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AMERICAN ROMANIAN ACADEMY OF ARTS AND SCIENCES

B Y L A W S

PREAMBLE

Scholars and artists of Romanian origin living on American soil , as well as a number of American scientists specializing in Romania civilization , culture and language , guided by the aspiration of serving both the American and the Romanian nations through creative scientific and cultural activity , do establish :

The American Romanian Academy

of Arts and Sciences

as a "non profit organization" .

I. Purpose and Character of the Academy

Art. 1 . A.R.A. is an academic forum . Its vocation is the enhancement of Roma - nian cultural values in the spirit of academic autonomy as defined by Western democratic thought . The Academy has the following objectives:

(a) to foster Romanian culture and acquaint the Western world with Romanian spiritual values ;

(b) to strengthen the cultural and spiritual ties between the American and Romanian peoples ;

(c) to provide , in the United States of America , for the Romanian nation , a constant "point d'appui" at the scientific and cultural levels .

Art. 2. In order to achieve its goal , the American Romanian Academy of Arts and Sciences shall preserve and strongly defend its independence , by avoiding any af filiation to other organizations or its subordination to Associations or groups of any type .

Art. 3. The residence of the American Romanian Academy (A.R.A.) will be that of its President . The President represents the A.R.A. de facto and de jure .

II. The Members , their categories , Admission Procedures, Cessation of Membership

Art. 4. The A.R.A. consists of :

(a) full members ; (b) associate members ; and (c) honorary members .

Art. 5. The full members are elected according to the following criteria :

(a) Their activity in the field of their specialization , with publications or exhibitions of value , recognized by their respective scientific or artistic circles ;

(b) Their concern for the ideals of promoting Romanian culture under conditions free from political pressures . Any member of the A.R.A. has the right to recommend to the President - by a documented report - the admission of a new member into the Academy . The President will ask also the advice of a full member in a domain close to the special field of the candidate . In the event , this advice is favorable , the President shall transmit in writing the proposal to all full members of the Academy , together with all necessary data in view to enable the members to be informed about the academic (scientific or artistic) activities of the candidate .

In this proposal , the President will specify the candidate's status in his or her country of residence in order that it may be established whether the candidate is in a position to undertake lasting collaboration with the A.R.A. in the spirit of freedom stipulated by the Bylaws . The admission as a member is obtained by two thirds of the votes received by mail from the full members , provided that the number of ballots received represents the majority of the total number of the full members of the A.R.A.

Art. 6. The admission of the associate members follows a procedure similar to that described in Art. 5 . However , their admission is justified primarily by the moral and material support they offer the Academy .

Art. 7. Persons who have rendered particular services to the Academy or have substantially contributed to the fulfillment of its goals may be appointed honorary members at the President's proposal and with the approval of the Executive Committee ; the honorary members are exempted from the annual dues .

Art. 8 . Only the full members have the right to vote .

Art. 9 . The quality of member is lost by anyone who :

(a) departs from the stipulations of Articles 5 or 6 of the Bylaws ;

(b) offers a written resignation to the President ;

(c) does not pay the annual fees during two consecutive years .

Membership is automatically terminated in the case specified under (c) , at

the Secretary-Treasurer's acknowledgement ; and in the case specified under (b) , at the acknowledgement of the President . These acknowledgements should be included in the Minutes of the next meeting of the Executive Committee . In the case under (a) , the situation should be submitted by the President to the Grievance Committee (see Art. 27) following a notice given by the Executive Committee . The Grievance Committee will proceed with investigation and will present its report to the President (see Art. 17) .

III. The Governing Bodies

Art. 10. The General Assembly takes place once a year at the time of the Congress (ordinary meeting) , or more than once yearly , if called in extraordinary meeting by the President. The President summons the Assembly by circular letter addressed to full members , one month before the date which has been decided for the meeting . The agenda of the meeting shall be attached to the letter . Associate members may participate in discussions , but decisions are taken by the majority of votes of the full members .

Before a General Assembly may be duly constituted , the personal presence of at least ten full members is required . Decisions of the General Assembly require a majority of 50 percent plus one of those members who are present in person or who have provided a written proxy . If , by any lack of "quorum" , the meeting cannot be assembled , the President , with previous approval of the Executive Committee , may consult all the full members by mail , based on the established agenda .

The results will be communicated by the President to all members and inserted in the next Bulletin .

The General Assembly deliberates on the order of the day , discusses and approves the reports of the President and of the Secretary-Treasurer , approves the balance sheet of incomes and expenditures , elects the members of the Executive Committee who will serve for three years , decides the place , the university and the date of the next Congress and General Assembly and elects the members of the Grievance Committee .

Art. 11. The Executive Committee conducts the activity of the A.R.A. between the annual congresses . The Committee is composed of nine members , elected for a a three-year term by the General Assembly , namely : The President , the Vice President , the Secretary-Treasurer and six Counselors . A representative of the ARA Research Institute and the editor of the Journal are members ex officio .

1. The President represents the A.R.A. , presides over the Congresses and the General Assembly , approves the programs of the annual Congresses in agreement with the decisions taken by the General Assembly , supervises the carrying through of the decisions taken by the General Assembly , conducts the procedures for the election of new members (cf. Art. 5 , 6 , 7) , approves the expenditures going beyond the scope of current and routine administration , summons the General Assembly meeting at least once a year , at the date of the Congress . At least once a year , the President informs all full , associate and honorary members by circular letter about the activities of the Academy (in relationship with Congresses , Publications , Studies , Exhibitions , Festivals , Financial Matters , etc.) , communicates to all members by special circular letter : the admission of new members , the cases of cessation of status of membership , the recommendations of the Grievance Commitee .

2. The Vice President acts as substitute for the President in case of need and assists the President especially in problems related to publications .

3. The Secretary-Treasurer draws up the minutes of the meetings of the General Assembly and of the Executive Committee , carries on the task assigned to him by the President , administers the assets of the Academy , keeps the account book , writes the financial reports , and makes payment of the expenditures needed by the activities of the Association under the supervision of the President . The Secretary-Treasurer submits the balance sheet , including the income and expenditures for approval before the Executive Committee at each of its meetings .

4. The six Counselors correspond to the various branches of activity of the Academy in agreement with the specifications below (see Art. 13) . At the request of the editors in charge of the publications of the A.R.A. , the counselors report on the works submitted to publication which fall within the competence of their own general fields of activity . They also report to the Scientific Committee of Congresses in maters related to papers on subjects close to their competence in view of organizing the programs by sections .

