

D O C U M E N T A C H E M I C A Y U G O S L A V I C A

CROATICA  
CHEMICA ACTA

(A R H I V Z A K E M I J U)

Z A G R E B  
YUGOSLAVIA

1 9 5 6

*Croat. Chem. Acta*

## CROATICA CHEMICA ACTA

*Published by The Croatian Chemical Society  
Official journal of the Croatian Chemical Society  
Official chemical journal of the University of Zagreb  
and of the Croatian Society of Natural Sciences*

### COMMITTEE OF PUBLICATION:

*Editor: Božo Težak  
Assistant Editors: Egon Matijević and Velimir Vouk  
(Since September 1, 1956 Petar Alaupović)  
Secretary: Dionis Sunko  
(Since Decembre 1, 1956 Dina Keglević-Brovet)*  
*Membres: Krešimir Balenović, Eugen Cerkovnikov, Ivan Filipović, Dragutin Fleš,  
Pavao Mildner, Nikola Plavšić, Karlo Schulz and Karlo Weber  
(Since November 15, 1956 Josip Kratohvil, Kazimir Šestanj and Otto Weber)*  
*Editorial office: 19 Marulićev trg (P. O. Box 131)  
Z a g r e b , Croatia, Yugoslavia*

---

## CROATICA CHEMICA ACTA

*Izdaje Hrvatsko kemijsko društvo  
Službeno glasilo Hrvatskog kemijskog društva  
Službeno kemijsko glasilo Sveučilišta u Zagrebu  
i Hrvatskog prirodoslovnog društva  
Adresa redakcije i administracije:  
Z a g r e b , Marulićev trg 19 (pošt. pret. 131)*

### REDAKCIIONI ODBOR:

*Glavni urednik: Božo Težak  
Pomoćni urednici: Egon Matijević i Velimir Vouk  
(Od 1. rujna 1956 Petar Alaupović)  
Tajnik: Dionis Sunko  
(Od 1. prosinca 1956 Dina Keglević-Brovet)*  
*Članovi: Krešimir Balenović, Eugen Cerkovnikov, Ivan Filipović, Dragutin Fleš,  
Pavao Mildner, Nikola Plavšić, Karlo Schulz i Karlo Weber  
(Od 15. studenog 1956 i Josip Kratohvil, Kazimir Šestanj i Otto Weber)*

## INDEKS PO AUTORIMA — AUTHOR INDEX

**RADOVI (O) — KRATKA SAOPĆENJA (S) — LABORATORIJSKE BILJEŠKE (L)**  
**PAPERS (O) — SHORT COMMUNICATIONS (S) — LABORATORY NOTES (L)**

