Concrete shrinkage is partly reversible (water reabsorption) and partly irreversible (chemical bonding). Irreversible shrinkage stems from absorbed water loss within calcium silicate hydrate micropores, and carbonation shrinkage occurs when calcium hydroxide reacts with carbon dioxide, causing water evaporation and reduced pH. Carbonation shrinkage is influenced by CO2 levels, permeability, and humidity (optimal around 50%). Shrinkage is also affected by factors like specimen size (smaller specimens shrink more), relative humidity (higher humidity reduces shrinkage), and the presence of aggregate and reinforcement. Adding slag to concrete reduces plastic shrinkage due to lower water needs; its effect on dry shrinkage is less consistent across studies. Porosity and permeability change with age, affecting shrinkage. Further research is needed on cement composition, curing, and the long-term effects of using slag, which is a significant supplementary cementing material but whose production might decrease due to environmental regulations. A six-page report on slag in Turkey is assigned for .next week, covering its history, availability, properties, current use, and potential alternative applications