The Executive Committee takes decisions in any matter falling within its competence . The Executive Committee is summoned by the President whenever he or she considers it necessary . The letter of convocation shall include the agenda of the meeting , asking that those members who are not able to participate in person should send their votes by mail ; for matters of emergency , the President may con-

sult the members of the Executive Committee by telephone or telegram . The decisions of the Executive Committee as well as the voting procedures shall be inserted in the official report of the proceedings , which will be submitted for approval at the next meeting , and published in the next Bulletin of the Academy .

IV. The Activities of the Academy

Art. 12. As an institution promoting Romanian studies , the A.R.A. intends to introduce and stimulate knowledge of the cultural values of the Romanian nation in international circles , by encouraging research into the various domains of the humanities , positive sciences and arts . The studies undertaken by A.R.A. in these domains will examine the Romanian past and present , as well as various Romanian creations (artistic or scientific) achieved inside or outside Romania , in the framework of the orientations and cultural perspectives of the contemporary free world .

Art. 13. The activities of A.R.A. include Congresses , publications , art exhibitions and music festivals .

1. Congresses are annual meetings of academic standard in which the full members , the associate members , as well as other persons interested in Romanian culture , may participate and present papers . The inclusion of papers in the program will be made on the basis of abstracts (sent before the date indicated by a circular letter) , after approval of the congressional scientific committee composed of the President , counselors , as well as the local organizer . The congresses take place annually in the locality and at the university selected by the general Assembly of the preceding year .

2. The Publications consist of : volumes , periodicals and bulletins . The editorial practices adopted in these publications will conform to those followed in scholarly Societies in the United States . The editing of each volume , bulletin or periodical , is assigned to an editor by the Executive Committee at the proposal of the President , following a written report of the Vice President .

3. Exhibitions are generally organized similarly to other parts of the congressional programs - at the place and time scheduled for congresses . They can also be organized separately by a decision of the Executive Committee .

4. Music Festivals are generally organized at the time of congresses and are designed to promote and encourage the free creation of Romanian music. Festivals can also be organized separately following decision of the Executive Committee.

5. Specialized help for members of the Academy in the preparation of their freely initiated activities as described above is provided by the A.R.A. Research Institute . The program of the Institute is approved by the Executive Committee of the Academy .

V. Financial Matters

Art. 14. The financial resources of the Academy are :

(a) The annual fees of members established by General Assembly ;

(b) Donations made by individuals ,foundations or private corporations . Acceptance thereof is subject to the decision of Executive Committee .

Art. 15. The A.R.A. shall proceed to the election of a Fund-Raising Committee from individuals and private institutions for publication of A.R.A. volumes , bulletins and periodicals . The Committee will be composed of five to seven persons elected by the General Assembly for a three-year term . The Fund-Raising Committee will work under the general supervision of the President . The funds are part of the assets of the Academy , to be used for meeting the costs of printing A.R.A. publications .

VI. The Grievance Committee

Art. 16. Any member of the A.R.A. has the right to addree a written complaint refering to : violations of the bylaws ; activities within the Academy inconsistent with its aims ; and financial irregularities . The complaint , giving a truthful and documented presentation of the facts , must be signed before a notary public . The President will submit the complaint to the Grievance Committee for investigation and report . The complaint has a confidential character .

Art. 17. The Grievance Committee is composed of three members elected by the General Assembly for a three-year term . Its members cannot be at the same time members of the Executive Committee . For the first year , the President of the Grievance Committee shall be the eldest of the three members . Then , the President may pass the function to other members of this committee by agreement among them . The solution of a complaint should not be delayed for more than 60 days from the date of its presentation to the President of A.R.A.

If the Grievance Committee needs an extension of time , the President of A.R.A. may grant another delay of a maximum of 30 days , by which time the procedure must be completed . The documented opinion of the Grievance Committee shall be sub-

mitted for decision to the Executive Committee . The decision will be communicated to the claimant by the President of A.R.A. by registered letter . The claimant retains the right of appeal to the General Assembly .

VII. Amendment of the Bylaws

Art. 18. Any amendment of the Bylaws falls within the jurisdiction of the General Assembly . The Assembly reaches decisions in this matter by a majority of two-thirds of the total number of full members of A.R.A. , voting in person or by proxy . The text of any proposed amendment should be attached to the letter of convocation sent by the President to all full members one month before the date of the Assembly , together with the agenda and with a statement confirming that the proposed text has been approved by the Executive Committee .

VIII. Final Provisions

Art. 19. In the extreme event in which the purposes of the Academy could no longer be achieved , A.R.A. could be dissolved . The dissolution of A.R.A. will be decided by at least two-thirds of the votes of the members of the Executive Committee . The decision of the Executive Committee must be approved by a special meeting of the General Assembly with a two-thirds majority of votes . In case of dissolution the entire assets of the A.R.A. shall be transferred to the "Hoover Institution for War , Revolution and Peace" of Palo Alto , California , which has already treasured other important Romanian documents .

Art. 20. The English version of the present Bylaws is the only authentic or juridically valid one .

Art. 21. The present Bylaws of A.R.A. replace the Bylaws of February 1983 .

MARIA I. MANOLIU-MANEA - President
American Romanian Academy of Arts and Sciences

NICHOLAS TIMIRAS - Vice President
American Romanian Academy of Arts and Sciences

MIRON BUTARIU - Secretary-Treasurer
American Romanian Academy of Arts and Sciences

O B I T U A R I E S

CONSTANTIN APOSTOL from Arizona State University in Tempe , Arizona , passed away in January 1987 , at the age of 50 . Apostol graduated from the University of Bucharest in the early 60's , and was active in research for more than two decades. He has been a Research Fellow with the Mathematical Institute of the Romanian Academy in Bucharest for more than a decade . While in Bucharest , Apostol obtained his Ph. D. degree in Mathematics with a thesis in Operator Theory . Most of his research work (he published more than 60 papers) was concerned with the Theory of Operators on Banach/Hilbert spaces . After the abolition of the Mathematical Institute in Bucharest (1975) , Apostol - like many other researchers affiliated with that institute - has decided to emigrate from Romania . Since a legal permission was almost impossible to be obtained , he has chosen not to return to Romania after visiting the United States . Several years have passed until his family has been allowed to join him in the United States . He is survived by his wife Valentina , and their daughter Catalina . Apostol was a fine researcher in the field of Operator Theory , and besides his journal papers that made him known to the specialists worlwide , he has been co-editor of several volumes published by Birkhauser , containing the proceedings of various conferences with international participation on Operator Theory (held in Timişoara and Herculane) .