Alaupović, Petar and Proštenik, Mihovil: Necrosamine Series. II. Synthesis of Racemic 4,5-Diaminoeicosane and of 2-Methyl-3,4-diaminononadecane. (O)	211
Alaupović, Petar and Proštenik, Mihovil: Necrosamine Series. III. Preparation of 4-(o-Carboxybenzamido)-5-benzylaminoeicosane and its Hydrolysis to 4-Amino-5-hydroxyeicosane. (O)	219
Alaupović, Petar and Proštenik, Mihovil: Necrosamine Series. IV. Preparation of 2-Methyl-3-hexahydrophthalimido-4-aminononadecane. (S)	225
Bačić, Iva: vidi Ivezković, Hrvoje	
Balenović, Krešimir and Bregant, Nada: A Route for the Synthesis of Substituted Dioxene Derivatives. (S)	67
Balenović, Krešimir, Škarić, Vinko and Dvornik, Dušan: Synthesis of Aminoalkylglyoxal Derivatives. III. Aminoalkylglyoxal Derivatives of $\alpha$ -Aminobutyric Acid and Valine. (O)	231
Balenović, Krešimir, Cerar, Đurđica and Bregant, Nada: Synthesis of Amino-hydroxy Acids from $\alpha$ -Amino Acids. Amino Acids XXXVII. (O)	279
Balenović, Krešimir, Fleš, Dragutin and Jambrešić, Ivan: L- $\beta$ -Methionine and Related Compounds. (S)	303
Balenović-Solter, Andelka: vidi Filipović, Ladislav	
Bogdanović, Paško, Maričić, Siniša and Vidan, Milan: The Kinetics of the Formation of Aluminium Hydroxide by Seeding Sodium Aluminate Solutions with Hydrargillite Crystals. IV. On the »Contact-intercristallisation«. (O)	155
Bona, Erna: vidi Branica, Marko	
Branica, Marko: Aparat za redestilaciju vode. (L) of Inorganic Ions with Organic Solvents. I. Continuous Extraction of Uranyl Nitrate with Tetrahydrosylvane and Tetrahydropyrane. (O)	129 9
Branica, Marko: Aparat za redestilaciju vode. (L)	129
Bregant, Nada: vidi Balenović, Krešimir	
Briha, Ivan and Vrbaški, Teodor: The Kinetics of Oxidation of Aldehydes to Acids and Acid Anhydrides. II. (O)	19
Briha, Ivan and Luetić, Pavica: The Energies of Activation of the Catalytic Dehydrogenation of Primary and Secondary Alcohols. (O)	93
Briha, Ivan: vidi Luetić, Pavica	
Cerar, Đurđica: vidi Balenović, Krešimir	
Černicki, Branislav and Težak, Božo: Methorics of the Precipitation Processes. XII. Mutual Influence of Silver Halides in Precipitation Processes. (O)	13
Černicki, Branislav and Težak, Božo: Methorics of the Precipitation Processes. XIII. A Study of the Precipitation of Sparingly Soluble Metal Fluorides. (O)	175
Dvornik, Dušan: vidi Balenović, Krešimir	
Filipović, Ladislav and Balenović-Solter, Andelka: Chelating Properties of 2,5-Dibenzoyl-3,4-dihydroxy Selenophene. (S)	311
Flajšman, Franjo: vidi Mirnik, Mirko	

