

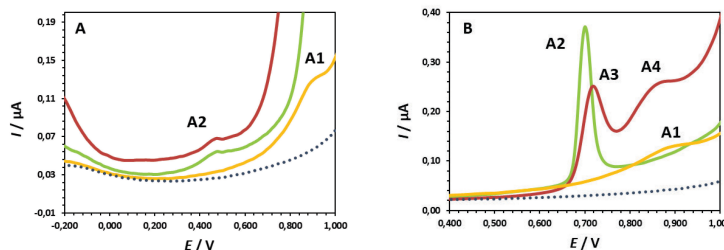
SCIENTIFIC ARTICLES – Proceedings of the 5<sup>th</sup> Day of Electrochemistry and 8<sup>th</sup> ISE SSRSE

ORIGINAL SCIENTIFIC ARTICLE

Electrochemical and UV/VIS Study of L-Histidine and Its Complexes with Cobalt and Nickel

Martina Medvidović-Kosanović,  
Anamarija Stanković, Marija Jozanović,  
Mateja Drulak, Marina Ilić

Croat. Chem. Acta 2018, 91(4), 421–426  
DOI: 10.5562/cca3423

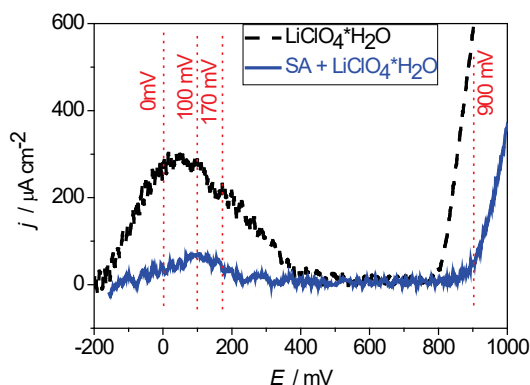


ORIGINAL SCIENTIFIC ARTICLE

Self-Assembling Monolayers of Stearic Acid in Protection of Steel

Katarina Marušić, Helena Otmačić Ćurković

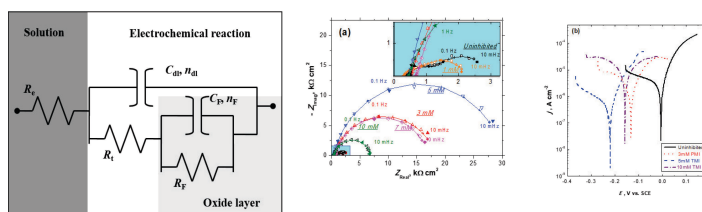
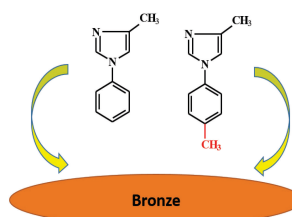
Croat. Chem. Acta 2018, 91(4), 427–433  
DOI: 10.5562/cca3436



ORIGINAL SCIENTIFIC ARTICLE

Two Imidazole Based Corrosion Inhibitors for Protection of Bronze from Urban Atmospheres

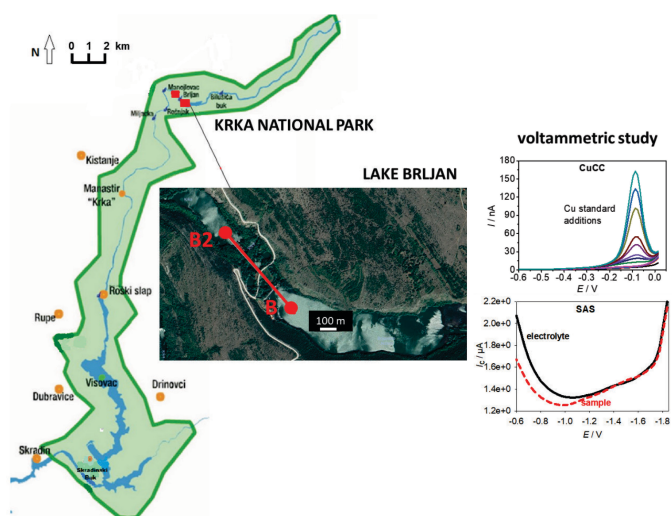
Katarina Marušić, Helena Otmačić  
Ćurković, Ema Supnišek Lisac,  
Hisasi Takenouti