EUGEN RADU from the University of Paris Nord XIII passed away in February 1987 in Paris , France , at the age of 58 . He was a student with the University of Bucharest , where he studied Mathematics and Philosophy . He served as a High-School teacher first , then he was appointed an Assistant at the Civil Engineering Institute in Bucharest , and then to the Military Academy in the same city . Winning a competition organized by the Mathematical Institute of the Academy , Radu obtains a position of Senior Researcher with that institute . In 1976 he obtains his Ph. D. in Mathematics , with a thesis in the field of Mathematical Logic . Eugen Radu refuses to become a member of the communist party of Romania , a fact that costs him a lot in regard to his career . In 1977 he is leaving Romania and accepts various positions in Marroco (Universities of Rabat

and Maraketch) . In 1982 Eugen Radu is admitted in France as a political refugee, and he remains in his new country until his premature death occurs . Besides his position with the University of Paris Nord XIII , Eugen Radu has been associated with other institutions , such as the prestigious Institut Henri Poincare , where he has given mathematical lectures addressed to economists .

SERGIU VASILACHE died in Vaudreuil , France , in February 1986 , at the age of 80 . He had his last residence in France (Mrs. Vasilache was French) , after he retired from the University of Laval in Canada . Sergiu Vasilache was very active in mathematical research , for a period of almost four decades . He has published an impressive number of journal papers (more than 100) , and at least two books (one in Romanian , another in French) . His research interests have been concentrated on various problems in the theory of differential equations (both ordinary and partial) , the theory of integral and integrodifferential equations . He has afforded a great number of problems , using both classical and modern (such as distribution theory , operational calculus) procedures . Besides problems in the theory of differential and related equations , Sergiu Vasilache has investigated various topics in Probability Theory , Set Theory , Topology , Functional Analysis . His contributions have been acknowledged by reputed mathematicians from many countries , including the United States , France , Soviet Union . While in Romania , Sergiu Vasilache has been associated with the Mathematical Institute of the Academy . During his early part of life , he has spent several years in France . Most of his publications are inserted in the Comptes Rendus de l'Academie des Sciences de Paris .

MARIE JEANNE MUNTEANU (Mrs.Reiman) of Bethesda , Maryland , passed away recently (we got notice when most of the volume was prepared for print) . While in Romania, M.J.Munteanu was associated with the University of Cluj-Napoca , where she graduated from . She conducted her research work mostly under the guidance of the late Tiberiu Popoviciu . Her main research interest was in Numerical Analysis . She spent the last sixteen years of her life in the United States .

FROM THE BOOKSHELVES

ERDELYI , IVAN and SHENGWANG , WANG : A Local Spectral Theory for Closed Operators . London Mathematical Society , Lecture Notes Series 105 , Cambridge University Press 1985 .

The monograph is the result of the joint work (and journal publications) of the authors , and its main purpose is to present a unified treatment of the local spectral theory for closed operators acting on a complex Banach space . The plan of the book can be sketched as follows : Chapter I introduces the concept of the "single valued extension property" with some realated topics . A general study of invariant subspaces is connected to some special types of subspaces , such as the ν - spaces , the μ - spaces , analytically invariant subspaces , T - absorbent spaces , with T a closed operator , and other types of subspaces . Chapter II is dedicated to the main topic of the book , namely , the general type of spectral decomposition property , with its relationship to the unbounded decomposable operators . In Chapter III , the "spectral duality" theory is dealt with . A spectral duality theorem is obtained under rather natural assumptions . Chapter IV provides more in depth information on the spectral decomposition , be means of the spectral resolvent concept . The various topics discussed in Chapter V , the last , are unified by the concept of strong decomposability . An Appendix deals with the (**) - version of the predual theorem . Several open problems are stated in a final section of the book . The Bibliography includes more than 200 items . We notice a good deal of contributions coming from Romanian mathematicians (C.Apostol , I.Bacalu , I.Colojoara , C.Foiaş , St. Frunza and F.H.Vasilescu) .

GEORGESCU , ADELINA : Hydrodynamic Stability Theory . Martinus Nijhoff Publishers , Dordrecht , 1985 .

This monograph is an updated translation of a book published in Romanian by Editura Stiintifica si Enciclopedica (Bucharest , 1976) . An Introduction contains

a short history of the problem of hydrodynamic stability , whose roots can be traced in Euler's work . Chapter I is dedicated to the classical theory of hydrodynamic stability . Various concepts of stability are defined for the Navier-Stokes equation , then for Orr-Sommerfeld equation , and then Serrin's , Synge's and Joseph's classical results are presented . Chapter II deals with generalized solutions in hydrodynamic stability , and features such topics as Function spaces Types of solutions in hydrodynamic stability , Linearization principle , Universal criteria of hydrodynamic stability . In Chapter III , entitled "Branching and stability of the solutions of the Navier-Stokes equation" , several methods of investigation are emphasized (Topological degree method , Leray-Schauder method , Liapunov-Schmidt method , Hopf bifurcation by the Joseph-Sattinger method) . The problem of generation of turbulence by instability and local branching is also considered . Chapter IV deals with the nature of turbulence , and presents some of the most recent contributions to the topic : Leray model , Landau-Hopf conjecture , the Ruelle-Takens theory , and other items , such as the pattern formation . A list of open problems closes the chapter . Chapter V is dedicated to the investigation of the influence of a porous medium on hydrodynamic stability . In particular , the contribution of St. Gheorghitza is illustrated in this regard . There are 8 appendices , dedicated to various mathematical problems that occur in the exposition . The book is primarily addressed to those readers who posses a rather sophisticated knowledge of the hydrodynamic theory , based on advanced mathematical apparatus .

GOHBERG , I. and KAASHOEK , M. A. : Constructive Methods of Wiener-Hopf Factorization . Birkhauser Verlag , Basel , 1986 .

This volume constitutes the result of joint work conducted by the authors and their co-workers , related to the Wiener-Hopf factorization and its applications (particularly , to integral equations) . Most of the work done by the contributors to this volume has been carried out within the Department of Mathematics and Computer Science at the Vrije Universiteit in Amsterdam . The volume should be regarded as a continuation , with considerable developments , of several publications of the first author , among which we would like to mention in the first place the book by Gohberg and Feldman "Convolutuion Equations and Projection Method for their Solution" (AMS Translations , 1974).

