

## EDITORIAL

Davor Kovačević

*Croat. Chem. Acta* **80** (2007) XXXIXNIKOLA KALLAY – *curriculum vitae*

Davor Kovačević and Tajana Preočanin

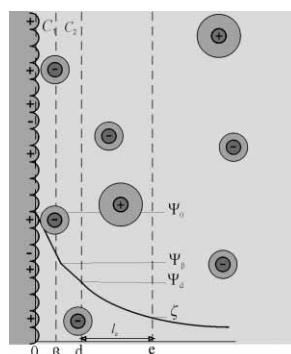
*Croat. Chem. Acta* **80** (2007) XLI–LNIKOLA KALLAY – *List of Publications*

Davor Kovačević and Tajana Preočanin

*Croat. Chem. Acta* **80** (2007) LI–LVII

CCA-3172

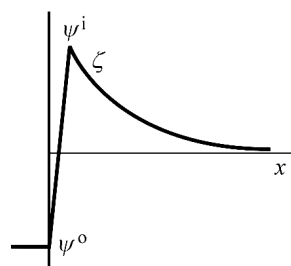
## Equilibria in the Electrical Interfacial Layer Revisited

Davor Kovačević, Tajana Preočanin, Suzana Žalac,  
and Ana Čop*Authors' Review**Croat. Chem. Acta* **80** (2007) 287–301

CCA-3173

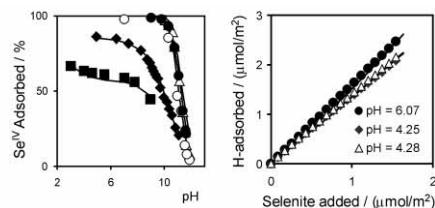
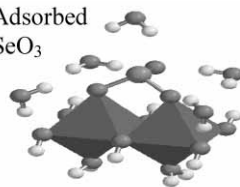
## Electrical Double Layer on Silver Iodide and Overcharging in the Presence of Hydrolyzable Cations

Johannes Lyklema and Tatiana Golub

*Original Scientific Paper**Croat. Chem. Acta* **80** (2007) 303–311

CCA-3174

## Surface Complexation of Selenite on Goethite: MO/DFT Geometry and Charge Distribution

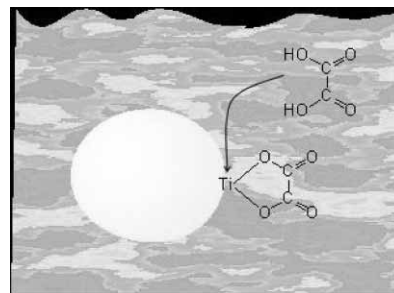
Tjisse Hiemstra, René P. J. J. Rieter,  
and Willem H. Van Riemsdijk*Original Scientific Paper**Croat. Chem. Acta* **80** (2007) 313–324Adsorbed  
SeO<sub>3</sub>

CCA-3175

### Stability of Surface Complexes Formed at the $\text{TiO}_2$ /Water Interface

Ariel D. Weisz, Alberto E. Regazzoni, and Miguel A. Blesa

Original Scientific Paper

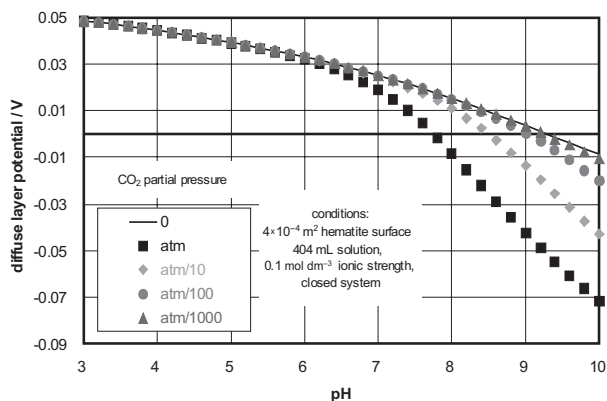
Croat. Chem. Acta **80** (2007) 325–332

CCA-3176

### Influence of Impurities on Acid-base Data for Oxide Minerals – Analysis of »Observable« Surface Charge and Proton Affinity Distributions and Model Calculations for Single Crystal Samples