Croat. Chem. Acta 2018, 91(4), 435–446  
DOI: 10.5562/cca3440

### Voltammetric Study of Organic Matter Components in the Upper Reach of the Krka River, Croatia

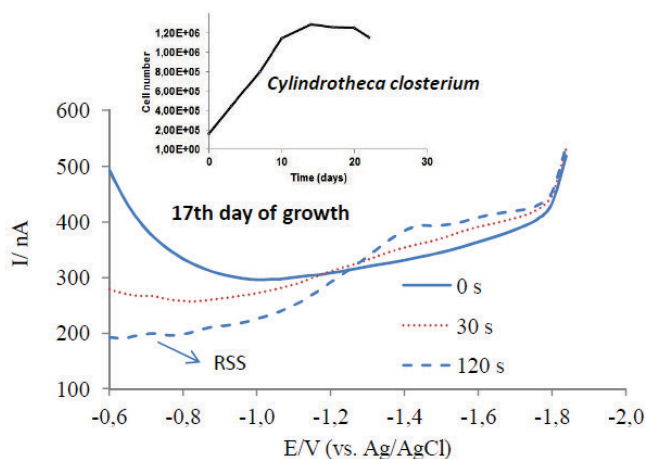
Slađana Strmečki, Irena Ciglencečki, Marija Gligora Udovič, Marija Marguš, Elvira Bura-Nakić, Jelena Dautović, Marta Plavšić



*Croat. Chem. Acta* **2018**, *91*(4), 447–454  
DOI: 10.5562/cca3443

### Production of Surface Active Organic Material and Reduced Sulfur Species During the Growth of Marine Diatom *Cylindrotheca closterium*

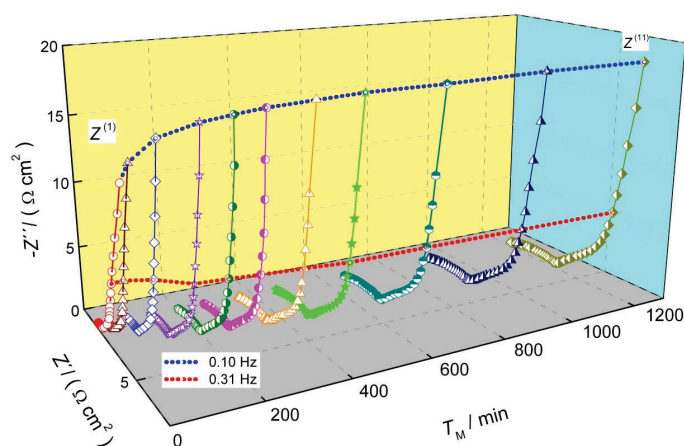
Irena Ciglencečki, Jelena Dautović, Ana Cvitešić, Galja Pletikapić