Fleš, Dragutin and Markovac-Prpić, Anica: Application of the Arndt-Eistert Synthesis to the Preparation of Dipeptides of $\beta$ -Amino Acids. (S) . . . . .	73
Fleš, Dragutin and Markovac-Prpić, Anica: Synthesis of Some Quaternary Ammonium Salts Derived from Esters of Dihydromuconic Acid. (S) . . . . .	299
Fleš, Dragutin: vidi Balenović, Krešimir	
Gušťák-Mašek, Ivana: vidi Hahn, Viktor	
Hahn, Viktor, Škarić, Vinko, Miler, Erika and Stojanac, Žarko: Sinteze u redu difeniletera. IV. O fenoksifenilhidrazinima. (O) . . . . .	57
Hahn, Viktor, Kochansky, Zlata, Gušťák-Mašek, Ivana and Jemrić, Klara: S-Benzylthiuronium Salts of Some Barbituric Acid Derivatives. (O) . . . . .	119
Iskrić, Sonja: vidi Jaeger, Milenka	
Iveković, Hrvoje, Vrbaški Teodor and Pavlović, Dušanka: On the Changes of Viscosity Preceding the Precipitation of Aluminium Hydrate from Aluminate Solutions. (O) . . . . .	41
Iveković, Hrvoje, Vrbaški, Teodor and Pavlović, Dušanka: The Precipitation of Alumina Hydrate from Aluminate Solutions in the Presence of Some Higher Alcohols and Starch. (O) . . . . .	101
Iveković, Hrvoje and Bačić, Iva: Über einige Gesetzmässigkeiten im System Aluminatlauge-Äthanol. I. Bildung einer neuen Phase. (O) . . . . .	181
Iveković, Hrvoje and Bačić, Iva: Über einige Gesetzmässigkeiten im System Aluminatlauge-Äthanol. II. Approximative Bestimmung von Aluminium in Aluminatlägen. (O) . . . . .	191
Jaeger, Milenka, Iskrić, Sonja and Wicherhauser, Milan: Enzymatic Resolution of O-Methyl-N-acetyl-DL-serine. Amino Acids XXXII. (O) . . . . .	5
Jambrešić, Ivan: vidi Balenović, Krešimir	
Jukić-Markušić, Tomislava: vidi Lovreček, Branko	
Jemrić, Klara: vidi Hahn, Viktor	
Karas, Vinka: vidi Pinter, Tomislav	
Kochansky, Zlata: vidi Hahn, Viktor	
Kostelac, Rajka: vidi Weber, Karlo	
Kraljić, Ivan and Mate, Margareta: Photometric Determination of Microquantities of Cyanides. (O) . . . . .	249
Kraljić, Ivan and Mate, Margareta: A New Very Sensitive and Selective Spot Test for Mercury. (O) . . . . .	273
Lisenko, Nikola: vidi Stubičan, Vladimir	
Lovreček, Branko i Jukić-Markušić, Tomislava: Polarografsko ispitivanje alkaloida I. (O) . . . . .	255
Lovreček, Branko: Ispitivanje polarizacije na platinskoj elektrodi I. (O) . . . . .	261
Luetić, Pavica and Brihta, Ivan: Observations on the Solubility of Polyvinylchloride in Some Solvents Derived from Furfural. (S) . . . . .	125
Luetić, Pavica: vidi Brihta, Ivan	
Matijević, Egon, Schulz, Karlo F. and Težak, Božo: Methodics of Coagulation Processes. XIII. Systematic Comparison of Coagulation Values for Various Cations on Negative Silver Halogenide Sols. (O) . . . . .	82
Maričić, Siniša and Wrischer, Mercedes: Note on a Graphite-Sample with X-Ray Diagrams Free of »Orientation effect«. (S) . . . . .	307
Maričić, Siniša: vidi Bogdanović, Paško	
Markovac-Prpić, Anica: vidi Fleš, Dragutin	
Mate, Margareta: vidi Kraljić, Ivan	
Miholić, Stanko: The Acidulated Water of Kiseljak in Bosnia. A Geochemical Study. (O) . . . . .	113
Miholić, Stanko i Mirnik, Katarina: Termalno vrelo Sutinskikh toplica. Geokemijska studija. (O) . . . . .	163

