

## CV: Peder Wolkoff - D.Sc.(Med), Ph.D., M.Sc.

National Research Centre for the Working Environment (NRCWE), Denmark ([pwo@nrcwe.dk](mailto:pwo@nrcwe.dk))

### Academic degrees and education

1996	<b>D.Sc.(Med)</b>	University of Copenhagen (Indoor environmental science; Faculty of Medicine) <sup>1</sup>
1976-1978	<b>Post Doctoral Fellow</b>	University of Ottawa
1976/4-9	<b>NATO Science Fellow</b>	Der Universiteit van Amsterdam
1976	<b>Ph.D. (lic.scient.)</b>	University of Copenhagen (org. chem., mass spectrometry; Faculty of Science)
1972	<b>M.Sc. (cand.scient.)</b>	University of Copenhagen (org. chem.; Faculty of Science)

### Academic career

2015-2020	“Named Person” at NRCWE
2009-2019	Adjunct professor (full), Dept. of Chemistry, University of Copenhagen
2004-2012	Research professor (full) in Indoor Environmental Science, NRCWE, Denmark
1991-2015	Project Coordinator and Principal Investigator, Indoor Air and Chemistry group, NRCWE, Denmark
1990-	Senior Researcher, NRCWE, Denmark
1982-1990	Scientist, NIOH, Denmark
1979-1981	Senior Research Fellow (funded by NRC), University of Copenhagen
1975	Research Fellow, University of Copenhagen (funded by NRC)
1972-1973	Research Associate, Brock University, Ontario

### Bibliometrics – peer-reviewed papers/Comments to the editor

- Co-authored: **163** papers in peer-reviewed journals (leading: 87; sole-author: **23**)
- Co-authored: **21** peer-reviewed papers - the last five years
- First/last authorship: **14** - the last five years
- Sole-author of **5** reviews - the last 5 years
- Authored **4** “Comments” to the Editor
- Citations: “Web of Knowledge (ISI)”/“Mendeley”: **>5600 / >6000** **h-index: 43/46**
- Average citation rate/paper (ISI): **≥37**
- **📌**Top-cited Science Citation Papers (ISI): **3**
- Citations: Google Scholar: **> 9700** **h-index: 56**
- Google Scholar: **i10-index: 144**
- ResearchGate Score: **49**

### Research publication weblinks

<http://scholar.google.dk/citations?user=kla8IEAAAAAJ&hl=da>  
[https://www.researchgate.net/profile/Peder\\_Wolkoff](https://www.researchgate.net/profile/Peder_Wolkoff)  
<https://www.mendeley.com/profiles/peder-wolkoff/>  
<http://orcid.org/0000-0003-1933-7351>  
<http://www.dibic.unimi.it/ecm/home/collaborazioni-internazionali/icoh>

### Inventions - Achievements - Awards - Honors

1991	Invention: Field and Laboratory Emission Cell (FLEC) – ISO (16000-7) and ASTM (D-7143) standards
1994	Invention: Danish Indoor Climate Labelling Scheme for construction products’ emission
2015	Certificate of Outstanding Contribution in Reviewing – The Editors of Atmospheric Environment
2012-2018	Secretary for Scientific Committee “Indoor Air Quality and Health” Int Comm on Occup Health (ICOH)
2018-2021	Chairman for Scientific Committee “Indoor Air Quality and Health” Int Comm on Occup Health (ICOH)
2002- 2018	Editorial Board, “Indoor Air” Journal
2011-2013	Editorial Board, “TheScientificWorld” Journal
2000	Best Poster Award at Healthy Buildings ‘00 by ISIAQ
1999	Best Paper Award in Indoor Air Journal (1996-1998) by ISIAQ
1998	Scandinavian Indoor Climate Award by ISS Denmark
1997	Elected Academy Fellow of ISIAQ (International Society of Indoor Air Quality)

### Memberships/expert/administrative experience/supervision (2002 and onwards)

- “Harmonization of Indoor material emissions labelling systems in the EU”, EU Collaborative Action, 2002-2005
- “Prioritization of building materials as indoor pollution sources”, EU Collaborative Action, 2006-2009
- “Harmonisation of the health-based evaluation of indoor material emissions in EU”, EU-LCI Action, 2010-2015
- “EU-LCI harmonization” featured by DG Growth, 2016-
- “Ozone-Initiated Chemistry and Its impact on IAQ and Human Health”, EU Collaborative Action, 2006-2007.

<sup>1</sup> Publication No. 54.

- Temporary expert for WHO (Indoor Air Quality Guidelines), 2008-2010
- Scientific Committee on “Work and Vision”, Int. Comm. on Occup Health (ICOH), 2003 -
- Scientific Advisory Board – “Indoor Environment Quality” – Rockwool International, 2004 - 2014
- Technical assessor for Danish Accreditation of Laboratories (DANAK), 1985 -

### Referee (regular) for journals

Building&Environment - Chemosphere – Environ Science Technol – Environ Int - Indoor Air – Int J Environ Res Pub Health - J. Hazard Materials - STOTEN

### Review and evaluation

Hong Kong Research Grant Council (regular)  
Austrian Research Council - FORMAS (Sweden) -  
Professorship and lectureship/senior researcher evaluations

### Organizer/convener of international conferences, symposia and courses

- Course leader: NIVA (Nordic Advanced Training in Occupational Health) Courses on Indoor Air Quality: 1989, 1992, 1996, 1999, 2003, 2006, 2018
- Clean Air at Work, Brussels, 1991
- EURO Course, Ispra, 1992
- International FLEC Symposia, Copenhagen: 1999 and 2001
- Atmos. Chem. - Indoor Pollution Session – Euro. Geochem. Union Meeting, Vienna, April 2005
- INTROP, workshop on “Reactive indoor air chemistry” financed by ESF, Borås, September 2008.
- National organizing committee member for Indoor Air 2008 International Conference, Lyngby, August 2008

### Supervision of research students/Teaching

- 7 PhDs and 8 MScs (with graduation)
- Lectured at advanced courses since 1989
- Teaching at the Copenhagen Master of Excellence graduate school “Environmental Chemistry and Health” at University of Copenhagen, 2009-2015
- Course leader and lecturer NIVA “Indoor Air Quality Problems”, 1989, 1992, 1996, 2002, 2006, and 2018.

### Participation in EU and Danish projects (2009-2018)

- **"OFFICAIR"** (On the reduction of health effects from combined exposure to indoor air pollutants in modern offices) funded by the European Union 7th Framework (Agreement 265267) under the Theme: ENV.2010.1.2.2-1. 2010-2013. WP5 Leader. [http://www.officair-project.eu/index.php?option=com\\_content&view=article&id=9&Itemid=6](http://www.officair-project.eu/index.php?option=com_content&view=article&id=9&Itemid=6)
- **"EPHECT"** (Emission, Exposure Patterns, and Health Effects of consumer Products in the EU), funded by European Union, Executive Agency for Health and Consumers under the sub-action: Healthy environments. 2010-2013. WP4 Leader. <https://sites.vito.be/sites/ephect/Pages/home.aspx>
- **"CISBO"** (Centre for Indoor Climate and Healthy Dwellings). Funded by Real Dania. 2009-June – 2015-Dec. WP4 Leader. <http://www.cisbo.dk/english>
- **(Airway effects of spray products for surface coating)** Luftvejseffekter af sprayprodukter til overfladebehandling og imprægnering - toksikologisk og fysisk/kemisk karakterisering. Funded by Working Environment Research Fund, 2010-2014 and Ministry of Environment (Danish EPA) in 2012.
- **Biocides in spray products – exposure and health** (Biocider i sprayprodukter - eksponering og sundhed). Funded by Danish EPA, 2015-2017.
- **Spray products, chemical compounds and asthma in the cleaning branch** (Sprayprodukter, kemiske stoffer og astma i rengøringsbranchen). Funded by Working Environment Research Fund, 2018-2021.

