



# Library Indian Institute of Science Education and Research Mohali



**DSpace@IISERMohali (/jspui/)**  
**/ Publications of IISER Mohali (/jspui/handle/123456789/4)**  
**/ Research Articles (/jspui/handle/123456789/9)**

Please use this identifier to cite or link to this item: <http://hdl.handle.net/123456789/162>

Title:	Disentangling diffusion information of individual components in a mixture with a 3D COMPACT-IDOSY NMR experiment
Authors:	Shukla, Matsyendranath (/jspui/browse?type=author&value=Shukla%2C+Matsyendranath) Dorai, K. (/jspui/browse?type=author&value=Dorai%2C+K.)
Keywords:	DOSY 3D heteronuclear pulse sequence HMBC
Issue Date:	2012
Publisher:	Wiley
Citation:	Magnetic Resonance in Chemistry 50 (5) , pp. 341-346
Abstract:	A new 3D diffusion-ordered heteronuclear NMR experiment COMPACT-IDOSY (cross-polarization optimized multisite polarized accelerated time internally encoded diffusion ordered spectroscopy) has been designed and experimentally implemented on a mixture of flavonoids rutin and quercetin. The pulse sequence uses a cross-polarization mixing period and diffusion encoding gradients internally incorporated into the coherence transfer interval of a long-range heteronuclear correlation experiment. Substantial reduction in experimental time, good sensitivity and excellent resolution of signal overlap lead to the accurate determination of translational diffusion coefficients of individual components in the mixture.
URI:	<a href="http://onlinelibrary.wiley.com/doi/10.1002/mrc.2877/full">http://onlinelibrary.wiley.com/doi/10.1002/mrc.2877/full</a> ( <a href="http://onlinelibrary.wiley.com/doi/10.1002/mrc.2877/full">http://onlinelibrary.wiley.com/doi/10.1002/mrc.2877/full</a> ) DOI: 10.1002/mrc.2877 (DOI: 10.1002/mrc.2877) <a href="http://hdl.handle.net/123456789/162">http://hdl.handle.net/123456789/162</a> ( <a href="http://hdl.handle.net/123456789/162">http://hdl.handle.net/123456789/162</a> )
Appears in Collections:	Research Articles (/jspui/handle/123456789/9)

Files in This Item:

File	Description	Size	Format	
Need to add pdf.odt (/jspui/bitstream/123456789/162/3/Need%20to%20add%20pdf.odt)		8.63 kB	OpenDocument Text	<a href="#">View/Open (/jspui/bitstream/123456789/162/3/Need%20to%20add%20pdf.odt)</a>

[Show full item record \(/jspui/handle/123456789/162?mode=full\)](#)

[Statistics \(/jspui/handle/123456789/162/statistics\)](#)

Items in DSpace are protected by copyright, with all rights reserved, unless otherwise indicated.