Johannes Lützenkirchen

Original Scientific Paper

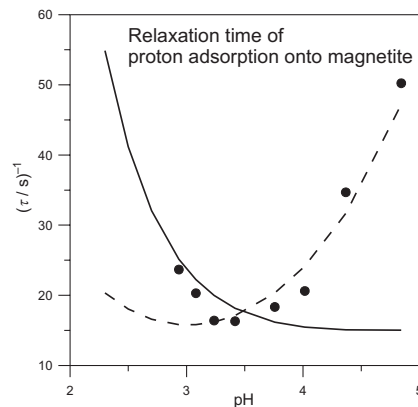
Croat. Chem. Acta **80** (2007) 333–343

CCA-3177

### Relaxation Time of Proton Adsorption from Solution onto Magnetite and Anatase: Classical and New Theoretical Approach

Wojciech Piasecki, Piotr Zarzycki, and Władysław Rudziński

Original Scientific Paper

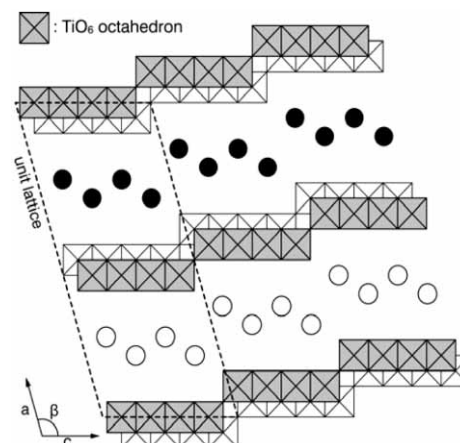
Croat. Chem. Acta **80** (2007) 345–349

CCA-3178

### Cation Exchange Properties of Tetratitanic Acid with Interlayer Protons and of Titania with Surface Hydroxyl Protons

Hiroki Tamura, Kyosuke Nakamura, and Shinichi Kikkawa

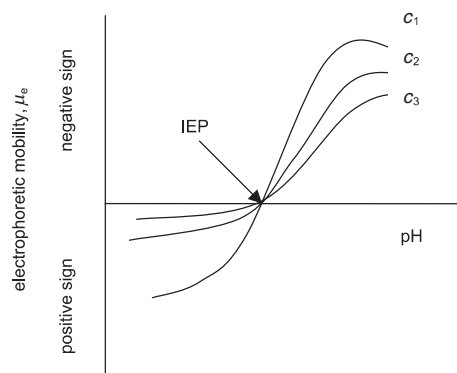
Original Scientific Paper

Croat. Chem. Acta **80** (2007) 351–356

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**Electrokinetic Data: Approaches, Interpretations and Applications**