The book is divided in two parts : Part I deals with canonical and , more generally , with minimal factorization . Part II is concerned with non-canonical Wiener-Hopf factorization (the factorization indices are not all zero) . There are nine separate contributions included in this volume . Part I : J.A.Ball and A.C.M. Ran , Left versus right canonical factorization ; H.Bart , I. Gohberg and M.A.Kaashoek , Wiener-Hopf equations with symbols analytic in a strip ; I.Gohberg M.A.Kaashoek , L.Lerer and L.Rodman , On Toeplitz and Wiener-Hopf operators with contour-wise rational mayrix and operator symbols ; L.Roozemond , Canonical pseudo-spectral factorization and Wiener-Hopf integral equations ; I.Gohberg and M. A.Kaashoek , Minimal factorization of integral operators and cascade decompositions of systems ; Part II : H. Bart , I. Gohberg and M.A.Kaashoek , Explicit Wiener-Hopf factorization and realization & Invariants for Wiener-Hopf equivalence of analytic operator functions & Multiplication by diagonals and reduction to canonical factorization ; M.A.Kaashoek and A.C.M. Ran , Symmetric Wiener-Hopf factorization of self-adjoint rational matrix functions and realizations . This volume constitutes a major contribution to the Wiener-Hopf theory , and illustrates the interrelations in between this theory and other branches of science (System Theory , for instance) . The traditional (classical) theory of Wiener-Hopf equations/operators is considerably extended , such that nonconvolution kernels are allowed . The book is highly recommended to specialists in Functional Analysis , Integral Equations/Operators , System Theory .

GROSSWALD , EMIL : Representations of Integers as Sums of Squares . Springer Verlag , Berlin , New York , 1985 .

This book has emerged from a course taught by the author at the Technion in Haifa (Israel) , during the academic year 1980-1981 . The following chapters provide the book;s structure : 1. Preliminaries ; 2. Sums of two squares ; 3. Triangular numbers and the representation of integers as sums of four squares ; 4.Representation as sums of three squares ; 5. Legendre's theorem ; 6. Representations of integers as sums of nonvanishing squares ; 7. The problem of the uniqueness of essentially distinct representations ; 8. Theta functions ; 9. Representations of integers as sums of an even number of squares ; 10. Various results on representations as sums of squares ; 11. Preliminaries to the circle method and the method of modular functions ; 12. The circle method ; 13. Alternative methods for evaluating $r_s(n)$; 14. Recent work (Hilbert's 17th problem , the work of Artin , the

work of Pfister , Hilbert's 11th problem a.o.). An Appendix is dedicated to the statement of six open problems , related to the topic discussed in the book . The list of references contains 283 items , while the bibliography is listing 301 papers and books . The book illustrates profusely the relationships of the Number Theory , even considered under a specific angle , with the classical Analysis and other mathematical disciplines .

KUCZMA , MAREK : An Introduction to the Theory of Functional Equations and Inequalities . Panstwowe Wydawnictwo Naukowe , Warszawa , 1985 .

This books (over 500 pages) contains more topics that its title suggests . Indeed , the first 100 pages are dedicated to the discussion of some general concepts from Set Theory , Topology , Measure Theory and Algebra . Part II of the book has the title "Cauchy's functional equation and Jensen's inequality" , and discusses the following topics : Additive functions and convex functions ; Elementary properties of convex functions ; Continuous convex functions ; Ine - qualities ; Boundedness and continuity of convex functions and additive functi - ons ; The classes A , B , C; Properties of Hamel bases ; Further properties of convex functions and additive functions . Part III is entitled "Related Topics" and is dedicated to various extensions and to the discussion more in depth of the concepts already considered in the Part II , as well as to the discussion of new concepts and types of equations/inequalities : Convex functions of higher order , Subadditive functions , Nearly additive functions , Extensions of homo- morphisms . A list of references including some 400 contributions concludes the volume . Contributions due to Romanian mathematicians , mentioned in this volume belong to Tiberiu Popoviciu , Solomon Marcus , Elena Moldovan-Popoviciu , and Gliceria Godini . This book is a very useful addition to the existing literature in the field , and the author has to be congratulated for exposing such a varied material in a well organized and attractive manner .

REZUS , ADRIAN : Impredicative Type Theories . Faculteit der Wiskunde en Naturwetenschappen , Katholieke Universiteit Nijmegen , 1986 .

This work is dedicated to the study of certain problems having their origin in Jean-Yves Girard's dissertation Universite de Paris VII , 1972) , as well as in a paper by John C. Reynolds (Lecture Notes in Computer Science , Springer Ver- lag , 1974) . These authors have approached on different bases the study of the so-called "functional systems" and their hierarchy , respectively an extension of

first-order typed lambda calculus . It is significant the fact that these ab - construction have found support in the theory of languages (programming) , as well as in the modelization of higher order computational phenomena . The author detects some equivalence of the concepts dealt with by Girard and Reynolds , and develops what he calls the Girard-Reynolds formalism . The chapters of the book are dedicated to various aspects of the theory , and they are entitled as follows : Basic second-order type theory (Heuristic and structural model theory) ; Higher - order type theories (Epitheory) ; Higher - order type theories (Grammar and proof theory) ; Higher - order type theories (Structural model theory) ; Idem (Formal pragmatics) . We regret the lack of the Contents and the fact that the pages have not been numbered . These items would certainly have facilitated the reading of a study that extends on over 300 pages , and which seems to be very interesting in itsels , as well as in regard to its connection with various applied problems (study of languages) .

NEW Ph. D. IN MATHEMATICAL SCIENCES

ELENA M. CROITORO has obtained her Ph. D. degree in Mathematics from "Simon Fraser" University (Canada) in 1985 . She has presented the thesis "Perturbations about a finite elastic inflation" , which has been written under the guidance of Professor G.A.C.Graham . Dissertation Abstracts International , Vol. 46 (May 1986) , contains the following summary of the thesis :
"A general solution for a class of plane strain boundary value problems involving perturbations about a finite inflation of a slab containing a circular hole or inclusion is obtained . The governing equations of equilibrium for the perturbed state are derived in terms of a general strain-energy function . An exact general analytic solution is obtained for Mooney-Rivlin materials although the method is not restricted to this particular class of materials . Applications are made to the case where a perturbational uniaxial tension is acting at sections far from the cavity or the inclusion and to some cases where perturbational loadings are applied at the edge of the hole . The deformation, the stress field and the stress concentration around the hole are investigated in detail and the computational results are presented graphically . The general solution obtained is also applicable to problem involving geometric perturbations of the boundaries of the original body . Specific analytic solutions are obtained taking into account both the perturbation due to an applied stress field and the perturbation in the geometry of the original body . We investigate the problem of a slab with a rough cavity and the case where the cros--section of the hole is elliptic , both in the context of a perturbational uniaxial tension . The method can also be extended to materials with a strain-energy function that may be regarded as aperturbation of the Mooney-Rivlin form."