<b>Miler</b> , Erika: vidi <b>Hahn</b> , Viktor	
<b>Mirnik</b> , Katarina: vidi <b>Miholić</b> , Stanko	
<b>Mirnik</b> , Mirko, <b>Flajšman</b> , Franjo and <b>Težak</b> , Božo: Electrophoretic Mobility and the Isoelectric Coagulation of the Silver Iodide Soils and Suspensions. (O)	167
<b>Pavlović</b> , Dušanka: vidi <b>Iveković</b> , Hrvoje	
<b>Perpar</b> , Marija, <b>Prus</b> , N., in <b>Tišler</b> , Miha: Prispevki k študiju uporabnosti Dennstedtove metode za sežig organskih spojin z visoko vsebnostjo dušika. (O)	53
<b>Pinter</b> , Tomislav und <b>Karas</b> , Vinka: Über den Nachweis des Ferro-Ions in wässerigen Pentacyanoaquo- und Hexacyanoferrat (II)-Lösungen, das unter dem Einfluss des Lichtes und der Mercuri-Ionen entsteht. (O)	107
<b>Procházka</b> , Željko: vidi <b>Weber</b> , Karlo	
<b>Proštenik</b> , Mihovil: Studies in the Sphingolipids Series. VII. The Configuration of $\alpha$ -Hydroxy-n-hexacosanoic Acid of Yeast Cerebrin. (O)	287
<b>Proštenik</b> , Mihovil: vidi <b>Alaupović</b> , Petar; <b>Stanaćev</b> , Nikola Ž.	
<b>Prus</b> , N.: vidi <b>Perpar</b> , Marija	
<b>Pučar</b> , Zvonimir: Beiträge zur Kenntnis der Papierelektrophorese in feuchter Kammer. IV. Kontinuierliche Elektrophorese und zweidimensionale Elektrochromatographie. (O)	195
<b>Schulz</b> , Karlo F.: vidi <b>Matijević</b> , Egon	
<b>Stanaćev</b> , Nikola Ž. and <b>Proštenik</b> , Mihovil: On the Reaction of Diphthaloyl-DL-Lysine Chloride with Dibenzyl Sodiomethylmalonate. Preparation of DL-4,8-Diamino-3-octanone. (O)	291
<b>Stojanac</b> , Žarko: vidi <b>Hahn</b> , Viktor	
<b>Stubičan</b> , Vladimir, <b>Lisenko</b> , Nikola and <b>Wrischer</b> , Mercedes: Studies of Bentonites. II. The Morphology of Montmorillonite Particles and the Crystal Form of Free Silica in Some Bentonites. (O)	239
<b>Šimunović</b> , Nevenka: vidi <b>Branica</b> , Marko	
<b>Škarić</b> , Vinko: vidi <b>Hahn</b> , Viktor; <b>Balenović</b> , Krešimir	
<b>Špoljarić</b> , Ivan: vidi <b>Weber</b> , Karlo	
<b>Štefanac</b> , Zlata: A Contribution to the Micro Determination of Active Hydrogen in Organic Compounds by Lithium Aluminium Hydride. (S)	295
<b>Težak</b> , Božo: vidi <b>Branica</b> , Marko; <b>Černicki</b> , Branislav; <b>Matijević</b> , Egon; <b>Mirnik</b> , Mirko	
<b>Tišler</b> , Miha: Syntheses in the 4-Substituted Thiosemicarbazide Series. (O)	147
<b>Tišler</b> , Miha: vidi <b>Perpar</b> , Marija	
<b>Vidan</b> , Milan: vidi <b>Bogdanović</b> , Paško	
<b>Vrbaški</b> , Teodor: vidi <b>Brihta</b> , Ivan; <b>Iveković</b> , Hrvoje	
<b>Weber</b> , Karlo, <b>Procházka</b> , Željko und <b>Špoljarić</b> , Ivan: Über die Luminescenz des Luminols. VII. Die Wirkung von Fremdstoffzusatz auf die Luminolreaktion. (O)	25
<b>Weber</b> , Karlo und <b>Kostelac</b> , Rajka: Über die Luminescenz des Luminols. VIII. Eine sehr wirksame Inhibition der Luminolreaktion. (O)	33
<b>Wickerhauser</b> , Milan: vidi <b>Jaeger</b> , Milenka	
<b>Whischer</b> , Mercedes: vidi <b>Stubičan</b> , Vladimir; <b>Maričić</b> , Siniša	
<b>Živanović</b> , Dušan: Prilog određivanju arsena u piritu. (S)	69

## SADRŽAJ — CONTENTS

**RADOVI (O) — KRATKA SAOPĆENJA (S) — LABORATORIJSKE BILJEŠKE (L)  
PAPERS (O) — SHORT COMMUNICATIONS (S) — LABORATORY NOTES (L)****FIZIČKA I ANORGANSKA KEMIJA — PHYSICAL AND INORGANIC CHEMISTRY**