## 163 publications in journals with peer-review - 2020 – 1972 P WOLKOFF

Leading or responsible author in 89 papers; sole-author of 23 papers

📌 Three top-cited SCI-papers (156, 148 and 131)

### 2020 (5)

163. **Wolkoff**, P. Dry symptoms in offices and deteriorated work performance. *Build Environ*, **172** (2020) 106704 (11 pages).
162. Palmisani, J., Nørgaard, A.W., Kofoed-Sørensen, V., Clausen, P.A., de Gennaro, **Wolkoff**, P. Formation of ozone-initiated VOCs and Secondary Organic Aerosol following application of a carpet deodorizer. *Atmos Environ*, **222** (2020); 117149 (10 pages).
161. **Wolkoff**, P. Indoor air chemistry: Terpene reaction products and airway effects. *Int J Hyg Environ Health*, **225** (2020) 113439 (8 pages).
160. Clausen, P.A., Mørck, TA, Jensen, A.C.Ø., Schou, T.W., Kofoed-Sørensen, V., Koponen, I.K., Frederiksen, M., Detmer, A., Fink, M., Nørgaard, A.W., **Wolkoff**, P. Biocidal Spray Product Exposure: Measured Gas, Particle and Surface Concentrations compared with Spray Model Simulations. *J Occup Environ Hyg*, **17** (2020) 15-29.
159. Spinazzè, A., Campagnolo, D., Cattaneo, A., Urso, P., Sakellaris, I.A., Saraga, D.E., Mandin, D., Canha, N., Mabilia, R., Perreca, E., Mihucz, V.G., Szigeti, T., Ventura, G., de Oliveira Fernandes, E., de Kluzenaar, Y., Cornelissen, E., Hänninen, O., Carrer, P., **Wolkoff**, P., Cavallo, D.M., Bartzis, J.G. Indoor air pollutants determinants in office buildings - the OFFICAIR project. *Indoor Air*, **30** (2020) 76-87.

### 2018-2017 (11)

158. **Wolkoff**, P. The mystery of dry indoor air: An overview. *Environ Int*. **121** (2018) 1058-1065.
157. Carrer, P., **Wolkoff**, P. Assessment of indoor air quality problems in office-like environments: Role of occupational health services. *Int J Environ Res Public Health*, **2018**, 15, E741 (8 pages).
156. **Wolkoff**, P. Indoor humidity, air quality and health. An overview. *Int J Hyg Environ Health*, **221** (2018) 376-390. 📌 *Top cited paper (ISI, Web of Knowledge)*
155. Wells, J.R., Schoemaeker, C., Carlsaw, N., Waring, M.S., Ham, J., Nelissen, I., **Wolkoff**, P. Reactive indoor air chemistry and health – A workshop summary. *Int J Hyg Environ Health*, **220** (2017) 1222-1229.
154. Scheepers, P.T.J., Masen-Poos, L., van Rooy, F., Oerlemans, A., van Daalen, E., Cremers, R., Lichtenbeld, H., Biesma, B., Sørli, J.B., Koponen, I.K., Larsen, S.T., **Wolkoff**, P., Nørgaard, A.W. Pulmonary injury associated with spray of a water-based nano-sized waterproofing product: a case study. *J Occup Med Toxicol*, **12**:33 (2017).
153. Nielsen, G.D., **Wolkoff**, P. Evaluation of airborne sensory irritants for setting exposure limits or guidelines: A systematic approach. *Regul Pharmacol Toxicol*, **90** (2017) 308-317.
152. Campagnolo, D.; Saraga, D.E.; Cattaneo, A.; Spinazze, A.; Mandin, C.; Mabilia, R.; Perreca, P.; Sakellaris, I.; Canha, N.; Mihucz, V.G.; Szigeti, T.; Ventura, G.; Madureira, J.; Fernandes, E.D.O.; de Kluzenaar, Y.; Cornelissen, E.; Hänninen, O.; Carrer, P.; **Wolkoff**, P.; Cavallo, D.M.; Bartzis, J.G. VOCs and aldehydes source identification in European office buildings - The OFFICAIR study. *Build Environ* **115** (2017) 18-24.
151. **Wolkoff**, P., Nielsen, G.D. Effects by inhalation of abundant fragrances in indoor air – an overview. *Environ Int* (2017) **101** (2017) 96-107.
150. Mandin, C., Trantallidi, M., Cattaneo, A., Canha, N., Mihucz, V.G., Szigetti, T., Mabilia, R., Perreca, E., Spinazzè, A., Fossati, S., De Kluzenaar, Y., Cornelissen, E., Sakellaris, I., Saraga, D., Hänninen, O., Fernandes, E.D.O., Ventura, G., **Wolkoff**, P., Carrer, P., Bartzis, J. Assessment of indoor air quality in office buildings across Europe – The OFFICAIR study. *Sci Tot Environ*, **579** (2017) 169-178.
149. **Wolkoff**, P. External eye symptoms in indoor environments. *Indoor Air*, **27** (2017) 246-260.
148. Nielsen, G.D., Larsen, S.T., **Wolkoff**, P. Re-evaluation of the WHO (2010) formaldehyde indoor air quality guideline for cancer risk assessment. *Arch Toxicol* **91** (2017) 35-61. 📌 *Top-cited paper (ISI, Web of Knowledge)*

### 2016-2015 (5)

147. Hansen, J.S., Nørgaard, A.W., Koponen, I.K., Sørli, J.B., Paidi, M.D., Hansen, S., Clausen, P.A., Nielsen, G.D., **Wolkoff**, P., Larsen, S.T. Limonene and its ozone-initiated reaction products attenuate allergic lung inflammation in mice. *J Immunotoxicol*, **13** (2016) 793-803.
146. Madsen, A.M., Larsen, S.T., Koponen, I.K., Kling, K.I., Barooni, A., Karotki, D.G., Tendal, K., Frederiksen, M.W., **Wolkoff**, P. Generation and characterization of indoor fungal aerosols for inhalation studies. *Appl Environ Microbiol*, **82** (2016) 2479-2493.
145. **Wolkoff**, P., Crump, D.J., Harrison, T.T.C. Pollutant exposures and health symptoms in aircrew and office workers: Is there a link? *Environ Int*, **82** (2016) 74-84.
144. Trantallidi, M., Dimitropoulou, C., **Wolkoff**, P., Kephelopoulos, S., Carrer, P. EPHECT III: Health risk assessment of exposure to household consumer products. *Sci Tot Environ*, **536** (2015) 903-913.
143. Bartzis, J., **Wolkoff**, P., Stranger, M., Efthimiou, G., Tolis, E., Maes, F., Nørgaard, A.W., Ventura, G., Kalimeri, K., Goelen, E., Fernandes, O. Intercomparisons on organic emissions from indoor use of consumer products' use. *J Hazard Mat.*, **285** (2015) 37-45.

### 2014-2013 (12)

142. Nørgaard, A.W., Kofoed-Sørensen, V., Mandin, C., Ventura, G., Mabilia, R., Perreca, E., Cattaneo, A., Spinazzè, A., Mihucz, V.G., Szigeti, T., de Kluzenaar, Y., Cornelissen, H.J.M., Trantallidi, M., Carrer, P., Sakellaris, I., Bartzis, J., **Wolkoff**, P. Ozone-initiated Terpene Reaction Products in Five European Offices: Replacement of a Floor Cleaning Agent, *Environ Sci Technol*,

