GUIDELINES TO AUTHORS

Journal Submission Procedures

- Submit three DOUBLE-SPACED, single-column copies of papers and technical notes to Prof. S. R. Gandhi / Shri Anirudhen I.V., Editors – Indian Geotechnical Journal, Department of Civil Engineering, Indian Institute of Technology Madras, Chennai – 600 036. (The references and abstract must also be double-spaced.)
- Retain the original manuscript and illustrations and send them to IGJ when your manuscript is approved for publication.
- Include a covering letter (Annexure 1) preferably on official letter head.

Manuscript Requirements

Typescript

Type the manuscript using type no smaller than 12 points, DOUBLE-SPACED, single-column (including references and abstract) on one side only of 297 x 210 mm (A4 size) with at least 40 mm margin on left side and 25.4 mm (1-in.) margins for other 3 sides. Handwritten manuscripts will not be accepted for review. Provide an electronic copy of the manuscript on a disk with the file type indicated (e.g., Word, Word Perfect, LaTex, etc.) on the CD.

General Text Considerations

Cover Page. The manuscript should have first sheet comprising only the title of the paper, names of all the authors and a foot note providing affiliation and address including e-mail address of each author.

***Title*.** Make sure the title is not more than 70 characters long including spaces between words. Avoid titles beginning with "Analysis of ...," "A Note on ...," "Theory of ...," "On the ...," "Some ...," and "Toward a ....", etc.

Under the title of a submission, type the full name of each author. At the bottom of the first page of the typescript, type a footnote stating each author's title, current affiliation, and complete address (even if the affiliation and address information is the same for some or all of the authors).

***Abstract*.** The 2nd sheet should have title of the paper, Abstract and a list of selected key words (6 nos.) only. This page should not contain the names of the authors. The page number should start from this page only starting with ‘1’. Write an abstract of 150-175 words for paper or technical note. An abstract should be written in plain language and include a summary of the key conclusions. It should be written for a general engineering audience such as recent graduates/beginning graduate students. To be most useful to the engineering community, the following should be clear: the purpose of the work, the scope of the effort, the procedures used to execute the work (if of special interest), and the major findings. Do not include mathematics or references to other literature in an abstract.

Key words**.** Provide a list of up to six key words below the abstract in the second sheet with submissions for publication. Suggested key words are given in Annexure 2.

Text of the paper. The 2^{nd} page (3dr sheet) should start with title followed by Introduction and the remaining text.

Length. The maximum number of words and word-equivalents is 7,500 for papers and 4,000 for technical notes. The editor may waive these restrictions to encourage papers on topics that cannot be treated within these limitations. Such topics may include state-of-the-art reviews and detailed case histories. However, authors are advised that most topics can be covered within these limitations, and that clear justification is required for longer manuscripts

Gender-Specific Words**.** Avoid "he," "she," "his," "her," and "hers." Use words such as "author," "discusser," "engineer," and "researcher."

Mathematics

Clearly type all mathematics and make sure special characters and super scripts and subscripts are distinguishable. List symbols alphabetically in a section called "Notation" at the end of the manuscript (preceding the references). Note that the section is typed double-spaced and that capital letters precede lowercase letters. The Roman alphabet comes first, followed by the Greek alphabet. Do not intermingle alphabets. Note also that the Greek alphabet is in the Greek alphabetical order.

Identify the levels of subscripts, superscripts, and exponents if they are typed ambiguously, e.g., $Y^{a1/2}$, for example if superscripts have sub- or superscripts.

Matrices, tensors, and vectors should be typed either in boldface or placed consistently within brackets, e.g., **X** or [X].

In text, write single-level expressions, e.g., 1/(*a* + *b*), not stacked equations. In numbered (displayed) equations, stack numerators over denominators. All displayed equations should be numbered sequentially throughout the entire manuscript, including equations in appendices. Equations should be in the body of a manuscript; complex equations in tables and figures are to be avoided.

SI Units

The use of Systéme International (SI) units as primary units of measure is mandatory. Other units may be given in parentheses after the SI unit if the author desires.

There should be a space between numerals and SI units (e.g., 2 N).

Concluding the Paper

Conclusions**.** Write a set of conclusions, or a summary and conclusion, in which the significant implications of the information presented in the body of the manuscript are reviewed.

Acknowledgments**.** Include an acknowledgments section to recognize any advisory or financial help you received, if required.

Appendices**.** Use appendices to record details and data that are of secondary importance or that are needed to support assertions in the text. Make sure the text contains references to all appendixes. Equations, tables, and figures should be numbered sequentially from text.