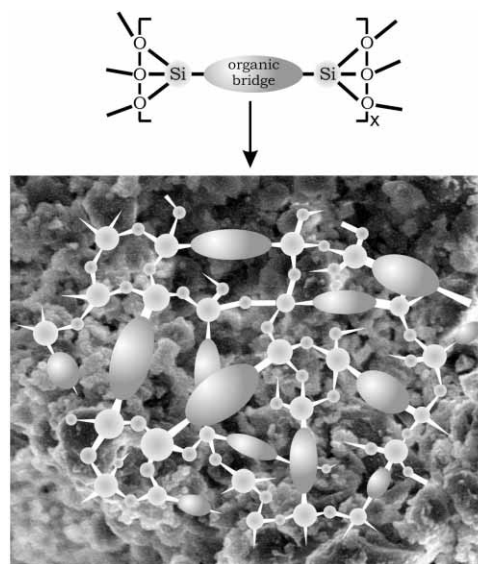
Jasenka Biščan

*Author's Review**Croat. Chem. Acta* **80** (2007) 357–365

CCA-3180

**Bridged Polysilsesquioxanes as a Promising Class of Adsorbents. A Concise Review**

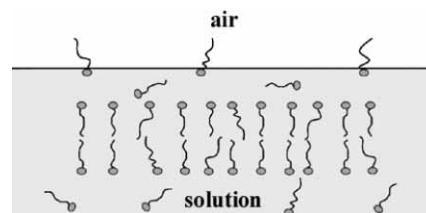
Andrzej Dąbrowski and Mariusz Barczak

*Review**Croat. Chem. Acta* **80** (2007) 367–380

CCA-3181

**Air/Solution Interface and Adsorption – Solution for the Gibbs Paradox**

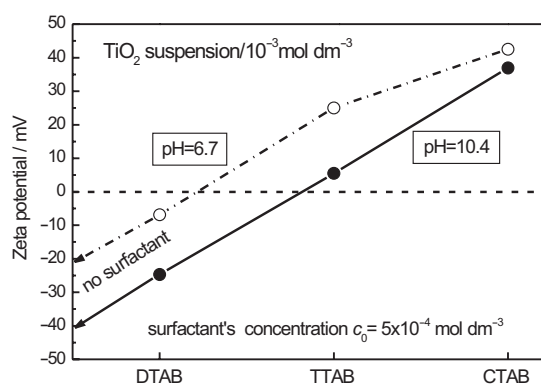
Yoshikiyo Moroi

*Author's Review**Croat. Chem. Acta* **80** (2007) 381–394

CCA-3182

**Influence of Ionic Surfactants and Lecithin on Stability of Titanium Dioxide in Aqueous Electrolyte Solution**

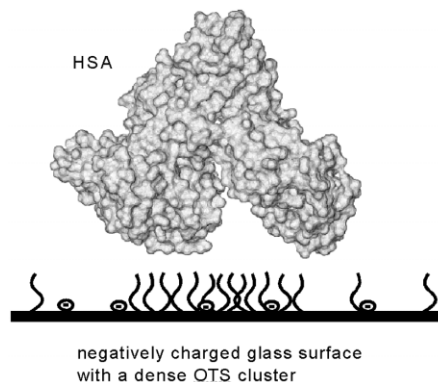
Emil Chibowski, Lucyna Holysz, Konrad Terpilowski, and Agnieszka Ewa Wiacek

*Original Scientific Paper**Croat. Chem. Acta* **80** (2007) 395–403

CCA-3183

### How Surface Heterogeneity Affects Protein Adsorption: Annealing of OTS Patterns and Albumin Adsorption Kinetics

Gerald N. Hodgkinson and Vladimir Hlady



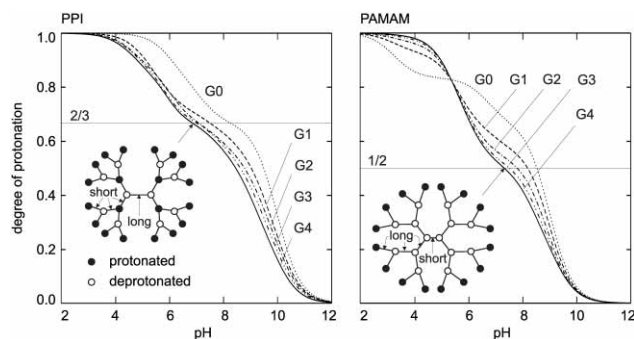
Original Scientific Paper

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### Microscopic Protonation Mechanism of Branched Polyamines: Poly(amidoamine) versus Poly(propyleneimine) Dendrimers

