Department: Economics		
Academic Year : 2022-23		
Sr. No.	**Programme Code**	**Name of the Programme**
01.	107	B.A. Economics (Horns.) IVth semester. (Internship)

Harishca

Head
Dept. of Economics
GURU GHASIDAS UNIVERSITY
BILASPUR (C.G.)

Signature and Seal of the Head

SRC MINERALS AND PROCESSORS, TUMSAR

SRC

INTERNSHIP REPORT

From 20-05-23 to 25-06-23

Submitted by

Anjali Chandra

BA. HONOURS (4th sem)

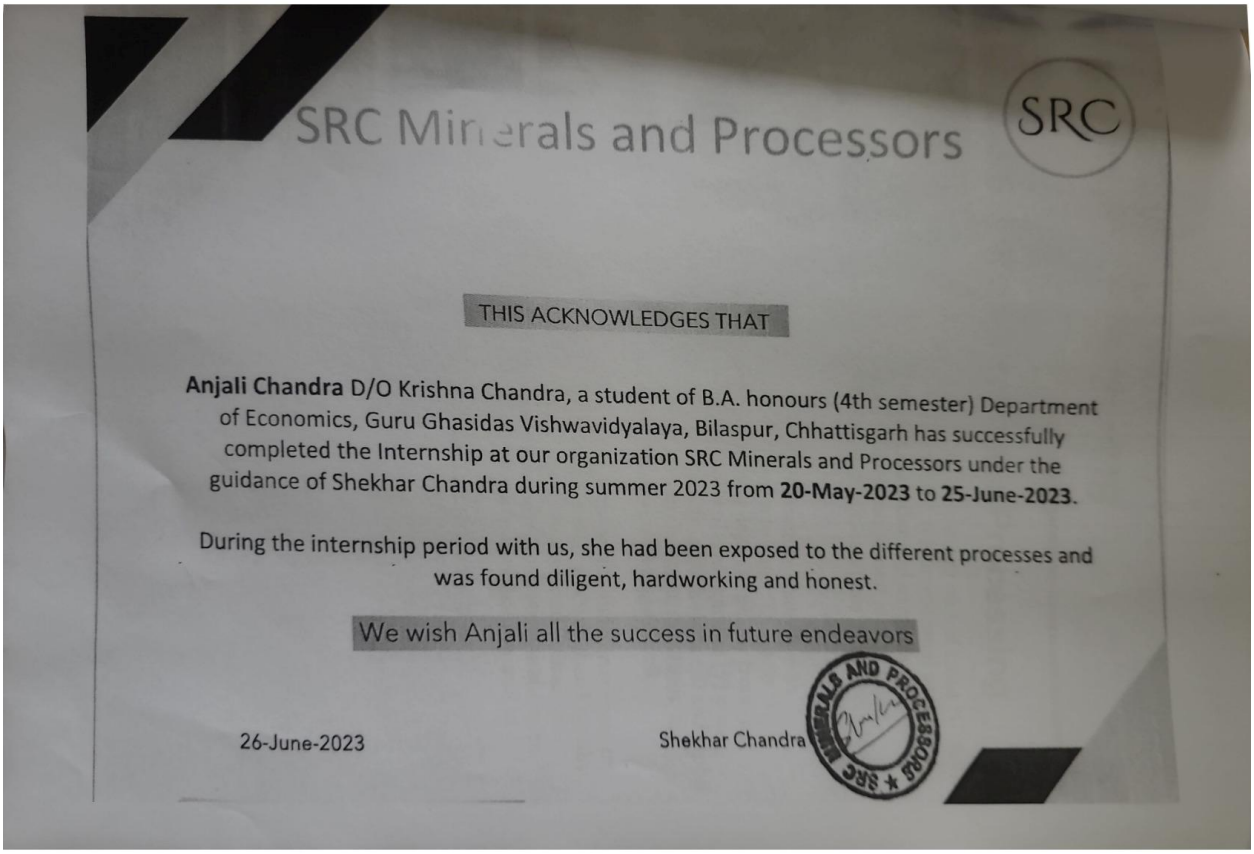
ECONOMICS DEPARTMENT

GURU GHASIDAS VISHWAVIDYALAY

Submitted to

Mr. Chitranjan Nayak Sir

09/9/23



SRC Minerals and Processors

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THIS ACKNOWLEDGES THAT

Anjali Chandra D/O Krishna Chandra, a student of B.A. honours (4th semester) Department of Economics, Guru Ghasidas Vishwavidyalaya, Bilaspur, Chhattisgarh has successfully completed the Internship at our organization SRC Minerals and Processors under the guidance of Shekhar Chandra during summer 2023 from **20-May-2023** to **25-June-2023**.

During the internship period with us, she had been exposed to the different processes and was found diligent, hardworking and honest.

We wish Anjali all the success in future endeavors

26-June-2023

Shekhar Chandra

SRC MINERALS AND PROCESSORS

Manganese Processing

What happens in Manganese Processing

Manganese (Mn) is a hard, silvery white metal with a melting point of 1,244 °C (2,271 °F). Ordinarily too brittle to be of structural value itself, it is an essential agent in steelmaking, in which it removes impurities such as sulfur and oxygen and adds important physical properties to the metal. For these purposes it is most often employed as a ferromanganese or silicomanganese alloy; as a pure metal it is added to certain nonferrous alloys.

Manganese is an allotropic metal—that is, its crystal structure changes with temperature. While cooling from the molten state down to 1,138 °C (2,080 °F), it solidifies into a body-centred cubic structure called the delta (δ) phase; from that point down to 1,100 °C (2,000 °F) it is in the face-centred cubic gamma (γ) phase, and from this point down to room temperature it goes through the beta (β) and alpha (α) phases. These last two phases, characterized by complex cubic structures, are extremely hard and brittle, while the simpler gamma phase is more ductile.

Manganese metal oxidizes superficially in air, rusts in moist air, and burns in air or oxygen at elevated temperatures. It decomposes water slowly when cool and rapidly when heated, forming hydrogen gas and manganous hydroxide, and it dissolves readily in dilute mineral acids, generating hydrogen and various manganous salts. The chemical reactivity of the metal accounts for its utility in metallurgy and in various chemical compounds.