References

To cite sources in the text, use the author-date method; list the last names of the authors, then the year. The formats are as follows: one author—(Madhav 2004); two authors—(Madhav and Miura 2004); three or more authors—(Madhav et al. 2004). Prepare a reference section listing all references alphabetically by last name of the first author. For anonymous reports and standards, alphabetize by the issuing institution. Double-space the reference section. Below are samples of properly formatted and complete references:

Baecher, G.B. and Christian, J.T. (2003): *Reliability and Statistics in Geotechnical Engineering*, John Wiley and Sons, NJ, USA.

Genevois, R. and Remeo, R. (2003): “Probability of Failure Occurrence and Recurrence in Rock Slopes Stability Analysis”, *International Journal of Geomechanics,* **3(1)**, pp.34-41.
Venkatachalam, G., Dodagoudar, G.R. and Quadri, S.S. (2003): “Landslide Hazard and Risk Assessment using fuzzy Sets”, *Proc. International Conference on Geo-environmental Engineering,* Singapore, pp.235-242.

Unpublished Material: Unpublished material is not to be included in the references.

Web Pages : Moxhay, A.L., Tinsley, R.D. and Suttuon, J.A. (2000) : “Monitoring of Soil Stiffness During Ground Improvement Using Seismic Surface Waves”, **http://www.**gdsinstruments.com/technical_papers/ground_eng/GE_Jan_2001.pdf> (July 7 2006).

Include an author if possible, a copyright date, a title, the Web address, and the date the material was accessed or downloaded (in parentheses at the end).

Tables

Tables should be grouped together at the end of the manuscript preceding the figures, not intermingled with the body of the manuscript.

Every table must be called out in the text and must be in sequential order (e.g. Table 1). The tables will be placed in the pages as close to the first reference to that table (call-out) as possible. For example, do not mention Table 3 on Page 1 when no other tables have been mentioned. This will require the copy editor to renumber all your tables and move them. Also make sure that your table call-outs match the actual tables provided.

Table format. Tables should follow the guidelines below. See sample Table A to follow for an example of a properly formatted table.

- Tables should be also typed on paper size 297x210 mm. These should be numbered serially with the word Table in capitals. The title in the next line lower case capitalized and centered. The same material should not be presented in the form of both graphs and tables.
- All tables should be typed with clear columns, one table per page, and put after the references section.
- Each table must be called out in text; it will be placed on a page as close to the first mention as possible.
- Tables must have a table number, a title, and be numbered sequentially. Do not number tables as 1, 1a, 1b, etc. If there are individual tables, please number them 1, 2, 3, etc

TABLE 1 : Properties of materials used in FEA

Properties	Clay		Sand	Stones
	c_u = 30 kPa	c_u = 15 kPa		
Modulus of elasticity, E (kPa)	6000	2500	20000	60000
Poisson's ratio (ν)	0.4	0.47	0.3	0.3
Friction angle, ϕ	0^0	0^0	32^0	45^0
Dilation angle (ψ)	0^0	0^0	4^0	12^0
Dry density γ_{dry} (kN/m^3)	15.5	14.5	16	17
Wet density γ_{dry} (kN/m^3)	19.4	18.8	-	-

- Tables must have more than one column with each column having a unique heading; do not repeat column heads in order to create more than one column

- Vertical rules are not permitted in tables.
- Horizontal rules are permissible around headings only.
- Divide tables into two or more when data are sizable. (Note: Avoid redundancy of data in figures, tables, and text. Select the format that presents data in the clearest form for readers.)

Figures

All the figures can be referred in the text and must be in sequential order (e.g. Fig. 1).

***Figure Captions*.** Brief figure captions (which are to serve as identifying labels) must be typed double-spaced on a separate page. Place explanations, descriptions, and other expository prose in the text, not the figure captions.

Figures, whether line art or photographs, should be grouped together sequentially at the end of the manuscript in the order to which they are referred in the text. Clear copies are acceptable for review purposes but only first-generation originals should be submitted with an accepted manuscript. Scanned or Xeroxed copies are not acceptable. SI units should be used in figures as well as in the text.

Any figures that are reproduced from another source need to be acknowledged. Please indicate in the legend if figure is "based on research by...", "used with permission from...", or "Adapted from...", as the case may be.