JOHN THEODOR FAGARASAN has obtained his Ph. D. degree in Mathematics from the University of California (Los Angeles) , in December 1986 . He has presented the thesis "On the Visibility of Repeated and Complex Eigenvalues and Oscillations in Compartmental Models" . The committee consisted of : Prof. Robert J. Jennrich , Prof. Elliot M. Landaw , Prof. Ronald J. Miech , Prof. David G. Cantor (Co-Chair) , and Prof. Joseph J. DiStefano III (Co-Chair) . The abstract :

In compartmental analysis, when time series data are initially fitted by sums of n exponential functions, it is usually assumed that the eigenvalues are real and distinct and the number of pools equals n. However, repeated real or complex eigenvalues, although more difficult to detect, may be inherent in the data, and the number of pools may be larger than n. In order to describe compartmental models with such properties, the visible multiplicity of eigenvalues and the concepts of hidden pools, and visible and hidden modes are defined. It is shown that if a model is state observable, each mode is visible in the zero-input response for some choice of initial state, but not conversely, and also that the visible multiplicity of eigenvalues is determined by the submodel of input-output connectable pools. These models are then decomposed into strongly connected components and an upper bound is found for the visible multiplicity of eigenvalues in these terms. For single-pool-input/single-pool-output models, this bound is shown to be attained for generalized trees. We also determine the visible multiplicity of the eigenvalue with the largest real part, which is real and visible, by applying the Perron-Frobenius theorem. If the model has one or more traps, the leading eigenvalue always has visible multiplicity one. Cascade models and fully visible eigenvalues are defined and it is shown that, for any cascade model, the leading eigenvalue is fully visible in the impulse response. A necessary and sufficient condition is given for full visibility of the leading eigenvalue of any input-output connectable model. Generalized mammillary compartmental models are then defined, in which a central pool exchanges with peripheral clusters through connector pools, and their transfer functions are calculated corresponding to all single-pool-input/single-pool-

output configurations. When the peripheral clusters are identical and the input or the output is in the central pool, the model is zero-input equivalent, up to a multiplicative constant, with a reduced model having one peripheral cluster only. Sufficient conditions are given for such models to exhibit oscillations in the impulse response for some input/output configurations, while for other such configurations all oscillations are totally hidden. An interesting example is presented of a class of models with complex eigenvalues satisfying these conditions. This class resembles models used to describe cell membrane protein synthesis and turnover.

IOANA SCHIOPU-KRATINA has obtained her Ph. D. degree in Mathematics from McGill University (Montreal,Canada) in 1985 . She has defended the thesis "General Tightness Conditions and Weak Convergence of Point Processes . Dissertation Abstract International , Vol. 46 (May 1986) has inserted the following summary: "In this dissertation we consider two aspects of the theory of weak convergence of cadlag processes . We first give a necessary and sufficient condition for the tightness of a sequence of cadlag processes (Chapters 2 an 3) which generalizes Rebolledo's condition . It is a stochastic condition in the sense that stopping times rather than deterministic times are used in the statement . We then discuss the predictability of the limit of a sequence of predictable processes (Chapter 4 - 6) . For a convergent sequence of point processes we show that , if the sequence of compensators converges , then the limit of compensators is the compensator of the limit of point processes . Finally , we prove in Chapter 6 that the extended weak convergence of a sequence of increasing predictable processes ensures the predictability of the limit."

CARMEN VLAD has obtained her Ph. D. degree in Mathematics from New York Poly - technic in April , 1987 . She presented the dissertation "Special Topics in Probability Measure Theory" . The committee consisted of Prof. George Bachman , Prof. Andrew Terzuoli , and Prof. Emeric Deutsch . Part of the thesis appears in this volume of Libertas Mathematica .

I.C.M. - 1986

The 28th Congress of the International Mathematical Union was held from August 3 to August 11 , 1986 in Berkeley , California . The University of California at Berkeley was the host institution , and its Campus was the meeting place of more than 3,500 mathematicians from over 70 countries . Approximatelly 1,700 mathematicians traveled to Berkeley from outside the United States .

At the opening meeting , held in the Greek Theater , the Fields Medals have been awarded to the following mathematicians : S.D.Donaldson from Oxford University , Gerd Faltings from Princeton University , and Michael Freedman from the University of San Diego , California . The Nevanlinna Prize has been awarded to Leslie Valiant from Harvard University .

There have been 19 sections , dedicated to various branches of contemporary research in Mathematical Sciences . The Congress scheduled 16 plenary sessions, and over 150 45-minute lectures have been presented in various sections of the Congress . More than 800 contributed papers have been presented in the 19 sections (10 minutes each).

The following mathematicians of Romanian extraction have participated to the Congress : M.V.Bodnarescu (West Germany) ; Malvina Baica (USA) ; Constantin Corduneanu (USA) ; Aurel Cornea (West Germany) ; Mordechai Epstein (Israel) ; Emil Grosswald (USA) ; Sergiu Hart (Israel) ;Nicolae Dinculeanu (USA) ; Aldo Lazar (Israel) ; Monica Nicolau (USA) ; Henri Moscovici (USA) ; Dan Pascali (USA) Petre Papadopol (USA) ; Vladimir Protopopescu (USA) ; Costel Peligrad (USA) ; Adrian Ocneanu (USA) ; A.Pollingher (Israel) ; Tudor Ratiu (USA) ; Alexandru Stanculescu (USA).

From Romania , the following mathematicians have participated : Sergiu Aizicovici (Iași) ; Viorel Barbu (Iași) ; Dan Voiculescu (Bucharest).

The preliminary list of participants included the following names of Romanian mathematicians who did not attend the Congress: M.Deaconescu (Iași) ; Gabriel Ciobanu (Iași); Vincentiu Dumitru (Bucharest) ; Marcel Rosculeț (Bucharest) ; Florentin Smarandache (Craiova) .

P E R S O N A L I A

ADRIAN OCNEANU from Pennsylvania State University is the recipient of award of the Alfred P. Sloan Foundation in New York .

LASZLO ZIDO from the University of Stuttgart was a Visiting Professor during the academic year 1986-7 at the University of Cincinnati , Ohio .

DAN PASCALI from Forest Hills , N.Y. , is the recipient of a grant from the National Science Foundation , allowin him to carry out research on the topic "Variational and Spectral Methods in Nonlinear Functional Analysis" . Dr. Pas- has lectured in June 1987 at the Universities of Paderborn and Stuttgart in West Germany .

