

17.04. 2017

Peter Nesvadba, Prof. Dr. Ing.**Senior Research Fellow**

BASF Schweiz AG

R-1059.6.05

Mattenstrasse 22

CH-4058 Basel, Switzerland

Telephone: +41 61 636 2412 / e-mail: peter.nesvadba@basf.com

Date of birth 21. 3. 1954, Tanvald, Czechoslovakia
 Marital status Married, 2 Children, Swiss citizen (since 1997)

Education

1969-1973 Industrial School of Technology (SPŠCH), Usti nad Labem, Abitur
 1973-1978 University of Chemistry and Technology (VŠCHT), Prague. Ing.chem. in Organic Technology
 1979-1981 Postgraduate studies at VŠCHT in Prague
 1981-1982 Institute of Organic Chemistry and Biochemistry, Czechoslovak Academy of Sciences, Prague
 1982-1987 University of Fribourg, Switzerland, PhD in Organic Chemistry

Professional activity

1987-1993 Researcher at Ciba-Geigy, Switzerland
 1993-1994 Job rotation at Ciba-Geigy Research Center in Ardsley, New York, USA
 1994-2003 Researcher at Ciba SC, Switzerland
 2003 Nomination as Senior Research Fellow of Ciba SC
 2003-present Senior Research Fellow, Ciba SC, since 2008 BASF Schweiz AG, Basel.

Academic activity

Since 2001 Assistant lecturer, University of Fribourg, Switzerland
 Lectures on
 - *Synthetic Methods of Organic Chemistry*
 - *Radicals in Organic Synthesis*
 - *Macromolecular Chemistry*
 - *Industrial Applications of Computational Chemistry*
 - *Organometallic Chemistry*
 2007 Habilitation in Organic Chemistry, University of Fribourg, Switzerland, Privatdozent
 2011-present Assistant Professor, University of Fribourg, Switzerland

<u>Expertise</u>	<ul style="list-style-type: none"> - <i>Tribology Additives for Lubricants</i> - <i>Antioxidants and Process Stabilizers for Polymers</i> - <i>Polymerization Inhibitors for Monomers</i> - <i>Isoxindigo Dyes</i> - <i>Safe Radical Initiators</i> - <i>Controlled Radical Polymerization</i> - <i>Materials for Organic Light Emitting Diodes</i> - <i>Redox Polymers for Li-Ion Battery</i> - <i>Overcharge Protection Additives for Li-Ion Battery</i> - <i>Photoinitiators, Photoacids, Photobases</i> - <i>Thermolatent Acids and Bases</i> - <i>Functionalization of Polymeric Surfaces</i> - <i>Nitrification Inhibitors for Agrochemistry</i> - <i>Computational Chemistry</i>
<u>Language skills</u>	Czech, English, French, German, Russian (passive)
<u>Publications & patents</u>	Author or co-author of 142 publications and patents
<u>Awards</u>	<p><u>1987</u> <i>Joseph Vigener Prize</i>, University of Fribourg (best PhD thesis in 1987)</p> <p><u>1998</u> <i>Ciba Research Prize</i> (Discovery of Irganox® HP-136 Stabilizer for Polyolefines)</p> <p><u>2001</u> <i>Ciba Research Prize</i> (Discovery of Irgatec® CR 76 for Controlled Rheology of Polypropylene)</p> <p><u>2004</u> <i>Ciba Research Prize</i> (Development of Controlled Radical Polymerization)</p> <p><u>2011</u> <i>Sandmeyer Award of the Swiss Chemical Society</i> (Development of Novel Specialty Polymers via Controlled Radical Polymerization)</p> <p><u>2016</u> <i>Senior Industrial Investigator Award of the Swiss Chemical Society</i> (Radicals in the Life of Industrial Polymers)</p>

Publications

(As of 17.01.2017)

