Instructions to authors for the Journal of Electrophoresis

The *Journal of Electrophoresis* is the official and international journal of the Japanese Electrophoresis Society. It is written in English, published under the responsibility of the Editorial Board of the Japanese Electrophoresis Society, and supports the development of electrophoretic technologies and their applications to biochemical or biomedical research and clinical investigations. Topics include new or improved analytical and preparative methods, theory development, clinical observations, and innovative applications of electrophoresis and its related separation and detection methods in the study of nucleic acids, proteins, carbohydrates, lipids, and many other biomolecules and clinical samples. The *Journal of Electrophoresis* is an open access journal, and all papers published in it are freely available to anyone for reading and downloading via J-STAGE, an electronic journal platform for science and technology information in Japan (https://www.jstage.jst.go.jp/browse/jelectroph).

1. Types of papers

The types of papers published are classified as follows:

- 1) Full Papers: full-length papers that are original and novel, containing worthy facts or conclusions.
- 2) Short Communications: short papers containing new facts or a worthy conclusion based on parts of a research.
- 3) Reviews: papers that comprehensively and systematically discuss a trend in electrophoresis research and its related fields and papers that newly summarize and systematize the results of several papers on a specific topic that an author has previously published.
- 4) Technical Notes: papers reporting findings or data concerning the development or improvement of techniques, methods, equipment, reagents, and protocols, among others.
- 5) Case Reports: papers reporting clinical observations that are of particular interest due to their novelty and potential impact on biomedical research and clinical practice.

All types of papers will be peer-reviewed according to the criteria of originality and quality by the Editorial Board of the Japanese Electrophoresis Society.

2. Manuscript preparation

Manuscript preparation should adhere to the following guidelines:

- 1) Manuscripts should be prepared as Microsoft Word files and typed in an 11-point font with double spacing throughout, including references, tables, and figure legends, on a white page 210 × 295 mm (ISO A4) with at least 25-mm margins all around (25–28 lines per page). Insert serial page numbers and serial line numbers on the manuscript pages. Manuscripts should be written in English throughout. Use Arabic numerals when referring to figures and tables. Units should be expressed as SI units (m, kg, s, A, K, mol, Hz, V, °C, etc.) and non-SI units (min, h, d, L, etc.) officially accepted for use with the SI.
- 2) Manuscripts should comprise the following sections: i) title page, ii) text, iii) tables, iv) figure

legends, and v) figures. Tables and figures are not essential and need not be included depending on the manuscript type.

- 3) Title page: Each manuscript should have a separate title page. The structure of the title page is as follows: i) type of paper (Full Paper, Short Communication, Review, Technical Note, or Case Report), ii) article title, iii) authors' names [write given name(s) first and then family name(s), with initial capital letters], iv) authors' affiliations [if the coauthors are not from the same institution, place superscript Arabic numbers (1, 2, 3, etc.) immediately after the appropriate author's name and in front of the appropriate institution], v) name and complete postal address, e-mail address, and phone/fax number of the corresponding author, which should be marked with an asterisk (*), and vi) 3–5 key words or key phrases appropriately expressing the content of the text. If necessary, vii) abbreviations used should also be listed.
- 4) Text: The text for Full Papers and Short Communications should contain the section headings of SUMMARY (less than 250 words), INTRODUCTION, MATERIALS AND METHODS, RESULTS, DISCUSSION, and REFERENCES. If required, CONCLUSIONS and ACKNOWLEDGMENTS sections should be added immediately before the REFERENCES section. The RESULTS and DISCUSSION sections may be combined into a RESULTS AND DISCUSSION section, which should then be followed by a CONCLUSIONS section. Reviews do not require MATERIALS AND METHODS, RESULTS, or DISCUSSION sections but must contain SUMMARY (less than 250 words), INTRODUCTION, CONCLUSIONS, and REFERENCES sections. Technical Notes and Case Reports should not be divided into titled sections and should be written in a continuous style. If required, a REFERENCES section can be added at the end of the manuscript.
- 5) Text word count: The text should not exceed the following number of words, according to the manuscript type:

• Full Papers: 6,500 words

• Short Communications: 3,000 words

• Reviews: 8,500 words

• Technical Notes and Case Reports: 2,500 words

All word counts include the REFERENCES section as well as figure and table legends. Tables and Figures should be counted as 200 words per table or figure and included in the word count. Papers exceeding the word limits described above may only be published if approved by the Editorial Board.