<b>M. Branica, E. Bona, N. Šimunović and B. Težak:</b> Extraction of Inorganic Ions with Organic Solvents. I. Continuous Extraction of Uranyl Nitrate with Tetrahydrosylvane and Tetrahydropyran (Ekstrakcija anorganskih iona organskim otapalima. I. Kontinuirana ekstrakcija uranil nitrata tetrahidrosilvanom i tetrahidropiranom) (O) . . . . .	9
<b>B. Černicki and B. Težak:</b> Methodics of the Precipitation Processes. XII. Mutual Influence of Silver Halides in Precipitation Processes (Metorika precipitacionih procesa. XII. Medusobni utjecaj argentum halogenida kod precipitacionih procesa) (O) . . . . .	13
<b>I. Brihta and T. Vrbaški:</b> The Kinetics of Oxidation of Aldehydes to Acids and Acid Anhydrides. II (Kinetika oksidacije aldehida u kiseline i anhidride kiselina. II) (O) . . . . .	19
<b>K. Weber, Ž. Procházka und I. Špoljarić:</b> Über die Luminescenz des Luminols. VII. Die Wirkung von Fremdstoffzusatz auf die Luminolreaktion ( <i>O luminescenciji luminola. VII. Dijelovanje dodatka tudihih tvari na luminolsku reakciju</i> ) (O) . . . . .	25
<b>K. Weber und R. Kostelac:</b> Über die Luminescenz des Luminols. VIII. Eine sehr wirksame Inhibition der Luminolreaktion ( <i>O luminescenciji luminola. VIII. Vrlo djelotvorna inhibicija luminolske reakcije</i> ) (O) . . . . .	33
<b>H. Iveković, T. Vrbaški and D. Pavlović:</b> On the Changes of Viscosity Preceding the Precipitation of Aluminium Hydrate from Aluminate Solutions ( <i>O promjeni viskoziteta aluminatnih lužina prije izlučivanja aluminijeva hidrata</i> ) (O) . . . . .	41
<b>Dušan Živanović:</b> Prilog određivanju arsena u piritu (Note on the Determination of Arsenic in Pyrite) (S) . . . . .	69
<b>E. Matijević, K. F. Schulz and B. Težak:</b> Methodics of Coagulation Processes. XIII. Systematic Comparison of Coagulation Values for Various Cations on Negative Silver Halogenide Sols (Metorika koagulacionih procesa. XIII. Sistematska usporedba koagulacionih vrijednosti različitih kationa za negativne solove srebrnih halogenida) (O) . . . . .	81
<b>I. Brihta and P. Luetić:</b> The Energies of Activation of the Catalytic Dehydrogenation of Primary and Secondary Alcohols (Energija aktivacije katalitičke dehidrogenacije primarnih i sekundarnih alkohola) (O) . . . . .	93
<b>H. Iveković, T. Vrbaški and D. Pavlović:</b> The Precipitation of Alumina Hydrate from Aluminate Solutions in the Presence of Some Higher Alcohols and Starch (Izlučivanje aluminijevog oksihidrata iz aluminatnih lužina u prisutnosti nekih viših alkohola i škroba) (O) . . . . .	101
<b>T. Pinter und V. Karas:</b> Über den Nachweis des Ferro-Ions in wässrigeren Pentacyanoaquo- und Hexacyanoferrat (II)-Lösungen das unter dem Einfluss des Lichtes und der Mercuri-Ionen entsteht ( <i>O dokazu feroina u vodenim pentacianoakvo- i heksacijanoferat (II) otopinama pod utjecajem svjetla i merkuri iona</i> ) (O) . . . . .	107
<b>S. Miholić:</b> The Acidulated Water of Kiseljak in Bosnia. A Geochemical Study (Mineralna voda Kiseljak. Geokemijska studija) (O) . . . . .	113