ANNEXURE 1

Sample of covering letter

Prof. K. S. Rao
Department of Civil Engineering
Indian Institute of Technology
New Delhi – 110 016.
India

Ph. No.:
Fax No.:
E-mail id:

Date:

To
Prof. S. R. Gandhi / Shri Anirudhen I.V.
Department of Civil Engineering
Indian Institute of Technology Madras
Chennai – 600 036

Dear Sir,

Sub: Submission of Technical Paper for Consideration in Indian Geotechnical Journal

Please find enclosed herewith three copies of our manuscript along with a CD containing the manuscript as detailed below:

1. Title of the Manuscript :
2. Authors: (1) Name :
   Affiliation :
   Address :
   (2) Name :
   Affiliation :
   Address :
   (3) Name :
   Affiliation :
   Address :
3. Number of sheets :……………………….(in each copy)

I would like to have this manuscript reviewed by the Indian Geotechnical Journal.

I certify that all the authors mentioned above have gone through the manuscript and that the work has not been published in other Journal / Publication.

Thanking you,

Sincerely,

(Corresponding author)

ANNEXURE 2

Key words

A

Abrasive

Absorption

Abutment

Acceleration

Accelerometer

Accreditation

Accretion

Accuracy

Acid rain

Acidic water

Acids

Active pressure

Adhesive

Admixtures

Adsorbed water

Adsorption

Aerial photography

Aerial survey

Aggradation

Aggregate

Aging

Algorithm

Alignment

Alkalinity

Allocation

Alluvial deposits

Alluvium

Amplification

Amplitude

Analysis

Analytical techniques

Anchorage

Anchor

Angle of friction

Anisotropic materials

Anisotropic soils

Anisotropy

Application methods

Approximation methods

Aquifers

Arsenic

Artificial islands

Artificial recharge

Ashes

Asymmetry

Atmospheric pressure

Atrest pressure

Atterberg limit

Auger

Axial compression

Axial force

Axial load

Axial strain

Axisymmetry

B

Backfills

Ballast

Barrier island

Base friction

Basement

Bearing capacity

Bearing design

Bedrock

Bending moments

Bentonite

Biaxial load

Biaxial stress

Biaxial test

Bitumen
Black-cotton soil
Blast load
Blasting
Bond stress
Bored pile
Borehole
Boring
Boulder
Boundary element method
Boundary shear
Breakwater
Bridge foundations
Building code
Bulk density
Buoyancy

C

Cadastral survey
Caisson
Calcareous soil
Capillary
Carbonation
Cargo
Casing
Cast in place
Cavity
Cement
Cement grouting
Cemented
Centrifuge
Centrifuge model
Chemical grouting
Classification
Clay liner
Clay
Closed form solutions
Coal
Coal ash
Coarse grained soils
Coating
Cofferdam
Cohensionless soil
Cohesion
Cohesionless sediment
Cohesive sediment
Cohesive soil
Collapsible soil
Colloids
Colluvium
Column
Compacted soil
Compaction
Compaction pile
Compaction grouting
Compatibility
Composite
Compressibility
Compression test
Compressive strength
Computer aided design
Computer aided simulation
Computer analysis
Concentrated load
Concentration
Concrete pile
Cone penetration test
Consolidation
Constitutive equation
Constitutive model