*Croat. Chem. Acta* **2018**, *91*(4), 455–461  
DOI: 10.5562/cca3433

### Frequency Response Analysis of a Nonstationary System: Electrochemical Transition of Polyaniline

Katja Magdić Košiček, Višnja Horvat-Radošević, Krešimir Kvastek



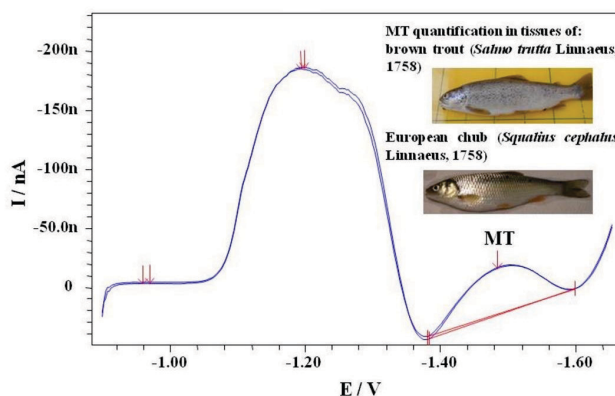
*Croat. Chem. Acta* **2018**, *91*(4), 463–473  
DOI: 10.5562/cca3454

### Electrochemical Determination of Metallothioneins by the Modified Brdička Procedure as an Analytical Tool in Biomonitoring Studies

Tatjana Mijošek, Marijana Erk, Vlatka Filipović Marijić, Nesrete Krasnići, Zrinka Dragun, Dušica Ivanković

*Croat. Chem. Acta* **2018**, *91*(4), 475–480  
DOI: 10.5562/cca3444

ORIGINAL SCIENTIFIC ARTICLE

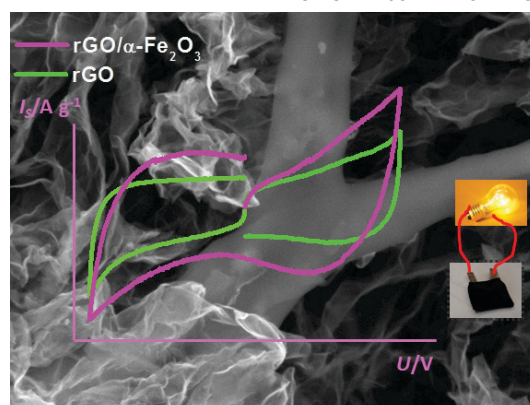


### Reduced Graphene Oxide/ $\alpha$ -Fe<sub>2</sub>O<sub>3</sub> Fibres as Active Material for Supercapacitor Application

Gabrijela Radić, Ivan Šajnović, Željka Petrović, Marijana Kraljić Roković

*Croat. Chem. Acta* **2018**, *91*(4), 481–490  
DOI: 10.5562/cca3452

ORIGINAL SCIENTIFIC ARTICLE

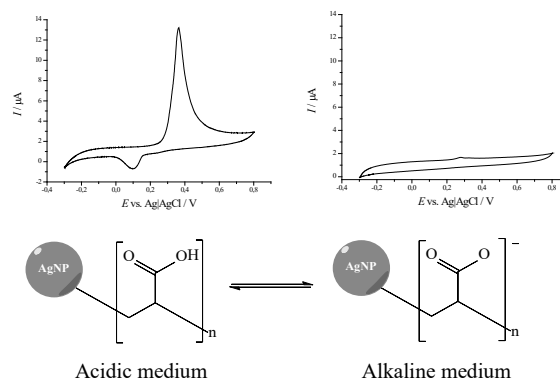


### Impact of Weak Organic Acids on Precipitation of Poly(acrylic acid) Stabilized Silver Nanoparticles; an Electrochemical Approach

