

6. PUBLICATIONS, PRESENTATIONS & OTHER SCIENTIFIC ACTIVITIES

6.1 Publications in Journals/Books

V.K. Gaur, 1998

Inverse Methods : An introduction

In: Inverse Methods : General Principles and Applications to Earth Systems Sciences,

N.K. Indira and P.K. Gupta (Eds.),

Narosa Publ. House, New Delhi , pp 1-18.

N.K. Indira, 1998

Inversion of Tide Gauge Data for Modelling Sea Level Variations

In: Inverse Methods : General Principles and Applications to Earth Systems Sciences,

N.K. Indira and P.K. Gupta (Eds.),

Narosa Publ. House, New Delhi, pp 61-168.

N.K. Indira and P.K. Gupta (Eds.), 1998

Inverse Methods : General Principles and Applications to Earth Systems Sciences Narosa Publ. House, New Delhi.

B. Joseph and P. Goswami, 1998

Effect of Land-Ocean Contrast on the Structure of Anomaly Tropical Circulation

Dyn. Atmos. Ocean, 28, pp 205-228.

T.R. Krishna Mohan, 1998

Bifurcations and Chaos in a Model Biochemical Reaction Pathway

Intl. J. of Bifurcation and Chaos, 8 (2), pp 381-394.

A. Kumar, 1998

Structure and Vortex Breakdown on a Delta Wing

Proc. Royal Society, London, A454, pp 89-110.

R.K. Mishra, **G.K. Patra**, A. Patnaik and S.K. Dash, 1998
New Method for Calculating the Input Impedance of Rectangular Patch Antenna

Defence Science Journal, 48, pp 417-421.

M. Mukul, 1998

A Geostatistical Approach to the Quantification of Finite Strain Variation in Penetratively Deformed Thrust Sheets and Example from the Sheeprock Thrust Sheet

Journal of Structural Geology, 20 (4), pp 371-384.

M. Mukul and G. Mitra, 1998

Finite Strain and Strain Variation Analysis in the Sheeprock

Thrust Sheet: An Internal Thrust Sheet in the Provo Salient of the Sevier Fold-and-Thrust Belt

Journal of Structural Geology, 20, pp 385-405.

M. Mukul and G. Mitra, 1998

Controversies in the Geology of the Sheeprock Thrust Sheet: A Re-examination Based on New Evidence

In: Geology of the Sheeprock Thrust Sheet,

Utah Geological Survey Miscellaneous Publication 98-1, pp 1-15.

M. Mukul and G. Mitra, 1998

Stratigraphy and Structural Geology of the Southern Sheeprock and the Adjacent West Tintic Mountains, Utah: A Review and New Interpretations based on Structural Analysis

In: Geology of the Sheeprock Thrust Sheet,

Utah Geological Survey Miscellaneous Publication 98-1, pp 17-57.

M. Mukul, 1999

Active Tectonics and Paleoseismology

Current Science, 76 (2), pp 131-132.

R.N. Singh, 1998

Continuous Inverse Theory

In: Inverse Methods : General Principles and Applications to Earth Systems Sciences,

N.K. Indira and P.K. Gupta (Eds.),

Narosa Publ. House, New Delhi, pp 19-24.

Sridevi Jade, K.S. Yajnik and P.K. Nanda, 1998

Numerical Analysis of Multi-layered Pavements Systems Highway Research Bulletin, 59, pp 41-55.

6.2 Presentations at Conferences/ Symposia/ Workshops

A. Kumar and G.K. Suryanarayana

Numerical Investigation of Flow around a Vented Sphere IUTAM Symposium on Mechanics of Passive and Active Flow Control, Goettingen, Sept 1998.

A. Kumar, R. A. Mashelkar and **R. Hema**

Numerical Simulation of Viscoelastic Flow at Moderate Reynolds Number

Third Asian Computational Fluid Dynamics Conference, Bangalore, Dec 1998.

D.S. Prakash, R. Jagadish and **Sridevi Jade**
Stress Field in Masonry Infilled Reinforced Concrete
Frames under Combined Lateral and Vertical Loading
Workshop on Recent Advances in Masonry Construction
(WRAMC-98), Institution of Engineers India, Roorkee Local
Center, Roorkee, Sep 1998.

D.S. Prakash, R. Jagadish and **Sridevi Jade**
Masonry Infilled Reinforced Concrete Frames under
Combined Lateral and Vertical Loading
All India Seminar on Concrete for Infrastructural
Development (CID), Institution of Engineers India, Roorkee
Local Center, Roorkee, Dec 1998.

M.K. Sharada and K.S. Yajnik
Comparison of Simulations of a Mixed-Layer FDM Type
Model with CZCS Data in North Indian Ocean
Workshop on Inverse Modelling in Global Biogeochemical
Cycles, Heraklion, Greece, Mar 1998.