Constitutive relations

Construction

Construction cost

Construction equipment

Construction method

Construction sites

Contact pressure

Continuum hypothesis

Convergence

Corrosion

Corrosion resistance

Cost analysis

Creep

Critical gradient

Critical path

Critical void ratio

Curtain grouting

Curtain wall

Curve fitting

Cyclic load

Cyclic strength

Cyclic test

D

Damage

Dam construction

Dam design

Dam failure

Dam foundations

Dam safety

Damping

Darcy's law

Data analysis

Dead loads

Deep foundations

Deep excavations

Deep compaction

Deep explosions

Deformation

Degrees of freedom

Degree of saturation

Densification

Density

Deposition

Desiccation

Design

Design chart

Design criteria

Design standards

Dewatering

Diaphragm wall

Dielectric constant

Differential equation

Differential settlement

Diffusion

Dilatancy

Dimensional analysis

Discrete elements

Discrimination

Displacement

Distinct elements

Distribution function

Down drag

Drainage

Drained condition

Dredging

Drilled pier foundation

Drilled shafts

Drilling

Driven pile

Dynamic analysis

Dynamic load

Dynamic pressure

Dynamic properties

Dynamic response

Dynamic test

Dynamics

E

Earth pressure

Earth reinforcement

Earth fill

Earthquake engineering

Earthquake load

Earthquake magnitude scale

Earthquake resistant structures

Earthquakes

Earthwork

Eccentric loads

Effective stress

Elastic analysis

Elastic deformation

Elastic foundations

Elastic halfspace

Elastic properties

Elasticity

Elastoplasticity

Electrical resistivity

Electroosmosis

Embankment stability

Embankments

Embedded foundation

Embedment

Empirical equation

Energy

Energy consumption

Engineering

Equilibrium

Equipment

Erosion

Excavation

Expansion

Expansion joint

Expansive soil

Experimental data

Experimentation

Exploration

F

Failure load

Failure mode

Failure

Fiber reinforced materials

Field density

Field investigations

Field test

Fills

Filter

Fine-grained soil

Finite difference method

Finite differences

Finite element method

Finite elements

Finite strip method

Flow net

Fly ash

Footing

Force

Foundation construction

Foundation design

Foundation settlement

Foundation

Fourier analysis

Frequency analysis

Frequency response

Friction

Friction resistance

Froude number

Frozen soil

Full-scale test

Functional analysis

Fuzzy sets

G

Gabions

Geodetic survey

Geogrid

Geotechnical engineering

Geomembrane

Geophysical survey

Geosynthetic

Geotechnical investigation

Geotechnical model

Geotextile

Geothermal energy

Glacial till

Grain size

Granular material

Graphic method

Gravel

Gravity

Gravity foundation

Gravity load

Gravity wall

Gravity wave

Grillages

Grinding

Groins

Ground improvement

Ground motion

Ground water

Ground-water depletion

Ground-water recharge

Grouting

H

Half space

Hazardous waste

Heave

Heterogeneity

Highways

History

Holes

Homogeneity

Horizontal loads

Hydraulic fill

Hydrodynamic pressure

Hydrodynamics

Hydroelasticity

Hydrographic survey

Hydrostatic pressure

Hydrostatics

Hydrostatic uplift

Hysteresis

I

Inclined load

Individual footing

Information retrieval

Island

Impact force

Impulsive load

Insitu test

Incremental load

Influence charts

Information systems

Information technology (IT)

Infrastructure

Initial stress

Injection

Inspection

Installation

Instrumentation

Intake structures

Integrated system

Intelligent structure

Interactions

Interface shear

Interfaces

Interfacial tension

Internal forces

Internal friction

Internal pressure

International development

International factor

Interpolation

Investigation

Ion adsorption

Ion exchange

Islands

Isolation

Isotropic material

Isotropy

J

Jet diffusion

Jet grouting

Jetting

Jointed rock

Joint

K

Kinematics

Kinetics

L

Laboratories

Laboratory test

Lagoons

Land application

Land development

Land information system

Land management

Land reclamation

Land subsidence

Land survey

Landfill

Landscaping

Landslide

Lateral displacement

Lateral load

Lateral pressure

Lateral stability

Lateral stress

Laterite

Layered soil

Leaching

Lime

Limestone

Limit analysis

Limit design

Limit equilibrium

Limit state

Linear analysis

Linear function

Linear system

Liners

Liquefaction

Liquid limit

Liquids

Littoral deposit

Live load

Load bearing capacity

Load distribution

Load duration

Load factor

Load resistance

Load test

Load transfer

Loading history

Loading rate

Load

Loess

M

Machine foundation

Marble

Marine clay

Marine deposit

Mat foundation

Material

Mathematical model

Matrix method

Maximum load

Mechanical properties

Mechanics

Membrane

Mesh generation

Methodology

Metric systems

Micro pile

Microporosity

Mine subsidence

Mineral deposit

Mini pile

Mixing

Model analysis

Model test

Models

Modulus of elasticity

Moisture

Moisture content

Moment distribution

Motion

Mud wave

N

Nails

Negative skin friction

Negative pore pressure

Network analysis

Neural networks

Noncohesive soil

Nonlinear analysis

Nonlinear differential equations

Nonlinear response

Nonuniformity

Normally loaded soils

Numerical analysis

Numerical model

Nutrient load

O

Observation well

Oedometer

Offshore construction
Offshore drilling
Offshore structure
Oil storage
Optimization
Optimization model
Organic soil
Osmosis
Overburden pressure
Overconsolidated soil

P

Partially saturated soil
Particle distribution
Particle interaction
Particle size
Particle size distribution
Passive pressure
Pavement
Peat
Penetration test
Permeability
Permeability test
Pervious
Photography
Physical properties
Piers
Piezometers
Pile caps
Pile driving
Pile foundation
Pile friction
Pile groups
Pile hammers
Pile lateral load
Pile load test
Pile settlement
Pile structure
Pile test
Pile
Plane strain
Plastic analysis
Plastic deformation
Plastic properties
Plasticity
Poisson's ratio
Pore pressure
Pore size distribution
Pore water
Pore water pressure
Poroelasticity
Porosity
Porous materials
Porous media
Portland cements
Preconsolidated soil
Preconsolidation pressure
Prediction
Preloading
Pressure distribution
Pressure measurement
Pressure
Probabilistic method
Probability distribution
Prototype test
Pull-out resistance
Pumping test

