

CLCHAU 29(6) 1007-1330 (1983) ISSN 0009-9147

climical chauge chemistry

Journal of the American Association for Clinical Chemistry

- 1007 Continuous-Flow System for Automation of Latex Immunoassay by Particle Counting Alfred M. Bernard and Robert R. Lauwerys
- 1012 Measurement of True Salicylate Concentrations in Serum from Patients with Reye's Syndrome

Ellen S. Kang, Timothy A. Todd, Mary T. Capaci, Kathryn Schwenzer, and J.T. Jabbour

- 1015 Inexpensive Double-Antibody Fluoroimmunoassay for Aminoglycoside Antibiotics, Phenytoin, and Theophylline in Serum Michael J. Kurtz, Mary Billings, Tung Koh, Glenn Olander, Thomas Tyner, Bill Weaver, and Lon Stone
- 1020 Variations in Amylase Isoenzymes and Lipase during Acute Pancreatitis, and in Other Disorders Causing Hyperamylasemia Pierre Leclerc and Jean-Claude Forest
- 1024 125I-Labeled Radioimmunoassay Kits for Progesterone Evaluated for Use in an In Vitro Fertilization Program
 L.F. Blight and G.H. White
- 1028 Interpretation of Cerebrospinal Fluid Protein Assays in Various Neurologic Diseases Robert H. Christenson, Patricia Behlmer, James F. Howard, Jr., John B. Winfield, and Lawrence M. Silverman
- 1031 Pseudocholinesterase/High-Density Lipoprotein Cholesterol Ratio in Serum of Normal Persons and of Hyperlipoproteinemics
 Rajendra Jain, K. Madhavan Kutty, Shao-Nan Huang, and Kenneth Kean
- 1034 Evaluation of Serum γ -Glutamyltransferase by Electrofocusing, and Variations in Isoform Patterns

Hans Lilja, Jan-Olof Jeppsson, and Hans Kristensson

- 1038 Reflectance Digital Matrix Photometry William E. Neeley and Alfred Zettner
- 1042 Beta-Carotene Determined in Serum by Liquid Chromatography with an Internal Standard William J. Driskell, Mark M. Bashor, and Jane W. Neese
- 1045 Immunoquantification of Total Apolipoprotein B in Serum by Nephelometry: Influence of Lipase Treatment and Detergents Paolo DaCol and Gerhard M. Kostner
- 1051 Simultaneous Determination of Phenytoin and Phenobarbital in Serum or Plasma by Substrate-Labeled Fluorescent Immunoassay Kenneth J. Dean, Stephan G. Thompson, John F. Burd, and Robert T. Buckler
- 1057 Serum LD-1 Activity in Suspected Acute Myocardial Infarction Willie Gerhardt, Stefan Hofvendahl, Lars Ljungdahl, Johan Waldenström, Nils Tryding, Thomas Pettersson, and Ola Ohlsson
- 1061 Quantitative Enzyme Antigen Immunoassay of Acetylcholinesterase in Amniotic Fluid Bent Nørgaard-Pedersen, Jorgen Hangaard, and Ole Jannik Bjerrum
- 1065 Rapid Acetylcholinesterase Screening Test for Neural Tube Defect D.L. Hay, G.F. Ibrahim, and I. Horacek
- 1070 Stability of Estrogen- and Progesterone-Receptor Concentrations in Human Uterus Tissue N.Y. Zachariah and Z.H. Chakmakjian SCIENTIFIC NOTES
- 1073 Enzyme Inactivation in Serum before Determi-

nation of Total Bile Acids

Naomi Quast Hanson and Esther F. Freier

- 1075 Reagent for the Enzymatic Determination of Serum Total Cholesterol with Improved Lipolytic Efficiency Joachim Siedel, Edgar O. Hägele, Joachim Ziegenhorn, and August W. Wahlefeld
- 1080 Glycosylated Hemoglobin Measured by Affinity Chromatography: Micro-Sample Collection and Room-Temperature Storage Randie R. Little, Jack D. England, Hsiao-Mei

Wiedmeyer, and David E. Goldstein

- 1082 Liquid-Chromatographic Study of Fluorescent Materials in Uremic Fluids James S. Swan, Edith Y. Kragten, and Hans Veen-
 - James S. Swan, Edith Y. Kragten, and Hans Veening
- 1085 Liquid-Chromatographic Determination of Nadolol in Plasma Ram N. Gupta, R. Brian Haynes, Alexander G.