- 48** (2014) 13331-13339.
141. Duch, P., Nørsgaard, A.W., Hansen, J.S., Sørli, J.B., Jacobsen, P., Lynggaard, F., Levin, M., Nielsen, G.D., **Wolkoff**, P., Ebbehøj, N., Larsen, S.T. Pulmonary toxicity following exposure to aerosolized nanoparticle. Clinical and toxicological evaluation of an outbreak, *Clin Toxicol*, **52** (2014) 498-505.
  140. Vibenholt, A., Clausen, P.A., **Wolkoff**, P. Ozone reaction characteristics of indoor floor dust examined in the emission cell "FLEC", *Chemosphere*, **107** (2014) 230-239.
  139. Nørsgaard, A.W., Kudal, J.D., Kofoed-Sørensen, V., Koponen, I.K., **Wolkoff**, P. Airway effects of ozone-initiated VOC and particle emissions from a cleaning agent and an air freshener: A risk assessment, *Environ Int*, **68** (2014) 209-218.
  138. Nørsgaard, A.W., Hansen, J.S., Sørli, J.B., Levin, M., **Wolkoff**, P., Nielsen, G.D., Larsen, S.T. Pulmonary toxicity of perfluorinated siloxanes in nanofilm spray products: Solvent dependence, *Toxicol Sci*, **137** (2014) 179-188.
  137. Hansen, J.S., Nielsen, G.D., Sørli, J.B., Clausen, P.A., **Wolkoff**, P., Larsen, S.T. Adjuvant and inflammatory effects in mice after repeated subchronic inhalation of allergen and ozone-initiated limonene reaction products, *J Toxicol Environ Health A*, **76** (2013) 1085-1095.
  136. Nørsgaard, A.W., Vibenholt, A., Benassi, M., Clausen, P.A., **Wolkoff**, P. Study of ozone-initiated limonene reaction products by low temperature plasma ionization mass spectrometry, *J Am Soc Mass Spectrom*, **24** (2013) 1090-1096.
  135. Larsen, S.T., **Wolkoff**, P., Hammer, M., Kofoed-Sørensen, V., Clausen, P.A., Nielsen, G.D., Acute airway effects of airborne formaldehyde in sensitized and non-sensitized mice housed in a dry or humid environment, *Toxicol Appl Pharmacol*, **268** (2013) 294-299.
  134. Nørsgaard, A.W., Kofoed-Sørensen, V., Svensmark, B., **Wolkoff**, P., Clausen, P.A. Gas chromatography interfaced with atmospheric pressure ionization-quadrupole time-of-flight-mass spectrometry by low-temperature plasma ionization, *Anal Chem*, **85** (2013) 28-32.
  133. **Wolkoff**, P., Larsen, S.T., Hammer, M., Kofoed-Sørensen, V., Clausen, P.A., Nielsen, G.D. Human reference values for acute airway effects of five common ozone-initiated terpene reaction products in indoor air, *Toxicol Lett*, **216** (2013) 54-64.
  132. Nielsen, G.D., Larsen, S.T., **Wolkoff**, P. Recent trend in risk assessment of airborne formaldehyde, *Arch Toxicol*, **87** (2013) 73-98.
  - 131. Wolkoff**, P. Indoor air pollutants in office environments: assessment of comfort, health, and performance. *Int J Hyg Environ Health*, **216** (2013) 371-394. [Top cited paper \(ISI, Web of Knowledge\)](#)

#### 2012-2011 (4)

130. **Wolkoff**, P., Clausen, P.A., Larsen, S.T., Hammer, M., Nielsen, G.D. Airway effects of repeated exposures to ozone-initiated limonene oxidation products as model of indoor air mixtures. *Toxicol Lett*, **209** (2012) 166-172.
129. Clausen, P.A., Liu, Z., Kofoed-Sørensen, V., Little, J., **Wolkoff**, P. The influence of temperature on the emission of di-(2-ethylhexyl) phthalate (DEHP) from PVC flooring in the emission cell FLEC. *Environ Sci Technol*, **46** (2012) 909-915.
128. **Wolkoff**, P., Kärcher, T., Mayer, H. Problems of the outer eyes in the office environment: An ophthalmologic approach. *J Occup Environ Med*, **54** (2012) 621-631.
127. Nørsgaard, A.W., Janfelt, C., Benassi, M., **Wolkoff**, P., Lauritsen, F.R. Electrospray and desorption ionization analysis of reactive organo-functionalized silanes in nano film products, *J Mass Spectrom*, **46** (2011) 402-410.

#### 2010-2009 (8)

126. **Wolkoff**, P. Ocular discomfort by environmental and personal risk factors altering the precorneal tear film. *Toxicol Lett*, **199** (2010) 203-212.
125. **Wolkoff**, P., Nielsen, G.D. Non-cancer effects of formaldehyde and relevance for setting an indoor air guideline. *Environ Int*, **36** (2010) 788-799.
124. Nørsgaard, A.W., **Wolkoff**, P., Lauritsen, F.R. Characterization of nano film spray products by mass spectrometry. *Chemosphere*, **80** (2010) 1377-1386.
123. Nielsen, G.D., **Wolkoff**, P. Cancer effects of formaldehyde: A proposal for an indoor air guideline value. *Arch Toxicol* **84** (2010) 423-446.
122. Nørsgaard, A.W., Larsen, S.T., Hammer, M., Poulsen, S.S., Jensen, K.A., Nielsen, G.D., **Wolkoff**, P. Lung damage in mice after inhalation of nanofilm spray products: The role of perfluorination and free OH groups, *Toxicol Sci*, **116** (2010) 216-224.
121. Nørsgaard, A.W., Jensen, K.A., Janfelt, C., Lauritsen, F.R., Clausen, P.A., **Wolkoff**, P. Release of VOCs and particles during use of nano film spray products, *Environ Sci Technol*, **43** (2009) 7824-7830.
120. Carslaw, N., Langer, S., **Wolkoff**, P. Where is the link between reactive indoor air chemistry and health effects? *Atmos Environ*, **43** (2009) 3808-3809.
119. Vibenholt, A., Nørsgaard, A.W., Clausen, P.A., **Wolkoff**, P. Formation and stability of secondary ozonides from monoterpenes studied by mass spectrometry, *Chemosphere*, **76** (2009) 572-577.

#### 2008-2007 (15)

118. Clausen, P.A. Knudsen, H.N., Larsen, K., **Wolkoff**, P., Wilkins, C.K. Use of thermal desorption gas chromatography olfactometry/mass spectrometry for the comparison of identified and unidentified odor active compounds emitted from building products containing linseed oil, *J. Chromatography A* **1210** (2008) 203-211.
117. **Wolkoff**, P., Clausen, P.A., Larsen, K., Hammer, M. and Nielsen, G.D. Acute airway effects of ozone-initiated *d*-limonene chemistry: Importance of gaseous products. *Toxicol Lett*, **181** (2008) 171-176.
116. **Wolkoff**, P. "Healthy" eye in office-like environments. *Environ Int*, **34** (2008) 1204-1214.
115. Nielsen, P.K., Sjøgaard, K., Skotte, J., **Wolkoff**, P. Ocular surface area and human eye blink frequency during VDU work – the effect of monitor position. *European J. Physiology*, **103** (2008) 1-7.

