

Instruction to Authors

Roumanian Biotechnological Letters is an International Journal edited by Centre for Research in Enzymology and Biotechnology (Bucharest University) and the Roumanian Society for Biological Sciences supported by the University of Bucharest. The Journal's editorial policy emphasizes the prompt publication of communications (on average within 12 weeks after receipt), covering aspects related to the domain of biotechnology.

It is a condition of publication that manuscripts submitted to this journal have not been published and will not be simultaneously submitted or published elsewhere.

The contents of the manuscripts concern the authors directly.

Types of Contribution. Manuscripts should represent a brief and definite communication of fundamental interest and significance, considered to prompt publication. There is a maximum length for the printed contribution of 6–8 pages (there are approx. 850 words to a printed page). Each type of heading for sub - division of the text should be clearly identified using different type styles. All papers are subjected to scrutiny by referees of standing who also assess the papers submitted to the Roumanian Biotechnological Letters. In general, the Executive Editor will decide whether an acceptable paper will appear in the Roumanian Biotechnological Letters, but the author's preference will always be given consideration.

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Disk. Manuscripts and illustration may be submitted on computer diskettes 3.5” Double density IBM or PC – compatible. In such case send the disk together with a print –out from the current version of the disk. The disk should be marked clearly with a file name and the software used. The preferred software is MS Word for Windows 6.0 (fonts Times 12 pts.).

Physico-chemical quantities

Quantity	Preferred unit	Symbol
Amount (of substance)	mole	mol
Capacities	farad	F
Concentration	moles per litre	M or mol L ⁻¹
Current	ampere	A
Electrical conductance	siemens	S
Electromotive force	volt	V
Flow (blood or other liquid)	litres per second (or min)	L s ⁻¹ or L min ⁻¹
Flow (air or others gas)	litres per second (or min)	L s ⁻¹ or L min ⁻¹
Force	newton	N
Frequency of regular event	hertz	Hz
Length	meter	m
Mass	gram	g
Power	watt	W
Pressure (or partial pressure)	pascal	p
Radioactivity	becquerel or curie	Bq (60 d.p.m.) or Ci (3.7 × 10 ¹⁰ Bq)
Resistance (electrical)	ohm	Ω
Temperature	degree celsius	°C
Time	second (preferred)	s
	minute	min
	hour	h
Volume (blood or other liquid)	litre	L
Volume (air or other gas)	litre	L
Work	Joule	J

1. The manuscript *on disk must* be the final version.
2. A double spaced hard copy accompanies the disk and matches the disc version exactly.
3. DO NOT include automatic pagination. Manuscript page should be numbered by hand in the hard copy version.
4. DO NOT USE COMPRESSION !

Abbreviations, symbols and other nomenclature requirements.

Clinical and Biological abbreviations

<i>A</i>		Correction coefficient	<i>r</i>
Acetylcholine	ACh	Cubic	cu
Acetylcholinesterase	AChE	<i>D</i>	
Adenosine 3':5'-cyclic monophosphate	cyclic AMP	Degree of freedom (statistic)	d.f
Adenosine 5'-phosphate	AMP	Deoxyribonucleic acid	DNA
Adenosine triphosphate	ATPase	Deoxyribonuclease	DNase
γ -aminobutyric acid	GABA	Dextro- (absolute configuration)	D–
Analysis of variants	F		
Adrenaline	Ad	Dextro- (optical rotation)	(+)–
Analytical standard of reagent purity	A.R.	Diameter	diam.
		Diameter, inside	i.d.
Anhydrous	anhyd.	Diameter, outside	o.d.
Approximate(ly)	approx.	Diffusion coefficient	D
Approximately equals	~	3,4-dehydroxyphenylalanine	DOPA
Aqueous	aq.	3,4-dehydroxyphenylethylamine	dopamine
<i>B</i>			
Boiling point	b.p.	Direct current	d.c.
Bovine serum albumin	BSA	Disintegration per minute	d.p.m.
<i>C</i>		Dissociation constant	K _D
Cardiovascular system	CVS	Dissociation constant, negative logarithm of	pK
Catechol- <i>O</i> -methyl transferase	COMT	Distilled	dist.
		Dry ice	solid CO ₂
Central nervous	CNS	<i>E</i>	
Cerebrospinal	CSF	Edition	edn
Chi – squared (statistic)	λ^2	Editor(s)	ed.
Clearance	c	Effective concentration	EC ₅₀
Coenzyme A	CoA	Effective dose, median	ED ₅₀
Concentrated	conc.	Electrocardiogram	ECG