Duško Čakara and Michal Borkovec



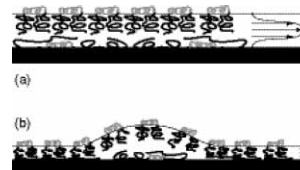
Original Scientific Paper

Croat. Chem. Acta **80** (2007) 421–428

CCA-3185

### Effects of pH and Additives on Aqueous Wetting Films Stabilized by a Triblock Copolymer

O. V. Eliseeva, N. A. M. Besseling, L. K. Koopal, and M. A. Cohen Stuart



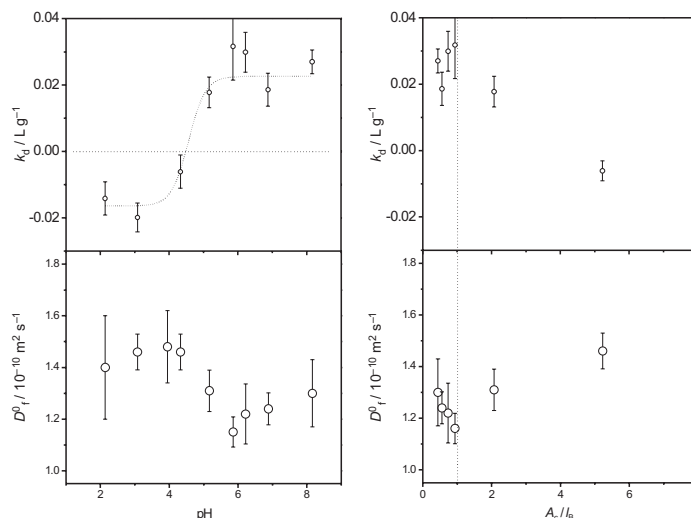
Original Scientific Paper

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### Hydrodynamic Properties of Short NaPMA in Excess Salt: a Dynamic Light Scattering Study

Sabina Haber-Pohlmeier and Andreas Pohlmeier



Original Scientific Paper

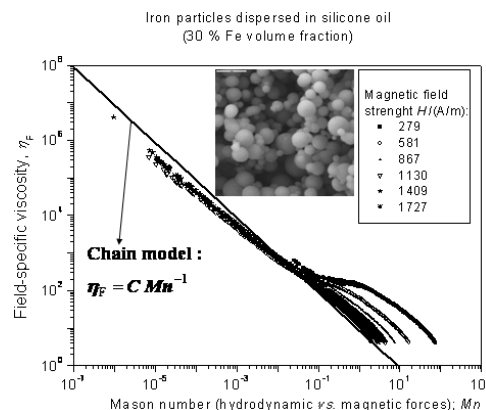
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### Scaling between Viscosity and Hydrodynamic / Magnetic Forces in Magnetic Fluids

Modesto T. López-López, Juan D. G. Durán,  
Angel V. Delgado, and Fernando González-Caballero

*Original Scientific Paper*  
*Croat. Chem. Acta* **80** (2007) 445–451

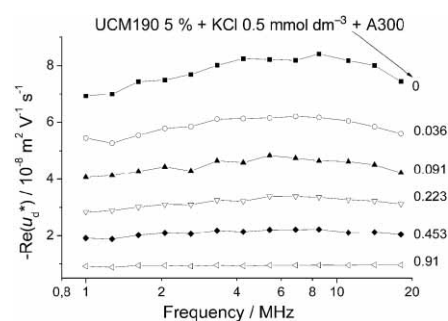


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### Electroacoustic Characterization of Bidisperse Suspensions

María L. Jiménez, Francisco J. Arroyo, Silvia Ahualli,  
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*Original Scientific Paper*  
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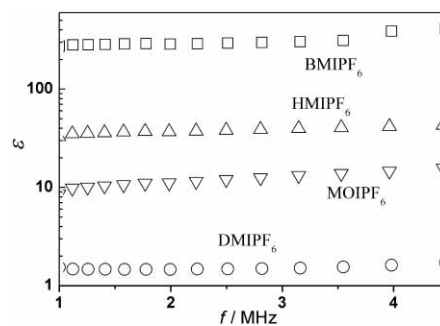


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### Permittivities of 1-Alkyl-3-methylimidazolium Tetrafluoroborates and Hexafluorophosphates

Marek Kosmulski, Krystyna Marczevska-Boczkowska,  
Paweł Żukowski, Jan Subocz, and Czesław Saneluta