<b>P. Luetić and I. Brihta:</b> Observations on the Solubility of Polyvinylchloride in Some Solvents Derived from Furfural ( <i>Opažanja o topljivosti polivinil-klorida u nekim otapalima, dobivenim iz furfurola</i> ) (S) . . . . .	125
<b>Marko Branica:</b> Aparat za redestilaciju vode ( <i>An Apparatus for Redistillation of Water</i> ) (L) . . . . .	129
<b>P. Bogdanović, S. Maričić and M. Vidan:</b> The Kinetics of the Formation of Aluminium Hydroxide by Seeding Sodium Aluminate Solutions with Hydrargillite Crystals. IV. On the »Contact-intercocrystallization« ( <i>Kinetika stvaranja aluminijeva hidroksida cijepljenjem otopine natrijeva aluminiata kristalima hidrargilita. IV. O »kontaktnoj interkristalizaciji</i> ) (O) . . . . .	155
<b>S. Miholić i K. Mirnik:</b> Termalno vrelo Sutinskih toplica. Geokemijska studija ( <i>The Termal Source of Sutisko. A Geochemical Study</i> ) (O) . . . . .	163
<b>M. Mirnik, F. Flajšman and B. Težak:</b> Electrophoretic Mobility and the Isoelectric Coagulation of the Silver Iodide Sols and Suspensions ( <i>Elektroforetska pokretljivost i izoelektrična koagulacija solova i suspenzija argentum jodida</i> ) (O) . . . . .	167
<b>B. Černicki and B. Težak:</b> Methodics of the Precipitation Processes. XIII. A Study of the Precipitation of Sparingly Soluble Metal Fluorides ( <i>Metorika precipitacionih procesa. XIII. Precipitacija teško topljivih fluorida metala</i> ) (O) . . . . .	175
<b>H. Ivezović und I. Bačić:</b> Über einige Gesetzmässigkeiten im System Aluminatlauge-Äthanol. I. Bildung einer neuen Phase ( <i>O nekim zakonitostima u sistemu aluminatna lužina-etalon. I. Stvaranje nove faze</i> ) (O) . . . . .	181
<b>H. Ivezović und I. Bačić:</b> Über einige Gesetzmässigkeiten im System Aluminatlauge-Äthanol. II. Approximative Bestimmung von Aluminium in Aluminatlauzen ( <i>O nekim zakonitostima u sistemu aluminatna lužina-etalon. II. Aproksimativno određivanje aluminija u aluminatnim lužinama</i> ) (O) . . . . .	191
<b>Zvonimir Pučar:</b> Beiträge zur Kenntnis der Papierelektrophorese in feuchter Kammer. IV. Kontinuierliche Elektrophorese und zweidimensionale Elektrochromatographie ( <i>Prilog upoznavanju elektroforeze na filterskom papiru metodom vlažne komore. IV. Kontinuirana elektroforeza i dvo-dimenzionalna elektrokromatografija</i> ) (O) . . . . .	195
<b>V. Stubičan, N. Lisenko and M. Wriscer:</b> Studies of Bentonites. II. The Morphology of Montmorillonite Particles and the Crystal Form of Free Silica in Some Bentonites ( <i>Studije bentonita. II. Morfologija montmorilonitnih čestica i kristalna modifikacija kremične kiseline u nekim bentonitima</i> ) (O) . . . . .	239
<b>I. Kraljić and M. Mate:</b> Photometric Determination of Microquantities of Cyanides ( <i>Fotometrijsko određivanje mikrokoličina cijanida</i> ) (O) . . . . .	249
<b>B. Lovreček i T. Jukić-Markušić:</b> Polarografsko ispitivanje alkaloida. I ( <i>Polarographic Investigation of Alkaloids. I</i> ) (O) . . . . .	255
<b>B. Lovreček:</b> Ispitivanje polarizacije na platinскоj elektrodi. I ( <i>Investigation of Polarisation at Platinum Electrode. I</i> ) (O) . . . . .	261
<b>I. Kraljić and M. Mate:</b> A New Very Sensitive and Selective Spot Test for Mercury ( <i>Novo, vrlo osjetljivo i selektivno dokazivanje žive u kapi</i> ) (O) . . . . .	273
<b>S. Maričić and M. Wriscer:</b> Note on a Graphite-Sample with X-Ray Diagrams Free of »Orientation-effect« ( <i>Bilješka o uzorku grafita s rentgenografskim dijagramima bez »efekta orijentacije«</i> ) (S) . . . . .	307
<b>L. Filipović and A. Balenović-Solter:</b> Chelating Properties of 2,5-Dibenzoyl-3,4-dihydroxy Selenophene ( <i>Helatna svojstva 2,5-dibenzoil-3,4-dioksi selofena</i> ) (S) . . . . .	311

#### ORGANSKA KEMIJA I BIOKEMIJA — ORGANIC CHEMISTRY AND BIOCHEMISTRY

- M. Jaeger, S. Iskrić and M. Wickerhauser:** Enzymatic Resolution of O-Methyl-N-acetyl-DL-serine. Amino Acids. XXXII. (*Enzimatsko cijeplanje O-metil-N-acetyl-DL-serina*) (O) . . . . .

