

# SOLUTION MINING RESEARCH INSTITUTE

812 MURIEL STREET  
WOODSTOCK, ILLINOIS 60098  
815-338-8579

MEETING  
PAPER



Applications of SMART the new 3-D Model  
of Dissolution during Solution Mining

by

Dr. Devraj Sharma  
Principia Mathematica Inc.

Presented at the SMRI Spring Meeting  
Baton Rouge, Louisiana, April 20-22, 1986.

## 1.0 INTRODUCTION

During the past eighteen months, developments have been undertaken of a new mathematical model of salt dissolution. The applied research activity leading to this development was sponsored by the Solution Mining Research Institute as a research project (SMRI, 1984) based upon a proposal submitted by Dr. Devraj Sharma of Principia Mathematica Inc. (Principia, 1984). The mathematical model is called SMART; a mnemonic name coined to denote Solution Mining Analyzer of Responses in Three dimensions. The purpose of this paper is to present a brief summary of the important features of the model and a few results of its applications to solution mining problems.

●2023 - Solution Mining Research  
Institute  
Full Paper is Available in the SMRI  
Library([www.solutionmining.org](http://www.solutionmining.org))