

18.1 PUBLICATIONS
IN JOURNALS/
BOOKS

CSIR CENTRE FOR MATHEMATICAL
MODELLING & COMPUTER SIMULA-
TION

CM 1 NUMERICAL SIMULATION OF
TIDALLY INDUCED CIRCULATION
AND POLLUTANT TRANSPORT IN
BOMBAY HARBOUR REGION

M S Phanikumar, M D Raghunath, K S
Yajnik

Proc. of the 5th Int. Symp. on CFD,
III:434-439 (1993), JSCFD

CM 2 STEIN ESTIMATION FOR SIR-
PREDICTABLE MODELS OF EARTH-
QUAKE OCCURRENCE

P S Moharir

Proc. Ind. Acad. Sci. (Earth Planet Sci.),
102:367-381 (1993)

CM 3 HISTORY SYNDROME OR
POPPERIAN CREDENTIALS OF
GEOLOGY

P S Moharir

Proc. Ind. Acad. Sci. (Earth Planet Sci.),
102:283-305 (1993)

CM 4 POPPERIAN EVALUATION OF
EARTH SCIENCE

P S Moharir

Current Science, 65:669-672 (1993)

CM 5 PROBABILITY OF THE WORLD
BY PROBABILITY

P S Moharir

*Souvenir, 18th Ann. Conv. and Seminar
on Exploration Geophysics,* (Ed) Y
Sreedhar Murthy, Jaipur 31-34 (1993)

CM 6 STATISTICAL MODELS FOR
SLOPE INSTABILITY CLASSIFICA-
TION

Sridevi Jade, S Sarkar

*International Journal of Engineering
Geology* Elsevier Publications 36:91-96
(1993)

CM 7 INTRAPLATE STRESSES ALONG
A SECTION OF DSS PROFILE IN THE
SOUTH INDIAN SHIELD INDUCED BY
THE DENSITY HETEROGENEITIES
AND TOPOGRAPHY

P Mandal, A Manglik, R N Singh
J. Geodynamics, 17:203-211

CM 8 INCIPIENT VORTEX SIZE DE-
PENDENT EVOLUTION OF TROPICAL
DISTURBANCES PART I: RE-
SULTS FROM A NUMERICAL EXPERI-
MENT

P Goswami, R Koteswara Rao

*Proc. of the 1st Acad. Sci., (Earth and
Planetary Sciences),* 102(3):439-463

CM 9 STABILITY ASSESSMENT OF
SLOPES

Sridevi Jade, Kusum Deep

*National Seminar on Geotechnical En-
gineering,* 100-102 (1993)

CM 10 NONLINEAR BENDING ANALY-
SIS OF SYMMETRIC CROSS-PLY
LAMINATES

S Savithri, T K Varadan

*International Journal of Nonlinear Me-
chanics,* 28:1-12 (1993)

CM 11 QUANTIFICATION OF EARTH-
QUAKE HAZARD IN THE INDIAN
CONTINENT : ISSUES AND AP-
PROACHES

V K Gaur

Special Issue of Current Science

CM 12 QUANTIFICATION OF EARTH-
QUAKE HAZARD IN THE HIMALAYAN
REGION, EARTHQUAKE HAZARD AND
LARGE DAMS IN THE HIMALAYA
INTACH

V K Gaur

CM 13 TECHNOLOGICAL AP-
PROACHES TO MITIGATION OF
NATURAL DISASTERS

V K Gaur

Special Symposium on Natural Disas-
ters organized as a part of the Annual
meeting of the Indian Academy of Sci-
ences and Proceedings to appear in a
special issue of the *Proc. Indian Acad-
emy of Sciences (Sadhna)* Univ. of
Roorkee, November 1993

CM 14 MITIGATING EARTHQUAKE
HAZARD

V K Gaur

Current Science, 65(7):509 (1993)
(also edited the CM 11,12,13).