Logan, Lorry A. Macdonald, Robin Pickersgill, and Christine Achber

1087 Improved Determination of Aluminum in Serum by Electrothermal Atomic Absorption Spectrophotometry

Roger L. Bertholf, Sue Brown, Brian W. Renoe, Michael R. Wills, and John Savory

- 1090 Evaluation of a Direct Potentiometric Method for Sodium and Potassium Used in the Du Pont aca David D. Koch, Donna Parrish, and Jack H.
- Ladenson

 1093 Direct Spectrophotometric Assay for Angiotensin-Converting Enzyme in Serum
 Simonetta Ronca-Testoni
- 1097 Reversed-Phase Liquid-Chromatographic Simultaneous Analysis for Thiopental and Pentobarbital in Serum

Michael Kelner and David N. Bailey

1100 Kinetic Measurement of Total Amylase and
Isoamylase Activities with a Centrifugal Ana-

Dik de Rijke and Hans J.H. Kreutzer

- 1104 Liquid-Chromatographic Determination of Aminoglutethimide in Plasma B.A. Robinson and F.N. Cornell
- 1106 Interference from Renal Dialysis Patients' Specimens in a Direct Method for Serum Iron Peter S. Bunting and Mahesh Aggarwal
- 1109 Three Commercial Methods for Serum Ferritin Compared and the High-Dose "Hook Effect" Eliminated

Ronald H. Ng, Becky A. Brown, and Roland Valdes, Jr.

1113 Effects of Whole Blood Storage on Results for Glycosylated Hemoglobin as Measured by Ion-Exchange Chromatography, Affinity Chromatography, and Colorimetry

Randie R. Little, Jack D. England, Hsiao-Mei Wiedmeyer, and David E. Goldstein

- 1115 Boehringer Immunoinhibition Procedure for Creatine Kinase-MB Evaluated and Compared with Column Ion-Exchange Chromatography Henny F. ter Welle, Ton Baartscheer, and Jan W.T. Fiolet
- 1119 Reference Intervals for Amylase Isoenzymes in Serum and Plasma of Infants and Children Baiba Kurins Gillard, Janet A. Simbala, and Lee Goodglick
- 1123 Bioluminescent Assay for Total Bile Acids in

Serum with Use of Bacterial Luciferase Inger Styrélius, Anders Thore, and Ingemar Björkhem

1127 Automated Particle-Counting Immunoassay of C-Reactive Protein and Its Application to Serum, Cord Serum, and Cerebrospinal Fluid Samples

D. Collet-Cassart, J.C. Mareschal, C.J.M. Sindic, J.P. Tomasi, and P.L. Masson

1131 New Statistical Approach in Biochemical Method-Comparison Studies by Using Westlake's Procedure, and Its Application to Continuous-Flow, Centrifugal Analysis, and Multilayer Film Analysis Techniques Dominique Gerbet, Philippe Richardot, Jean-

Dominique Gerbet, Philippe Richardot, Jean-Louis Auget, Jean Maccario, Catherine Cazalet, Denis Raichvarg, Ohvanesse G. Ekindjian, and Jacques Yonger

35th NATIONAL MEETING, AACC

- 1137 Scientific Program
- 1138 Symposia Lecturers and Abstracts
- 1156 Abstracts of Meeting Papers
- 1288 Workshops
- 1298 Commercial Workshops
- 1300 Roundtables
- 1304 New Products Review

