**Synopsis:**

※The title page of the manuscript, which states the title of the paper, authors, etc., should be prepared using the application form. Please fill in the application form and upload the PDF file to the submission review system.

A Synopsis must briefly state the work's main objective, scope, and findings within 250 words. At least some Keywords must accompany the abstract.

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**Keywords:**

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**Main Styles of Template**

Top and bottom margins: 35mm

Left and right margins: 25mm

Height and width: 26 vertical lines×42 horizontal characters

Font: Times New Roman

Font size: 11 pt

Bold for heading only

Page breaks before body text, tables, and figures

**1. Introduction**

This document is a template for submitting papers to ISIJ International. Advance online publications will also be published as per this template. For both the official online publications and paper-based publications the layout will be revised.

**2. Regarding the Template for Submissions**

**2. 1 Setting up the Template**

Since the paper size used in this template is A4, which is laid out vertically with 35 mm top and bottom margins, 25 mm left and right margins, 42 horizontal characters, 26 vertical lines, Times New Roman font, 11 pt. font size, it shall be used without amendment. The text should be page-break before the synopsis and body.

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**3. 1 Formulas**

When writing formulas, use Word functions to create them.

The formula should be centered in the line, assigned a number which would be placed on its right in half-width typeface, and enclosed in parentheses.

$L\_{Cu}(mol)≡\frac{N\_{Cu (in Ca-Pb)}}{N\_{Cu (in Fe )}}=\frac{γ\_{Cu (in Fe)}}{γ\_{Cu (in Ca-Pb)}}$ (1)

**3. 2 Figures and Tables**

At the time of official publication, the text is split into two columns. Consider the size of the figure (half width or full width) and place it close to the in-text description. Tables should be created using Word functions.

The captions of the figures and tables shall be listed below the figures and above the tables together with the number of the figure and table. The caption is inserted into the template itself, not included with the image of the table or figure. In addition to the figures and tables are shown below.

When a figure or table is submitted in color, it is automatically published in color in the online version as well. The phrase “(Online version in color.)” will be added to the end of the caption at the time of official release. If the author wishes for a figure or table to be published in color in the print version, the author should add the word “(color in print)” to the end of the caption. There is a charge for color publication in the print version.

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If Supporting Information is to be attached, insert one blank line and write it as shown in the following example after Conclusions (with the URL of the DOI at the end).The URL will be added at the official publications.

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**Statement for conflict of interest**

Authors are requested to declare any conflicts of interest related to the conduct of this research.

**Acknowledgment(s)**

If necessary. It is advisable to state the source of funding for the research.　Acknowledgements to companies that proofread or reviewed the manuscript should not be included.

**NOMENCLATURE (notation example)**

u: Linear velocity (cm/s, at STP)

ε: Void fraction (–)

C: Concentration of gas (mol/cm3)

VB: Volume of bed (cm3-bed)

**REFERENCES**

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**Graphical Abstract**

Table 1 Experimental results of the Sn distribution between molten iron and Ca-Pb alloy.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Run No. | {mass%Ca}final | {mass%Sn}final | [mass%Sn]final | *L*Sn(mass) |
| Sn-1 | 11.6 | 0.750 | 0.130 | 5.77 |
| Sn-2 | 26.9 | 1.388 | 0.061 | 22.7 |
| Sn-3 | 47.4 | 0.995 | 0.020 | 50.4 |
| Sn-4 | 61.8 | 2.287 | 0.005 | 439 |



Fig. 1. Schematic illustration of (a) experimental apparatus, (b) sample arrangement for the equilibrium experiment, and (c) sample arrangement for the Al (and Ca) addition experiment.



Fig. 2. Summary of the variation of inclusions observed in this work. **(color in print)**