42. **NMP of styrene in batch and CSTR at elevated temperatures: Modeling experimental trends.** Payne, Kevin A.; Debling, Jon; Nesvadba, Peter; Cunningham, Michael F.; Hutchinson, Robin A. *European Polymer Journal* (2016), 80, 186-199.
41. **Nitroxide-Mediated Polymerization at Elevated Temperatures.** Payne, Kevin A.; Nesvadba, Peter; Debling, Jon; Cunningham, Michael F.; Hutchinson, Robin A. *ACS Macro Letters* (2015), 4(3), 280-283.
40. **Reaction of Benzopinacol with Non-ionic Bases: Reversing the Pinacol Coupling.** Zalibera, Michal; Nesvadba, Peter; Gescheidt, Georg, *Organic Letters* (2013), 15(18), 4627-4629.
39. **Controlled/living radical polymerization mediated by stable organic radicals.** Nesvadba, Peter. RSC Polymer Chemistry Series (2013), 4 (Fundamentals of Controlled/Living Radical Polymerization), 112-167.
38. **The electronic structure of TEMPO, its cation and anion.** Kubala, D.; Regeta, K.; Janeckova, R.; Fedor, J.; Grimme, S.; Hansen, A.; Nesvadba, P.; Allan, M. *Molecular Physics*, (2013), 111(14-15), 2033-2040.
37. **Radical polymerization in industry.** Nesvadba, Peter. Editor(s): Chatgililoglu, Chrissyostomos; Studer, Armido. Encyclopedia of Radicals in Chemistry, Biology and Materials (2012), 4, 1701-1736. Publisher: John Wiley & Sons Ltd., Chichester, UK
36. **Synthesis of a polymeric 2,5-di-t-butyl-1,4-dialkoxybenzene and its evaluation as a novel cathode material.** Nesvadba, Peter; Folger, Lucienne Bugnon; Maire, Pascal; Novak, Petr. *Synthetic Metals* (2011), 161(3-4), 259-262.
35. **Novel thione-thiol rearrangement of dithiocarbonic acid O-(2,2,6,6-tetramethyl-piperidin-1-yl) ester in the context of controlled radical polymerization.** Nesvadba, Peter; Bugnon, Lucienne; Wagner, Trixie. *Chimia* (2010), 64(1-2), 56-58.
34. **Synthesis of a Novel Spirobisnitroxide Polymer and its Evaluation in an Organic Radical Battery.** Nesvadba, Peter; Bugnon, Lucienne; Maire, Pascal; Novak, Petr. *Chemistry of Materials* (2010), 22(3), 783-788.
33. **1-tert-Butyl-3,3,5,5-tetraalkyl-2-piperazinon-4-oxyls: Highly Efficient Nitroxides for Controlled Radical Polymerization.** Miele, Saskia; Nesvadba, Peter; Studer, Armido. *Macromolecules* (2009), 42(7), 2419-2427.
32. **Exfoliation of sheet silicates by nitroxide mediated polymerization.** Muhlebach, Andreas; Nesvadba, Peter; Rime, Francois; Bugnon, Lucienne. *Chimia* (2008), 62(10), 799-804.
31. **Novel curing agents: Thermal radical initiators as viable alternatives to peroxides.** Studer, Katia; Nesvadba, Peter; Jung, Tunja; Benkhoff, Johannes; Powell, Karin; Lordelot, Caroline. *Progress in Organic Coatings* (2008), 61(2-4), 119-125.
30. **Radical but not explosive novel radical initiators for conventional and NIR induced thermal hardening.** Studer, Katia; Powell, Karin; Nesvadba, Peter. *Farbe + Lack* (2007), 113(11), 36,38,40,42-43.

29. **Synthesis of Poly(4-methacryloyloxy-TEMPO) via Group-Transfer Polymerization and Its Evaluation in Organic Radical Battery.** Bugnon, Lucienne; Morton, Colin J. H.; Novak, Petr; Vetter, Jens; Nesvadba, Peter. *Chemistry of Materials* (2007), 19(11), 2910-2914.
28. **N-Alkoxyamines: synthesis, properties, and applications in polymer chemistry, organic synthesis, and materials science.** Nesvadba, Peter. *Chimia* (2006), 60(12), 832-840.
27. **Re-formation reaction of cyclic nitroxide-based alkoxyamines: steric and polar/stabilization effects.** Fischer, Hanns; Marque, Sylvain R. A.; Nesvadba, Peter. *Helvetica Chimica Acta* (2006), 89(10), 2330-2340.
26. **Steric and polar effects of the cyclic nitroxyl fragment on the C-ON bond homolysis rate constant.** Fischer, Hanns; Kramer, Andreas; Marque, Sylvain R. A.; Nesvadba, Peter. *Macromolecules* (2005), 38(24), 9974-9984.
25. **Redefining the design of pigment dispersants.** Auschra, Clemens; Eckstein, Ernst; Knischka, Ralf; Nesvadba, Peter. *Asia Pacific Coatings Journal* (2003), 16(5), 20, 22-23.
24. **Synthesis of 2-hydroxybenzophenones by oxidation of 3-aryl-3H-benzofuran-2-ones.** Nesvadba, Peter; Bugnon, Lucienne; Scheffel, Marvin. *Synthetic Communications* (2004), 34(15), 2797-2802.
23. **Synthesis of new open-chain alkoxyamines and their evaluation for nitroxide-mediated radical polymerization.** Nesvadba, Peter; Bugnon, Lucienne; Sift, Rosemarie. *Polymer International* (2004), 53(8), 1066-1070.
22. **New 7-membered diazepanone alkoxyamines for nitroxide-mediated radical polymerization.** Nesvadba, Peter; Bugnon, Lucienne; Sift, Rosemarie. *Journal of Polymer Science, Part A: Polymer Chemistry* (2004), 42(13), 3332-3341.
21. **Synthesis of N-alkoxy amines via catalytic oxidation of hydrocarbons.** Kirner, Hans-J.; Schwarzenbach, Franz; Van Der Schaaf, Paul A.; Hafner, Andreas; Rast, Valerie; Frey, Markus; Nesvadba, Peter; Rist, Guenther. *Advanced Synthesis & Catalysis* (2004), 346(5), 554-560.
20. **Steric Effects of Ring Substituents on the Decay and Reformation Kinetics of Piperazinone-Based Alkoxyamines.** Marque, Sylvain; Sobek, Jens; Fischer, Hanns; Kramer, Andreas; Nesvadba, Peter; Wunderlich, Wiebke. *Macromolecules* (2003), 36(9), 3440-3442.
20. **New cyclodimerization reaction of (3,5-Di-tert-butyl-4-oxocyclohexa-2,5-dienylidene)acetic acid.** Nesvadba, Peter; Rzadek, Piotr; Rist, Gunther. *Collection of Czechoslovak Chemical Communications* (2001), 66(8), 1250-1256.
19. **An easy synthesis of some 1,2,3,4-tetrahydro-9-oxa-10-phosphaphenanthrene-10-oxides.** Nesvadba, Peter; Dubs, Paul. *Synthetic Communications* (2001), 31(2), 161-165.
18. **New Alkoxyamines from the Addition of Free Radicals to Nitrones or Nitroso Compounds as Initiators for Living Free Radical Polymerization.** Zink, Marie-Odile; Kramer, Andreas; Nesvadba, Peter. *Macromolecules* (2000), 33(21), 8106-8108.
17. **Easy large scale synthesis of 2,6-di-t-butyl-7-cyano-, 7-carboxy- and 7-methoxycarbonyl quinone methides.** Nesvadba, Peter. *Synthetic Communications* (2000), 30(15), 2825-2832.
16. **An easy new synthesis of isoxindigos.** Nesvadba, Peter. *Synthesis* (2000), (3), 355-356.
15. **A versatile new synthesis of 3-aryl-3H-benzofuran-2-ones.** Nesvadba, Peter; Bugnon, Lucienne; Dubs, Paul; Evans, Samuel. *Synlett* (1999), (Spec.), 863-864.

