

<b>Curriculum vitae</b>			
<b>Personal information</b>			
First name(s) / Surname(s)	<b>Jurgen / Liebscher</b>		
Telephone(s)	(+4)0264-584037		
Fax(es)	(+4)0264-420042		
Web sites:	<a href="http://www.itim.ro">http://www.itim.ro</a>		
E-mail	liebscher@chemie.hu-berlin.de		
Nationality	German		
Marital status	married		
Date of birth	October 4, 1945		
Gender	Male		
<b>Present Activity</b>			
<b>Workplace / Occupational field</b>	National Institute for Research and Development of Isotopic and Molecular Technologies (INCDTIM), Cluj-Napoca, ROMANIA chemist, senior researcher - degree I, university professor		
<b>Key Words</b>	Organic synthesis, bioorganic chemistry, molecular self-assembling, molecular recognition, nanoparticles, catalysis, polydopamine and analogues		
<b>Domains of competence</b>	<ul style="list-style-type: none"> <li>- Synthesis of organic and bioorganic compounds, bioconjugates and analogues of natural products</li> <li>- Synthesis of functionalized monomers and their transformation into polymers applied as shells in magnetic core-shell nanoparticles</li> <li>- functionalized magnetic core-shell nanoparticles</li> <li>- polydopamine and analogues</li> <li>- catalysis</li> <li>- asymmetric synthesis</li> <li>- ionic liquids</li> <li>- molecular recognition</li> <li>- chemistry of organic hydroperoxides and peroxides</li> </ul>		

<b>Domains of interest</b>	<ul style="list-style-type: none"> <li>- Organic synthesis</li> <li>- Heterocyclic Chemistry</li> <li>- Polydopamine and analogues</li> <li>- Conjugates of biological materials</li> <li>- Functionalized magnetic core-shell nanoparticles</li> <li>- Molecular recognition and self-assembling processes</li> </ul>
<b>Education and training</b>	
	<p>Dr. habil. in organic chemistry, 1977, Technical University Dresden, Germany          PhD in organic chemistry, 1973, Technical University Dresden, Germany          Diplom – MSc 1969, Technical University Dresden</p>
<b>Work experience</b>	
Dates / Occupation or last position held/ Name of employer	<p><b>Since 2010</b> / Senior Researcher/ Director of European POS project          National Institute for Research and Development of Isotopic and Molecular Technologies, Cluj-Napoca, Romania</p> <p><b>1981 – 2011</b>/ University Professor of Organic and Bioorganic Chemistry,          Humboldt-University Berlin, Germany</p> <p><b>2009 - 2015</b> / Assoc. Professor / Babes Bolyai University, Faculty of          Chemistry and Chemical Engineering</p> <p><b>1979 – 1981</b>/ Assoc. Professor of Organic Chemistry, Department of          Chemistry, Addis Ababa University, Addis Ababa, Ethiopia</p>
<b>Professional affiliations</b>	
<b>Coordinated research projects (selection – last years)</b>	<ul style="list-style-type: none"> <li>• <b>POS CCE – AXA II, id nr. 550</b> “Advanced Methods for the synthesis of hybride materials” 1 530 000 EURO, 2010 – 2013 (Project Director)</li> <li>• <b>BMBF-Project Nanobiotechnology, Germany</b> “Intelligent nucleic acid-nanomaterials” 440 000 EURO, 2007-2010 (Project Director)</li> <li>• <b>BMBF-Project Nanobiotechnology, Germany</b> “Lipophilic nucleic acid building blocks for functionalisation and nanostructuring of biomimetic structures” 310 000 EURO, 2004-2007 (Project Director)</li> <li>• <b>BMBF-Project Innovative methods in chemical industries, Germany</b> “Novel ionic liquids as innovative <i>reaction media</i>” 100 000 EURO, 2005-2008 (Project Director)</li> <li>• <b>Research Project with Bayer Technology Services, Leverkusen, Germany</b> “Amphiphilic lipids for targeted triggered drug delivery, 182 000 EURO, 2006-2010 (Project Director)</li> <li>• <b>DFG-Project, Priority program Ionic Liquids</b> “Triazolium-Tagged Organocatalysts”, 68 000 EURO, 2009 – 2011 (Project Director)</li> <li>• <b>DFG-Project</b> “Geminal dihydroperoxides as oxygen-transfer reagents”, 75 000 EURO, 2007 – 2010 (Project Director)</li> </ul>