CHRISTIAN CONSTANDA from the University of Strathclyde in Glasgow , Scotland , has been a Visiting Professor at the University of Tulsa , Oklahoma . He has participated in the annual meeting of the AMS held in San Antonio , Texas .

ADRIAN REZUS from the University of Nijmegen , Holland has traveled to Australia and lectured at the Australian National University in Canberra and at the Univer- sity of Wollongong (NSW) . He carried out research work sponsored by ZWO (the equivalent of National Science Foundation in the Netherlands) .

CONSTANTIN CORDUNEANU participated in the International Conference on Volterra Integral Equations , held in Trento (Alto Adige) from February 2 to February 8 , 1987 . In June 1987 , he lectured on various sublects concerning Volterra equa- tions at the Universities of Florence and Naples , and at the Politecnico di Torino .

NICOLAE DINCULEANU has traveled to France , and participated in several inter- national meetings organized in that country .

SILVIU TELEMAN has come to the United States in the Fall of 1986 , and spent the academic year 1986-7 at the Indiana University in Bloomington , Indiana .

RADU ROŞU has been allowed to give course to the invitation received from the Institute of Advanced Study in Princeton . He arrived to the United States in the Fall of 1986 .

DAN VOICULESCU has decided not to return to Romania after he participapted in the International Congress of Mathematicians in Berkeley , California . He has spent the acdemic year 1986 - 7 at the University of California at Berkeley .

NICOLAE PAVEL has spent the period July 1986 to December 1986 at the International

Centre for Theoretical Physics in Trieste , Italy . Since December 30th 1986 , he is holding a Visiting Professorship with the Ohio State University in Columbus Ohio . Starting September 1st 1987 , he will join the staff of the Department of Mathematics at the University of Texas at Arlington , as a Visiting Faculty .

DAN BURGHELEA from Ohio State University has spent the academic year 1986 - 7 in Europe . The Fall semester at the ETH in Zurich , Switzerland , and the Spring semester in Paris , France .

ADOLF HAIMOVICI , an Emeritus Professor at the University of Iași , is 75 years old in September 1987 . He is very active in the Academe , still guiding some young mathematicians in their research work , and being the Chief Editor of the Analele Științifice ale Universității Iași , Series Mathematics . He traveled to Italy in the Summer of 1987 and lectured in several academic centers . He is warmly congratulated by his former students and colleagues .

RADU MIRON from the University of Iași is 60 years old in 1987 . He is warmly congratulated on his anniversary be his former colleagues outside Romania .

DIMITRIE D. STANCU from the University of Cluj-Napoca is warmly congratulated by his former colleagues and friends , outside Romania , on the occasion of his 60th anniversary .

CAIUS JACOB , an Emeritus Professor with the University of Bucharest , is 75 years old in 1987 . He is warmly congratulated by his former students and colleague who are now living and working outside Romania .

GHEORGHE GHEORGHIEV , an Emeritus Professor with the University of Iași , is 80 years old in 1987 . He is warmly congratulated by his former students and colleagues now living outside Romania .

FROM THE STRUGGLE OF ROMANIAN MATHEMATICIANS IN ROMANIA

In past volumes of Libertas Mathematica we have several times informed the readers about difficult situations created by the Romanian authorities to various colleague of ours who were - and some of them still are - in Romania . During the year 1986 , RADU ROSU and SILVIU TELEMAN have been finally given permission to come to the United States . But the treatment applied by the Romanian government to some scientists , including mathematicians like MIHAI BOTEZ , is still one of the most violent and inhuman to be encountered in countries that do not respect the elementary human rights . Other mathematicians , like Florentin Smarandache from Craiova and Victor Pambuccian from Bucharest , are also subject to harassment from the part of the authorities , and are denied the permission to travel abroad or to leave the country permanently .

MIHAI BOTEZ , widely known nowadays like a key figure among the Romanian dissenters and a human right activist , has been beaten again in street by individuals whom the Romanian Human Rights League in Paris identifies as policemen in plainclothes . This incident took place in February 1987 on a Bucharest street. The well known newspaper Christian Science Monitor (Boston) reports this incident and describes Botez as the "Andrei Sakharov of Romania" . Botez , reported the Christian Science Monitor , has been one the most outspoken critics of the Romanian Government . He was the only dissident willing to speak to a Monitor reporter during a visit to Bucharest . He used the occasion to denounce the practice many fellow dissidents have chosen of fleeing the country . His decision to stay in Romania and confront the authorities shows him to be a man full of idealism and despair . By 1986 , his activities had led him to open confrontations with the police . Now 47 years old , he visited the US several times in the early 70's for his work . He was refused visas 34 times to visit the West between 1977 and 1986 . Sanda Stolojan , Director of the Romanian Human Rights League in Paris , said that she has been called by friends in Romania who reported the attack on Botez by unidentified men in the street (it is well known that this is a practice of the Securitatea police in Romania . Another influential publication from Paris the weekly L'Express , has dedicated to Mihai Botez ample space (May 29 , 1987)

and inserted an interview with him , taken a few days before the visit Mikhail Gorbatchev made to Romania . At the question addressed by the reporter " Do Romanians expect anything from this visit ?" , the answer provided by Mihai Botez was : "Of course . In Bucharest , there are rumours of all kinds . As far as I am concerned , I remain skeptical . Not in regard to what happens now in Moscow but in regard to the influence of any project for a socialism with a "human face" can exert on our present leaders . And I do not think that an official visit can change the structure of a power or an economy " . Another question addressed by the reporter sounds : "Did "Ceauşescu's era" reach a crucial point in Romania ?". The answer given by Botez was : "We want to stress the fact that the Romanian regime is undoubtedly the most "traditional" in the East : it is the classical communism of the 30's from Soviet Union , where the triad "one people , one party one leader" became only one leader , who thinks of himself as being the party . We are in the period in which the cult of the leader , and that of his family , reached a paroxystic stage (which is the Romanian originality !) . The leader wants to leave his mark on everything , on what has been done , on what's being done , and on what has to be done , at any cost" . Another question addressed by the reporter was : "Numerous appeals for action , here in Romania , are anonymous . On the contrary , you are speaking openly .. " . Mihai Botez provided the following answer : "What is really important is that the leaders know there are persons who say "no" . ... I think the most important aspect of the matter is now to establish a dialogue in this country , and in order to achieve this it is necessary to have different opinions" . Finally , another question of the reporter : "Is it possible to evaluate the degradation of the economic situation in Romania ?" . "Romania is sinking in tragedy . For a long time , no other European country has known such a regress during a period of peace " - is one of the conclusions of L'Express .