6.3 AT C-MMACS

6.3.1 Meetings and Workshops

International Scientific Symposium on "Biogeochemistry
of the Arabian Sea: Synthesis and Modelling" Jan 18-20,
1999

Training Course on "Biogeochemical Modelling of the
Ocean", Jan 21-29, 1999

6.3.2 Lectures

Apr 7, 1998
Dr. Shubha Satyendranath, Dalhousie University, Canada
High-Nitrogen, Low-Chlorophyll Regions in the Ocean :
the Role of Light and Mixed-Layer Depths

May 13, 1998
Dr. Vidyadhar Mudkavi, NAL, Bangalore, Object Oriented
Programming and CFD

Jun 10, 1998
Prof. Keith Priestley, University of Cambridge, Cambridge,
UK, Seismic implications of Plume-Lithospheric
Interactions

Jun 17, 1998
Prof. Alexander O. Gliko, Institute of Planetary Geophysics,
Moscow and Corresponding Member, Russian Academy
of Sciences, Moscow

A Model for a Coupled Mid-Ocean Ridge Magma-
Hydrothermal System

Sep 4, 1998
Prof. V. Balakrishnan, Dept. of Physics, IIT, Chennai,
Recurrences in Dynamical Systems

Sep 24, 1998
Dr. A.K. Nandakumaran, Dept. of Mathematics, IISc,
Bangalore, Homogenization of Differential Equations -
Theory and Applications

Oct 8, 1998
Prof. Alexander O. Gliko, Institute of Planetary Geophysics,
Moscow and Corresponding Member, Russian Academy
of Sciences, Moscow
Modelling of Formation of Charnokitic Rocks

Oct 16, 1998
Prof. D. Guptasarma, NGRI, Hyderabad
Imaging with Acoustic Signals, Part I

Oct 20, 1998
Prof. D. Guptasarma, NGRI, Hyderabad
Imaging with Acoustic Signals, Part II

Nov 11, 1998
Dr. S.K. Basu, Space Application Centre, Ahmedabad
Assimilation of Satellite Data in Reduced Gravity Model of
the North-Western Indian Ocean

Nov 16, 1998
Prof. R.S. Yeats, Univ. of Oregon, USA
Ramp-Flat Model for the Main Himalayan Thrust :
Implications for Earthquake Hazards

Nov 26, 1998
Prof. Claude Froidevaux, Dept. of Terre-Atmosphere-
Ocean, Ecole Normale Superieure, Paris, France
Dynamics of Earth's Mantle: Constraints from Post- Glacial
Rebound, Seismic Tomography and the Geoid

Dec 18, 1998
Prof. J. Sclater, USA
Problems of Using Transformed Faults for Plate Tectonic
Reconstruction: Continental Models for Faulting in an
Oceanic Setting

Dec 22, 1998
Prof. S.K. Jain, Ohio University, Athens, USA
The Drazin Inverse

Dec 23, 1998
Prof. S.K. Jain, Ohio University, Athens, USA
Drazin Inverse and Applications to Singular System of
Differential Equations

Dec 24, 1998
Prof. S.K. Jain, Ohio University, Athens, USA
Drazin Inverse - Further Applications

Dec 24, 1998
Prof. P. Bhimasankaram, Indian Statistical Instt., Hyderabad
Some Observations on the Drazin Inverse

Feb 11, 1999.
Prof. D. Guptasarma, NGRI, Hyderabad
Forward Modelling of Gravity and Magnetic Anomalies

Mar 1, 1999.
Prof. T.N. Narasimhan, Univ. of California, Berkely, USA
History and Structure of the Diffusion Equation

Mar 1, 1999
Prof. T.N. Narasimhan, Univ. of California, Berkely, USA
Coupled Processes Related to Energy Transport, Fluid
Flow and Deformation in the Earth

Mar 30, 1999
Prof. P.G. Vaidya, Washington State University, USA
Overcoming the Nyquist Barrier using the Chinese
Remainder Theorem

Mar 31, 1999
Mr. S. Himesh, CBRI, Roorkee
Calibration and Validation of Surface Water Quality Model

6.3.3 Visitors to C-MMACS

Dr. Shubha Satyendranath, Dalhousie University, Canada
Apr 7, 1998

Prof. Keith Priestley, University of Cambridge, UK
Jun 10, 1998

Prof. Alexander O. Gliko, Institute of Planetary Geophysics,

Moscow
Jun 10 and Oct 13, 1998.

Prof. V. Balakrishnan, Deptt. of Physics, IIT, Chennai
Sep 4, 1998

Dr. M. O. Garg, Indian Instt. of Petroleum, Dehradun
Sep 15, 1998

Dr. M. Fazlur Rahman, Ministry of Sc. & Tech., Govt. of
Bangladesh
Sep 16, 1998

Prof. D. Guptasarma, Emeritus Scientist, NGRI, Hyderabad
Oct 16-20, 1998 and Feb 11, 1999

Dr. J. Stuart Godfrey, CSIRO Marine Research, Australia
Nov 3, 1998

Prof. George Philander, Princeton University
Nov 3, 1998

Dr. D.K. Sharma, The Dow Chemical Company, Midland
Michigan, USA
Nov 4-5, 1998

Prof. R.S. Yeats, Univ. of Oregon, USA
Nov 16, 1998

Prof. Claude Froidevaux, Dept. of Terre-Atmosphere-
Ocean, Ecole Normale Superieure, Paris, France
Nov 26, 1998

Prof. A. Janardhan, Mysore University, Mysore
Nov 26, 1998

Prof. J. Sclater, USA
Dec 18, 1998

Prof. S.K. Jain, Ohio University, Athens, USA
Dec 16-27, 1998.

Prof. P. Bhimasankaram, Indian Statistical Instt., Hyderabad
Dec 24, 1998