LETTERS

- 1309 Bilirubin Interferes in the aca Determination of Mg²⁺ in Serum Sandra McCoy, Noel K. Maclaren, and John C. Gudat
- 1309 Cloxacillin Interference with Screening Tests for Bence Jones Proteins

Peter Dennis, Beryl Biegler, and Ian Larmour

- 1310 Questioning the Presence of Pregnancy-Specific β₁-Glycoprotein (or Immunologically Similar Material) in Cerebrospinal Fluid Axel M. Gressner
- 1310 Sodium Drift in the Beckman ASTRA: A Response
 Thomas M. Happe

1310 Urine Urea Nitrogen as Measured in the Beckman Astra-8 Laurence M. Demers, Brenda Dourte, and

- Barbara Hutchinson

 1311 Evaluation of a Kit to Measure HDL Cholesterol
 (HDL-C) in Serum
- Dale A. Clark, Phillip R. Rozell, and E.L. Mosser
 1311 Cefoxitin Interference with Urinary 17-Hydroxycorticosteroid Determination
 Fred H. Faas, Johnita Norman, and William J.
 Carter

1313 A Potential Problem on Comparison of Plasma with Serum for Zinc Content Tetsuo Makino

1314 Determination of Total Urinary and Cerebrospinal Fluid Protein with a New Precipitant-Dye Method

E. Nissenbaum and W. Gyure

- 1315 Measurement of Serum Calcium by Use of a Rapid Kit Procedure Peter West
- 1315 Automated Sequential Urea and Glucose Assay in One Cuvet Lorenzo Prencipe, Sergio Brenna, and Cesare E.
- 1317 Kits for Measurement of Free Thyroxin Vioin D. Shah

clinical chemistry & clinical chemistry reference edition

Journal of the American Association for Clinical Chemistry

J. Stanton King, Executive Editor

Virginia Shires Marcum, Assistant Editor

Board of Editors

Theodore Peters, Jr., Chairman David N. Bailey Edward W. Bermes, Jr. **Bernard Berne**

George N. Bowers, Jr. Carl A. Burtis **Basil T. Doumas** Richard H. Gadsden Harold J. Grady

Hanns-Dieter Gruemer Eugene K. Harris Peter I. Jatlow George F. Johnson Thomas R. Koch

Jack Ladenson John A. Lott Robert Rej Robert F. Ritchie **Robert Schaffer**

Raymond Vanderlinde W. H. C. Walker **Mario Werner** Michael R. Wills **Robert Wolen**

1317 Enzymatic Assay for Methotrexate with a Centrifugal Analyzer (Cobas-Bio) A.M. Imbert, T. Pignon, and N. Lena

1318 Aluminum, Barium, Silicon, and Strontium in

Amniotic Fluid by Emission Spectrometry Gene S. Hall, Michael J. Carr, Emilie Cummings. and Ming-Liang Lee

1319 Correlation between Glycosylated Hemoglobin in Specimens Containing Potassium EDTA and Fluoride/Oxalate

Fiona M. Sinclair and Derek J. MacDonald

1319 "Alpha" and "Beta" Errors S. Raymond Gambino and Robert S. Galen

1319 Dehydroepiandrosterone Sulfate Concentrations in Plasma of Normal Ovulatory Women James A. Simon and John E. Buster

1320 Fetal Alcohol Syndrome and Lactic Acidosis John C. Cate IV, Regina Hedrick, and Raoul Morin

1320 Chloride Interference with Use of an Iodide-Selective Electrode for Urinary I Garth J.S. Cooper and Michael S. Croxson

1320 Glucose Method Comparison Criticized Richard B. Passey (Reply)

Ottavio Giampietro, Alessandro Pilo, Giuseppe Buzzigoli, Claudio Boni, and Renzo Navalesi