- 6) Subsections can be included in the MATERIALS AND METHODS, RESULTS, and DISCUSSION sections. However, the SUMMARY, INTRODUCTION, and CONCLUSIONS sections should not include subsections. In the SUMMARY section, no line breaks should be included.
- 7) The names of chemical compounds used should be according to the IUPAC nomenclature. However, element symbols and chemical formulas of simple inorganic compounds can be used.

- 8) Abbreviations must be defined at first use in the text, with the abbreviation written in parentheses following the full term. Standard abbreviations that can be used in the title, summary, or text without definition are listed in Appendix Table 1.
- 9) Company names should be described with the name of the city and the country where the company is located.
- 10) For in-text citations, cite only the family name of the first author of the reference (without prefixing titles) followed by "et al." instead of the names of the coauthor(s).
- 11) Refer to figures and tables in the text as Fig. 1, Table 1, etc.
- 12) Literature references should be numbered consecutively in order of their first citation in the text, and the corresponding reference list numbers should be placed at the appropriate locations as superscript numerals ^{1,2)} or ³⁻⁵⁾ when three or more references are cited.
- 13) Literature references should be described in the REFERENCES section at the end of the text. Citation style should follow Citing medicine: the National Library of Medicine style guide for authors, editors, and publishers (2nd Edition) (https://www.ncbi.nlm.nih.gov/books/NBK7256/), published by the National Library of Medicine.
 - <u>Journal example:</u> Names of all authors. Article title. Journal title. Year of publication; volume: page range (print journals) or article number (on-line journals).
 - 1) Kinoshita E, Kinoshita-Kikuta E, Koike T. Separation and detection of large phosphoproteins using Phos-tag SDS-PAGE. Nat Protocol. 2009;4:1513–1521.

If there are four or more authors, mention the names of the first three authors followed by "et al."

- 2) Kinoshita E, Kinoshita-Kikuta E, Takiyama K, *et al.* Phosphate-binding tag, a new tool to visualize phosphorylated proteins. Mol Cell Proteomics. 2006;5:749–757.
- Kameyama A, Dissanayake SK, Thet Tin WW. Rapid chemical de-N-glycosylation and derivatization for liquid chromatography of immunoglobulin N-linked glycans. PLoS One. 2018;13:e0196800.

<u>Books example:</u> Names of all authors. Title. Names of all editors. Name of book (volume and edition). Place of publication: Publisher; year of publication. Page number/page range.

- 3) Kinoshita-Kikuta E, Kinoshita E, Koike T. Phos-tag technology for kinomics. In: Kraatz H-B, Martic S, editors. Kinomics: Approaches and applications. Weinheim: Wiley-VCH Verlag GmbH & Co. KGaA; 2015. p. 195–210.
- 14) Tables: Tables should be prepared in English and separated from the text. Do not use vertical lines in tables. Titles should be placed at the top and brief descriptions at the bottom of the tables.
- 15) Figure legends: Figure legends should be prepared in English and placed together at the end of the manuscript before the figures, separately from the text and figures. If figures are reproduced from another source, the authors must obtain permission from the copyright holder to reproduce them and acknowledge the original source as follows:
 - Fig. 1 Schematic diagram of analytical system

1: DW; 2: EtOH; 3: MeOH; 4: DMSO. Reprinted with permission from Ref. 16 © (2014) Wiley-VCH Verlag GmbH & Co. KGaA, Weinheim.

