

VENUE

Cedar West Lakes
Suite 104, 145 Brebner Drive
West Lakes, South Australia 5021

ACCOMMODATION

The Lakes Resort Hotel
141 Brebner Drive
West Lakes, South Australia 5021
Phone: (08) 8356 4444
Web: www.lakesresorthotel.com.au
Email: reception@lakesresorthotel.com.au



DATE

Wednesday 11th September to Friday 13th September 2019,
9.00am to 5.30pm.
Please register early to avoid disappointment.
Tailored courses are available for clients.

COURSE COST

This course is priced at \$AUD 3,870 per person (Inc GST).
Each client will be provided with a computer and required software for the duration of the course.
Lunch is provided during the course. Accommodation and dinner is not included.



ANALYSIS OF MINERAL RECOVERY BY SIZE AND LIBERATION DATA IN FLOTATION



REGISTRATION

To register for the Manta Controls three day course (5571) please fill out the details below and fax to +61 8 8356 9150 or email despina.karageorgos@mantacontrols.com.au
For more information please contact Despina Karageorgos on +61 8 8356 9021.

Name : Date :

Position : Company :

Contact Ph : Email :

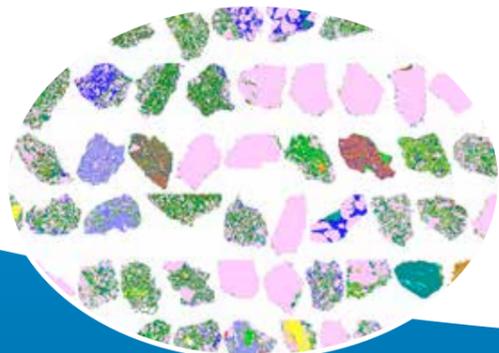
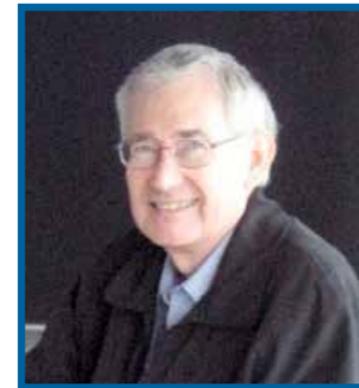
Payment Method : Purchase Order Cheque

Purchase orders or cheques must be organised and payment in full is required before the course.
Cheques payable to : Manta Controls Pty Ltd, 1 Sharon Place, Grange South Australia 5022.

TRAINING COURSE September 2019

Analysis of Mineral Recovery / Size / Liberation Data

1. Course objectives (includes listing of flotation texts)
2. Surveying and calculation of the solid balance
3. Calculation of lip tonnages and some sampling issues
Hand-out - Notes on practical concentrator sampling
4. **PRACTICAL 1** - Solids and Water Balance
Calculation of solid balance for closed circuit lead cleaner data (3 stages), and solid and water balance for an initial cleaning stage with water addition to the froth
5. Summarising and analysis of unsized data including element to mineral conversions; the theoretical grade recovery curve
6. Calculation and interpretation of sized data for minerals
Paper - Rate of capture of small particles in flotation
7. **PRACTICAL 2** - Mineral Recovery / Size
8. Entrainment mechanism
9. Calculate and interpret recovery-size data for liberated and composite occurrences of minerals
Paper - Mineralogical and metallurgical results at Penoles Mining Operations, Mexico
10. **PRACTICAL 3** Mineral Recovery / Size / Liberation
11. Some examples
Paper - Metallurgical characterisation of George Fisher ore textures and implications for ore processing
Paper - The design of a base metals separation process
12. Process Improvement
Paper - Liberated 0-10 micron particles from sulphide ores, their production and separation - Recent developments and future needs
Information - Developing solutions and estimating the benefits
13. Methods for obtaining size fractions



The course facilitator will be Dr Bill Johnson with John Karageorgos assisting. Bill Johnson delivered annual courses of this type at the University of Queensland initially as an Adjunct Professor (1990-97), while employed at Mount Isa Mines Limited, and then as the Professor of Minerals Engineering at the University of Queensland (1998-2005). The applied nature of the course arose from his experience in analysis of mineral recovery/size/liberation data at Mount Isa Mines Limited from 1982 to 1997 and in preceding years. Since 2003, he has delivered 30 courses to industrial metallurgists in Australia and overseas.