<b>M. Perpar, N. Prus in M. Tišler:</b> Prispevek k študiju uporabnosti Dennstedtove metode za sežig organskih spojin z visoko vsebnostjo dušika ( <i>A Modification of Dennstedt's Method for Substances of High Nitrogen Contents</i> ) (O) . . . . .	53
<b>V. Hahn, V. Škarić, E. Miler i Ž. Stojanac:</b> Sinteze u redu difeniletera. IV. O fenoksifenihidrazinima ( <i>Syntheses in the Diphenyl Ether Series. IV. The Phenoxyphenylhydrazines</i> ) (O) . . . . .	57
<b>K. Balenović and N. Bregant:</b> A Route for the Synthesis of Substituted Dioxene Derivatives ( <i>Sinteza supstituiranih derivata dioksena</i> ) (S) . . . . .	67
<b>D. Fleš and A. Markovac-Prpić:</b> Application of the Arndt-Eistert Synthesis to the Preparation of Di-peptides of $\beta$ -Amino Acids ( <i>Pripravljanje di-peptida <math>\beta</math>-amino kiselina primjenom Arndt-Eistertove reakcije</i> ) (S) . . . . .	73
<b>V. Hahn, Z. Kochansky, I. Guštak-Mašek and K. Jemrić:</b> S-Benzylthiuronium Salts of Some Barbituric Acid Derivatives ( <i>S-Benziltiuronijeve soli nekih derivata barbiturne kiseline</i> ) (O) . . . . .	119
<b>M. Tišler:</b> Syntheses in the 4-Substituted Thiosemicarbazide Series ( <i>Sinteze u redu 4-supstituiranih tiosemikarbazida</i> ) (O) . . . . .	147
<b>P. Alaupović and M. Proštenik:</b> Necrosamine Series. II. Synthesis of Racemic 4,5-Diaminoeicosane and of 2-Methyl-3,4-diaminononadecane ( <i>Nekrozamin. II. Sinteza racemičkog 4,5-diamino-eikosana i 2-metil-3,4-diamino-nonadekana</i> ) (O) . . . . .	211
<b>P. Alaupović and M. Proštenik:</b> Necrosamine Series. III. Preparation of 4-(o-Carboxybenzamido)-5-benzylaminoeicosane and its Hydrolysis to 4-Amino-5-hydroxyeicosane ( <i>Nekrozamin. III. Pripravljanje 4-(o-karboksi-benza-mido)-5-benzilamino-eikosana i hidroliza u 4-amino-5-hidroksi-eikosan</i> ) (O) . . . . .	219
<b>P. Alaupović and M. Proštenik:</b> Necrosamine Series. IV. Preparation of 2-Methyl-3-hexahydrophthalimido-4-amino-nonadecane ( <i>Nekrozamin. IV. Pripravljanje 2-metil-3-heksahidroftalimido-4-amino-nonadekana</i> ) (S) . . . . .	225
<b>K. Balenović, V. Škarić and D. Dvornik:</b> Synthesis of Aminoalkylglyoxal Derivatives. III. Aminoalkylglyoxal Derivatives of $\alpha$ -Aminobutyric Acid and Valine ( <i>Aminoalkilglioksali. III. Aminoalkilglioksalni derivati <math>\alpha</math>-amino-maslačne kiseline i valina</i> ) (O) . . . . .	231
<b>K. Balenović, D. Cerar and N. Bregant:</b> Synthesis of Aminohydroxy Acids from $\alpha$ -Amino Acids. Amino Acids. XXXVII. ( <i>Sinteza amino-oksi kiselina iz <math>\alpha</math>-amino kiseline. Amino kiseline XXXVII</i> ) (O) . . . . .	279
<b>M. Proštenik:</b> Studies in the Sphingolipids Series. VII. The Configuration of $\alpha$ -Hydroxy-n-hexacosanoic Acid of Yeast Cerebrin ( <i>Studije u redu sfin-golipoida VII. Konfiguracija <math>\alpha</math>-oksi-n-heksakozanske kiseline iz kvaščeva cerebrina</i> ) (O) . . . . .	287
<b>N. Ž. Stanaćev and M. Proštenik:</b> On the Reaction of Diphthaloyl-DL-lysine Chloride with Dibenzyl Sodiummethylmalonate. Preparation of DL-4,8-Diamino-3-octanone ( <i>O reakciji klorida diftaloil-DL-lizina s dibenzil natrium-metil-malonatom. Pripravljanje DL-4,8-diamino-3-oktanona</i> ) (O) . . . . .	291
<b>Z. Štefanac:</b> A Contribution to the Micro Determination of Active Hydrogen in Organic Compounds by Lithium Aluminium Hydride ( <i>Prilog mikro-određivanju aktivnog vodika u organskim spojevima s pomoću litijsko-aluminijskog hidrida</i> ) (S) . . . . .	295
<b>D. Fleš and A. Markovac-Prpić:</b> Synthesis of Some Quaternary Ammonium Salts Derived from Esters of Dihydromuconic Acid ( <i>Sinteza nekih kvarternih amonijskih soli, derivata estera dihidromukonske kiseline</i> ) (S) . . . . .	299
<b>K. Balenović, D. Fleš and I. Jambrešić:</b> L- $\beta$ -Methionine and Related Compounds (L- $\beta$ -Metionin i srodnii spojevi) (S) . . . . .	303