Electrocorticogram	ECoG	N-[2-Hydroxyethyl] piperazine-N'- [2-ethanesulphonic]	HEPES
Electroconvulsive therapy	ECT		
Electroencephalogram	EEG		
Electromyogram	EMG	5-hydroxyindoleacetic	5-HIAA
Electron spin resonance	e.s.r.	5-hydroxytryptamine	5-HIT
endothelial-derived relaxing factor	EDRF	<i>I</i>	
Epithelial-derived relaxing factor	EpDRF	Immunoglobulins	IgA, IgD, IgE, IgG IgM
Equilibrium constants	K	Inhibitor constants	K _i
Equivalent (general use)	equiv.	Inhibitory concentration	IC ₅₀
Erythrocyte	r.b.c.	Inhibitory postsynaptic potential	i.p.s.p.
Erythrocyte sedimentation rate	ESR	Insoluble	insol.
Ethylendiaminetetracetic acid	EDTA	International unit	iu
Excitatory postsynaptic potential	e.p.s.p.	Intra – arterial	i.a.
		Intracellular fluid	ICF
Experiment	expt.	Intradermal	i.d.
Experimental	exptl	Intramuscular	i.m.
<i>F</i>		Intraperitoneal	i.p.
Fatty acids, nonesterified	NEFA	Intracerebroventricular	i.c.v.
Figure(s) (with reference number)	Figure(s)	Intravenous	i.v.
		Isotope (atomic mass) e.g. iodine-131	¹³¹ I
Figure (diagram)	figure		
<i>G</i>			
Gas-liquid chromatography	g.l.c.	Isotopically substituted compounds e.g.	[¹⁴ C]- ethanol
glomerular filtration rate	GFR	<i>L</i>	
<i>H</i>			
Haemoglobin	Hb	Leavo-(absolute configuration)	L–
Half-life	t _{1/2}	Leavo-(optical rotation)	(–)–
Half-frequency	h.f.	Lethal dose, median	LD ₅₀
High performance liquid chromatography	h.p.l.c.	Leukotriene	LT
Human serum albumin		HSA	
Hydrogen – ion concentration	[H ⁺]	Logarithm to base e	log _e or ln
Hydrogen-ion activity, negative logarithm of (hydrogen-ion exponent)	pH	Logarithm to base 10	log ₁₀
		Maximum	max.
		Mean arterial pressure	MAP
6-hydroxydopamine	6-OHDA	Mean value of (statistics)	
		Melting point	m.p.
		Meta	m-

Michaelis constant	K_M	S	
Minimum	min.	Section	§
Mobility (electrophoresis)	m	Sedimentation coefficient (ultracentrifugation)	s
Monoamine oxydase	MAO		
N		Sinister (configuration by the sequence rule)	S
Noradrenaline	NA		
Nuclear magnetic resonance	n.m.r.	Soluble	sol.
Number	no. or No.	Solution	soln.
Number of observations (statistics)	n	Separman rank coefficient	rs
		Standard derivation (of observed sample)	s.d.
O		Standard error (of estimate mean value)	s.e. mean
Ortho-	o-		
P		Standard error (of sampling)	s.e.
Packed cell volume	PCV		
Page / pages	p. / pp.	Standard temperature and pressure	STP
Para-	p-		
Paragraph	para. or ¶	Subcutaneous	s.c.
Parts per million	p.p.m.	Sum (statistical): of hypothetical population of observed sample	S S or S
Per centplatelet activating factor	% PAF		
Posterior	post.	T	
Probability (significance level in a statistical test)	P	Temperature	temp.
		R	
R		Thin layer chromatography	t.l.c.
Radioimmunoassay	RIA	Time, clock – 24 h clock used e.g. 18 h 30 min	t
Rectus (configuration by the sequence rule)	R		Time constant
Red blood corpuscle	RBC	2-amino-2-hydroxymethyl-propan-1,3-diol	Tris
Relative band speed to font (chromatography)	R_F		
U		Ultraviolet	u.v.
Renal plasma flow	RPF	Unit	u
Resistance (respiratory)	R	V	
Respiratory conductance	Sgaw	Vacuum	vac.
Revolutions per minute	r.p.m.		
Ribonucleic acid	RNA		

