

Accepted Manuscript

Title: Halogen bond in high-performance liquid chromatography enantioseparations: description, features and modelling

Authors: Roberto Dallocchio, Alessandro Dessì, Maurizio Solinas, Antonio Arras, Sergio Cossu, Emmanuel Aubert, Victor Mamane, Paola Peluso



PII: S0021-9673(18)30697-6
DOI: <https://doi.org/10.1016/j.chroma.2018.05.061>
Reference: CHROMA 359429

To appear in: *Journal of Chromatography A*

Received date: 14-4-2018
Revised date: 24-5-2018
Accepted date: 27-5-2018

Please cite this article as: Roberto Dallocchio, Alessandro Dessì, Maurizio Solinas, Antonio Arras, Sergio Cossu, Emmanuel Aubert, Victor Mamane, Paola Peluso, Halogen bond in high-performance liquid chromatography enantioseparations: description, features and modelling, *Journal of Chromatography A* <https://doi.org/10.1016/j.chroma.2018.05.061>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Original Research Article, SPECIAL ISSUE *Enantioseparation*

Halogen bond in high-performance liquid chromatography enantioseparations: description, features and modelling

Roberto Dallochio^a, Alessandro Dessì^a, Maurizio Solinas^a, Antonio Arras^a, Sergio Cossu^b, Emmanuel Aubert^c, Victor Mamane^{d*} vmamane@unistra.fr, Paola Peluso^{a,*} p.peluso@icb.cnr.it

^a Istituto di Chimica Biomolecolare ICB, CNR, Sede secondaria di Sassari, Traversa La Crucca 3, Regione Balduca, I-07100 Li Punti - Sassari, Italy

^b Dipartimento di Scienze Molecolari e Nanosistemi DSMN, Università Ca' Foscari di Venezia, Via Torino 155, I-30172 Mestre Venezia, Italy

^c Cristallographie, Résonance Magnétique et Modélisations (CRM2), UMR CNRS 7036, Université de Lorraine, Bd des Aiguillettes, 54506 Vandoeuvre-les-Nancy, France

^d Institut de Chimie de Strasbourg, UMR CNRS 7177, Equipe LASYROC, 1 rue Blaise Pascal, 67008 Strasbourg Cedex, France

*Corresponding author: Tel.: +39 079 2841218

*Additional corresponding author: Tel.: +33 368 851612

HIGHLIGHTS

- Brief description of halogen bond-driven enantioseparations
- Molecular dynamics to study halogen bonds on polysaccharide polymers are described
- Enantiomer elution orders on cellulose polymer were predicted (success rate 75%)
- Enantioseparations driven by halogen and hydrogen bond are described and discussed

Download English Version:

<https://daneshyari.com/en/article/7607667>

Download Persian Version:

<https://daneshyari.com/article/7607667>

[Daneshyari.com](https://daneshyari.com)