## RECENZIJE — BOOK REVIEWS

<b>Kalervo Rankama:</b> <i>Isotope Geology</i> (S. Miholić) . . . . .	79
<b>F. Todt:</b> <i>Korrosion und Korrosionsschutz</i> (T. Marković) . . . . .	80
<b>E. H. Rodd:</b> <i>Chemistry of Carbon Compounds. Vol. IA, IB, IIA, IIB, III</i> (K. Balenović) . . . . .	143
<i>Gmelins Handbuch der anorganischen Chemie: Calcium</i> (I. Filipović) . . . . .	145
<b>V. A. Kalichersky and K. A. Kolbe:</b> <i>Petroleum Refining with Chemicals</i> (V. Škarić) . . . . .	299
<i>Gmelins Handbuch der anorganischen Chemie: Zink</i> (I. Filipović) . . . . .	313
<b>H. Remy:</b> <i>Treatise on Inorganic Chemistry Vol. I and Vol. II</i> (C. Đorđević) . . . . .	314

## NEKROLOG — OBITUARY

<b>Prof. Dr. Ivan Plotnikov</b> (V. Njegovan, K. Weber) . . . . .	131
<b>Prof. Dr. Bogdan Šolaja</b> (V. Njegovan) . . . . .	145

## PRILOG — APPENDIX

Glavna Godišnja skupština Hrvatskog kemijskog društva za godinu 1956. . . . .	A 1
Kongres za kliničku kemiju . . . . .	A 18
Popis časopisa koje prima Centralna kemijska biblioteka . . . . .	A 19
Popis novih članova Hrvatskog kemijskog društva . . . . .	A 31
Kolokviji Hrvatskog kemijskog društva . . . . .	A 33
Obavijesti . . . . .	A 18, A 34

## BIBLIOGRAFIJA CHEMICA CROATICA

Radovi (Papers) . . . . .	B1, B4, B7
Disertationes . . . . .	B6