114. Nørgaard, A.W., Nøjgaard, J.K., Clausen, P.A., **Wolkoff**, P. Secondary ozonides of substituted cyclohexenes: A new class of pollutants characterized by collision-induced dissociation mass spectrometry using negative chemical ionization, *Chemosphere*, **70** (2008) 2032-2038.
113. Nøjgaard, J.K., Nørgaard, A.W. and **Wolkoff**, P. On-line analysis of secondary ozonides from cyclohexene and d-limonene ozonolysis using atmospheric sampling Townsend discharge ionization mass spectrometry, *Atmos Environ*, **41** (2007) 8345-8354.
112. **Wolkoff**, P., Kjærgaard, S.K. The dichotomy of relative humidity in office-like environments. *Environ Int*, **33** (2007) 850-857.
111. Cain, W.S., Schmidt, R. and **Wolkoff**, P. Olfactory detection of ozone and d-limonene: Reactants in indoor spaces, *Indoor Air*, **17** (2007) 337-347.
110. Nøjgaard, J.K., Nørgaard, A.W. and **Wolkoff**, P. Atmospheric sampling of some endocyclic alkene secondary ozonides using Townsend discharge ionization mass spectrometry, *Int J Mass Spectrom*, **263** (2007) 88-93.
109. Nielsen, G.D., **Wolkoff**, P., Alarie, Y. Sensory irritation: Risk assessment approaches, *Regul Toxicol Pharmacol*, **48** (2007) 6-18.
108. Wilkins, C.K., **Wolkoff**, P., Knudsen, H.N., Clausen, P.A. The impact of information on perceived air quality – “organic” versus “synthetic” building materials, *Indoor Air*, **17** (2007) 130-134.
107. Nielsen, G.D., Larsen, S.T., Olesen, O., Løvik, M., Poulsen, L.K., Glue, C., **Wolkoff**, P. Do indoor chemicals promote airway allergy? *Indoor Air*, **17** (2007) 226-235.
106. Nørgaard, J.K., Larsen, K. and **Wolkoff**, P. Atmospheric sampling Townsend discharge ionisation mass spectrometry for analysis of gas-phase mixtures. *International Journal of Mass Spectrometry*, **260** (2007) 49-56.
105. Clausen, P.A., Xu, Y., Kofoed-Sørensen, V., Little, J.C., **Wolkoff**, P. The influence of humidity on the emission of di-(2-ethylhexyl) phthalate (DEHP) from vinyl flooring in the emission cell “FLEC”. *Atmos Environ*, **41** (2007) 3217-3224.
104. Knudsen, H.N., Clausen, P.A., Wilkins, C.K. and **Wolkoff**, P. Sensory and chemical evaluation of odorous emissions from building products with and without linseed oil. *Building and Environment*, **42** (2007) 4059-4067.

#### 2006-2005 (10)

103. Nørgaard, A.W., Nøjgaard, J.K., Larsen, K., Spørring, S. Wilkins, C.K., Clausen, P.A., **Wolkoff**, P. Secondary limonene endo-ozonide: A major product from gas-phase ozonolysis of R-(+)-limonene at ambient temperature. *Atmos Environ*, **40** (2006) 3460-3466.
102. **Wolkoff**, P., Nøjgaard, J.K., Franck, C., Skov, P. Udtørrer det moderne kontormiljø øjnene? *Ugeskrift for læger*, (2006), 3893-3896.
101. **Wolkoff**, P., Nøjgaard, J.K., Franck, C. Skov, P. The modern office environment desiccates the eyes? *Indoor Air* (2006) **16**, 258-265.
100. Nøjgaard, J.K., Stenby, C., Bilde, M., Nielsen, O.J., **Wolkoff**, P. The effect of NO<sub>x</sub> on particle formation during ozonolysis of two abundant monoterpenes indoors”, *Atmos Environ* **40** (2006) 1030-1042.
99. **Wolkoff**, P., Wilkins, C.K., Clausen, P.A., Nielsen, G.D. Organic compounds in office environments – Sensory irritation, odor, measurements, and the role of reactive chemistry, *Indoor Air*, **16** (2006) 7-19.
98. Nielsen, G.D., Larsen, S.T., Hougaard, K.S., Hammer, M., **Wolkoff**, P., Clausen, P.A., Wilkins, C.K., Alarie, Y. Mechanism of acute inhalation effects of (+) and (-)- $\alpha$ -pinene in BALB/c mice, *Pharmacol Toxicol* **96** (2005) 420-428.
97. Nøjgaard, J.K., Christensen, K.B., **Wolkoff**, P. “The effect on human blink frequency by exposure to limonene oxidation products and methacrolein”, *Toxicol Lett*, **156** (2005) 241-251.
96. **Wolkoff**, P., Klenø, J., Troiano, P. and Piccoli, B. Eye complaints in the office environment: The influence of the precorneal tear film integrity and eye blinking efficiency. *Occup Environ Med* **62** (2005) 4-12.
95. **Wolkoff**, P., Salthammer, T., Woolfenden, E.A. Emission Cells and Comparison to Small Chambers for Materials Emissions Testing, *Gefahrstoffe – Reinhaltung der Luft* **65** (2005) 93-98.
94. Carslaw, N., **Wolkoff**, P. A new European initiative for indoor air pollution research, *Indoor Air* **16** (2006) 4-6.

#### 2004-2003 (5)

93. Klenø, J. and **Wolkoff**, P. Changes in Eye Blink Frequency as a Measure of Trigeminal Stimulation by Exposure to Limonene Oxidation Products, Isoprene Oxidation Products and Nitrate Radicals, *Int Arch Occup Environ Health*, **77** (2004) 235-243.
92. Clausen, P.A., Hansen, V., Gunnarsen, L., Afshari, A., **Wolkoff**, P. Emission and sorption of di(2-ethylhexyl)phthalate from PVC flooring into air and dust in FLEC and CLIMPAQ. *Environ Sci Technol*. **39** (2004) 2531-2537.
91. **Wolkoff**, P., Skov, P., Franck, C., Petersen, L.P. Eye irritation and environmental factors in the office environment. Hypotheses, causes, and a physiological model, *Scan J Work, Environ & Health*, **29** (2003) 411-430.
90. Wilkins, C.K., **Wolkoff**, P., Clausen, P.A., Hammer, M. and Nielsen, G.D. Upper airway irritation of terpene/ozone oxidation products (TOPs). Dependence on reaction time relative humidity, and initial ozone concentration, *Toxicol Lett*, **143** (2003) 109-114.
89. Knudsen, H.N., Nielsen, P.A., Clausen, P.A., Wilkins, C.K. and **Wolkoff**, P. Sensory evaluation of emissions from selected building products exposed to ozone, *Indoor Air*, **13** (2003) 223-231.
88. **Wolkoff**, P. Trends in Europe to Reduce the Indoor Air Pollution of VOCs, *Indoor Air*, **13** (Suppl. 6) (2003) 5-11.

#### 2002-2000 (10)

87. Vejrup, K.V. and **Wolkoff**, P. Linear alkylbenzene sulphonates in indoor floor dust. *Science Tot Environ*, **300** (2002) 51-58.
86. Klenø, J.G., **Wolkoff**, P., Clausen, P.A., Wilkins, C.K. and Pedersen, T. Degradation of the adsorbent Tenax TA by nitrogen oxides, ozone, hydrogen peroxide, OH radical, and limonene oxidation products, *Environ Sci Technol*, **37** (2002) 4121-4126.

85. Rohr, A., Wilkins, C.K., Clausen, P.A., Hammer, M., Nielsen, G.C., **Wolkoff**, P and Spengler, J.D. Upper airway and pulmonary effects of oxidation products of (+)- $\alpha$ -Pinene, d-limonene and isoprene in BALB/c mice, *Inhal Toxicol*, **14** (2002) 663-684.
84. **Wolkoff**, P. and Nielsen, G.D. Organic compounds in indoor air – Their relevance for perceived indoor air quality, *Atmos Environ*, **35** (2001) 4407-4417.
83. Klenø, J.G., Clausen, P.A., Weschler, C., **Wolkoff**, P. Determination of ozone removal rates by selected building products using the FLEC emission cell, *Environ Sci Technol*, **35** (2001) 2548-2553.
82. Wilkins, C.K., Clausen, P.A., **Wolkoff**, P. Larsen, S.T., Hammer, M., Larsen, K., Hansen, V., Nielsen, G.D. Formation of strong airway irritants in a model mixture of isoprene/ozone, *Environ Health Perspect*, **109** (2001) 937-941.
81. Clausen, P.A., Wilkins, C.K., **Wolkoff**, P. and Nielsen, G.D. Chemical and biological evaluation of a reaction mixture of R-(+)-limonene/ozone: Formation of strong airway irritants, *Environ Int*, **26** (2001) 511-522.
80. Larsen, S.T., Hougaard, K.S., Hammer, M., Alarie, Y., **Wolkoff**, P., Clausen, P.A., Wilkins, C.K. and Nielsen, G.D. Effects of R-(+)- and R(-)-limonene on the respiratory tract in mice, *Hum Exp Toxicol*, **19** (2000) 457-466.
79. Peitersen, J., Brohus, H., Hyldgaard, C.E., Nielsen, J.B., Valbjørn, O., Hauschildt, P., Kjærgaard, S.K., **Wolkoff**, P. The effect of renovating an office building on occupants' comfort and health, *Indoor Air*, **11** (2001) 10-25.
78. **Wolkoff**, P., Clausen, P.A., Wilkins, C.K., and Nielsen, G.D. Strong airway irritants formed in terpene/ozone mixtures, *Indoor Air*, **10** (2000) 82-91.