Valency	e.g. Fe ²⁺ ; Fe (II) protoporphyrin
Volume by volume	v / v7
W	
Wavelength	λ
Weight	wt.
Weight by volume	w /

Format and Presentation of the Manuscript. Manuscript should be typed with double spacing using 1" margins or 8.5" × 11" paper, and printed on one side only. The contents should be arranged in the following order: 1. Title, authors' name(s), affiliation(s). The corresponding authors should be indicated by an asterisk and adequate postal address(es) and Fax, e-mail; 2. Short Summary and up to 6–7 indexing keywords/phrases; 3. Introduction; 4. Materials and methods; 5. Results; 6. Discussion (or Results and Discussion); 7. Acknowledgements; 8. References; 9. Table; 10. Figures; 11. Legends for Figures.

Title. The title should be brief, informative and not more than 60–70 characters, including letter spaces and punctuation (see this journal).

Abstracts (short Summary) should be typed capitalized and centered, two lines below the addresses and write - alined. This should be followed by a single - spaced – concise abstract of 100-120 words maximum. Allow two lines of spaces below the abstract before beginning the text of the manuscript.

Introduction. The Introduction should give a short and clear account of the background of the problem and the rationale of the investigation. Only previous work that has a direct bearing on the present problem should be cited.

Methods. The Methods must be described in sufficient detail to allow the experiment to be interpreted and repeated by the reader.

The doses of reactives should be given as unit weight per body weight, e.g. mmol kg⁻¹ or mg kg⁻¹; concentrations should be given in term of molarity, e.g. nM or μ M.

Reference should be made to any statistical analyses that have been performed on the results in order.

These major headings should be separated from the text by two lines of space above and one line of space below. Each major heading should be typed in capital letters, centred and underlined.

Results. The description of the experimental results should be succinct but with sufficient detail to allow the experiments to be repeated by others. Every effort should be made to avoid unnecessary repetition of data in the text, tables and figures. Conclusions and theoretical consideration should be elaborated in this part of the section.

Discussion. Discussion should be brief and pertinent interpretation of the results against the background of existing knowledge. Recapitulation of the results is not acceptable.

Conclusion. The main conclusion should be conveyed in a short final paragraph.

Secondary headings, should be laced flush with the left margin, underlined and have the first letter or main words capitalized. Leave two lines of space above and one line of space below secondary headings.

The first word of each paragraph within the body of the text should be indented 5 spaces.

Acknowledgements, sources of research support and address changes for authors should be briefly listed in a separate section at the end of the manuscript, immediately preceding the differences.

References should be numbered consecutively and placed in a separate section at the end of the manuscript. In the text, references to other works should take the form (C. ONISCU & al. [4] or MARINESCU [5]. Reference to "unpublished observations" (works) or "personal communications" should be mentioned in the text only, *and not included in the list of references. Papers in preparation or which have been submitted but not yet finally accepted, for publication must not be included in the of references.* They should be typed single - spaced, with one line space between each reference. Each reference should contain names of all authors (with initials of their first and middle names); do not use et al. for a list of authors. Abbreviations of journal titles will follow the international standards. The REFERENCES should be capitalized and centred above the reference list. Following acceptable reference formats:

Journal: C. ONISCU, R. TUDOSE, D. CASCAVAL, *Rev. Roum. Chim.*, **39**(11), 1343–1350 (1994).

Book: L.R. SNYDER, J.J. KIRKLAND, *Introduction to Modern Liquid Chromatography*, K.M. GOODING, F.E. REGNIER, eds., Marcel Dekker, inc., New York, 1990, pp. 301–332.

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Tables. Each table must be given on a separate page and must be numbered consecutively with arabic numerals. Number should be followed by a brief descriptive caption, not more than two lines, at the head of the table. Each column should have a heading and the unit of measurement (in parantheses in the heading). Tables should be self-explanatory and the absolute necessary descriptions should be at the bottom of the table.