<p><b>Book chapter</b></p>	<p>Z, Yacob, <b>J. Liebscher</b>: "1,2,3-Triazolium Salts as a Versatile New Class of Ionic Liquids" in <i>Ionic Liquids – Classes and Properties</i>, InTech, <b>2011</b> part 1, chapter 1 (editor S. T. Handy), p. 3 – 22, ISBN 978-953-307-634-8.</p> <p>Nan, <b>J. Liebscher</b>: "Ionic Liquids as Advantageous Solvents for Preparation of Nanostructures" in <i>Applications of Ionic Liquids in Science and Technology</i>, InTech, <b>2011</b>, part 4, chapter 14 (editor S. T. Handy), p. 287 – 308, ISBN 978-953-307-605-8</p> <p>M. Pätzelt, S. Pritz, <b>J. Liebscher</b>: "α-Heteroatom-Substituted Alkanamides" in <i>Science of Synthesis</i>, Georg Thieme Verlag Stuttgart, <b>2005</b>, Vol. 21 (Volume editor: S. Weinreb), p. 447 – 535.</p> <p>H. J. Hamann, E. Höft, <b>J. Liebscher</b>: "Preparation of Optically Active Hydroperoxides and their Use for Stereoselective Oxygen Transfer" in <i>Peroxide Chemistry, Mechanistic and Preparative Aspects of Oxygen Transfer, DFG</i> (Ed. W. Adam), Wiley-VCH <b>2000</b>, p. 381 - 405.</p> <p>V. G. Granik, A. V. Kadushkin, <b>J. Liebscher</b>: "Synthesis of Amino Derivatives of Five Membered Heterocycles by Thorpe-Ziegler Cyclisation" in <i>Advances in Heterocyclic Chemistry</i>, ed. A. Katritzky, <b>1998</b>, 72, p. 79-125</p> <p>M. Bohle, <b>J. Liebscher</b>: "Ring Contraction of Heterocycles by Sulfur Extrusion" in <i>Advances in Heterocyclic Chemistry</i>, ed. A. R. Katritzky, Academic Press, <b>1996</b>, 65, p. 39 – 92</p> <p><b>J. Liebscher</b>: "1,3-Thiazole" in <i>Houben-Weyl, Methoden der Organischen Chemie</i>, Thieme Verlag, Stuttgart, <b>1994</b> vol. E8b, partl 2, p. 1 - 399,</p>
----------------------------	--

**Scientific papers in  
peer-reviewed  
journals  
(selection – last  
years)**

**Liebscher, J.** (2019). "Chemistry of Polydopamine – Scope, Variation, and Limitation." Eur. J. Org. Chem. 4976 – 4994 (Very important paper)  
DOI: 10.1002/ejoc.201900445

A. Petran, A. Pop, N. D. Hadade, **J. Liebscher** (2020) "New insights into catechol oxidation – application of ammonium peroxydisulfate in the presence of arylhydrazines" ChemistrySelect **5**, 9523 – 9530  
DOI:10.1002/slct.202002370

Kurz, A., A. Bunge, A. K. Windeck, M. Rost, W. Flasche, A. Arbuzova, D. Strohbach, S. Mueller, **J. Liebscher**, D. Huster, A. Herrmann (2006). "Lipid-anchored oligonucleotides for stable double-helix formation in distinct membrane domains." Angewandte Chemie-International Edition **45**(27): 4440-4444. DOI 10.1002/anie.200600822

Loew, M., R. Springer, S. Scolari, F. Altenbrunn, O. Seitz, **J. Liebscher**, D. Huster, A. Herrmann, A. Arbuzova (2010). "Lipid Domain Specific Recruitment of Lipophilic Nucleic Acids: A Key for Switchable Functionalization of Membranes." Journal of the American Chemical Society **132**(45): 16066-16072. Doi 10.1021/Ja105714r

J. Liebscher, R. Mrowczynski, H. A. Scheidt, C. Filip, N. Hadade, A. Bende, R. Turcu, S. Beck (2013) "The Structure of Polydopamine – A Never Ending Story?" Langmuir **29** (33), 10539-10548. DOI 10.1021/la4020288

R. Mrowczynski, A. Nan, **J. Liebscher** (2014) „Magnetic nanoparticle-supported organocatalysts an efficient way of recycling and reuse" RSC Advances, **4**, 5927-5952

R. Mrowczynski, R. Markiewicz, **J. Liebscher** (2016) "Chemistry of polydopamine analogues" Polym. Int. **65**, 1288-1299. DOI 10.1002/pi.5193

M. Circu, A. Nan, G. Borodi. **J. Liebscher**, R. Turcu (2016) "Refinement of magnetic nanoparticles by coating with organic stabilizers" Nanmaterials **6**, 228 (12 pages). DOI 10.3390/nano6120228

A. Bunge, L. Magerusan, I. Morjan, R. Turcu, G. Borodi, **J. Liebscher** (2015) "Diazonium salt-mediated synthesis of new amino, hydroxy, propargyl, and maleinimido-containing superparamagnetic Fe@C nanoparticles as platforms for linking bio-entities or organocatalytic moieties" J. Nanopart. Res. 17:379