*Original Scientific Paper*  
*Croat. Chem. Acta* **80** (2007) 461–466

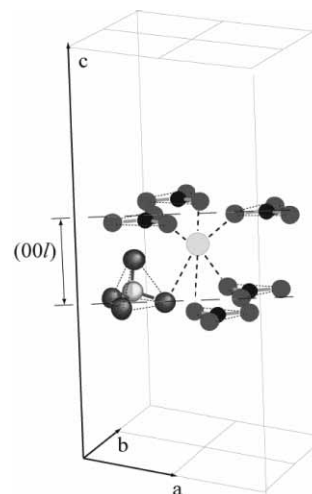


CCA-3190

### On Calcium Carbonates: from Fundamental Research to Application

Ljerka Brečević and Damir Kralj

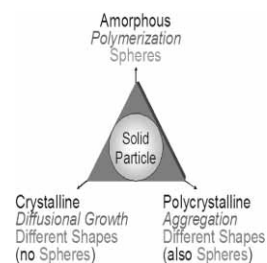
*Authors' Review*  
*Croat. Chem. Acta* **80** (2007) 467–484



CCA-3191

**Formation Mechanisms of Uniform Colloid Particles**

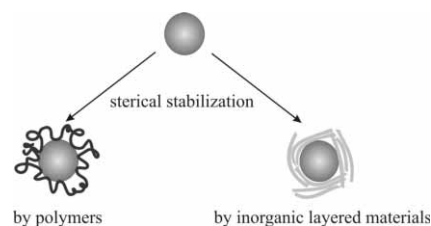
Egon Matijević and Dan Goia

*Authors' Review**Croat. Chem. Acta* **80** (2007) 485–491

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**Formation and Stabilization of Noble Metal Nanoparticles**

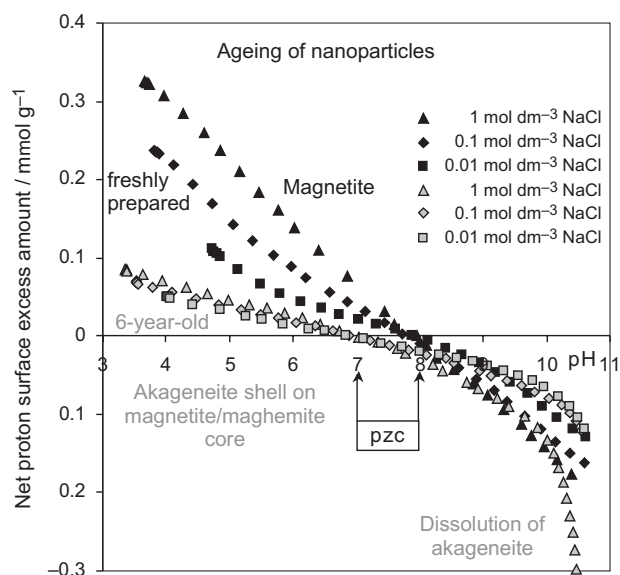
Szilvia Papp, Rita Patakfalvi, and Imre Dékány

*Original Scientific Paper**Croat. Chem. Acta* **80** (2007) 493–502

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**Ageing in the Inorganic Nanoworld: Example of Magnetite Nanoparticles in Aqueous Medium**

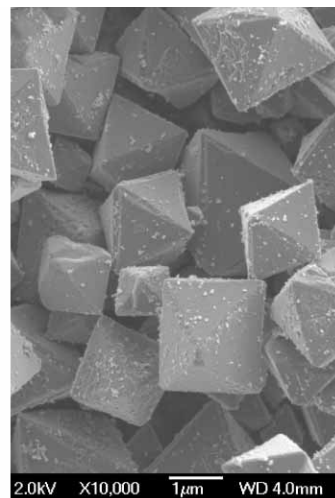
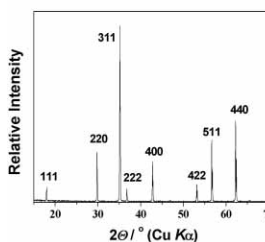
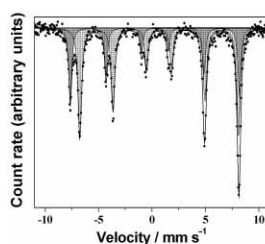
Etelka Tombácz, Erzsébet Illés, Andrea Majzik, Angéla Hajdú, Nóra Rideg, and Márta Szekeres