Recently , we have learnt that the Romanian authorities have decided to deport Mihai Botez from Bucharest , to Tulcea . This small city on the Danube is well insulated with respect to visits from foreigners , and the hope of the authorities - unable by now to silence Botez - is that further interviews like those from which we have quoted above will be impossible in the future . Of course , this last action of the Romanian Government is another proof of its total disdain of elementary human rights . Tulcea does not have a science library that

would allow Botez to conduct his research work . We can conclude that the Romanian Government will be satisfied with an "intellectual death" of Botez , now when impacts from all directions seem to indicate that the cause he is struggling for constitutes the only alternative to the despair .

A circular letter signed by Prof. Francisco Bellot from Valladolid , Spain , and dated June 26 , 1987 , signals the serious situation in which another Romanian mathematicain - FLORENTIN SMARANDACHE - has been placed by the Romanian Government . As we have noticed in our report on the ICM - 86 Congress , Mr. Smarandache was among the potential participants from Romania . But he never arrived at the Congress due to the fact that the authorities have refused him an exit visa from Romania . As we understand , Smarandache is not allowed to travel anywhere outside Romania , and -as a result of a hunger strike in protest to this kind of treatment - he cannot take any position sponsored by the Romanian authorities . Since nobody else can employ a mathematician in Romania , it is obvioius that they are trying to silence him , and to retain him forcefully in Romania . Mr. Smarandache is now in need of a sponsor who could offer him some kind of employment , even on a temporary basis , so that he can further act in view of a possible emigration from Romania .
The address of Mr. FLORENTIN SMARANDACHE : Rovine Street , Bloc H , Apt.19 , CRAIOVA , Romania .

VICTOR PAMBUCCIAN is another Romanian mathematician seeking exit visa from Romania . He is applying for a passport , but Romanian authorities are denying him this right . As he put it in a letter to the editor " I consider myself in exile , and I am asking you to put my name on the list of Romanian mathemati - cians who are living in exile" .

THE AUTHORS OF VOLUME VII

Corneliu CONSTANTINESCU is a Professor of Mathematics at ETH in Zurich (ETH-Zentrum , 8095 ZURICH , Switzerland) . See Libertas Mathematica , vol. I , for his biographical sketch .

Constantin CORDUNEANU is a Professor of Mathematics at the University of Texas, Arlington , Texas 76019 . See his biographical sketch in Libertas Mathematica , vol. I .

Irinel DRAGAN is a Professor of Mathematics at the University of Texas , Arlington , TX , 76019 . See vol. II of Libertas Mathematica for his biography .

Dorin GHIŞA is associated with the Glendon College of the York University , Toronto , Ontario , Canada (M4N 3N6) . See his biographical entry in vol. IV of Libertas Mathematica

Marica LEWIN (LEIZER) was born in Iaşi , and attended undergraduate and graduate courses at the University of Iaşi . She obtained her M.Sc. degree in Mathematics in 1972 , defending a thesis in Control Theory . From 1972 until 1974 , she has held positions in Bucharest with a Computing Center , and with the Polytechnic Institute . In 1974 she returns to Iaşi , as an Assistant with the Department of Applied Mathematics at the Polytechnic Institute of Iaşi , and she starts the Ph. D. studies at the University of Iaşi , under the supervision of Prof.C.Corduneanu. She defended her Ph. D. dissertation in 1982 (Prof. A. Haimovici as Chairman) , with a subject from the theory of Stochastic Processes . In 1984 Dr. Lewin has emigrated to Israel , and from 1984 until 1986(January) she held a position at Haifa Technion . From 1986 until 1987 (May) , Dr. Lewin held a visiting position of Assistant Professor with the University of Texas at Arlington . She has about 15 publications in the field of Stochastic Analysis , including several contributions to the theory of Volterra stochastic integral equations . Dr. Lewin has participated and made presentations in various meetings in Romania , Bulgaria , Czechoslovakia , Israel and the United States of America .

Dan PASCALI is residing at 105-40 62nd Rd. , # 1P , Forest Hills ,New York , N.Y. 11375 . See his biographical sketch in Libertas Mathematica , vol. III .

Nicolae PAVEL has obtained his M. Sc. degree from the University of Iaşi in 1967 . He has been immediately appointed as a Research Fellow with the Institute of Mathematics , Branch of Iaşi , of the Romanian Academy . He continued his graduate studies at the University of Iaşi , and in 1972 he obtained the Ph. D. degree in Mathematics with a thesis devoted to the Qualitative Theory of Differential Equations (under guidance of Prof. C. Corduneanu) . He continued his research work within the Institute of Mathematics until 1975 , when the Institute has been abolished by the Romanian authorities . For the next 11 years , Dr. Pavel is associated with the Facultatea de Matematica at the University of Iaşi , where he held various teaching/research positions . In the summer of 1986 , Dr. Pavel is invited in Italy (Trieste) where he remains until the last days of December . Upon invitation of Ohio State University , Dr. Pavel has come to the United States . He has taught during the Spring and Summer semesters at Ohio State University in Columbus , and starting September 1 , 1987 , he will be on a visiting position at the University of Texas at Arlington , TX 76019 . Dr. Pavel has been active in research for more than two decades , and his list of publications contains more than 60 entries (among them 4 books) . His last book (Nonlinear Semigroups and Applications) is due soon at Springer Verlag .

Ilie POPESCU is a Professor at the University of Quebec at Hull . His biographical data are included in vol. III of Libertas Mathematica .

Eugene ROVENŢA is currently associated with the Glendon College , York University , Toronto , Ontario Canada . He graduated from the University of Timişoara , with a M. Sc. degree in Mathematics . He has been appointed on a position of Assistant Professor at the Polytechnic Insitute in Timişoara , where he remained until 1983 when he is obtaining a visiting position with the University of Oran (Algeria). While in Romania , E. Roventa prepares and defends his Ph. D. thesis in Mathematical Sciences . The topic of his thesis was "On some problems concerning topological structure and measure theory for Fuzzy Sets and their applications" . Since 1985 . Dr. Roventa is in Canada , and continues his teaching and research activities . Besides various journal papers , Dr. Roventa has authored (while in Romania) a textbook of Mathematics for the Engineering students .