Nan, A., R. Turcu, I. Craciunescu, O. Pana, H. Scharf, **J. Liebscher** (2009). "Microwave-Assisted Graft Polymerization of epsilon-Caprolactone onto Magnetite." J. Polym. Sci. Part A – Polym. Chem. **47**(20): 5397-5404. DOI 10.1002/Pola.23589

Karsten, S., M. A. Ameen, S. I. Kallane, A. Nan, R. Turcu, **J. Liebscher** (2010). "A Versatile Method of Tethering Biomolecules to Pyrrole Precursors for Functionalized Magnetic Polypyrrole Core-Shell Nanoparticles." Synthesis-Stuttgart(17): 3021-3028. DOI 10.1055/s-0029-1218846

Pescador, P., N. Brodersen, H. A. Scheidt, M. Loew, G. Holland, N. Bannert, **J. Liebscher**, A. Herrmann, D. Huster, A. Arbuzova (2010). "Microtubes self-assembled from a cholesterol-modified nucleoside." Chem. Comm. **46**(29): 5358-5360. Doi 10.1039/C0cc00562b

Goldenbogen, B., N. Brodersen, A. Gramatica, M. Loew, **J. Liebscher**, A. Herrmann, H. Egger, B. Budde, A. Arbuzova (2011). "Reduction-Sensitive Liposomes from a Multifunctional Lipid Conjugate and Natural Phospholipids: Reduction and Release Kinetics and Cellular Uptake." Langmuir **27**(17): 10820-10829. Doi 10.1021/La201160y

<p><b>International Scientific Meetings</b></p> <p>(selection – last years)</p>	<p><b>J. Liebscher</b>, O. Kaczmarek, m N. Brodersen, A. Bunge, L. Löser, A. Kurtz, A. Arbuzova, M. Loew, D. Huster, A. Herrmann: <i>"Nucleolipids - Synthesis, Supramolecular Behaviour and Phospholipid-Membrane Interactions"</i>, 9. Florida Heterocyclic and Synthetic Conference (Flohet 9), Gainesville, USA, 2008.</p> <p><b>J. Liebscher</b>: "Funktionalisierte Nanomaterialien auf der Basis von lipophilen Nucleinsäuren", 3. BMBF-Symposium Nanotechnologie, Hannover, 2007 H.-J. Hamann, T. D. Greco, A. Wlosnewski, R. Uebel, <b>J. Liebscher</b>: <i>Novel Cyclic Peroxides by Hydroperoxides-Rearrangement and Ozonolysis</i>, ORCHEM 2006, Bad Nauheim.</p> <p><b>J. Liebscher</b>: <i>Novel Cyclic Peroxides and Hydroperoxides as Potential Antimalaria Compounds</i>, KCS 5<sup>th</sup> International Conference, Nairobi, 2005.</p> <p>A. Kurz, M. Rost, W. Flasche, O. Kaczmarek, A. Bunge, <b>J. Liebscher</b>, D. Huster, A. Herrmann: <i>"Ordering and functionalization of lipid membranes by lipophilic nucleosides"</i>, NanoBio Europe, Münster 2005.</p> <p>J. Shah, S. Sadiq Khan, Z. Yacob, <b>J. Liebscher</b>: <i>"Ionic Liquid-Tagging in Organocatalysis"</i>, ISO 2010, Mühlheim 2010</p> <p>J. Shah, Z. Yacob, S. Hanelt, S. S. Khan, H. Blumenthal, <b>J. Liebscher</b>: "Ionic Liquids as Innovative Reaction Media" .30th National Chemistry Conference, Calimanesti, Romania, 2008</p> <p>J. Liebscher "Polydopamine – Famous but Structurally Challenging", 18th Asian Chemical Congress, Taipei ,Taiwan, 2019</p>				
	<b>Mother tongue(s)</b>	German			
	<b>Other language(s)</b>	Self-assessment	<b>Understanding</b>	<b>Speaking</b>	<b>Writing</b>
	<b>Language</b>	English	Very good	Very good	Very good
	<b>Language</b>	Romanian	Beginner	Beginner	Beginner
<b>Additional information</b>	<b>Additional information</b>	<p>More than 280 published papers; 7 book chapters; about 170 patents, many presentations at conferences and workshops. Member of editorial boards of the journals Journal of Heterocyclic Chemistry, Bulletin Chemical Society Ethiopia, Studia Universitatis Babeş-Bolyai, Seria Chemia. Referee for various journals: Angewandte Chemie, Chemistry a European Journal, European Journal of Organic Chemistry, Tetrahedron, Tetrahedron Letters, Advanced Synthesis and Catalysis, Journal of Organic Chemistry...</p>			

Date: October 14 2021