*Original Scientific Paper**Croat. Chem. Acta* **80** (2007) 503–515

CCA-3194

**Formation of Magnetite in Highly Alkaline Media in the Presence of Small Amounts of Ruthenium**

Stjepko Krehula and Svetozar Musić

*Original Scientific Paper**Croat. Chem. Acta* **80** (2007) 517–527

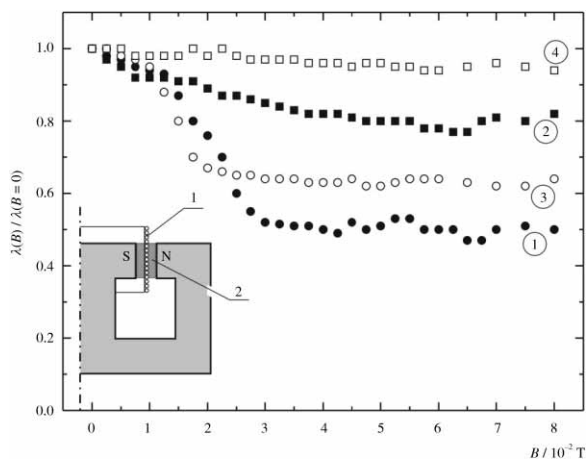
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### Thermal Conductivity Measurements of the $\text{CoFe}_2\text{O}_4$ and $\gamma\text{-Fe}_2\text{O}_3$ based Nanoparticle Ferrofluids

Ivan Djurek, Andrej Žnidaršič, Aljoša Košak, and Danijel Djurek

Original Scientific Paper

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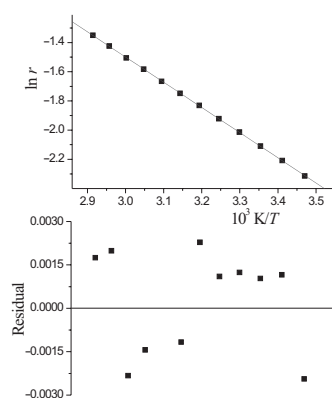
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### Effect of Temperature on UV Spectra of Concentrated $\text{NaNO}_3$ Aqueous Solutions

Vjekoslav Butorac, Vladimir Simeon, and Vladislav Tomišić

Original Scientific Paper

Croat. Chem. Acta **80** (2007) 533–539



CCA-3197

### Zagreb Indices: Extension to Weighted Graphs Representing Molecules Containing Heteroatoms

Dušanka Janežič, Ante Miličević, Sonja Nikolić, Nenad Trinajstić, and Damir Vukičević

Original Scientific Paper

Croat. Chem. Acta **80** (2007) 541–545

$$M_1 = \sum_i [ZM]_{ii}$$

$$M_2 = \sum_{i \neq j} [ZM]_{ij}$$

$$[ZM]_{ij} = \begin{cases} [d(i)d(j)] & \text{if } i = j \\ [d(i)d(j)] & \text{if } i \neq j \\ 0 & \text{otherwise} \end{cases}$$

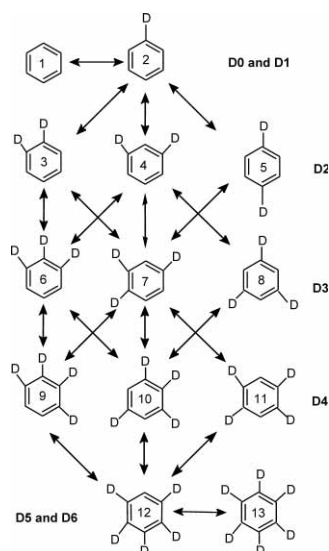
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### On the Vibrational Interlacing Rule in Deuterated Benzenes: I. Out-of-plane Vibrations