1321 Glutaraldehyde Intensifies Jaffé Reaction with

Hippocrates Yatzidis

1322 Reliability of Kit Methods for Free Thyroxin: **The Corning Test System** D. Geiseler

1322 Valproic Acid Does Not Interfere with an Enzymatic Determination of Free Fatty Acids in

Fiorenzo Albani, Roberto Riva, Agostino Baruzzi, Renato Calliva, Alberto Frascari, and M. Maddalena Spoto

1323 Marked Post-Operative Increase in Serum Aspartate Aminotransferase Activity Amin A. Nanji

1323 Is There an Enzymatic Reversibility of Nonen-

zymatic Glyosylation of Hemoglobin?

Gert Lubec, Walter Vycudilik, Hermann Coradello, Andreas Lischka, and Arnold Pollak

1324 Interference in Radioimmunoassy of Total Serum Thyroxin and Free Thyroxin Due to Thyroxin-Binding Autoantibodies

C.I. Bhagat, P. Garcia-Webb, F. Watson, and J.P. Beilby

1325 Triamterene Interferes in Urinary Catecholamine Analyses

Ricky P. Bateh and Lemuel J. Bowie

1327 BOOK REVIEW George E. Nichoalds

1328 CORRECTIONS

1329 THE CLINICAL CHEMIST J. Stanton King

Editorial Board, Selected Methods Willard R. Faulkner, Chairman **Martin Fleisher** Donald T. Forman **Christopher Frings**

Richard H. Gadsden Judith A. Hopkins Lawrence M. Killingsworth Samuel Meites

George E. Nichoalds Henry C. Nipper Thomas C. Stewart Raymond E. Vanderlinde

Marian Hartness, Editorial Assistant Celia Sparger, Admin. Assistant Christina Rea, Copy Editor

Editorial Office Tel. (919) 725-0208 Box 5218 (street address: 2110 Cloverdale) Winston-Salem, NC 27113-5218

Business Office Tel. (202) 857-0717 1725 K St., NW Washington, DC 20006

The contents of advertisements or articles of Clinical Chemistry (ISSN 0009-9147) are not to be construed as official statements, evaluations, or endorsements by the Board of Editors of the American Association for Clinical Chemistry.

Copyright © 1983 The American Association for Clinical Chemistry

General Information. Manuscripts, editorial inquiries, and books for review should be addressed to the Editorial Office (address above). All subscriptions and circulation inquiries should be sent to the Business Office (address above). Information for Authors appears in the January issue.

Subscriptions: Clinical Chemistry and Clinical Chemistry Reference Edition (CCRE) are issued monthly. Subscriptions are to be prepaid; payment should accompany the order. Individuals subscribe to Clinical Chemistry; rates per year: \$55.00 in US; \$65.00 in North America outside US; \$80.00 elsewhere. Institutions subscribe to CCRE; rates per year: \$95.00 in US; \$105.00 in North America outside US; \$115.00 elsewhere. Both are available in soft cover, microfilm, or microfiche. Japanese yen price is available from our exclusive agent in Japan: U.S. Asiatic Co., Ltd., 13-12 1-Chome, Shimbashi Minato-Ku, Tokyo 105, Japan. Members, domestic and foreign, \$25.00 (included in dues). All subscriptions before Oct. 1 start with first issue of the current volume. Single copies of currentand back-volume issues \$8.00; ask for current prices on Special Issues. Claims for missing numbers will not be allowed (a) unless we are notified no later than three months after the issue date for domestic and Canadian subscribers, four months after the issue date for foreign subscribers; (b) if notice of a recent change of address has not been received; or (c) if the reason for claim is "missing from files." Advertising inquiries should be sent to Scherago Associates, Inc., 1515 Broadway, 10th Flr., New York, NY 10036. Second class postage paid at Washington, DC 20006 and additional mailing offices. Published monthly by the American Association for Clinical Chemistry, Inc., Winston-Salem, NC 27113-5218. Printed at 20th and Northampton Sts., Easton, PA 18042.