#### 1999-1998 (9)

77. Nielsen, G.D., Hougaard, K.S., Larsen, S.T., **Wolkoff**, P., Clausen, P.A., Wilkins, C.K., Alarie, Y. Sensory irritation, pulmonary irritation and bronchoconstriction due to acute airborne exposures to formaldehyde and ozone in BALB/c mice, *Hum Exp Toxicol*, **18** (1999) 400-409.
76. **Wolkoff**, P. How to evaluate VOC emissions from building products. A perspective, *Sci Tot Environ*, **227** (1999) 199-213.
75. **Wolkoff**, P. Photocopiers and Indoor Air Pollution, New Directions paper in *Atmos Environ*, **33** (1999) 2129-2130.
74. Knudsen, H.N., Kjær, U.D., Nielsen, P.A., **Wolkoff**, P. Sensory and Chemical Characterization of Emissions from Building Products: Impact of Concentration and Air Velocity, *Atmos Environ*, **33** (1999) 1217-1230.
73. **Wolkoff**, P., Clausen, P.A., Wilkins, C.K., Hougaard, K.S., Nielsen, G.D. Formation of Strong Airway Irritants in a Model Mixture of (+)- $\alpha$ -Pinene/Ozone, *Atmos Environ (Fast track)*, **33** (1999) 693-698.
72. Wilkins, C.K., Larsen, S.T., Hammer, M., Poulsen, O.M. **Wolkoff**, P., Nielsen, G.D. Respiratory effects in mice exposed to airborne emissions from *Stachybotrys chartarum* and implications for risk assessment, *Pharmacol & Toxicol*, **83** (1998) 112-119.
71. Clausen, P.A., Wilkins, C.K., **Wolkoff**, P. Gas chromatographic analysis of fatty acids and fatty acid salts extracted with neutral and acidified dichloromethane from office floor dust, *J. Chromatogr.*, **814** (1998) 161-170.
70. **Wolkoff**, P., Schneider, T., Kildesø, J., Degerth, R., Jaroszewski, M., Schunk, H. Risk in Cleaning - Chemical and Physical Exposure and Quality of Cleaning, *Sci Tot Environ*, **215** (1998) 135-156.
69. **Wolkoff**, P. Impact of air velocity, temperature, humidity, and air on long-term VOC emissions from building products, *Atmos Environ*, **32** (1998) 2659-2668.

#### 1997-1996 (14)

68. Jr. Bardana et al. American Thoracic Society, Achieving Healthy Indoor Air, Report of the ATS Workshop: Santa Fe, New Mexico, November 16-19, 1995, *Am. J. Respir. Crit. Care Med.* **156** (1997), Part 2: S33-S64.
67. Wilkins, C.K., Nielsen, **Wolkoff**, P. Patterns in volatile organic compounds in dust from moldy buildings, *Indoor Air* **7** (1997) 128-134.
- 66<sup>2</sup> **Wolkoff**, P., Clausen, P.A., Jensen, B., Nielsen, G.D. and Wilkins, C.K. Are We Measuring the Relevant Indoor Pollutants?, *Indoor Air*, **7** (1997) 92-106.
65. Clausen, P.A. and **Wolkoff**. Evaluation of Automatic Thermal Desorption - Capillary GC for Determination of Semivolatile Organic Compounds (SVOCs) in Indoor Air. *J High Resol Chromatogr*, **20** (1997) 99-108.
64. Clausen, P.A. and **Wolkoff**, P. Degradation Products of Tenax TA Formed During Sampling and Thermal Desorption Analysis: Indicators of Reactive Species Indoors, *Atmos Environ*, **31** (1997) 715-725.
63. Nielsen, G.D., Hansen, L.F. and **Wolkoff**, P. Chemical and Biological Evaluation of Building Material Emissions. Part 2. Approaches for Setting Indoor Air Standards or Guidelines for Chemicals. *Indoor Air*, **7** (1997) 17-32.
62. Nielsen, G.D., Hansen, L.F., Hammer, M., Vejrup, K. and **Wolkoff**, P. Chemical and Biological Evaluation of Building Material Emissions. Part 1. Sensory Evaluation. *Indoor Air*, **7** (1997) 8-16.
61. Jensen, Olsen, **Wolkoff**, P. Toluene in Roto-Gravure Printed Brochures. High-Speed Emission Testing and Comparison with Exposure Data, *Appl. Occup. Environ. Hyg.*, (1996) 1055-1063.
60. Jensen, **Wolkoff**, P., Wilkins. Characterization of Linoleum. Identification of Oxidative Emission Processes. In Tichenor, B.A. (ed): Characterizing Indoor Air Pollution and Related Sinks, ASTM STP 1287, American Society for Testing Materials Publication, Philadelphia, Pa., pp. 145-152.
59. Kjær, Nielsen, Vejrup, **Wolkoff**, P. A Method for Determination of the Sink Effect of VOCs from Building Materials. In Tichenor, B.A. (ed): Characterizing Indoor Air Pollution and Related Sinks, ASTM STP 1287, American Society for Testing Materials Publication, Philadelphia, Pa., pp. 123-133.
58. **Wolkoff**, P., Nielsen. Indoor Climate Labeling of Building Materials. The Experimental Approach for a Prototype. In Tichenor, B.A. (ed): Characterizing Indoor Air Pollution and Related Sinks, ASTM STP 1287, American Society for Testing Materials Publication, Philadelphia, Pa., pp. 331-349.

<sup>2</sup> Best Paper Award in Indoor Air Journal (1996-1998) by IAIAS.

57. **Wolkoff, P.**, Nielsen. Indoor Climate Labeling of Building Materials in Denmark - Chemical Emission Testing, Modeling, and Odor Thresholds. *Atmos Environ*, **30** (1996) 2679-2689.
56. Mølhav, L., Sparks, L.S., **Wolkoff, P.**, Clausen, P.A., Nielsen, P.A. and Bergsøe, N. The Danish Twin Apartment Study. Part II: The Relative Source Strength of Indoor Sources Related to the Building. *Indoor Air*, **6** (1996) 18-30.
55. **Wolkoff, P.** A Micro Emission Cell for Measurements of Volatile Organic Compounds Emitted from Building Materials for Indoor Use - The Field and Laboratory Emission Cell (FLEC). *Gefahrstoffe - Reinhaltung der Luft*, **56** (1996) 151-157.

#### 1995-1994 (9)

- 54.<sup>3</sup> **Wolkoff, P.** Volatile organic compounds. Sources, Measurements, Emissions, and Aspects of Their Impact on the Indoor Air Quality. *Indoor Air*, **5** Suppl. 3 (1995) 1-73.
53. **Wolkoff, P.**, Clausen, P.A. and Nielsen, P.A. Applications of Field and Laboratory Emission Cell FLEC - Performance and Intercomparison Studies, and Case Study of Damaged Linoleum in an Office. *Indoor Air*, **5** (1995) 196-203.
52. Jensen, B., **Wolkoff, P.**, Wilkins, C.K. Characterization of linoleum. Part 2: Preliminary odour evaluation. *Indoor Air* **5** (1995) 44-49.
51. Jensen, B., **Wolkoff, P.**, Wilkins, C.K. and Clausen, P.A. "Characterization of linoleum. Part I: Measurement of VOC by use of FLEC. *Indoor Air* **5** (1995) 38-43.
50. **Wolkoff, P.** and Wilkins, C.K. Household Floor Dust as a Source of VOCs. Comparison of Headspace with Desorbed VOCs, Method for VOC Release Determination. *Indoor Air*, **4** (1994) 248-254.
49. Gyntelberg, F., Suadecani, P., Nielsen, J.W., Skov, P., Valbjørn, O., Nielsen, P.A., Schneider, T., Jørgensen, O., **Wolkoff, P.**, Wilkins, C.K., Gravesen, S. and Norn, S. Dust and the Sick Building Syndrome. *Indoor Air* **4** (1994) 223-248.
48. Nielsen, P.A., Jensen, L.K., Bastholm, P., Eng, K., Hugod, C., Husemoen, T., Mølhav, L. and **Wolkoff, P.** Technical and health-related evaluation of building materials". *Indoor Air* **4** (1994) 146-153.
47. Hodgson, M., Levin, H. and **Wolkoff, P.** "Volatile organic compounds and indoor air". *J. Allergy, Clin. Immunol. Suppl.*, **94** (2 pt) (1994) 296-303.
46. Gunnarsen, L., Nielsen, P.A. and **Wolkoff, P.** "Design and characterization of the CLIMPAQ, Chamber for Laboratory Investigations of Materials, Pollution and Air Quality". *Indoor Air*, **4** (1994) 56-62.

