International Seminar on Mineral Processing Technology (MPT–2010)

Venue : National Metallurgical Laboratory, Jamshedpur
December 15-17, 2010

Submission of Full Manuscript: Instructions to Author

It is planned to bring out seminar pre-print volume (in balck & white) covering all the papers accepted for presentation in MPT-2010 through a standard publisher. We need to maintain the deadline suggested by the publisher. Authors are requested to timely submit the full manuscript otherwise it would not be possible to include paper in the seminar volume. Authors are requested to submit the manuscript alongwith the duly filled-in and signed copyright transfer form as per the following guidelines :

- **Submission**: The full manuscript may be submitted to The Chairman, Technical Committee, *MPT-2010, C/o Mineral Processing Division, National Metallurgical Laboratory, Jamshedpur- 831007* (email: mpt2010@nmlindia.org / ratnakar_singh @yahoo.co.uk / rs@nmlindia.org) **by 30th September 2010**.

- The manuscript is to be submitted in electronic format (e-mail or on CD) alonwith a hard copy using MS Word software (MS Office 2003 or 2007) and should be **limited to six pages (Times New Roman, Font size -10)** inclusive of tables and figures. For submission of the manusscript through e-mail, pdf version may be submitted in lieu of hard copy. Alternatively, paper can be submitted on-line by uploading it to the seminar website : http://www.mpt2010.org and may please also be intimated using the e-mail id : mpt2010@nmlindia.org. While preparing the manuscript authors kindly note that document will be produced in single colour (B/W) only.

- **Format** : The paper must be divided into sections starting with Title, and ending with conclusions. Typical format for papers dealing with experimental results is as indicated below. A sample format is given in Annexture –I.

    - Title
    - Name (s) of the author (s) and their affiliation, address (es), e-mail id of principal/corresponding author
    - Abstract
    - Keywords
    - Introduction
    - Experimental (covering materials and methods)
    - Results & Discussion
    - Conclusion
    - Acknowledgement, and
    - References.

- **Title Page** : (a) The title of the paper must be brief and contain words useful for indexing. (b) The names with initials of authors and the name and address of the institution where the work was done must be given. The e-mail address of the 'corresponding author' should be provided.

- **Abstract :** Papers must have a brief abstract (150-200 words) of the significant results reported therein.

- **Keywords :** Between 3 and 6 keywords must be provided for indexing and information retrieval.

- **Tables :** All tables must be numbered consecutively in arabic numerals in the order of occurrence in the text. They should be self contained and have a descriptive title.

- **Figures :** All figures including line drawings, graphs and photographs/plates should be numbered consecutively in arabic numerals in the order of appearance in the text. The line diagrams may be prepared with computer assisted graphic package such as MS Excel. The figures should be of high quality and high resolution with a suitable caption. The original graphic files should also be sent.

- **Units :** Units and associated symbols must invariably follow SI practice.

- **References :** References should be cited in the text by number and is to be shown within square bracket as superscript. References at the end of the paper should be serially listed by authors' names followed by initials, year of publication, name of the journal (*in italics*), volume number (**bold**) and number of the first page. Reference to books/ Proceedings should include: Name(s) of author(s), initials, year of publication, title of the book, edition if not the first, initials and name(s) of editors if any, chapter referred to, publisher, and place of publication with country and number of the first page. References to thesis must include the year, the title of the thesis, the degree for which submitted and the University. Some examples are given below :

  For Journals

  [1] Fuerstenau, D.W., Gutsche, O. and Kapur, P.C.,1996, *International Journal of Mineral Processing*, **44-45**, p.521.

  [2] Lewandowski, K.A. and Kawatra, S. Komar, 2010, *Mineral and Mertallurgical Processing*, **27**, p.8.

  For Books, Proceedings

  [1] Wills, B.A., 1992, In : Mineral Processing Technology, Fifth Edition, Chapter 12, Pergamon Press, Oxford (England), p. 491.

  [2] Das, S.K., Godiwalla, K.M., Panda, L., Bhattacharyya, K.K., Singh, R. and Mehrotra, S.P., 2007, In : Advanced Gravity Separation, R. Singh, A. Das and N.G. Goswami (Eds.), NML Publication, Jamshedpur (India), p. 86..

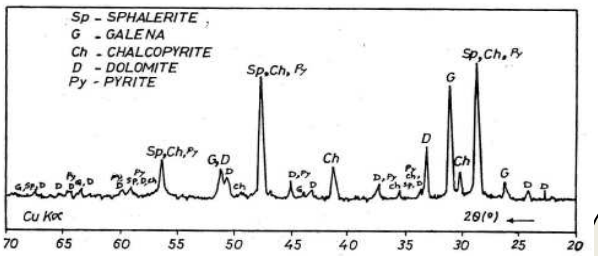
  [3] Singh, R., Banerjee, B., Bhattacharyya, K.K. and Srivastava, J.P., 2006, In : Proceedings XXIII International Mineral Processing Congress, Vol. 3, G. Onal et. al (Eds.), Promed Advertising Agency, Istanbul, (Turkey), p.2303.

