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ABSTRACT: *The vanadium (IV) – 4-nitrocatechol (NC) – neotetrazolium chloride (NTC) – water – organic solvent system was studied by using an extractionspectrophotometric method. The optimum extraction conditions (pH, concentration of the reagents, organic solvent, extraction time), the composition of the extracted species and their spectrophotometric characteristics were determined. Two complexes were detected in the organic phase: a ternary ion-associated complex (NT)[VO(NC)$_2$] and a binary complex [VO(NC)]. Some aspects of the extraction mechanism were investigated. A conclusion was drawn about the specific role of NT^{2+}. The effect of foreign ions and reagents on the extraction of vanadium was studied. The interfering action of many ions was eliminated by addition of ammonium citrate and measurement at an appropriate wavelength.*

Key words**:** vanadium, extraction, complex, 4-nitrocatechol, tetrazolium salt