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○ ● □ ■ ▲ + × ▽ ▼

Photographs. These should be submitted, twice as large as their intended published size as good quality prints of high contrasts, especially where traces and records are illustrated.

Footnotes. Authors are encouraged to minimize the use of footnotes. A footnote may include the designation of a corresponding authors of the manuscript, current address information for an author and traditional footnotes content.

Footnotes should be indicated in the text by the following symbols: * (asterisk), † (dagger), ‡ (double dagger), § (paragraph mark), ¶ (section mark), || (parallels), # (number sign). Please do not use numerals for footnote call - outs, as they may be mistaken for bibliographical reference call - out or exponents. For the footnotes within a table the same symbols listed above are recommended.

Terms used to describe affinity and potency

1. EC_{50} The concentration of an agonist that produces 50% of the maximal response for that agonist *in vitro*. When EC_{50} values are determined in the presence of other agonists or antagonists the concentration of the latter should be stated;

2. IC_{50} This term may be used in the following ways: (i) The concentration of antagonist that reduces the response to a sub - maximal concentration of agonist by 50%; the concentration of agonist should be stated. (ii) The concentration of competing agonist or antagonist that inhibits the binding of a radioligand by 50%; the concentration of radioligand should be stated;

3. ED_{50} The dose of the agonist or antagonist that produces 50% of the maximal possible effect of that agonist or antagonist *in vitro*. or The dose of drug that produces the effect under investigation in 50% of the population;

4. K The dissociation equilibrium constant (mol L^{-1}) for ligand – receptor interactions. The reciprocal is called the affinity constant or association equilibrium constant;

5. n_H The hill coefficient;

6. pA_2 The negative logarithm to base 10 of the concentration of an antagonist that makes it necessary to double the concentration of agonist needed to elicit a given submaximal response. Note that the definition is empirical and does not pre - suppose the mechanism of antagonism;

7. pD_2 The negative logarithm to base 10 of the EC_{50} ;

8. pIC_{50} The negative logarithm to base 10 of the IC_{50} ;

9. pK The negative logarithm to base 10 of K .

Enzymes. The International Union of Biochemistry and Molecular Biology Enzyme Commission (EC) number and full name (Enzyme Nomenclature 1992, Academic Press, San Diego and London) must be quoted when first mentioned in text. Trivial names may be used in the title.

Other Nomenclature.

Racemates. Authors must state unambiguously in the Methods section of papers which isomers were used, e.g. (+)- or (-)- propranolol, and must bring to the attention of the reader the composite character of drugs that were mixtures of stereoisomers;

Eicosanoids. *The system of nomenclature to be used for eicosanoids is that published in Methods in Enzymology, 187, 1–9 (1990).*

Cell lines. Cell type, species and source should be defined.

Tension. Tension is force and should be calibrated in newtons (1 newton=1 Kg m s⁻¹) or in kg weigh, g weigh, or mg weigh etc. *Trends Pharmacol. Sci.*, 9, 124–125 (1988).

Ions. When referring to ions, the charge should be indicated, e.g. Na⁺, Ca²⁺, 2Na⁺/Ca²⁺ exchange, etc.

Inhibitors of nitric oxide synthase. The most commonly used and currently accepted abbreviations for NG - nitro - L - arginine and NG - nitro - L - arginine methyl ester are L - NOARG and L - NAME respectively.

Abbreviation and Symbols

Use the SI symbols for units. The following prefixes for multiples of units should be used:

<i>Multiplier</i>	<i>Prefix</i>	<i>Symbol</i>
10^{-1}	deci	d
10^{-2}	centi	c
10^{-3}	milli	m
10^{-6}	micro	μ
10^{-9}	femto	n
10^{-12}	pico	p
10^{-15}	femo	f
10^{-18}	atto	a

<i>Multiplier</i>	<i>Prefix</i>	<i>Symbol</i>
10^3	kilo	k
10^6	mega	M
10^9	giga	G
10^{12}	tera	T

Thus, micron = μm , ångstrom = 0.1 nm. Mixed prefixes are not permissible.

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