Irena Ivanišević, Vanja Rukavina, Petar Kassal, Stjepan Milardović

*Croat. Chem. Acta* **2018**, *91*(4), 491–499  
DOI: 10.5562/cca3445

ORIGINAL SCIENTIFIC ARTICLE

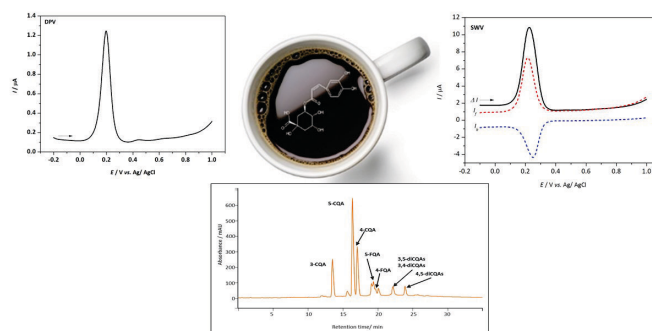


### Chromatographic and Voltammetric Characterization of Chlorogenic Acids in Coffee Samples

Ivana Tomac, Lidija Jakobek, Marijan Šeruga

*Croat. Chem. Acta* **2018**, *91*(4), 501–511  
DOI: 10.5562/cca3439

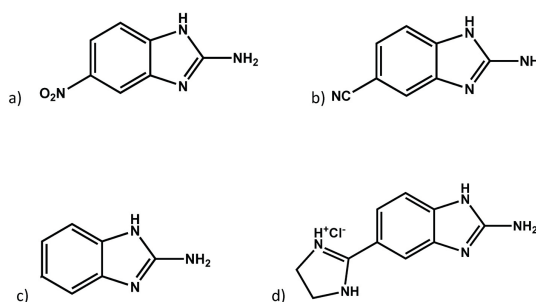
ORIGINAL SCIENTIFIC ARTICLE



### Benzimidazole Derivatives as Copper Alloy Corrosion Inhibitors

Martina Mumelaš, Helena Otmačić Ćurković, Dajana Mikić, Marijana Hranjec, Maja Cindrić

*Croat. Chem. Acta* **2018**, *91*(4), 513–523  
DOI: 10.5562/cca3450

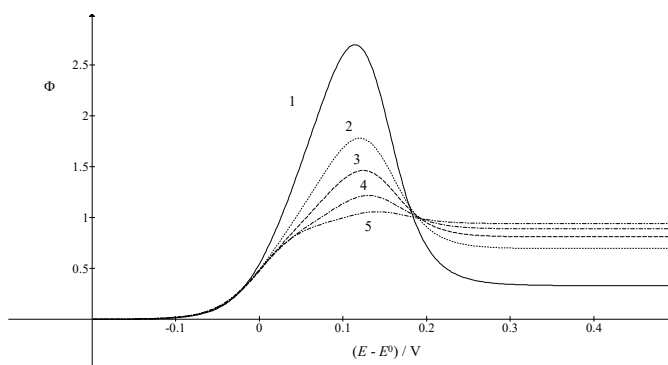


### SCIENTIFIC ARTICLES – Regular Section

### A Simplified Model of Reactant Adsorption in Normal Pulse Voltammetry

Šebojka Komorsky-Lovrić, Milivoj Lovrić

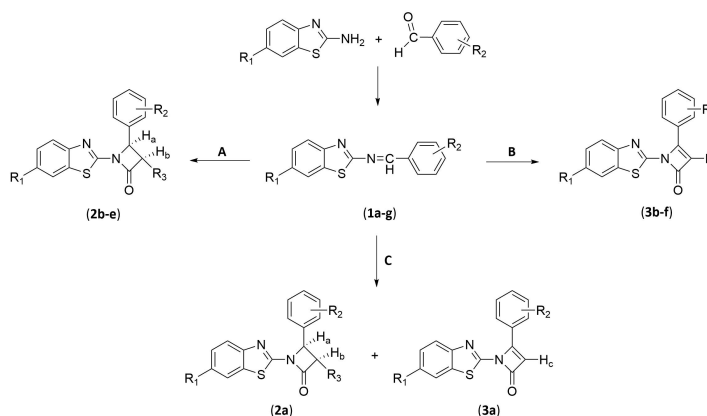
*Croat. Chem. Acta* **2018**, *91*(4), 525–531  
DOI: 10.5562/cca3453