Q

Qualitative analysis
Quality control

Quarry

Quarry dust

R

Raft foundation

Random variable

Recharge well

Reclamation

Regional analysis

Regression analysis

Regression models

Reinforced earth

Reinforced soil

Reinforcement

Relative density

Relaxation

Remedial action

Remolded soil

Repeated load

Residual soil

Residual strength

Residual stress

Resistivity

Resonance

Resource management

Retaining wall

Risk management

Rock cores

Rock fills

Rock joints

Rock mechanics

Rock

Roughness

S

Safe bearing capacity

Safety

Safety factor

Saline ground water

Sample disturbance

Sampling

Sand drain

Saturated soil

Scale effect

Sea wall

Sediment

Sediment deposits

Sediment load

Segregation

Seismic analysis

Seismic design

Seismic effect

Seismic survey

Seismic test

Seismic waves

Sensitive soil

Sensitivity analysis

Service load

Settlement

Shaft resistance,

Shaft

Shake table tests

Shallow foundation

Shear

Shear deformation

Shear distribution

Shear failure

Shear forces

Shear modulus

Shear properties

Shear resistance

Shear strain

Shear strength

Shear stress

Shear tests

Shear wall

Sheet pile

Shells

Shrinkage

Sieve analysis

Silt

Simulation

Site investigation

Site selection

Site survey

Size effect

Skin friction

Slaking

Slenderness ratio

Slope stability

Slurry wall

Soft clay

Softening

Soil analysis

Soil cement

Soil chemistry

Soil classification

Soil compaction

Soil condition

Soil consolidation

Soil deformation

Soil dynamics

Soil erosion

Soil gas

Soil grouting

Soil liquefaction

Soil loss

Soil mechanics

Soil mixing

Soil modulus

Soil moisture

Soil nailing

Soil permeability

Soil pollution

Soil porosity

Soil pressure

Soil properties

Soil resistance

Soil sampling

Soil settlement

Soil stabilization

Soil strength

Soil stresses

Soil structure

Soil suction

Soil surveys

Soil tests

Soil treatment

Soil water

Soil water movement

Soil-pile interaction

Soils

Soil-structure interaction

Solutions

Space exploration

Spatial analysis

Spatial data

Spatial distribution

Specific weight

Spread footing

Spread foundation
Stabilization
Standard deviation
Standards
State-of-the-art
Static load
Static test
Steel piles
Stiff clay
Stiffness methods
Stiffness test
Stochastic model
Stoke's law
Stone column
Stones
Storage tank
Strain
Strain distribution
Strain gage
Strain hardening
Strain measurement
Strain rate
Strain softening
Strain relaxation
Strength
Stress
Stress analysis
Stress concentration
Stress distribution
Stress history
Stress intensity factor
Stress measurement
Stress relaxation
Stress strain relation
Structural analysis
Structural failure
Structural response
Structural safety
Structural settlement
Structure
Strut
Subsidence
Substructures
Surcharge
Surface roughness
Surveys
Suspended load
Swelling soil
Swell pressure
Symmetry
System analysis

T

Temperature
Temperature distribution
Tensile load
Tensile strain
Tensile strength
Tensile stress
Tension
Test equipment
Test procedures
Tests
Theories
Thixotropy
Three-dimensional analysis
Time series analysis
Topographic surveys
Topsoil
Transducers

Transient load

Transverse load

Transverse shear

Triaxial compression

Triaxial load

Triaxial shear

Triaxial stress

Triaxial tests

Tropical soil

Tunnel construction

Tunnel lining

Two-dimensional analysis

Two-dimensional models

U

Ultimate bearing capacity

Ultimate load

Ultimate strength

Underground construction

Underpinning

Undisturbed sample

Uniformity

Unsaturated soil

Unsymmetrical footing

Uplift pressure

Uplift resistance

Urban development

V

Vacuum

Validation

Variance analysis

Vector analysis

Velocity distribution

Vertical force

Vertical load

Vibration

Viscoplasticity

Void ratio

Volcanic deposit

W

Wall

Wall friction

Waste management

Waste treatment

Water

Water content

Water pressure

Wave equation

Wave force

Weathered rock

Weathering

Well foundation

Well graded soil

Wind force

Wind load

Wind pressure

Wood piles

X

X-ray analysis

X-ray diffraction

Y

Yield

Yield stress

Yield surface

Young's modulus

Z

Zero air void