#### 1993-1992 (6)

45. Wilkins, C.K., **Wolkoff, P.**, Gyntelberg, F., Skov, P. and Valbjørn, O. Characterization of office dust by VOC and TVOC release - Identification of potential VOC by PLS analysis. *Indoor Air*, **3** (1993) 283-290.
44. **Wolkoff, P.**, Clausen, P.A., Nielsen, P.A., Gunnarsen, L. "Documentation of Field and Laboratory Emission Cell "FLEC" - Identification of emission processes from carpet, linoleum, paint, and sealant. *Indoor Air*, **3** (1993) 291-297.
43. Nielsen, G.D., Heissel Petersen, S., Vinggaard, A.M., Hansen, L.F. and **Wolkoff, P.** "Respiratory rate, Tidal volume, CO<sub>2</sub> production, and effects of CO<sub>2</sub> exposure in conscious, restrained CF-1 mice", *Pharmacol Toxicol* **72** (1993) 163-168.
42. **Wolkoff, P.**, Wilkins, C.K., Clausen, P.A., Larsen, K. Comparison of Volatile Organic Compounds from Processed Paper and Toners from Office Copiers and Printers: Methods, Emission Rates, and Modeled Concentrations, *Indoor Air*, **3** (1993) 113-123.
41. Clausen, P.A., Lauersen, B., **Wolkoff, P.**, Rasmusen, E. and Nielsen, P.A. "Emission of Volatile Organic Compounds from a Vinyl Floor Covering". Modeling of Indoor Air Quality and Exposure, American Society for Testing Materials Publication, Philadelphia, Pa., ASTM STP 1205, pp. 3-13.
40. **Wolkoff, P.**, Johnsen, C.R., Franck, C., Wilhardt, P. and Albrechtsen, O. A Study of Human Reactions to the Emissions of Office Machines in a Climatic Chamber, *J Exp Anal Environ Epidemiol*, Suppl. 1, 71-96.

#### 1991-1990 (7)

39. **Wolkoff, P.**, Clausen, P.A., Nielsen, P.A., Gustafsson, H., Johnsson, B. and Rasmusen, E. Field and Laboratory Emission Cell "FLEC", Healthy Buildings 1991, ASHRAE paper, pp 160-165.
38. Clausen, P.A., **Wolkoff, P.**, Holst, E. and Nielsen, P.A. Long term emissions of volatile organic compounds from waterborne paints. Methods of comparison. *Indoor Air* **1** (1991) 562-576.
37. **Wolkoff, P.**, Clausen, P.A., Nielsen, P.A. and Mølhav, L. The Danish twin apartment study. Part I: Formaldehyde and Long-term measurements of VOC. *Indoor Air* **1** (1991) 478-490.
36. **Wolkoff, P.**, Nielsen, G.D., Hansen, L.F., Albrechtsen, O., Johnsen, C.R., Heinig, J.H., Franck, C. and Nielsen, P.A. A study of human reactions to building materials in climatic chambers. Part II: VOC measurements, mouse bioassay, and decipol evaluation. *Indoor Air* **1** (1991) 389-403.
35. Johnsen, C.R. Heinig, J.H., Schmidt, K., Albrechtsen, O., Nielsen, P.A. **Wolkoff, P.**, Nielsen, G.D., Hansen, L.F. and Franck, C.A. study of human reactions to building materials in climatic chambers. Part I: Performance and comfort. *Indoor Air* **1** (1991) 377-388.
34. **Wolkoff, P.** Some guides for measurements of volatile organic compounds indoors, *Environ. Tech.* **11** (1990) 339-344.
33. **Wolkoff, P.** Proposal of methods for developing healthy building materials - laboratory and field experiments, *Environ. Tech.* **11** (1990) 327-338.

#### 1988-1983 (6)

32. **Wolkoff, P.** and Holmes, J.L. The importance of measuring metastable peaks and in conjunction with deuterium-labeling, *Int. J. Mass Spectrom. Ion Phys.* **47** (1983) 89-92.

<sup>3</sup> Doctoral (habilitation) dissertation (peer-reviewed), University of Copenhagen, 1996.

31. **Wolkoff**, P. Hammerum, S. and Holmes, J.L. Alkanes revisited - the behaviour of  $C_6H_{14}^+$  ions, *Int. J. Mass Spectrom. Ion Phys.* **47** (1983) 343-346.
30. **Wolkoff**, P. Holmes, J.L. and Lossing, F.P. The dichotomy of methyl loss from 2-methylalkane molecular ions, *Org. Mass Spectrom.* **20** (1985) 14-17.
29. **Wolkoff**, P. Rules for 1,2-alkyl shifts in alkane molecular ions in the  $\mu s$  time frame, *Adv. Mass Spectrom.* **9** (1986) 783-784.
28. **Wolkoff**, P. The adaption of microwave desorption to GC<sup>2</sup>/MS in occupational health, *Adv. Mass Spectrom.* **9** (1986) 893-894.
27. **Wolkoff**, P., Hansen, L.F., Nielsen, G.D. Airway-irritating effect of carbonless copy paper examined by the sensory irritation test in mice, *Environ Int* **14** (1988) 43-48.

#### 1982-1979 (8)

26. **Wolkoff**, P. and Holmes, J.L. Isomeric cyclic  $C_6H_{10}^+$  ions; the energy for ring opening, *Can. J. Chem.* **57** (1979) 348-354.
25. Holmes, J.L., **Wolkoff**, P. and Rye, R. Extrusions of  $^{12}CH_3$  and  $^{12}CH_4$  from the molecular ion of  $^{13}CH_3CH_2-CH_2^{13}CH_3$ , *J.C.S. Chem. Comm.* (1979) 544-545.
24. **Wolkoff**, P., Holmes, J.L. and Lossing, F.P. On the formation of cyclopentenium cations from all  $C_6H_{10}^+$  molecular ion structures, *Can. J. Chem.* **58** (1980) 251-257.
23. **Wolkoff**, P., Holmes, J.L. and Rye, R. Evidence against isomerization in alkane molecular ions, *Adv. Mass Spectrom.* **8** (1980) 651-656.
22. **Wolkoff**, P., Holmes, J.L. and Lossing, F.P. Ubiquitous cyclo-pentenium<sup>+</sup> formation from  $C_6H_{10}$  molecular ions by methyl loss and from higher homologues, *Adv. Mass Spectrom.* **8** (1980) 743-747.
21. Holmes\*, J.L., Burgers, P.C., Mollah, M.Y.A. and **Wolkoff\***, P. Isomerization of alkane molecular ions, *J. Am. Chem. Soc.* **104** (1982) 2879-2884.
20. **Wolkoff**, P. Dehydrobromination of secondary and tertiary alkyl and cycloalkyl bromides with DBU; synthetic applications, *J. Org. Chem.* **47** (1982) 1944-1948.
19. **Wolkoff\***, P. and Holmes, J.L. COPE rearrangement and ring closure of the 1,5-hexadiene radical cation prior to low energy decomposition, *J. Org. Chem.* **47** (1982) 3342-3344.