Tomislav P. Živković

Original Scientific Paper

Croat. Chem. Acta **80** (2007) 547–555

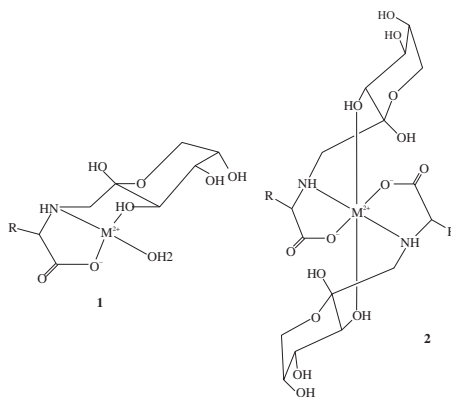


CCA-3199

**Prediction of Stability of Copper(II) and Nickel(II) Complexes with Fructose-Amino Acids from the Molecular Graph Models Developed on Amino Acid Chelates**

Ante Miličević and Nenad Raos

Original Scientific Paper

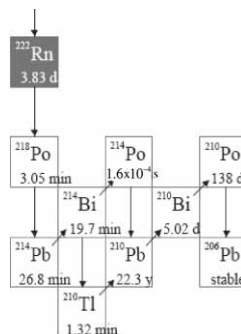
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CCA-3200

**The Importance of Nanosize Aerosols of Radon Decay Products in Radon Dosimetry**

Janja Vaupotič and Ivan Kobal

Original Scientific Paper

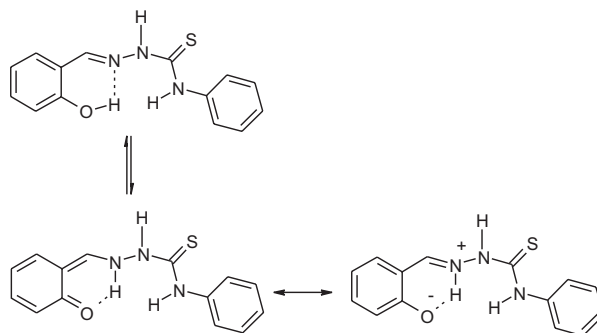
Croat. Chem. Acta **80** (2007) 565–573

CCA-3201

**Deuterium Isotope Effects in <sup>13</sup>C NMR Spectra of Intramolecularly Hydrogen-Bonded Salicylaldehyde-4-phenylthiosemicarbazone**

Predrag Novak, Katarina Pičuljan, Tomislav Biljan, Tomica Hrenar, Marina Cindrić, Mirta Rubčić, and Zlatko Meić

Original Scientific Paper

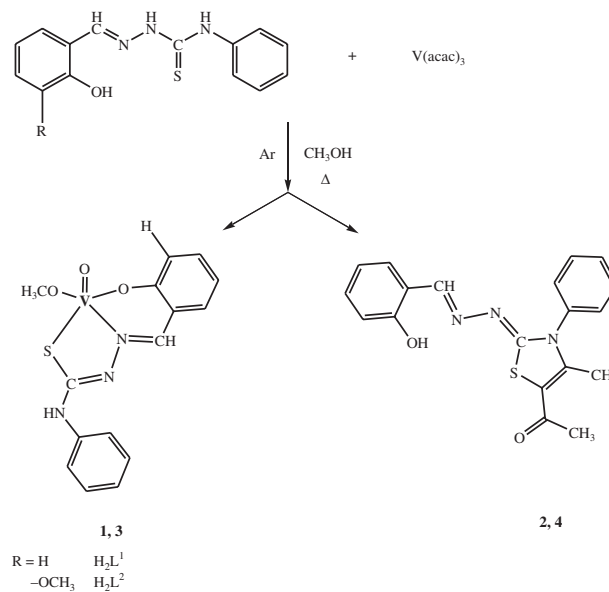
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CCA-3202