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- 16) Figures: Authors may be asked to redraw figures that are unsuitable to online publication. Figures should be prepared in English and placed on A4 paper with one figure per sheet. The number of the figure and name of the first author should be written to the lower left of the figure. Colored figures are welcome.
- Image manipulation is unacceptable. All figures must accurately reflect the original data. Information should not be enhanced, eliminated, added, obscured, or moved. In cases where manipulation is unavoidable, this should be clearly detailed in the figure legends. All instruments, software, and processes used to obtain the images must be fully detailed in the manuscript, either in the MATERIALS AND METHODS section or the figure legends. Acceptable image manipulation includes uniformly adjusting the contrast of an entire image and any control images and ensuring that all original data, including the background, remains visible and that no new features are introduced. The cropping of gels or repositioning of lanes/fields is permitted providing that all alterations are clearly indicated by dividing lines in the image itself, vital data are not removed, and an explanation of the alterations is included in the figure legend. Unacceptable manipulation includes, but is not limited to, the enhancement of one feature/band over others and the removal of background noise/bands, etc. Authors must be able to produce all data in its raw format upon editorial request.

3. Important manuscript submission requirements and notices

The authors should pay attention to the following points concerning manuscript submission:

- 1) The work mentioned in the manuscript must comply with the Declaration of Helsinki, the Fundamental Guidelines for Proper Conduct of Animal Experiment and Related Activities in Academic Research Institutions (Ministry of Education, Culture, Sports, Science and Technology, Japan, Notice No. 71, June 1, 2006, https://jes1950.jp/Download2/hoi1-10th-E-monkashou.pdf), and any guidelines and standards for experiments and research established by related institutions, facilities, or academic societies.
- 2) Information regarding the conflict of interest in the work mentioned in the manuscript or the lack thereof should be disclosed and noted before the REFERENCES section.
- 3) In cases where the work involves issues relevant to human rights protection and legal compliance that require obtaining the consent and/or cooperation of a third party, consideration in the handling of personal information or actions related to bioethics and/or biosafety (including the laws, regulations, and guidelines in the country/region(s) where the work is to be conducted) and the

- measures and actions for these issues should be disclosed and noted in the manuscript.
- 4) Do not submit a paper describing essentially the same work to other journals before the decision of acceptance or rejection has been received. A paper under submission for publication elsewhere cannot be received.
- 5) Manuscripts are accepted from both members and non-members of the Japanese Electrophoresis Society.
- 6) An article submission charge of JPY 50,000 is payable by the authors. However, the charge is waived if the first or corresponding author is a member (regular or associate member only) of the Japanese Electrophoresis Society or if the Editorial Board requested the paper.
- 7) The manuscript, including the i) title page, ii) text, iii) tables, iv) figure legends, and v) figures (tables and figures are not essential and need not be included depending on the manuscript type) should be submitted to the journal's Editorial Office (den-ei@nacos.com) via e-mail in the form of a single PDF file less than 10 MB in size. If the file exceeds 10 MB, please consult with the Editorial Office beforehand. The mailing address and phone/fax numbers of the Editorial Office are as follows:

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- 8) Supporting information is encouraged in the form of supplementary materials such as data sets, figures, movie files, audio clips, 3D structures, and other related nonessential multimedia files. Supplementary materials should be cited within the manuscript text (refer to supplementary figures or tables in the text as Supplementary Fig. 1, Supplementary Table 1, etc.), and a descriptive legend should be included. All supplementary materials will be included in the peerreview process. Thus, the materials must be submitted to the journal's Editorial Office via e-mail (den-ei@nacos.com) with the main body of the manuscript but as separate files. Supplementary materials are published online as supplied by the author, and a proof is not made available prior to publication. Thus, authors should provide any supplementary materials in the desired final format.
- 9) A received date and a receipt number for the manuscript will be sent to the corresponding author via e-mail.
- 10) If there are questions pertaining to the writing, format, submission, or sending of manuscripts or if there is no reply within 10 days after manuscript submission, please contact the journal's Editorial Office mentioned above.