#### 1978-1976 (12)

- 18<sup>§</sup>. **Wolkoff**, P. and Hammerum, S. The mass spectra of some simple phenylhydrazides, and a reexamination of the fragmentations of phenylhydrazine, *Org. Mass Spectrom.* **11** (1976) 375-382.
- 17<sup>§</sup>. **Wolkoff**, P. Fragmentation paths of O- and S- phenylbenzohydrazonates, and the isomeric N,N'- diphenylbenzohydrazides, *Org. Mass Spectrom.* **11** (1976) 394-397.
- 16<sup>§</sup>. **Wolkoff**, P. Fragmentation paths of hydrazonyl halides upon electron impact; simulation of nitrilimine formation *J.C.S. Perkin II* (1976) 921-924.
- 15<sup>§</sup>. **Wolkoff**, P. 1-substituted-3,5-diaryl-s-triazolo (3,4-c)-triazoles, *Acta Chem. Scand. Ser. B* **30** (1976) 463-464.
- 14<sup>§</sup>. **Wolkoff**, P. and Hammerum, S. Reaction of hydrazonyl halides with primary thioamides; formation of thiohydrazides and hydrazonyl sulphides, *Acta Chem. Scand. Ser. B* **30** (1976) 831-836.
- 13<sup>§</sup>. **Wolkoff**, P. and Hammerum, S. Reaction of hydrazonyl halides with secondary and tertiary thioamides; formation of 5-amino- and 5-alkoxy-1,3,4-thiadi-azolines, *Acta Chem. Scand. Ser. B* **30** (1976) 837-842.
12. Holmes, J.L., **Wolkoff**, P. and Terlouw, J.K. The isomerization of  $C_2H_4S^+$  ions; thioacetaldehyde as the only fragmenting species by H atom loss, *J.C.S. Chem. Comm.* (1977) 492-493.
11. Hammerum, S. and **Wolkoff**, P. Structure and reactions of  $C_6H_7N^+$  and  $C_6H_6N^+$  ions formed from phenylurethane upon electron impact *Acta Chem. Scand. Ser. B* **31** (1977) 871-874.
10. Hammerum, S. and **Wolkoff**, P. The structure of  $C_6H_7N^+$  and homologous fragment ions from simple aniline derivatives, and the influence of methyl substituents on the fragmentation of aniline and anilides, *Adv. Mass Spectrometry* **7** (1978) 1318-1321.
9. **Wolkoff**, P., Van der Greef, J. and Nibbering, N.M.M. The loss of  $C_2H_2O$  and  $C_3H_4O$  from the molecular ions of 3-phenylpropanal at short times studied by field ionization kinetics, isomerization of the molecular ions of 3-phenyl-2-propen-1-ol, *J. Am. Chem. Soc.* **100** (1978) 541-545.
8. **Wolkoff**, P. and Holmes, J.L. Isomerization of the 2,4,6- trimethyl-1-3-5-trithian molecular ion to that of 3,5,6-trimethyl-1,2,4-trithian before metastable decomposition in the gas phase, *Org. Mass Spectrom.* **13** (1978) 338-340.
7. **Wolkoff**, P. and Holmes, J.L. The fragmentations of alkane molecular ions, *J. Am. Chem. Soc.* **100** (1978) 7346-7352.

#### 1975-1972 (6)

- 6<sup>§</sup>. **Wolkoff**, P. Nemeth, S.T. and Gibson, M.S. Reaction of hydrazonyl halides with derivatives of thiourea and thiosemicarbazides; a new source of C-amino- and C-hydrazino-1,2,4-triazoles, *Can. J. Chem.* **53** (1975) 3211-3215.
- 5<sup>§</sup>. **Wolkoff**, P. A new method of preparing hydrazonyl halides, *Can. J. Chem.* **53** (1975) 1333-1335.
- 4<sup>§</sup>. **Wolkoff**, P. and Gibson, M.S. Formation of bis N-(aryl hydrazono)aralkyl disulphides from N-aryl-N'- thioaroylhydrazines and sulphonyl chlorides, and related topics, *J.C.S. Perkin I* (1974) 1173-1177.
3. **Wolkoff**, P., Hammerum, S., Callaghan, P.D. and Gibson, M.S. Routes to N-aryl-N'-thioaroylhydrazines and related sym- and unsym-hydrazonyl sulphides, and a note on the so-called N-phenyl-N'-thiobenzoyl-diimide, *Can. J. Chem.* **52** (1974) 879-883.
2. **Wolkoff**, P. and Hammerum, S. The mass spectrometry of 1,3,4-thiadiazolines, *Org. Mass Spectrom.* **9** (1974) 181-188.
1. Hammerum, S. and **Wolkoff**, P. Electron impact induced fragmentations mimicking retro-1,3-dipolar cycloadditions, *J. Org. Chem.* **37** (1972) 3965-3966.

<sup>§</sup> Part of Wolkoff, Ph.D. (lic.scient.) thesis, 1976 (University of Copenhagen).



## Comments to the editor (4)

4. **Wolkoff, P.** Comments to: "Assessment of formaldehyde levels in relation to respiratory and allergic symptoms in children from Alba County schools, Romania" by Neamtui et al. (2019). *Environ Monit Assess*, (2019) 191:682.
3. **Wolkoff, P., Nielsen, G.D.** Comment on: "Human symptom responses to bioeffluents, short-chain carbonyl/acids and long-chain carbonyls in a simulated aircraft cabin environment" by Weisel et al., *Indoor Air* (2017). *Indoor Air* **27** (2017) 1224-1225.
2. **Wolkoff, P., Nielsen, G.D.** Comment on: Differential health effects of constant and intermittent exposure to formaldehyde in mice: Implications for building ventilation strategies by Zhang et al. (2018). *Environ Sci Technol* (2018) 3320-3321.
1. **Wolkoff, P.** "Are we ready for indoor air pollution indices?" Commentary in *Indoor Air* **13** (2003) 371-372.

## Proceedings/abstracts/reports/book

- Co-authored: > 241 conference proceedings/abstracts
- Co-authored: 67 articles in Danish, and 33 national reports
- Co-authored: >18 international reports or book chapters
- Co-editor: 1 book on indoor air quality (Kluwer Academic Publ.), 1992
- Guest-editor: ScanJWorkEnviron&Health, 1998
- Editor: 2<sup>nd</sup> FLEC Symposium Proceedings, 2001