14. **Formation of fluorescent and nonfluorescent difluoroboron complexes in the reaction of BF₃ etherate with 21H,24H-bilin-1,19-dione derivatives.** Borle, Francois; Fehr, Felix; Nesvadba, Petr; Gossauer, Albert. *Photochemistry and Photobiology* (1997), 65(6), 949-956.
13. **Synthesis of bile pigments. Part 18. Synthesis and conformational studies of oxa- and thia-deaza-biliverdin analogs.** Nesvadba, Petr; Nögc-Phan, Do; Nydegger, Fredy; Espinosa Ferao, Arturo; Gossauer, Albert. *Helvetica Chimica Acta* (1994), 77(7), 1837-50.
12. **Structure and reactivity of xanthocorrinoids. Part V. Formation of trans-diol derivatives of 5,6-dihydrocobyric acid from xanthocorrinoids under acidic conditions.** Holze, Gerhard; Jenny, Titus A.; Nesvadba, Petr; Gossauer, Albert; Ernst, Ludger; Keller, Walter; Kratky, Christoph. *Helvetica Chimica Acta* (1991), 74(6), 1287-95.
11. **Reactivity of the 1H-pyrrole ring system. Oxidation and reduction of the pyrrole ring.** Gossauer, Albert; Nesvadba, Petr. *Chemistry of Heterocyclic Compounds* (Chichester, United Kingdom) (1990), 48 (Pyrroles, Pt. 1), 499-536. General Review written in English.
10. **Bilindionostilbenoparacyclophanes mimic the spectroscopic properties of photoreceptors for bacterial oxygenic photosynthesis.** Abou-Hadeed, Khaled; Nesvadba, Petr; Gossauer, Albert. *Chimia* (1988), 42(9), 282-9.
9. **Synthesis of bile pigments. 14. Synthesis of a bilindionostilbenoparacyclophane as a model for stretched bile pigment chromophores of biliproteins.** Nesvadba, Petr; Gossauer, Albert. *Journal of the American Chemical Society* (1987), 109(21), 6545-6.
8. **Structure and reactivity of xanthocorrinoids. II. Influence of the c-acetic acid chain on the course of the hydroxylation of the corrin chromophore by oxygen in the presence of ascorbic acid.** Gruening, Burghard; Holze, Gerhard; Jenny, Titus A.; Nesvadba, Petr; Gossauer, Albert; Ernst, Ludger; Sheldrick, William S. *Helvetica Chimica Acta* (1985), 68(6), 1754-70.
7. **Oxidation of 1,2,3,4,6-substituted pyridinium salts with ferricyanide.** Nesvadba, Petr; Kuthan, Josef. *Collection of Czechoslovak Chemical Communications* (1984), 49(2), 543-8.
6. **A new heterocyclic ring closure in ferricyanide oxidation of 2,4,6-triphenylpyridinium salts.** Nesvadba, Petr; Strop, Petr; Kuthan, Josef. *Collection of Czechoslovak Chemical Communications* (1983), 48(11), 3307-14.
5. **Oxidative elimination of phenyl group from α -position of quaternary quinolinium salts.** Nesvadba, Petr; Kuthan, Josef. *Collection of Czechoslovak Chemical Communications* (1983), 48(10), 2965-9.
4. **Oxidative elimination of the tert-butyl group from the α -position of quaternary pyridinium salts.** Nesvadba, Petr; Kuthan, Josef. *Collection of Czechoslovak Chemical Communications* (1983), 48(2), 511-16.
3. **Oxidation of polysubstituted pyridinium salts.** Nesvadba, Petr; Kuthan, Josef. *Collection of Czechoslovak Chemical Communications* (1982), 47(5), 1494-502.
2. **Oxidation of 1-substituted 2,4,6-triphenylpyridinium salts.** Nesvadba, Petr; Kuthan, Josef. *Tetrahedron Letters* (1980), 21(38), 3727-8.
1. **Some 3-cyano-4,6-diaryl-2-pyridones with luminescent properties.** Kuthan, Josef; Nesvadba, Petr; Popl, Milan; Fahnrich, Jan. *Collection of Czechoslovak Chemical Communications* (1979), 44(8), 2409-16.

