

Course 2: IKS Induction Program Module for Chemistry and Metallurgy (6 lectures)

Lecture 1: Introduction to IKS in general; introduction to a few terms along with the IAST transliteration scheme with diacritic marks.

Lecture 2: Outline of the contributions of ancient and medieval Indians in the area of chemistry and metallurgy as gleaned from archaeological artefacts, temple icons and other such tangible objects like the Delhi Iron Pillar that have survived the test of time.

Lecture 2: Specific use, processing, and finishing of 6 metals since the vedic times and how the knowledge constantly evolved to incorporate other metals like mercury and zinc at later periods

Lecture 3: Chemistry of dyes, pigments, and other coloring materials used in paintings, fabrics, beads, and other day-to-day utilities since ancient times and their constant evolution through different periods of time

Lecture 4: Chemistry in Ayurvedic texts as well as in Ayurveda practice. A few case studies pertaining to the preparation, quality control, and delivery of herbo-mineral drug formulations.

Lecture 5: Introduction to select original texts pertaining to chemistry and metallurgy like the *Rasāṅṅava* and *Rasaratnasamuccaya*; dwelling on the style of writing a technical subject as well as on the content that are in vogue in contemporary chemistry.