## Major international reports (8)

1. Carrer, P., **Wolkoff, P.** Consensus document: Role of occupational health services in the assessment and management of indoor air quality problems in offices. *ICOH NewsLetter*, Vol 16 (1), April 2018, p. 23-27.
2. Kephapopolous, S., Geiss, O., Annys, E. *et al*, and **Wolkoff, P.** Report No ECA 29: European Collaborative Action: Harmonisation framework for health based evaluation of indoor emissions from construction products in the European Union using the EU-LCI concept, European Commission, Joint Research Centre Institute for Health and Consumer Protection. December 2013, Luxembourg: Publications Office of the European Union, pp. 1-197.
3. Kaden D., Mandin, C., Nielsen, G.D., **Wolkoff, P.** Chapter 3. Formaldehyde, *Indoor Air Guidelines*, World Health Organization, Bonn, December 2010, WHO European Office, Copenhagen, pp. 97-149.
4. Kephapopolous, S., Kotzias, D., Kimmo, K., Carslaw, N., Carrer, P., Serena, S., Hoffman, T., Langer, S., Larsen, B., Monn, C., Melanie, N., Salthammer, T., Schlitt, C., Winterhalter, R., **Wolkoff, P.** Report No 26: EUROPEAN COLLABORATIVE ACTION: Impact of Ozone-initiated Terpene Chemistry on Indoor Air Quality and Human Health. June 2007, EUR 23052 EN; European Communities. pp. 1-78.
5. Kephapopolous, S., Kimmo, K., Kotzias, D., Augustin, R., Cochet, C., Crump, D., De Oliveira fernandes, E., Däumling, C., Loomans, M., Lundgren, B., Maupetit, F., Oppl, R., Pacary, T., Saarela, K., Seifert, B., Vankann, E., Witterseh, T., **Wolkoff, P.** Report No 24: EUROPEAN COLLABORATIVE ACTION: Harmonisation of indoor material emissions labelling systems in the EU Inventory of existing schemes. 06/2005; EUROPEAN COMMISSION, Office for Official Publications of the European Communities. pp. 1-42.
6. Lundgren, B., Derrick, DR., Knöppel, H., Laurent, A-M., Lebre, E., Rothweiler, H., Seifert, B., **Wolkoff, P.**, Cavallo, D. EUROPEAN COLLABORATIVE ACTION Report 14: Sampling strategies for volatile organic compounds (VOCs) in indoor air. 01/1994; European Commission, Joint Research Centre - Environment Institute. pp. 1-48.
7. Seifert, B., Knöppel, H., Lanting, R.W., Person, A., Siskos, P., **Wolkoff, P.** EUROPEAN COLLABORATIVE ACTION Report 6: Strategy for sampling chemical substances in indoor air. 12/1989. European Commission, Joint Research Centre - Environment Institute. pp. 1-28.
8. Hansen, V., Larsen, A.L. and **Wolkoff, P.** Round Robin – Chemical Emission testing by use of FLEC. Nordtest Report, TR 438, 1999-10, pp. 1-56.

## Selected articles in Danish – 2016-2002

### 2016

Nielsen, GD., Larsen, S.T., Wolkoff, P. Revurderet cancerrisiko ved formaldehydudsættelse i indeklimaet. *Dansk Kemi*, 97(8) (2016) 14-15.

### 2012

Wolkoff, P. "Ögonbesvär i kontorsmiljö – multifaktoriella orsaker/mekanismer" *Inomhusklimat Örebro* 2012, 14-15 March 2012, Universitetssjukhuset Örebro, pp. 35-44.

### 2011

Birkedal, R., Frankel, M., Koponen, I., Madsen, A.M., Nørgaard, A.W., Vibenholt, A., Wolkoff, P., Jensen, K.A. Nanopartikler, mikrobiologi, støv og gasser, *Dansk Kemi* 92 (2011-3) 32-35.

Larsen ST, Nørgaard AW, Poulsen SS, Hammer M, Jensen KA, Wolkoff P, Nielsen GD. *Dansk Kemi* 2011;92(1-2):20-21.

Nørgaard, A.W., Hammer, M., Jensen, K.A., Poulsen, S.S., Wolkoff, P., Nielsen, G.D., Larsen, S.T. *miljø og sundhed* **17** (aug. 2011) 34-38.  
 Wolkoff, P., Nielsen, G.D. WHO guideline - Formaldehyd. *Miljø og sundhed* **17** (2011) May, p. 13-18.  
 Wolkoff, P., Nielsen, G.D. Formaldehyd sikres gennem WHO's nye norm for indemiljøet. *Dansk Kemi*, april 2011(4), 19-21.

## 2009

Wolkoff, P. Slimhindeeffekter af gasser og ultrafine partikler – Ozon-limonen reaktioner, Inomhusklimaet Örebro 2009, 24-25 March 2009, Universitetssjukhuset Örebro, pp. 207-219.

## 2008

Wolkoff, P. Lugttærskler er størrelsesordner for høje – Ozon og limonen som eksempler. *HVAC* (2008)-2, 40-42

Wolkoff, P., Nøjgaard, J.K., Larsen, S.T., Clausen, P.A., Nielsen, G.D., Ladefoged, O. EU Kommissionen tager hul på indeklima-debatten. *Dansk Kemi* 89-1 (2008) 19-21.

Wolkoff, P. Lugttærskler er størrelsesordner for høje – Ozon og limonen som eksempler. *Dansk Kemi* 89-1 (2008) 24-25.

Nøjgaard, J.K., Nørgaard, A.W., Clausen, P.A., Wolkoff, P. Stabile sekundære ozonider fra gasfase ozonolyse af cykliske alkener - nye potentielle luftforureninger? *Dansk Kemi* 89-1 (2008) 22-23..

## 2007

Wolkoff, P. Den relative fugtigheds betydning for indeklimaet, *Hospital, Drift og Teknologi*, 2. marts 2007, 13-14.

Wolkoff, P., Nøjgaard, J.K., Larsen, S.T., Clausen, P.A., Nielsen, G.D., Ladefoged, O. Opinion on risk assessment on indoor air quality – ny EU-rapport, *miljø og sundhed*, nr. 34, september 2007, 25-29.

Wolkoff, P., Nøjgaard, J.K., Larsen, S.T., Clausen, P.A., Nielsen, G.D., Ladefoged, O. EUs rapport om indeklima – Opinion on risk assessment on indoor air quality, *Biozoom* 10(3) (2007) 28-31.

## 2006

Nøjgaard, J.K., Wolkoff, P. Kan luftforureninger forklare øjenirritation i kontormiljøer? *Dansk Kemi* **87** (1) (2006) 30-32.

Nøjgaard, J.K., Wolkoff, P. Kan luftforureninger forklare øjenirritation i kontormiljøer. *Biozoom* **9** (2006-1) 29-33.

Wolkoff, P., Nielsen, G.D., Møller, P., Nielsen, P.A. Vurdering af VOCer i indemiljøluften II: Lugt-luftkvalitetens betydning. *miljø og sundhed* (2006/april) 3-12.

Wolkoff, P., Nøjgaard, J.K., Clausen, G.D., Nielsen, G.D. Kan kemiske luftforureninger i indemiljøet forårsage symptomer? *miljø og sundhed* (2006/maj), suppl. 6, 19-26.

Wolkoff, P. Den relative fugtighed i kontormiljøet – et tveægget sværd? *miljø og sundhed* (31-2006/sept.) 31-36.

Wolkoff, P. Den relative fugtighed – et tveægget sværd- i kontormiljøet. *Biozoom* **9** (2006-4) 26-30.

Wolkoff, P. Optimal relativ fugtighed i kontormiljøet? *HVAC Magasinet* (10-2006) 59-61.

## 2005

Wolkoff, P., Nøjgaard, J.K., Franck, C., Skov, P. Giver tør luft irriterede øjne i kontormiljøet? *HVAC Magasinet* **7** (2005) 48-49.

Nielsen, G.D., Wolkoff, P. Vurdering af VOCer i indemiljøluften I: sundhedseffekter og oplæg om pragmatiske guidelines, *miljø og sundhed* (2005/december) 31-40.

## 2004

Wolkoff, P., Nøjgaard, J.K. Indeklimakemi: Øjnene irriteres i dårligt indeklima. *HVAC Magasinet* **40** (2004) 16.

Wolkoff, P., Nøjgaard, J.K. Indeklimakemi: Øjet påvirkes af limonen- og isopren oxidationsprodukter samt nitratradikaler. *Arbejdsmiljø* 2004-5, p. 11.

Wolkoff, P. Ozon – den oversete synder i indeklimaet? *HVAC Magasinet* **40** (2004) 12-14+16.

Wolkoff, P. Ozonkemi – synder i kontormiljøet? *Arbejdsmiljø* 6/7-2004, p. 40-41.

Poulsen, O.M., Schneider, T., Wolkoff, P., Borg, V. Hvorfor har storrumskontorer indeklimaproblemer? *Arbejdsmiljø* 11-2004, p. 52-53.

Wolkoff, P. Kemien i indeklimaet – sundhedsmæssige aspekter, *miljø og sundhed* (2004/december), p. 9-12.

## 2002

Wolkoff, P., Clausen, P.A., Wilkins, C.K., Nielsen, G.D. Kemisk forklaringsmodel for øjne- og luftvejseffekter i indeklimaet, *miljø og sundhed* (2002/maj) 5-10.