Patent Applications (As of 17.01. 2017)

100. Thioether compounds as nitrification inhibitors

Nave, Barbara; Dickhaut, Joachim; Nesvadba, Peter; Sisay, Mihiret Tekeste; Wissemeier, Alexander; Zerulla, Wolfram; Pasda, Gregor; Wallquist, Olof; Cunningham, Alan Francis
PCT Int. Appl. (2016), WO 2016180859 A1 20161117.

99. Polyurethanes with reduced aldehyde emission Otero Martinez, Iran; Nesvadba, Peter
PCT Int. Appl. (2016), WO 2016166008 A1 20161020.

98. Pyrazole compounds as nitrification inhibitors and use with fertilizers for crop Plants Nave, Barbara; Dickhaut, Joachim; Nesvadba Peter, Sisay, Mihiret Tekeste; Wissemeier, Alexander; Zerulla, Wolfram; Pasda, Gregor; Wallquist, Olof; Cunningham, Alan F.
PCT Int. Appl. (2016), WO 2016124769 A1 20160811

97. Mixtures containing lignocellulosic materials with salts of N-substituted carbamic acids
Assmann, Jens; Reuter, Frank; Lindner, Jean-Pierre Berkan; Nesvadba Peter
EP 3050919 A1 20160803

96. Alkynylpyrazoles as nitrification inhibitors for use in plant fertilizers Nave, Barbara; Dickhaut, Joachim; Nesvadba, Peter; Sisay, Mihiret Tekeste; Wissemeier, Alexander; Zerulla, Wolfram; Pasda, Gregor; Wallquist, Olof; Cunningham, Allan F.
PCT Int. Appl. (2016), WO 2016097318 A1 20160623

95. Polycyclic photoinitiator-containing photopolymerizable compositions, production methods and applications. Nesvadba, Peter; Bugnon Folger, Lucienne; Carroy, Antoine.
PCT Int. Appl. (2016), WO 2016034963 A1 20160310.

94. Methods for production of polyurethanes with reduced aldehyde emission. Otero Martinez, Iran; Nesvadba, Peter; Albuerne, Julio. PCT Int. Appl. (2015), WO 2015189095 A1 20151217.

93. Aqueous compositions containing polymers having aminooxy functional groups and polymers having aminooxy-reactive groups for crosslinking. Nesvadba, Peter; Zorn, Matthias; Wallquist, Olof; Reck, Bernd. PCT Int. Appl. (2015), WO 2015150508 A1 20151008.

92. Flame retardant composition based on substituted di-, tri- and tetra arylethane compounds. Roth, Michael; Fuchs, Sabine; Nesvadba, Peter; Keppeler, Uwe. Eur. Pat. Appl. (2015), EP 2927302 A1 20151007.

91. Controlled radical polymerization. Debling, Jon; Nesvadba, Peter; Hungenberg, Klaus-Dieter. PCT Int. Appl. (2015), WO 2015134591.

90. Hybrid photoinitiators for coatings. Nesvadba, Peter; Birbaum, Jean-Luc; Pilak, Yvonne; Spony, Bruno; Ziegler, Florian. PCT Int. Appl. (2014), WO 2014060450.

89. Iminoxytriazines as radical generators in olefin or other unsaturated compound polymerization. Nesvadba, Peter; Bugnon Folger, Lucienne; Carroy, Antoine; Faller, Marc. PCT Int. Appl. (2014), WO 2014064064.