Teodor RUS received the M. Sc. in Mathematics from the University of Cluj-Napoca, Romania , in 1960 , and the Ph. D. in Computer Science from the Romanian Academy

of Science , in 1965 . From 1960 until 1968 , Dr. Rus was a member of the Institute of Computer Science with the Branch of Cluj-Napoca of the Romanian Academy of Science . He carried out research work in Computation Theory and Programming Languages , as well as in Operating System Design and Implementation . In 1968 Dr. Rus was appointed a Senior Research Scientist at the Institute for Computing Technique in Cluj-Napoca , heading thr Language Design and Implementation Laboratories . In 1982 Dr. Rus joined the staff of the Department of Computer Science at University of Iowa , Iowa City . He is presently an Associate Professor . His recent interests are related to the development of a new technology for language design and implementation , allowing incremental program development and suporting parallel computation . This new technology is based on the algebraic specification of programming languages .

Fabian TODOR has graduated from the University of Cluj-Napoca , with a M. Sc. in Mathematics . He was close to the late Tiberiu Popoviciu , at that time a Professor of Mathematical Analysis with the University of Cluj-Napoca . After more than two decades spent in various learning institutions in Cluj , Braşov and Bucharest (where he was in the Mathematical Department of the Academy of Business) Mr. Todor has been appointed to a visiting position in Marroco . He has immigrated to Canada in the early 80's , and has been associated ever since with the University of Montreal . He obtained his Ph. D. in Mathematics with a thesis related to the evaluation of the remainder in the formulas of numerical quadrature , and has published papers on this subject . While in Romania , Dr. Todor has published mostly in the field of Statistics . He held a postdoctoral fellowship at the University of Montreal , and recently was associated with the School of Commerce affiliated with the same university .

Carmen VLAD has recently obtained her Ph. D. degree in Mathematics from the Polytechnic Insitute of New York (see the Section New Ph. D. in Mathematics , this volume) . In Romania , Dr. Vlad has obtained the M. Sc. degree from the University of Bucharest . She has held positions in the institutions of higher education in Bucharest , while pursuing her graduate studies with the University of Bucharest . She completed all requirements for submitting a Ph. D. thesis , and has worked under the guidance of Professor Cabiria Andreian-Cazacu in the field of Complex Analysis . After immigrating to the United States of America , she restarted her doctoral studies , and for several years has been associated with the Department of Mathematics of the New York Polytechnic (GTA) . She has taught also at Fordham University .

Samuel ZAIDMAN is Professor of Mathematics with the University of Montreal , Montreal . P.Q. , Canada (H3C 3J7) . For a biographical sketch , see Libertas Mathematica , vol. III . Recently , Professor Zaidman has completed the work on a new book "Introduction to the theory of partial differential equations " .

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The Editor of Libertas Mathematica has received an issue (No. 2 , 1986) of the publication "GAMMA" - the mathematical periodical of the "Steagul Roşu" High School , Braşov , Romania (courtesy of Mrs. Ella Ponomarenko from Mathematical Reviews) . The publication is primarily addressed to high school students with special interest in Mathematics , and it certainly is of help to high school teachers involved in this discipline . The issue contains a large number of problems and exercises proposed for solution , as well as 10 articles on various topics , most of them on Number Theory . We notice the presence in this issue of contributions due to Prof. Emil Grosswald , Prof. Florentin Smarandache and Mr. Bencze Mihail (History of Mathematics) . The publication is structured following the pattern of Gazeta Matematica (bucharest) , which is in its 93rd year of publication . Reading this issue was a very encouraging and refreshing experience .

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The 13th ARA annual convention will take place in May 1988 , in Portland , Oregon . Prof. Ladis Kristof , a member of ARA , will be the local organizer . As usual ,we are planning a mathematical session during the convention , and we invite the interested persons to announce their participation and the topic of their communi - cation to Prof. C.Corduneanu .

A.R.A. Publications

The American Romanian Academy of Arts and Sciences is publishing a series of books dedicated to the history , language , civilization snd culture of the Romanian nation . Due to the generous financial help provided at the beginning by the founder of A.R.A. , Monsignor Octavian Barlea , and by means of an active campaign of diffusion and sales , the following volumes have been printed and are available to the interested persons/institutions:

1) OCTAVIAN BARLEA : Romania şi Romanii ; Romania and the Romanians , 1977. The text is integrally parallel in the Romanian and English languages . The translation from the Romanian into English is due to George C. Mureşan and Enea Moţiu . The book has 421 pages and 21 maps .

2) PAUL D. QUINLAN : Clash over Romania (British and American Policies toward Romania , 1938 - 1947) , 1977 .
The volumes presents the diplomatic relations of England and the United States with Romania during the turbulent years between 1938 and 1947 .

3) MARIA MANOLIU-MANEA (Editor) : The Tragic Plight of a Border Area;Bassarabia and Bucovina , 1983 .
The book contains a collection of studies and articles on Bassarabia and Bucovina , Romanian provinces annexed by Soviet Union .

4) VLAD GEORGESCU : Istoria Romanilor (de la origini pana in zilele noastre) 1984 . This is the first comprehensive and uncensored book on the history of Romanians published since 1944 .

5) IONEL JIANU , GABRIELA CARP , ANA MARIA COVRIG , LIONEL SXANTYE : Romanian Artsits in the West , 1986 .
This anthology contains more than 170 articles (accompanied by two reproductions) , dedicated to Romanian artists (Painters , Sculptors) who have resettled in the West . A Romanian version is available . Excellent gra - phic conditions .

These volumes can be ordered at the followin address:

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4310 Finley Avenue # 6
LOS ANGELES , CA 90027

LIBERTAS MATHEMATICA

Libertas Mathematica is the mathematical periodical of the American Romanian Academy of Arts and Sciences.It is published once a year , as a volume of 200 - 250 pages. Contributions to Libertas Mathematica are requested by the editor , or they must be submitted by members of the A.R.A. Any paper submitted , if not accompanied by the report of an A.R.A. member , will undergo a reviewing process.Any correspondence regarding matters related to Libertas Mathematica must be addressed to the editor:

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ARLINGTON , Texas , 76019

The publication can be also ordered at the followig address:

A.R.A. Publications
4310 Finley Avenue # 6
LOS ANGELES , CA 90027

Volumes I (1981) - VII (1987) are available . Volumes I , II , III are priced $ 35.00 each Institutional , and $ 18.00 each for Individual subscribers . Volumes IV , V , VI , VII are priced $ 40.00 each Institutional , and $ 20.00 each Individual subscribers . Package Volumes I - VII can be ordered at $ 210.00 Institutional , and $ 105.00 for Individual subscribers . Handling and postage fees are included in the above shown prices . Checks/Money orders must be made payable to the American Romanian Academy .

Subscription Agencies/Booksellers get a 20% discount from the Institutional rate shown above .

Subscription for Volume VIII (1988) is $ 45.00 Institutional , and $ 22.00 for Individual subscribers .

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