  Similarly for article on website the following format may be used : Author' name followed by surname, year, Title, Edition, Publisher, Place of publication, Available from <URL> Accessed date.

Annexture-I

Instruction to Author for Preparation of Manuscript (A model)

MINERALOGICAL AND FLOTATION CHARACTERISTICS OF LEAD –ZINC ORE WITH A PARTICULAR REFERENCE TO EFFECTS OF OXIDATION	**(All caps 12 points, bold, Centered)**
R. Singh, D.S. Rao, N. Sinha[1], B. Banerjee and K.K. Bhattacharyya	**(U/L case, 11 points, bold, Centered)**
Mineral Processing Division National Metallurgical Laboratory, Jamshedpur – 831 007, India [1]Department of Chemistry, P.G. Centre, Jamshedpur Cooperative College, Jamshedpur -831 001, India	(U/L case, 10 points, Centered, normal)
ABSTRACT	**(All caps, 10 points bold, Centered)**
The present paper deals with the mineralogical and flotation characteristics of two lead-zinc ore samples (S1 and S2) from Ganesh-Himal region of Nepal. The two samples assayed 2.47%. ……	(Content: 9 points, normal)
Keywords: *Lead-zinc ore, Mineralogical characterisation, Flotation characteristics, Effects of foxidation.*	**(Heading – Italics, 9 points, bold;** Content : 9 points, italics, normal**)**
INTRODUCTION	**(Heading – All caps, 10 points bold)**
Bulk of the world's lead and zinc is supplied from their sulphide deposits which generally occur as finely disseminated bands of galena and sphalerite with varying amounts of pyrite. Froth flotation is widely used ...	(Content : 10 points, normal)
EXPERIMENTAL	**(Heading : All caps, 10 points, bold)**
Materials	**(Sub-heading : U/L case, 10 points, bold)**
Lead-zinc ore samples from Ganesh-Himal region of Nepal were used for the present studies. The chemical analysis of the two samples namely, S1 and S2 are given in Table-1. The mineralogical and liberation characteristics of the samples were determined and are discussed in the subsequent section. ….. Table -1 : Chemical analyses of lead-zinc samples Constituents / Samples: S1, S2 Pb, %: 2.47, 3.53 Zn, %: 13.63, 13.45 S, %: 15.96, 13.30	(Content : 10 points, normal)
Methods	**(U/L case, 10 points, bold)**
Bench scale flotation experiments were carried out using standard Wemco Fagergren Laboratory Flotation Cell. For this purpose the ore was crushed in stages in jaw and roll crushers to -1.68 mm. 0.5kg of -1.68 mm crushed sample was wet ground in laboratory rod mill at 66% pulp . . .	(Content : 10 points, normal)
RESULTS AND DISCUSSION	**(Heading : All caps, 10 points, bold)**
Studies on determination of mineralogical and liberation characteristics of the samples involving optical microscopy, X-ray diffraction and electron probe microanalysis techniques were carried out on the two samples. Further, a detailed froth flotation studies towards concentration and separation of lead and zinc	(Content : 10 points, normal)

bearing minerals were undertaken. The salient results are discussed below :	
Mineralogical Characterisation	**(Sub -heading : U/L, 10 points, bold)**
Mineralogical characterisation of the sample (S1) indicated that the ore was predominantly made up of sphalerite and pyrite in association with subordinate amounts of galena, minor amounts of pyrrhotite and chalcopyrite. Dolomite ....  *Fig. 1 : X-ray powder diffraction spectrum of lead-zinc ore sample.*	(Content : 10 points, normal)
Effects of particle size	*(Sub-sub heading : U/L case, Italics, 10 points, normal)*
Flotation experiments were carried out to study the effects of particle size of feed on flotation behaviour of lead and zinc bearing minerals. For this purpose, -1.68 mm ore sample, wet ground for different length	(Content : 10 points, normal)
CONCLUSION	**(Heading : Caps, 10 points, bold)**
Characterisation and flotation studies were carried out on two lead-zinc ore samples namely, S1 and S2 with a view to develop process for concentration and separation of lead and zinc bearing minerals from the ore. Following are the conclusions drawn from the studies undertaken	(Content : 10 points, normal)
ACKNOWLEDGEMENT	**(Heading : Caps, 10 points, bold)**
The authors are thankful to -------.	(Content : 10 points, normal)
REFERENCES	**(Heading : Caps, 10 points, bold)**
[1] Bills, B. A., 1992, In : Mineral Processing Technology, 5th Edition, Chapter 12, Pergamon Press, Oxford (England), p. 491. [2] Pradip, Das, K. K and Singh, R, 1995, In : Selected Topics in Mineral Processing, Pradip and R. Kumar (Eds.), Wiley Eastern Ltd., New Delhi (India), p. 119	(Book/ Proceedings Ref. : 10 points, normal)
[1] Sinha, N. and Singh, R., 2007, *Journal of Metallurgy and Material Science*, **49**, p.175. [2] Liu, R., Sun, W., Hu, Y., Wang, D., 2010, *Minerals Engineering*, **23** (2), p. 99.	(Journal Ref. : 10 points, normal)