88. **Surface-modified pigment preparations for use in coloring an org. material such as plastics, coatings or inks.** Bugnon, Philippe; Nesvadba, Peter. PCT Int. Appl. (2012), WO 2012089516.
87. **End-functionalized polymers** Kou, Huiguang; Moeck, Andreas; Auschra, Clemens; Nesvadba, Peter; Pirrung, Frank Oliver Heinrich; Gernandt, Andreas. PCT Int. Appl. (2011), WO 2011120947.
86. **O-Iminoisourea compounds as initiators and polymerizable compositions thereof.** Nesvadba, Peter; Bugnon Folger, Lucienne; Carroy, Antoine; Faller, Marc; Spony, Bruno. PCT Int. Appl. (2010), WO 2010128062.
85. **Dye sensitized solar cell.** Oka, Hidetaka; Tanabe, Junichi; Hintermann, Tobias; Takahashi, Ryuichi; Nesvadba, Peter; Nakamichi, Shinji. PCT Int. Appl. (2010), WO 2010121900.
84. **Triazene-based radical polymerization catalysts for curable compositions.** Nesvadba, Peter; Bugnon Folger, Lucienne; Birbaum, Jean-Luc; Faller, Marc; Carroy, Antoine. PCT Int. Appl. (2010), WO 2010112410.
83. **Photoresist composition.** Kura, Hisatoshi; Sameshima, Kaori; Kunimoto, Kazuhiko; Nesvadba, Peter; Ohwa, Masaki. PCT Int. Appl. (2010), WO 2010108835
82. **O-dialkylamino-isourea polymerization initiators.** Nesvadba, Peter; Bugnon Folger, Lucienne; Carroy, Antoine Christian; Faller, Marc. PCT Int. Appl. (2010), WO 2010079102.
81. **Hole injection material.** Schmidhalter, Beat; Nesvadba, Peter; Schaefer, Thomas. PCT Int. Appl. (2010), WO 2010063609
80. **Curable composition comprising a thermolatent base.** Nesvadba, Peter; Bugnon Folger, Lucienne; Knischka, Ralf. PCT Int. Appl. (2010), WO 2010057922.
79. **Polycyclic compounds for electronic applications.** Nesvadba, Peter; Wendeborn, Frederique; Schaefer, Thomas; Schmidhalter, Beat; Ricci, Andrea; Murer, Peter; Chebotareva, Natalia. PCT Int. Appl. (2010), WO 2010046259.
78. **Phenanthrolines.** Nesvadba, Peter; Bugnon Folger, Lucienne; Ricci, Andrea; Moegle, Gilbert. Eur. Pat. Appl. (2010), EP 21612722011.
77. **Nitroxide containing electrode materials for secondary batteries.** Nesvadba, Peter; Bugnon Folger, Lucienne; Hintermann, Tobias. PCT Int. Appl. (2008), WO 2008155247.
76. **Nitroxides for lithium-ion batteries.** Hintermann, Tobias; Nesvadba, Peter; Frey, Markus; Bugnon Folger, Lucienne). PCT Int. Appl. (2008), WO 2008110466.
75. **Imidazolidinone nitroxides as electrode materials for energy storage devices.** Nesvadba, Peter; Bugnon, Lucienne; Frey, Markus. PCT Int. Appl. (2008), WO 2008031733.
74. **Process for the preparation of crosslinked nitroxide polymers.** Nesvadba, Peter; Bugnon, Lucienne. PCT Int. Appl. (2007), WO 2007115939.
73. **Triazine containing electrode materials for secondary batteries.** Nesvadba, Peter; Bugnon, Lucienne. PCT Int. Appl. (2007), WO 2007107468.
72. **Viscosity breaking process for olefin polymers.** Horst, David E.; Roth, Michael; Nesvadba, Peter. PCT Int. Appl. (2007), WO 2007096276.

71. **Alkoxyamines containing unsaturated groups for manufacture of siloxane-modified vinyl polymers.** Engelbrecht, Lothar Alexander; Nesvadba, Peter. PCT Int. Appl. (2007), WO 2007048719.
70. **Preparation of polymeric nitroxides by group-transfer polymerization and use.** Nesvadba, Peter; Bugnon, Lucienne. PCT Int. Appl. (2006), WO 2006131451.
69. **Storage stabilizers for radiation-curable coating and ink compositions.** Ilg, Stephan; Fighetti, Edith; Nesvadba, Peter; Fuchs, Andre. PCT Int. Appl. (2006), WO 2006111494.
68. **N-substituted imides as curing initiators for coatings.** Nesvadba, Peter; Benkhoff, Johannes; Bugnon, Lucienne; Powell, Karin; Jung, Tunja. PCT Int. Appl. (2006), WO 2006051047.
67. **Degradation of polypropylene with hydroxylamine ester compositions.** Roth, Michael; Nesvadba, Peter; Horst, David E. PCT Int. Appl. (2006), WO 2006027327.
66. **In-can stabilizers for UV-curable resins with good storage stability.** Nesvadba, Peter; Fuchs, Andre; Ilg, Stephan; Pighetti, Edith. PCT Int. Appl. (2006), WO 2006024621.
65. **Stabilization of organic materials and their manufacture.** Gerster, Michele; Nesvadba, Peter. PCT Int. Appl. (2006), WO 2006024610.
64. **Alkoxyamines containing a radically polymerizable group.** Nesvadba, Peter; Kramer, Andreas; Bugnon, Lucienne. PCT Int. Appl. (2005), WO 2005118651.
63. **Improved process for the oxidation of secondary amines into the corresponding nitroxides with peracids in the presence of base.** Nesvadba, Peter; Bugnon, Lucienne; Von Bueren, Martin. PCT Int. Appl. (2004), WO 2004085397.
62. **Coating composition comprising hydroxylamine ester initiators and IR/UV curing of coatings.** Wolf, Jean-Pierre; Misev, Ljubomir; Nesvadba, Peter; Zeren, Sevgi. PCT Int. Appl. (2004), WO 2004081100.
61. **Preparation of hydroxy-vinyl-aromatic polymers or copolymers by anionic or controlled radical polymerization.** Kunimoto, Kazuhiko; Nesvadba, Peter; Kramer, Andreas. PCT Int. Appl. (2004), WO 2004044017.
60. **Polymeric alkoxyamines prepared by atom transfer radical addition polymerization.** Nesvadba, Peter; Bugnon, Lucienne. PCT Int. Appl. (2004), WO 2004026915.
59. **Cationic alkoxyamines and their use in producing nanoparticles from natural or synthetic clays.** Muehlebach, Andreas; Nesvadba, Peter; Kramer, Andreas. PCT Int. Appl. (2003), WO 2004000809.
58. **Flame retardant polymer compositions containing hydroxylamine esters.** Roth, Michael; Simon, Dirk; Leslie, Grant; Nesvadba, Peter; King, Roswell Easton; Kaprinidis, Nikolas. PCT Int. Appl. (2003), WO 2003087211.
57. **Open-chain alkoxyamines and their corresponding nitroxides for controlled low-temperature radical polymerization.** Hintermann, Tobias; Nesvadba, Peter; Kramer, Andreas; Fink, Jochen. PCT Int. Appl. (2003), WO 2003074572.
56. **Preparation of hydroxy-vinyl-aromatic polymers or copolymers by anionic or controlled radical polymerization.** Nesvadba, Peter; Kunimoto, Kazuhiko. PCT Int. Appl. (2003), WO 2003022895.

