



INTERNATIONAL JOURNAL OF

MINERAL PROCESSING

VOLUME 74, NOS. 1-4

CONTENTS

19 NOVEMBER 2004

(Abstracted/Indexed in: A.G.I.'s Bibliography and Index of Geology, Chemical Abstracts, Current Contents, Pascal/CNRS)

Research Papers

Bubble load measurement in the pulp zone of industrial flotation machines—a new device for determining the froth recovery of attached particles D.R. Seaman, J.-P. Franzidis and E.V. Manlapig	1
A novel experimental technique to study single bubble-bitumen attachment in flotation G. Gu, R. Sean Sanders, K. Nandakumar, Z. Xu and J.H. Masliyah	15
Slag treatment at Kardemir integrated iron and steel works Y. Topkaya, N. Sevinc and A. Günaydin	31
Variations in the compositional, textural and electrical properties of natural pyrite: a review P.K. Abraitis, R.A.D. Patrick and D.J. Vaughan	41
Variation of critical surface tension for wetting of minerals with roughness determined by Surtronic 3 ⁺ instrument U. Ulusoy and M. Yekeler	61
Recent developments in microwave-assisted comminution S.W. Kingman, K. Jackson, A. Cumbane, S.M. Bradshaw, N.A. Rowson and R. Greenwood	71
Agglomerate flotation of fine oxide particles Z. Sadowski and I. Polowczyk	85
Froth modification for reduced fuel oil usage in phosphate flotation R. Snow, J.P. Zhang and J.D. Miller	91
Advances in the adsorptive particulate flotation process L.A. Féris, A.T. De León, M. Santander and J. Rubio	101
Flotation of water-soluble mineral resources S. Titkov	107
Particulate interactions in water flotation froths: a micro-mechanistic approach M.T. Spyridopoulos and S.J.R. Simons	115
A MILP model for the design of mineral flotation circuits L.A. Cisternas, E.D. Gálvez, M.F. Zavala and J. Magna	121
An alternative energy-size relationship to that proposed by Bond for the design and optimisation of grinding circuits S. Morrell	133
Microbially induced flocculation and flotation for separation of chalcopyrite from quartz and calcite P. Patra and K.A. Natarajan	143

(Contents continued on page 385)

**CONTENTS
C_{orrect}**

This journal is part of **ContentsDirect**, the *free* alerting service which sends tables of contents by e-mail for Elsevier books and journals. You can register for **ContentsDirect** online at: <http://contentsdirect.elsevier.com>



0301-7516(20041119)74:1-4;1-4

Authors are requested to accompany their manuscripts with texts in electronic form with a completed checklist with each diskette. Copies of the guide for authors and the checklist are available from the publisher.