4. Review of submitted papers

1) Manuscripts are reviewed by the Editorial Board in accordance with the journal regulations, and

- the Editor-in-Chief will inform the author of the results of the review.
- 2) The Editor-in-Chief will inform the author if the manuscript is accepted for publication. The date when such information is relayed will be recorded as the acceptance date.
- 3) If the manuscript is accepted, the final version of the manuscript (prepared using Microsoft Word) and figures (color: 300 dpi, grayscale or line drawing: 600 dpi) should be submitted in electronic format to the Editorial Office mentioned above.

5. Page proofs and correction of errors

- 1) As a general rule, the author performs the first proof prior to online publication, and the Editorial Board the second and subsequent proofs.
- 2) The author can only make typographic corrections at the first proof stage.
- 3) If the author requests corrections within 6 months following online publication, they will be treated as follows (all correction requests by the author after 7 months will not be accepted):
 - a) Typographic errors will be published as a correction notice.
 - b) Any corrections and additions other than typographic errors will not be accepted.

6. Copyright, publication fees, and other issues

- 1) The copyright of the paper to be published in the *Journal of Electrophoresis* belongs to the Japanese Electrophoresis Society.
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Appendix Table 1. Standard abbreviations that can be used in the title, summary, or text.

Bis N, N'-methylenebisacrylamide

bp base pairs

%C cross-linking agent (g/100 mL)/%T

CBB Coomassie brilliant blue

cpm counts per minute

1D one-dimensional

2D two-dimensional

Da Dalton (molecular mass)

2DE two-dimensional gel electrophoresis

DIGE fluorescence difference gel electrophoresis

DGGE denaturing gradient gel electrophoresis

DMEM Dulbecco's modified Eagle medium

DMSO dimethyl sulfoxide
DNA deoxyribonucleic acid

DTT dithiothreitol

ECL enhanced chemiluminescence
EDTA ethylenediaminetetraacetic acid

EGTA ethylene glycol-bis(β-aminoethylether)-*N*,*N*,*N*',*N*'-tetraacetic acid

ELISA enzyme-linked immunosorbent assay

GST glutathione S-transferase
HE hematoxylin and eosin

HEPES N-(2-hydroxyethyl)piperazine-N-(2-ethanesulfonic acid)

HPLC high-performance liquid chromatography

IEF isoelectric focusing

Ig immunoglobulin

IP immunoprecipitation

IPG immobilized pH gradient

IPTG isopropyl-β-D-thiogalactopyranoside

kbp kilobase pairs

kDa kilodalton (molecular mass) LC liquid chromatography

MALDI-MS matrix-assisted laser desorption/ionization-mass spectrometry

Mbp megabase pairs

MES 2-(N-morpholino)ethanesulfonic acid MOPS 3-(N-morpholino)propanesulfonic acid $M_{\rm r}$ relative molecular mass (dimensionless)

MS mass spectrometry

MS/MS tandem mass spectrometry

m/z mass-to-charge ratio

NMR nuclear magnetic resonance

NP-40 Nonidet P-40
OD optical density
ORF open reading frame

PAGE polyacrylamide gel electrophoresis

PBS phosphate-buffered saline PCR polymerase chain reaction

PEG polyethylene glycol pI isoelectric point

PMSF phenylmethylsulfonyl fluoride PVDF polyvinylidene difluoride Q-TOF quadrupole time-of-flight

RNA ribonucleic acid

RIA radioimmunoassay

rpm revolutions per minute

RT-PCR reverse transcriptase PCR

SD standard deviation
SDS sodium dodecyl sulfate
S/N signal-to-noise ratio

SSCP single-strand conformation polymorphism

ssDNA single-stranded DNA

%T total gel concentration (acrylamide plus cross-linking agent, g/100 mL)

TBS tris-buffered saline

TEMED N,N,N',N'-tetramethylethylenediamine

TOF Time-of-flight

Tris tris(hydroxymethyl)aminomethane