55. **Multifunctional alkoxyamines based on polyalkylpiperidines, polyalkylpiperazinones and polyalkylmorpholinones and their use as polymerization regulators/initiators.** Kramer, Andreas; Muehlebach, Andreas; Nesvadba, Peter; Zink, Marie-Odile; Hintermann, Tobias. PCT Int. Appl. (2003), WO 2003004471.
54. **N-alkoxy 4-imino piperidine polymerization regulators and their use in free radical-mediated polymerization of vinyl monomers to low dispersity polymers.** Nesvadba, Peter; Hintermann, Tobias; Kramer, Andreas; Zink, Marie-Odile; Bugnon, Lucienne. PCT Int. Appl. (2002), WO 2002100831.
53. **Method of grafting ethylenically unsaturated carboxylic acid derivatives onto thermoplastic polymers using hydroxylamine esters.** Fink, Jochen; Roth, Michael; Pfaendner, Rudolf; Nesvadba, Peter; Kramer, Andreas. PCT Int. Appl. (2002), WO 2002092653.
52. **Novel high-performance nitroxides for controlled low-temperature radical polymerization.** Hintermann, Tobias; Kramer, Andreas; Nesvadba, Peter; Fink, Jochen. Abstracts of Papers, 224th ACS National Meeting, Boston, MA, United States, August 18-22, 2002 (2002), POLY-629.
51. **Novel high performance nitroxides for controlled low temperature radical polymerization.** Hintermann, Tobias; Kramer, Andreas; Nesvadba, Peter; Fink, Jochen. Polymer Preprints (2002), 43(2), 86-87.
50. **N-alkoxy-4,4-dioxy-polyalkyl-piperidine compounds, their corresponding N-oxides and controlled radical polymerization therewith.** Nesvadba, Peter; Zink, Marie-Odile; Wunderlich, Wiebke. PCT Int. Appl. (2002), WO 2002048205.
49. **Process for the synthesis of amine ethers from N-oxylamines and hydrocarbons in the presence of hydroperoxides and copper catalysts.** Hafner, Andreas; Kirner, Hans Juerg; Schwarzenbach, Franz; Van Der Schaaf, Paul Adriaan; Nesvadba, Peter. PCT Int. Appl. (2001), WO 2001092228.
48. **Hydroxylamine esters as polymerization initiators.** Roth, Michael; Pfaendner, Rudolf; Nesvadba, Peter; Zink, Marie-Odile. PCT Int. Appl. (2001), WO 2001090113.
47. **Manufacture of 2,6-diethyl-2,3,6-trimethyl- and 2,2-diethyl-6,6-dimethyl-1-alkoxypiperidinyl carboxylate esters and carboxamides as radical polymerization initiators.** Nesvadba, Peter; Zink, Marie-Odile; Kramer, Andreas. Ger. Offen. (2001), DE 10113209.
46. **3-arylbenzofuranones with electron-withdrawing substituents as polymer stabilizers.** Tinkl, Michael; Dosenbach, Oliver; Nesvadba, Peter; Wolff, Martin; Rotzinger, Bruno; Maeder, Dietmar. PCT Int. Appl. (2001), WO 2001059000.
45. **Stabilization of wood substrates for protecting wood against light induced degradation.** Koehler, Manfred; Auschra, Clemens; Cunkle, Glen Thomas; Nesvadba, Peter; Seltzer, Raymond; Koehler, Vivian; Koehler, Inga; Koehler, Antoin Kamran. PCT Int. Appl. (2001), WO 2001017738.
44. **Preparation of mono and multifunctional alkoxyamines for forming nitroxyl radical initiators and regulators useful in the preparation of polymers with narrow polydispersity.** Kramer, Andreas; Nesvadba, Peter; Zink, Marie-Odile; Wunderlich, Wiebke. PCT Int. Appl. (2001), WO 2001002345.

