

## **Topographical survey of end moraine and dead ice area at Imja Glacial Lake in 2001 and 2002**

**Akiko SAKAI<sup>1\*</sup>, Mitsuyoshi SAITO<sup>2</sup>, Kouichi NISHIMURA<sup>3</sup>, Tomomi YAMADA<sup>4</sup>,  
Yasuko IIZUKA<sup>5</sup>, Koichiro HARADA<sup>6</sup>, Shun'ichi KOBAYASHI<sup>7</sup>, Koji FUJITA<sup>1</sup> and C. B. GURUNG<sup>8</sup>**

1 Graduate School of Environmental Studies, Nagoya University, c/o HyARC, Chikusa-ku, Nagoya 464-8601, Japan

2 Mitsui Mineral Development Engineering, Co., Ltd., Gatecity Osaki West Tower 18F, 1-11-1 Osaki, Shinagawa-ku, Tokyo 141-0032, Japan

3 Department of Environmental Science, Faculty of Science, Niigata University, Ikarashi 2no-cho, 950-2181, Japan

4 Institute of Low Temperature Science, Hokkaido University, Sapporo 060-0819, Japan

5 Graduate School of Science and Technology, Niigata University, Ikarashi 2no-cho 8050, Niigata 950-2181, Japan

6 School of Food, Agricultural and Environmental Sciences, Miyagi University, 2-2-1, Taihaku-ku, Sendai 982-0215, Japan

7 Research Institute for Hazards in Snowy Areas, Niigata University, Ikarashi 2no-cho 8050, Niigata 950-2181, Japan

8 Department of Hydrology and Meteorology, Ministry of Science and Technology, Kathmandu, Nepal

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### **Abstract**

A survey was carried out at the end moraine and the dead ice area of the Imja Glacial Lake in October 2001 and in April 2002 using a digital theodolite with a laser distance meter and differential Global Positioning System (d-GPS). The survey points covered the whole dead ice area and end moraine of the Imja Glacier, and map contours were produced at 5-m intervals. This topographical map will be a significant means to analyze the time variation of the dead ice area and end moraine in future re-mapping. Changes in the lake level and the spillway on the dead ice area since 1994 were also analyzed in comparison with the measurements in 1994 by Watanabe *et al.* (1995).