> 84(1), 31-44 (2022). <a href="http://www.scientificbulletin.upb.ro/">http://www.scientificbulletin.upb.ro/</a> . ISSN= 1454-2331.	<b>0</b>	<b>0</b>
<a href="#"><b>3</b></a>	Maria, G., Renea, L., Tryptophan production maximization in a fed-batch bioreactor with modified <i>E. coli</i> cells, by optimizing its operating policy based on an extended structured cell kinetic model, <i>MDPI Bioengineering-Basel</i> , vol. 8, no. 12, 210-247, 2021, IF = 6.1, SRI= 1.241(MDPI Appl. Sciences Basel), ISBN= 2073-4409, <a href="https://doi.org/10.3390/bioengineering8120210">https://doi.org/10.3390/bioengineering8120210</a>	<b>6.1</b>	<b>1.241</b>
<a href="#"><b>4</b></a>	Maria, G., Maria, C., Renea, L., Application of (bio-)chemical engineering concepts and rules in Bioinformatics. Review of a CCM-based modular and hybrid kinetic model used to simulate and optimize a bioreactor with genetically modified cells, <i>Current Trends in Biomedical Engineering &amp; Biosciences</i> , (Juniper publ, Irvine CA, USA), 20(3): 556039, 2022, IF= 1.126, Scopus, Googlescholar, ISSN: 2572-1151. DOI: <a href="https://doi.org/10.19080/CTBEB.2022.20.556039">10.19080/CTBEB.2022.20.556039</a>	<b>1.12</b>	<b>0</b>

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