### Synthesis and Characterization of Some 2-Azetidinones and Unexpected Azet-2(1H)-ones

Handan Can Sakarya, Merve Yandimoğlu

*Croat. Chem. Acta* **2018**, *91*(4), 533–541  
DOI: 10.5562/cca3386



### First Appearance of Mendeleev's Periodic System of Elements in Croatian Chemistry Textbooks

Vanja Flegar, Suzana Inić

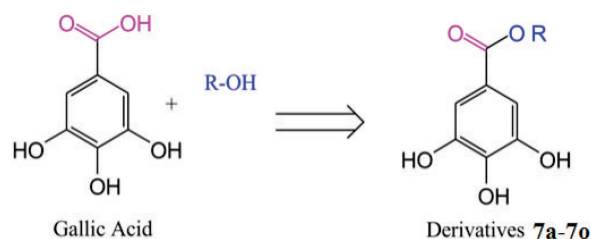
*Croat. Chem. Acta* **2018**, *91*(4), 543–549  
DOI: 10.5562/cca3437

Periodički sustav elemenata.

	I. skupina	II. skupina	III. skupina	IV. skupina	V. skupina	VI. skupina	VII. skupina	VIII. skupina
—	H 1							
1. Perioda } 1. niz	Li 7	Be 9	B 11	C 12	N 14	O 16	F 19	
2. Perioda } 2. n	Na 23	Mg 24	Al 27.5	Si 28	P 31	S 32	Cl 35.5	
3. Perioda } 3. n	K 39	Ca 40	Sc 44	Ti 48	V 51	Cr 52.2	Mn 55	Fe 56, Co 58.6, Ni 58.8
		Cu 63	Zn 65	Ga 70	Ge 72	As 75	Se 79	Br 80
4. Perioda } 4. n	Rb 85	Sr 87.5	Y 89	Zr 90	Nb 94	Mo 96		Ru 101, Rh 104, Pd 106
		Ag 108	Cd 112	In 114	Sn 118	Sb 120	Te 125	J 127
5. Perioda } 5. n	Cs 133	Ba 137	La 138.5	Ce 140			Sa 150	
			Yb 173				Ta 182	Os 191, Ir 193, Pt 194
6. Perioda } 6. n		Au 197	Hg 200	Tl 204	Pb 207	Bi 208	W 184	
					Th 232		U 238	

### Synthesis and Biological Evaluation of Novel Gallic Acid Analogues as Potential Antimicrobial and Antioxidant Agents

Lubna Sherin, Shahida Shujaat, Ayesha Sohail, Fatima Arif

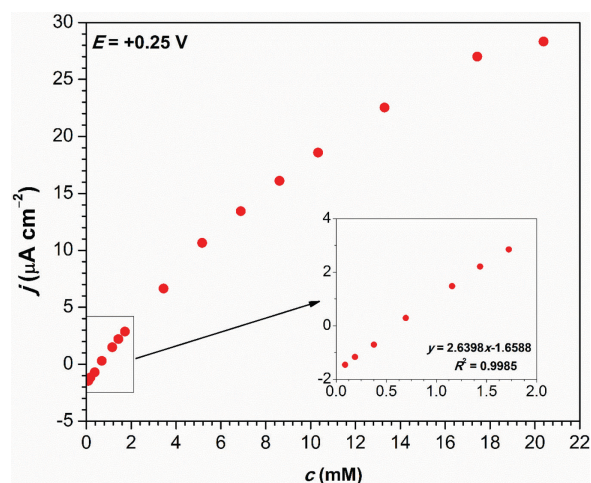


		Antibacterial Screening (MIC) (mg/mL)		
	R	<i>E. coli</i>	<i>P. mirabilis</i>	<i>E. aerogenes</i>
GA	H	1.0	2.0	1.0
7a		0.015	0.125	0.031
7c		0.015	0.031	0.015