43. **2-Benzofuranones as styryl dye analogs, their preparation and use.** Feiler, Leonhard; Ruch, Thomas; Wallquist, Olof; Nesvadba, Peter. PCT Int. Appl. (2000), WO 2000053597.
42. **Polymeric stabilizers having low polydispersity.** Steinmann, Alfred; Roth, Michael; Stauffer, Werner; Nesvadba, Peter; Muhlebach, Andreas. PCT Int. Appl. (2000), WO 2000039209.
41. **Oxobenzofuranylidenedihydroindolone dyes, their production and their use.** Nesvadba, Peter; Jandke, Joachim. PCT Int. Appl. (2000), WO 2000024736.
40. **Color photographic material.** Jeganathan, Suruliappa Gowper; Biry, Stephane; Nesvadba, Peter; Leppard, David George. PCT Int. Appl. (2000), WO 2000023849.
39. **Heterocyclic O-substituted amine oxides as regulators in controlled radical polymerization.** Nesvadba, Peter; Kramer, Andreas; Zink, Marie-odile. Ger. Offen. (2000), DE 19949352.
38. **Grafting of ethylenically unsaturated monomers onto polymers.** Roth, Michael; Pfaendner, Rudolf; Nesvadba, Peter. PCT Int. Appl. (2000), WO 2000014135.
37. **Open chain alkoxyamine compounds and their use as polymerization regulators.** Nesvadba, Peter; Kramer, Andreas; Zink, Marie-odile; Lazzari, Dario. PCT Int. Appl. (2000), WO 2000007981.
36. **Preparation of 3-arylbenzofuranones via carbonylation of arylmethylenecyclohexadienones.** Tinkl, Michael; Evans, Samuel; Nesvadba, Peter. PCT Int. Appl. (1999), WO 9967232.
35. **Dibenzonaphthyrone, their preparation and use for coloring/pigmenting high-molecular-weight organic material.** Nesvadba, Peter; Jandke, Joachim. PCT Int. Appl. (1999), WO 9952909.
34. **1-Alkoxypolyalkylpiperidine derivatives and their use as polymerization initiators.** Kramer, Andreas; Nesvadba, Peter. Ger. Offen. (1999), DE 19909767.
33. **Benzofuranone derivatives as stabilizers for elastomers.** Meier, Hans-Rudolf; Knobloch, Gerrit; Nesvadba, Peter. Ger. Offen. (1999), DE 19900829.
32. **Isoxindigo colorants, their preparation and their use.** Nesvadba, Peter; Jandke, Joachim. PCT Int. Appl. (1999), WO 9913007.
31. **Polymerizable compositions containing alkoxyamine initiators derived from nitroso- or nitron compounds.** Nesvadba, Peter; Kramer, Andreas; Steinmann, Alfred; Stauffer, Werner. PCT Int. Appl. (1999), WO 9903894.
30. **Polymerizable compositions containing alkoxyamine compounds derived from nitrogen oxide as polymerization initiators.** Nesvadba, Peter; Kramer, Andreas; Steinmann, Alfred; Stauffer, Werner. Eur. Pat. Appl. (1999), EP 891986.
29. **Benzofuranones as heat stabilizers for powder coatings.** Laver, Hugh Stephen; Nesvadba, Peter. Eur. Pat. Appl. (1998), EP 857765.
28. **Cyclic phosphinic acid esters, their preparation and their use as polymer stabilizers.** Nesvadba, Peter; Dubs, Paul. Eur. Pat. Appl. (1998), EP 850946.
27. **Antioxidants and light stabilizers on carriers as fillers and stabilizers.** Nesvadba, Peter; Kramer, Andreas; Steinmann, Alfred; Zingg, Juerg; Mueller, Daniel. Eur. Pat. Appl. (1996), EP 745646.

- 25. A one-pot process for the preparation of 7-aryl-2,6-disubstituted quinone methides.**
Evans, Samuel; Nesvadba, Peter; Allenbach, Stephan. Eur. Pat. Appl. (1996), EP 744392.
- 24. Preparation of 7-substituted quinone methides as polymerization inhibitors for unsaturated monomers.** Nesvadba, Peter; Evans, Samuel; Gande, Matthew Edward; Von Ahn, Volker Hartmut; Winter, Roland Arthur Edwin. Eur. Pat. Appl. (1996), EP 737659.
- 23. Preparation of 7-aryl quinone methides as polymerization inhibitors for unsaturated monomers.** Evans, Samuel; Gande, Matthew Edward; Nesvadba, Peter; Von Ahn, Volker Hartmut; Winter, Roland Arthur Edwin. Eur. Pat. Appl. (1996), EP 737660.
- 22. Preparation of polymerization inhibitors for (meth)acrylic acid and ester monomers.**
Gande, Matthew E.; Nesvadba, Peter; Pitteloud, Rita. Eur. Pat. Appl. (1995), EP 672652.
- 21. Process for the preparation of 3-arylbenzofuranones.** Nesvadba, Peter; Evans, Samuel; Schmitt, Ralf. Can. Pat. Appl. (1995), CA 2132132.
- 20. Preparation of 3-aryl-2-benzofuranone stabilizers for polymers.** Nesvadba, Peter; Evans, Samuel; Kroehnke, Christoph; Zingg, Juerg. Ger. Offen. (1995), DE 4432732.
- 18. Preparation of 2-benzofuranones as oxidative and thermal and light stabilizers for polymers.** Nesvadba, Peter; Evans, Samuel. Eur. Pat. Appl. (1995), EP 644190.
- 17. Phenyl phosphites as stabilizers for organic materials.** Nesvadba, Peter. Eur. Pat. Appl. (1994), EP 594539.
- 16. 3-(Carboxymethoxyphenyl)-2-benzofuranones and their use as stabilizers.** Nesvadba, Peter. Ger. Offen. (1993), DE 4316622.
- 15. 3-(4-Alkoxyphenyl)-2-benzofuranones, compositions containing them, and their use as stabilizers.** Nesvadba, Peter. Ger. Offen. (1993), DE 4316876.
- 14. 3-(Acyloxyphenyl)-1-benzofuranones, compositions containing them, and their use as stabilizers.** Nesvadba, Peter. Ger. Offen. (1993), DE 4316611.
- 13. Preparation of 3-(2-acyloxyethoxyphenyl)benzofuran-2-ones as stabilizers for organic materials.** Nesvadba, Peter. Eur. Pat. Appl. (1994), EP 591102.
- 12. Preparation of 3-(dihydrobenzofuran-5-yl)benzofuran-2-ones as stabilizers for organic materials.** Nesvadba, Peter. Eur. Pat. Appl. (1994), EP 589839.
- 11. Diphenylacetic acid derivatives as stabilizers for organic material.** Nesvadba, Peter. Eur. Pat. Appl. (1993), EP 545861.
- 10. Novel cycloalkylidene-bis phenol phosphites.** Nesvadba, Peter. Eur. Pat. Appl. (1993), EP 553059.
- 9. Compositions containing phosphonate-substituted 6-membered N-heterocyclic compounds as light and heat stabilizers for polymers, rubber, and functional fluids.**
Nesvadba, Peter. Eur. Pat. Appl. (1993), EP 530139.
- 8. Agent and process for the production of good quality molded articles from polyamide fibers.** Rembold, Manfred; Eckhardt, Claude; Nesvadba, Peter. Eur. Pat. Appl. (1993), EP 540471.
- 7. Preparation of benzofurananes as antioxidants and heat and light stabilizers.**
Nesvadba, Peter. Ger. Offen. (1993), DE 4220992.

