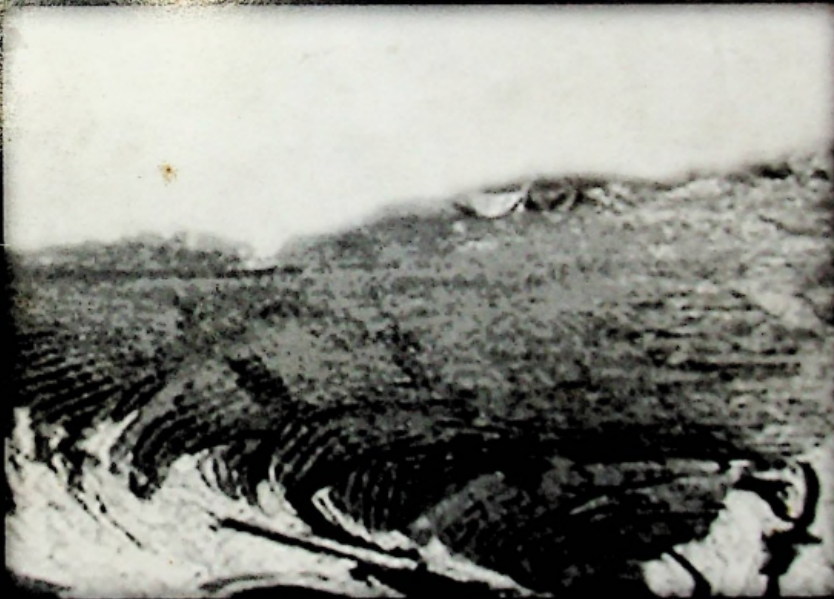




**Journal
of
Earth Resources Engineering**



1 / 2005

**Department of Earth Resources Engineering
Faculty of Engineering
University of Moratuwa**

**Journal
of
Earth Resources Engineering**

1 / 2005

**Department of Earth Resources Engineering
Faculty of Engineering
University of Moratuwa**

CONTENTS

Foreword	1
WELIDENIYA HS. Guidelines for industrial rock blasting	3
PREMASIRI HMR., RATNAYAKE NP. & ABESINGHA AMKB. Geo-environmental assessment along southern and western coastal belt of Sri Lanka after the Indian ocean mega tsunami	11
SHIROMI KARUNARATNE. Wetland plants for waste and storm – water runoff treatment: Management consideration	17
PUSWEWALA UGA., DELAKSHAN I., GIRISHANTH S., SASOKANTHAN K., SURESHKUMAR S., THAVASUTHAN T. & VASEEHARAN M.D. Developing a foundation design software – “Geosoft”	25
FERNANDO WLW., BASNAYAKE BMV., FERNANDO HAS., RAJAPAKSHA HMPB., RODRIGO SAIJ. & THERES LATHANKY J. Designing of a vibrating sieve	32
Journal of Earth Resources Engineering	38

FOREWORD

It is with great pleasure that we present the first volume of the Journal of Earth Resources Engineering, published by the Department of Earth Resources Engineering, Faculty of Engineering, The University of Moratuwa, Sri Lanka.

It is our intention to publish this Journal annually, carrying the research and project work of the departmental staff and students, in coincidence with the annual Department-Industry get-together of the Earth Resources Engineering Department. We earnestly hope that this publication would afford a valuable insight to the research and consultancy activities of the Department.

The Department presently offers a four-year full time degree course in Earth Resources Engineering. M.Sc., M.Phil and Ph.D degrees by research are also available for deserving graduates in collaboration with relevant industries. The Department also offers two part time courses in Gemmology and Geology at certificate level.

The key areas covered by the Earth Resources Engineering Degree course are Mineral Exploration, Mining Engineering, and Mineral Processing. The Department plans to expand the curriculum, in the year 2006, by introducing four new streams of study as Remote Sensing and GIS, Oceanography, Gemmology and Jewellery, and Geo-environmental Engineering, while continuing the current stream of Mining and Minerals Engineering. These proposed changes will be carried out using the funds made available by the World Bank funded project for Improvement of Relevance and Quality of Undergraduate Education (IRQUE).

The Department offers the industry and other external organizations many services, such as the designing and planning of underground mines and quarries and bulk material handling, designing of drilling and blasting operations, environmental impact assessments, site investigations, geological and engineering geological mapping, slope stability assessment, geophysical investigations for groundwater and minerals, resource management using RS & GIS, geological natural disaster management, designing of mineral processing plants, heat treatment and processing of precious stones, gem identification and valuation, and industrial waste water treatment.

We are grateful to the IRQUE Project for making available the funds for the publication of this Journal and the coincident Department-Industry get-together.

Dr. U.G.A. Puswewala
Head, Department of Earth Resources Engineering

19th December 2005