**8.2 PRESENTATIONS
AT
CONFERENCES**

*CSIR CENTRE FOR MATHEMATICAL
MODELLING & COMPUTER SIMULA-
TION*

**CM 15 EFFECT OF STRATOSPHERIC
AEROSOLS ON THE TROPICAL
RADIATION BUDGET**

P S Swathi, R Padma, K S Yajnik
National Symposium of the IGBP, CLRI,
Madras

**CM 16 VALIDATION OF AN ALGO-
RITHM FOR COMPUTING SCATTER-
ING OF RADIATION BY HIGHLY AB-
SORBING AND LARGE FIBERS**

T W Tong, P S Swathi, W Li
22nd International Thermal Conductiv-
ity conference, Arizona State Univer-
sity, Tempe AZ USA

**CM 17 FRACTAL DIMENSION OF SEAL
LEVEL VARIATION IN COASTAL
REGIONS OF INDIA**

N K Indira, R N Singh, K S Yajnik
2nd Int'l Working Conference Fractal
'93, Fractals in the Natural and Applied
Sciences, Kingston, England

**CM 18 STRESS MODELLING OF
DECCAN FLOOD BASALT PROVINCE**

P Mandal, R N Singh
Group Discussion on DVP, NGRI,
Hyderabad, India

**CM 19 RHEOLOGICAL MODELLING
OF THE INDIAN LITHOSPHERE AND
ITS IMPLICATIONS TO DECCAN
TRAPS**

A Manglik, R N Singh
Group Discussions on DVP, NGRI,
Hyderabad, India

**CM 20 THERMAL MODELLING OF THE
MOVEMENT OF THE LITHOSPHERE
- ASTHENOSPHERE INTERFACE IN
PRESENCE OF PHASE TRANSFORMA-
TION**

A Manglik, R N Singh
Group Discussion on DVP, NGRI,
Hyderabad, India

**CM 21 A THERMAL CONDUCTIVE/
CONVECTIVE MODEL OF THE INDIAN
CONTINENTAL LITHOSPHERE
ASTHENOSPHERE SYSTEM**

D V Ramana, A Manglik, R N Singh
Group Discussion on DVP, NGRI,
Hyderabad, India

**CM 22 MODELLING OF PARTIAL
MELTING PROCESSES IN DST SPE-
ONSORED COURSE ON NUMERICAL
METHOD IN GEOLOGY**

R N Singh
University of Delhi, Delhi

**CM 23 WATER TABLE FLUCTUA-
TION DUE TO TRANSIENT RECHARGE
IN A 2-D AQUIFER SYSTEM WITH AN
INCLINED BASE**

D V Ramana, S N Rai, R N Singh
Proc. of the 30th Annual Convention,
Indian Geophysical Union, Hyderabad

**CM 24 WATER TABLE FLUCTUATION
IN A SLOPING AQUIFER DUE TO
TRANSIENT RANDOM RECHARGE**

Kirti Srivastava, D V Ramana, S N Rai,
R N Singh
Proc. of the 30th Annual Convention,
Indian Geophysical Union, Hyderabad

**CM 25 SCENARIOS FOR RHEOLOGI-
CAL PROFILES AND CORRESPOND-
ING CONSTRAINTS ON STYLE OF
DEFORMATION IN HIMALAYA**

A Manglik, R N Singh
Workshop on Geological Hazards in
Himalaya and their Mitigation, Wadia
Inst. Hlm. Geol, Dehradun, India

**CM 26 CHAOTIC ADVECTION BY
ROSSBY-HAUFWITZ WAVES IN THE
ATMOSPHERE**

B Joseph
National Symposium on Climate Vari-
ability, TROPMET-94
IITM, Pune

**CM 27 EVALUATION OF WATER
QUALITY MANAGEMENT OPTIONS
FOR MALAD CREEK**

Vijay Joshi
Monitoring & Modelling of Coastal Ocean
: Towards an Operational System for
Regulating Waste Disposal

**CM 28 POLLUTANT DISPERSION
STUDY IN THANE CREEK**

M S Phanikumar
Monitoring & Modelling of Coastal Ocean
: Towards an Operational System for
Regulating Waste Disposal