**Oxovanadium(V) Complexes of Salicylaldehyde and 3-Methoxysalicylaldehyde 4-phenylthiosemicarbazones. Formation of Two New Thiazoline Compounds**

Marina Cindrić, Mirta Rubčić, Ivica Đilović, Gerald Giester, and Boris Kamenar

Original Scientific Paper

Croat. Chem. Acta **80** (2007) 583–590



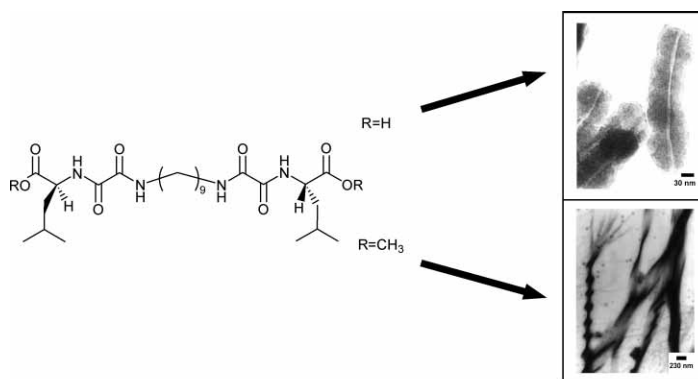
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### Transcription of Gel Assemblies of Bola Type Bis(oxalamide)-dicarboxylic acid and -diester Gelators into Silica Nanotubes and Ribbons under Catalyzed and Non-catalyzed Conditions

Nataša Šijaković-Vujičić, Nikola Ljubešić, and Mladen Žinić

Original Scientific Paper

Croat. Chem. Acta **80** (2007) 591–598



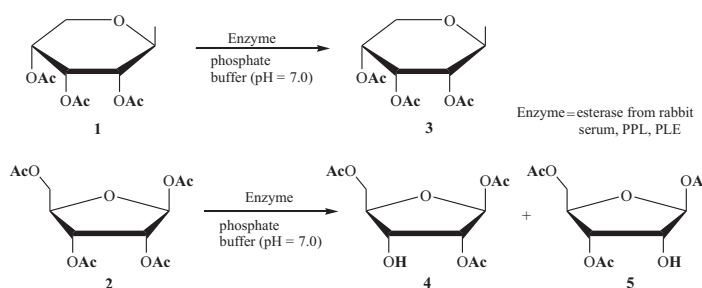
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### Enzymic Hydrolysis of Acetylated D-Ribose Derivatives

Željka Car, Vesna Petrović, and Srđanka Tomić

Original Scientific Paper

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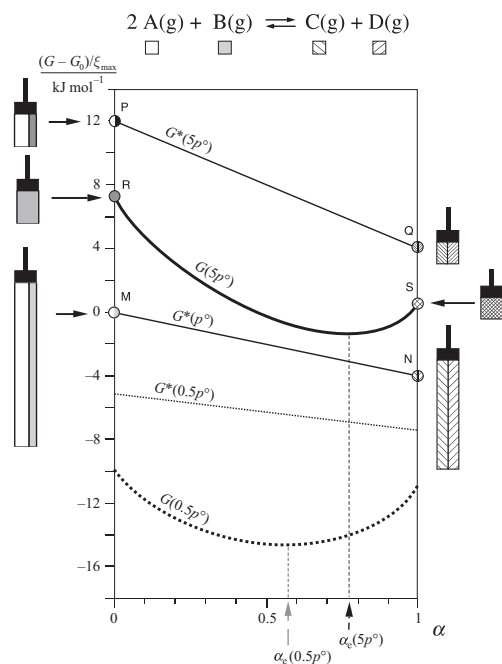
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### The Gibbs Function of a Chemical Reaction

Tomislav Cvitaš

Original Scientific Paper

Croat. Chem. Acta **80** (2007) 605–612



## APPENDIX

### BOOK REVIEW

Nenad Trinajstić

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### ACKNOWLEDGEMENT TO REVIEWERS

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