









## Funding



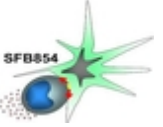

Important research projects that are and were funded by the German Research Foundation, the Federal Ministry of Education and Research, the Federal Ministry of Economics and Climate Protection, and the European Union:

### › DFG - Deutsche Forschungsgemeinschaft






Acronym	Name	Logo
› <b>FOR 5538</b>	Multistep Catalytic Production Systems for Fine Chemistry by Integrated Molecular, Material and Process Design 5 Subprojects in Magdeburg › To the press release of the Otto-von-Guericke-University ( <a href="https://www.ovgu.de/Presse+Medien/Pressemitteilungen/PM+2023/August/PM+77_2023-p-134678.html">https://www.ovgu.de/Presse+Medien/Pressemitteilungen/PM+2023/August/PM+77_2023-p-134678.html</a> ) (From 07.08.2023)	
› <b>GRK 2297</b>	Mathematical complexity reduction	
› <b>GRK 2408</b>	Maladaptive processes at physiological interfaces in chronic diseases	
› <b>MaRDI</b>	Making optimal use of mathematical research data	
› <b>NFDI4Cat</b>	Shaping the digital future of catalysis	
› <b>SFB/TRR 287</b> ( <a href="https://bulk-reaction.de/">https://bulk-reaction.de/</a> )	BULK-REACTION - Gas flow, moving debris with chemical reaction Information about the current status (25.05.2022) on the official site of the Otto von Guericke University Magdeburg ( <a href="https://www.ovgu.de/Universit%C3%A4t/Zusammen+die+Welt+neu+denken/Neuigkeiten/PM+29_2022-p-121070.html">https://www.ovgu.de/Universit%C3%A4t/Zusammen+die+Welt+neu+denken/Neuigkeiten/PM+29_2022-p-121070.html</a> )	
› <b>SPP 2080</b>	Catalysts and reactors under dynamic operating conditions for energy storage and conversion: 2 Magdeburger Subprojects	
› <b>SPP 2331</b>	"Machine Learning in Process Engineering": 5 Magdeburg Subprojects	
› <b>SPP 2364</b>	Autonomous processes of particle technology: 5 Magdeburger Subprojects	

## Completed



Acronym	Name	Logo
<b>GRK 1167</b>	Cell-cell communication in the immune and nervous systems: topological organization of signaling pathways.	
<b>SPP 1679</b>	8 Magdeburg subprojects Dynamic Simulation of Crosslinked Solid Processes	
<b>SFB 854</b>	Molecular organization of cellular communication in the immune system.	
<b>SFB/TRR 63</b>	Integrated chemical processes in liquid multiphase systems	









### › BMBF - Bundesministerium für Bildung und Forschung



Acronym	Name	Logo
› <u>deNBI</u>	Big Data Exploitation in Life Science	
› <u>H2Mare</u>	Offshore generation of green hydrogen and other power-to-X products	
› <u>Mikrobielle Biofabriken: 'ZIP'</u>	Development of Zymomonas mobilis into an industrial platform microorganism for products beyond ethanol.	

## Completed

Acronym	Name	Logo
<b>Biotechnologie 2020+</b>	Analysis and design of bacterial enzyme cascades for material recycling of CO <sub>2</sub>	
<b>Biotech 2020 + 'CORENZ'</b>	Cofactor regeneration in cell-free enzyme systems	
	Cyanosys - Systems biology of cyanobacterial biofuel production	
	InTraSig - Development of a personalized anti-inflammatory therapy to inhibit interleukin-6 trans-signaling	

	NoPain - The Nociceptor Pain Model	
<b>e:Bio</b>	SulfoSys - Applied Sulfolobus System Biology: Exploitation of the "hot" archeal metabolic potential for biotechnology	
	Joint project: CellSys - Systems biology approach for the development of a production cell line for influenza vaccines	
	Collaborative project: JAK-Sys - Elucidation of dysbalanced signal transduction by JAK2-V617F in myeloproliferative neoplasms using qualitative and quantitative modeling approaches	
	Virosys - Dissecting the innate immune response to viral infection	
<b>FORSYS - MaCS</b>	One of the four national research centers for systems biology	
<b>GERONTOSYS2</b>	Funding module: Systems biology for health in old age	
<b>HEPATOSYS</b>	National competence network for research into the systems biology of liver cells.	
<b>MaxSynBio</b>	Max Planck Research Network in Synthetic Biology	
<b>MEDSYS</b>	Funding Module: Medical Systems Biology	
<b>Modexa</b>	Model-Based Methods for the Optimal Design of Stimulus Experiments and Dynamic Analysis of Signal Transduction Processes	
<b>MSC</b>	Systems Biology for Tissue Engineering of Mesenchymal Stem Cells: Integrating Novel Experimental Methods and Mathematical Models	
<b>P2Chem</b>	New mixed-integer optimization methods for efficient synthesis and flexible management of power-to-chemicals processes	
<b>ROBUTYEAST</b>	Optimization of metabolic regulation in yeast production strains for dynamic conditions	
<b>SYSMO</b>	Transnational competence network for research into the systems biology of microorganisms	
<b>SYSTEC</b>	Funding Module: Using and shaping new methods in systems biology	
<b>Virtuelle Leber</b>	National competence network for research into the systems biology of liver cells	
<b>› BMWK - Bundesministerium für Wirtschaft und Klimaschutz</b>		
Acronym	Name	Logo
<b>› KI_embedded</b> ( <a href="https://www.offis.de/offis/projekt/ki-embedded.html">https://www.offis.de/offis/projekt/ki-embedded.html</a> )	AI basic development for embedded systems with leading applications in virtual sensor technology and fuel cell control	
<b>› EU - Europäische Union</b>		
Acronym	Name	Logo

ERC-2022-POC

> **TRANSMETECH** Translating a new metabolic engineering strategy to industrial biotech applications  
 (<a href="https://cordis.europa.eu/project/id/101105488">https://cordis.europa.eu/project/id/101105488</a> > To the official press release of the Max-Planck-Institute Magdeburg (From 30.01.2023)



European Research Council  
 Established by the European Commission

### Completed

Acronym	Name	Logo
<b>ADONET</b>	Marie Curie Research Training Network	
<b>CELLCHECK</b>	Marie Curie Research Training Network	
<b>ERC Grant Modest</b>	Mathematical Optimization for Clinical Decision Support and Training	 European Research Council Established by the European Commission
<b>ERC Grant StrainBooster</b>	Enforced ATP Wasting as a General Design Principle to Rationally Engineer Microbial Cell Factories	 European Research Council Established by the European Commission
<b>ROBUTYEAST</b>	Optimizing metabolic regulation in yeast production strains for dynamic conditions	 ERASys APP ERA for Applied Systems Biology
<b>T-CELL</b>	EU-Project SYBILLA	 SYBILLA SYSTEMS BIOLOGY OF T-CELL ACTIVATION

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