*Croat. Chem. Acta* **2018**, *91*(4), 551–565  
DOI: 10.5562/cca3429

### Non-enzymatic Amperometric Sensor for H<sub>2</sub>O<sub>2</sub> Based on MnCO<sub>3</sub> Thin Film Electrodes

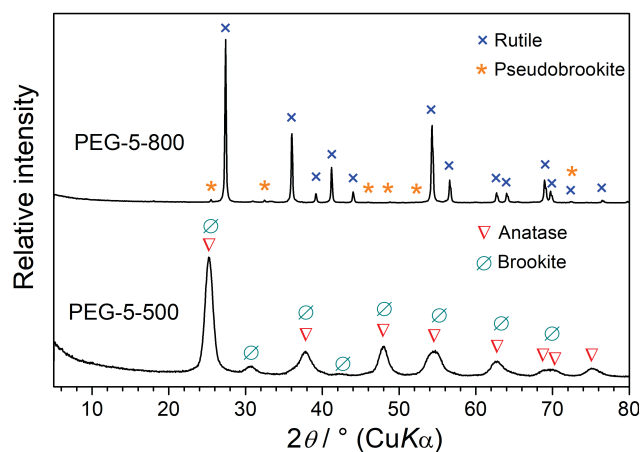
Sasho Stojkovicj, Metodija Najdoski, Birhan Sefer, Valentin Mirčeski



*Croat. Chem. Acta* **2018**, *91*(4), 567–575  
DOI: 10.5562/cca3424

### Structural Properties of Iron/Titanium Oxide Nanoparticles Synthesized by Sol-gel Method in the Presence of Poly(ethylene glycol)

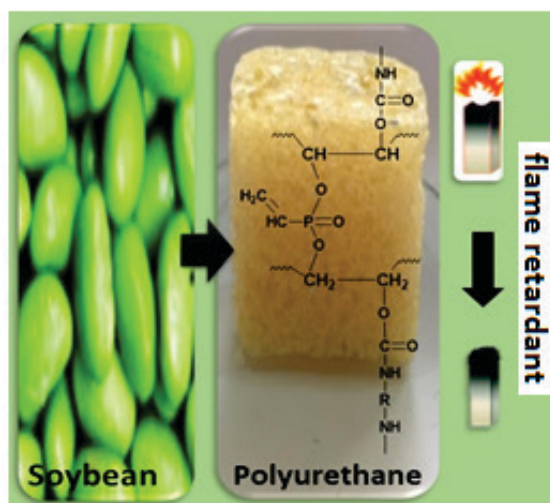
Ivan Marić, Marijan Gotić, Tanja Jurkin, Lara Mikac, Élisabeth Tronc, Mile Ivanda



*Croat. Chem. Acta* **2018**, *91*(4), 577–588  
DOI: 10.5562/cca3441

### Intrinsically Flame Retardant Polyurethane Prepared with Epoxidized Soybean Oil and Vinylphosphonic Acid

Aynur Özşeker, Kemal Karadeniz, Raşit Fikret Yılmaz

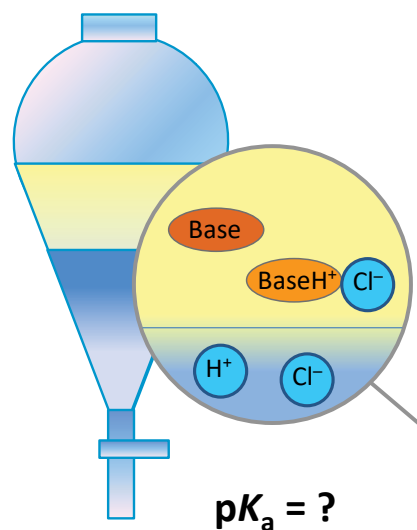


*Croat. Chem. Acta* **2018**, *91*(4), 589–597  
DOI: 10.5562/cca3396

PRELIMINARY COMMUNICATION

### Biphasic $pK_a$ Values

Sigrid Selberg, Sofja Tshepelevitsh, Ivo Leito



*Croat. Chem. Acta* **2018**, *91*(4), 599–602  
DOI: 10.5562/cca3405