6. **Preparation of bisbenzofuran-2-one stabilizing agents.** Nesvadba, Peter; Attinger-Sorato, Carla. Brit. UK Pat. Appl. (1993), GB 2257140.
5. **Preparation of hindered β -keto esters as stabilizers.** Nesvadba, Petr. Ger. Offen. (1991), DE 4103741.
4. **Alpha-carbonylphenylacetonitrile derivatives as stabilizers for organic substances.** Nesvadba, Peter. Eur. Pat. Appl. (1992), EP 466640.
3. **Dioxaphosphorinane compounds as stabilizers for organic materials.** Nesvadba, Peter. Eur. Pat. Appl. (1992), EP 463994.
2. **Isoindolinone compounds as stabilizers for organic materials and their use.** Nesvadba, Peter. Eur. Pat. Appl. (1991), EP 452266.
1. **Lubricating composition.** Camenzind, Hugo; Nesvadba, Peter. Eur. Pat. Appl. (1990), EP 376889.

Selected Invited Lectures (Since 1.1. 1997)

17. **Radicals in the Life of Industrial Polymers.** Fall Meeting of the Swiss Chemical Society, 15. 9. 2016. Senior Industrial Investigator Award Lecture.
16. **Industrial Realization of Controlled Radical Polymerization and Beyond** Hochschule trifft Industrie, Schloss Beuggen, 18.-20.9. 2013 and 10. Freiburger Symposium, 29.-30. September 2011.
15. **Nitroxide Radicals as Environmentally Friendly Catalysts and Mediators.** SCS-Syngenta Symposium, 28. October 2011.
14. **Beyond TEMPO: Neue Derivate sterisch gehinderter Amine und deren Einsatz in der industriellen Polymerchemie.** Spring Meeting of the Swiss Chemical Society, 10. 2. 2011. Sandmeyer-Award Lecture.
13. **Nitroxides containing polymers as novel redoxactive electrode materials for Li-ion batteries.** Polycoll 2010, Basel, 21.06. 2010.
12. **Electrochemically Active Nitroxide Radicals as Materials for Ecological and Safe Li-ion Batteries.** Freiburger Chemische Gesellschaft, 11.5. 2010.
11. **Electrochemistry of Nitroxides: Principles and Applications.** Glasgow Synthesis Symposium, 3.-4. 9. 2009.
10. **Beyond TEMPO: Novel Cyclic Nitroxides and Alkoxyamines for Living Radical Polymerization.** Glasgow Synthesis Symposium, 3.-4. 9. 2009.
9. **Electrochemistry of Nitroxides: Principles and Applications.** Invited plenary lecture at Spin 08, 5th International Conference on Nitroxide Radicals, Ancona, Italy, 7.-11.9. 2008.
8. **Synthesis of Poly(4-methacryloyloxy-TEMPO) via Group Transfer Polymerization and its Evaluation in Organic Radical Battery.** European Polymer Congress, Portoroz, Slovenia, 1.-6. 7. 2007.
7. **Beyond TEMPO: Synthesis of Cyclic Sterically Highly Hindered Nitroxides and Alkoxyamines and their Industrial Applications,** Spin 05, 4th International Conference on Nitroxide Radicals, Novosibirsk, Russia, 20-25.9. 2005.
6. **Synthesis and Properties of Novel Benzofuranones: Ciba's Fundamental Innovation for Polymers.** ETH Zürich, 28.11. 2005.

5. **Nitroxide Mediated Radical Polymerization - a Versatile Tool for Polymer Architecture Design.** ETH Zürich, 11.06. 2003.
4. **Nitroxide Mediated Radical Polymerization.** 3ème Cycle Champéry Summer School, 1.-6. 9. 2002.
3. **From 19th century research at Fribourg University to 21st century high performance antioxidants and dyes.** Freiburger Chemische Gesellschaft, 11.4. 2000.
2. **New highly active processing stabilizers for polymers.** Guildford, UK, September 1997.
1. **A new class of highly active phosphorous free processing stabilizers for polymers.** Additives 97, New Orleans, February 1-5, 1997.