**CM 29 NUMERICAL STUDIES IN IN-
TEGRAL TRANSFORM METHODS FOR
BOUNDARY LAYERS (INVITED PA-
PER)**

K S Yajnik, M S Phanikumar
Integral Methods in Science and Engi-
neering 1993, Sendai, Japan,

**CM 30 NUMERICAL SIMULATION OF
TIDALLY INDUCED CIRCULATION AND
POLLUTANT TRANSPORT IN BOM-
BAY HARBOUR REGION**

M S Phanikumar, M D Raghunath, K S
Yajnik
5th Int'l. Symp. on Comput. Flu. Dyn.,
Sendai, Japan

CM 31 THE BUILDING OF HIMALAYA

AND ASSOCIATED EARTHQUAKE HAZARD

V K Gaur
Jagasia Memorial Lecture, IIT, Bombay

CM 32 OCEANS: FLYWHEEL OF THE EARTH SYSTEM

V K Gaur
IGBP National Symposium held at Madras

CM 33 MATHEMATICAL SEISMOLOGY

V K Gaur
45 Lecture Course at Dept. of Maths., IISc, Bangalore

CM 34 MODELLING EARTHQUAKE PROCESSES

V K Gaur
Indian Statistical Institute, Calcutta

CM 35 THE MEANING OF ANNIVERSARIES: STRIVING TOWARDS EXCELLENCE

V K Gaur
Foundational day lecture at NBRI, Lucknow, October 1993

CM 36 SATELLITE BASED INFORMATION FOR RATIONAL HARVESTING OF MARINE FISH RESOURCES

V K Gaur
Inaugural keynote address at the International Workshop organised by COSTED and NRSA, Hyderabad

CM 37 CHALLENGING S&T PROBLEMS IN DEVELOPMENT OF THE COASTAL OCEAN

V K Gaur
Inaugural Lecture at the UNESCO workshop, Andhra Univ, Waltair,

CM 38 DISASTER MITIGATION

V K Gaur
Platinum Jubilee Lecture of Indian Science Congress at Jaipur

CM 39 INVERSE THEORY

V K Gaur
A short lecture series at Indian Institute of Geomagnetism, Bombay

CM 40 GEOPHYSICAL FLUID DYNAMICS AND THE COASTAL OCEAN

V K Gaur
A Short lecture series at Jadavpur Univ., Calcutta

CM 41 INDIAN SCIENTIFIC ENDEAVOURS IN ANTARCTICA

V K Gaur
CFRI, Dhanbad

CM 42 ENQUIRY AND INFERENCE: EXAMPLES FROM INDUS VALLEY ARCHAEOLOGY AND EVERYDAY PHYSICAL PHENOMENA

V K Gaur
Basic Science School Programmes

at Bangalore Educational Society School, Cluny Convent and Schools in Bangalore

CM 43 FRACTAL NATURE OF EARTH PROCESSES

V K Gaur
Short Lecture Series at Allahabad University

CM 44 TECTONICS AND SEISMICITY OF THE INDIAN PLATE

V K Gaur
Inaugural Lecture at the Institute of Rock Mechanics, Bangalore,

CM 45 APPROACHES TO EARTHQUAKE HAZARD ASSESSMENT IN THE INDIAN CONTINENT

V K Gaur
Wadia Inst. of Himalayan Geology, Dehradun

CM 46 MODELLING AND FORECASTING

K S Yajnik
1st National Symposium on IGBP, Madras, Anna Univ., and Central Leather Research Inst., (CLRRI).

CSIR CENTRE FOR MATHEMATICAL MODELLING & COMPUTER SIMULATION

CM 47 GROWTH OF TRANSPORT SECTOR IN INDIA: A MODELLING EXERCISE

N Somasekhara, T R Krishna Mohan, K Rajaram, K S Yajnik
TM CM 9301

CM 48 C-MMACS DATABASE ON INDIAN TRANSPORTATION (VERSION 1.0)

Umajuvorla, T R Krishna Mohan
CM IR 9401

CM 49 A CODE FOR A 1-1/2 LAYER REDUCED-GRAVITY OCEAN MODEL

Shankar Doraiswamy
CM TR 9402.

18.3 REPORTS AND THESES