



List of the publications

Ph. D. Thesis

Jukka Jokisaari, "Proton magnetic resonance spectra of some 2-substituted oxetanes and the far-infrared spectrum of oxetane", Department of Physics, University of Oulu, 1974.

A. Articles in international refereed journals

1. Erkki Rahkamaa and **Jukka Jokisaari**, "Temperature and solvent dependence of ^{13}C -H spin-spin coupling constant in ethyl formate", *Z. Naturforsch.* **23a**, 2094 (1968).
2. **Jukka Jokisaari**, Erkki Rahkamaa and P. Olavi I. Virtanen, "Studies on the PMR spectra of oxetanes. I. 2-Phenyloxetane", *Suomen Kemistilehti* **B43**, 14 (1970).
3. **Jukka Jokisaari** and Heikki Ruotsalainen, "Studies on the PMR spectra of oxetanes. II. 2-(4-Methylphenyl)oxetane, 2-(2,4-dimethylphenyl)oxetane and 2-(2,4,6-trimethylphenyl)oxetane", *Z. Naturforsch.* **25a**, 1655 (1970).
4. **Jukka Jokisaari**, "Studies on the PMR spectra of oxetanes. III. 2-Methyloxetane", *Z. Naturforsch.* **26a**, 136 (1971).
5. Kauko Räisänen, **Jukka Jokisaari**, Erkki Rahkamaa and P. Olavi I. Virtanen, "PMR spectral analysis of N-phenyl-2-pyrrolidone", *Suomen Kemistilehti* **B44**, 354 (1971).
6. **Jukka Jokisaari** and Auno Siikaluoma, "A computer program for evaluating PMR parameters", *Suomen Kemistilehti* **B43**, 11 (1970).
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11. **Jukka Jokisaari** and Jyrki Kauppinen, "Theory and computer program for treating one-dimensional vibrations of molecules", *Acta. Univ. Oul.* **A21**, 1973, Phys. 4, 23 pages.
12. **J. Jokisaari** and J. Kauppinen, "Vapor phase far-infrared spectrum and double minimum potential function of trimethylene oxide", *J. Chem. Phys.* **59**, 2260 (1973).

13. **Jukka Jokisaari**, "INDO- and CNDO- approximated molecular orbital calculations on the spin-spin coupling constant in some 2-substituted oxetanes", *Z. Naturforsch.* **29a**, 1907 (1974).
14. **Jukka Jokisaari**, "Studies on the PMR spectra of oxetanes. VI. 2-(3-Chlorophenyl)oxetane and 2-(2-chlorophenyl)oxetane at 60 and 100 MHz", *Z. Naturforsch.* **29a**, 1902 (1974).
15. Kalevi Pihlaja, **Jukka Jokisaari**, Marc Anteunis, P. Olavi I. Virtanen and Heikki Ruotsalainen, "Conformational Analysis - XIII. A 300 MHz PMR study of 2-methyl-, 2-phenyl-, 2-(2-chlorophenyl)- and 2-(4-chlorophenyl)oxetane", *Org. Magn. Res.* **7**, 286 (1975).
16. Pekka Pyykkö and **Jukka Jokisaari**, "Spectral density analysis of nuclear spin-spin coupling. I. A Hulthén potential LCAO model for J_{X-H} in hydrides XH_4 ", *Chem. Phys.* **10**, 293 (1975).
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20. **Jukka Jokisaari**, " ^{13}C - ^{13}C spin-spin coupling constants and ^{13}C isotope effects on ^{13}C chemical shifts in some four-membered rings", *Org. Magn. Res.* **11**, 157 (1978).
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B. Papers in press, submitted or under preparation

148. J. Autschbach, A. Kantola and **J. Jokisaari**, "NMR determinations and ZORA DFT calculations of the ^{199}Hg - ^{13}C spin-spin coupling tensor in methylmercury halides", under preparation.
149. V.-V. Telkki, J. Lounila and **J. Jokisaari**, Determination of pore sizes and volumes of porous materials by ^{129}Xe NMR of xenon gas dissolved in a medium, under preparation.

C. Patents

"Method of determining pore characteristic, preparation method of sample unit, and sample unit", Patent application no. 20045381. Inventors: J. Jokisaari, J. Lounila and V.-V. Telkki.