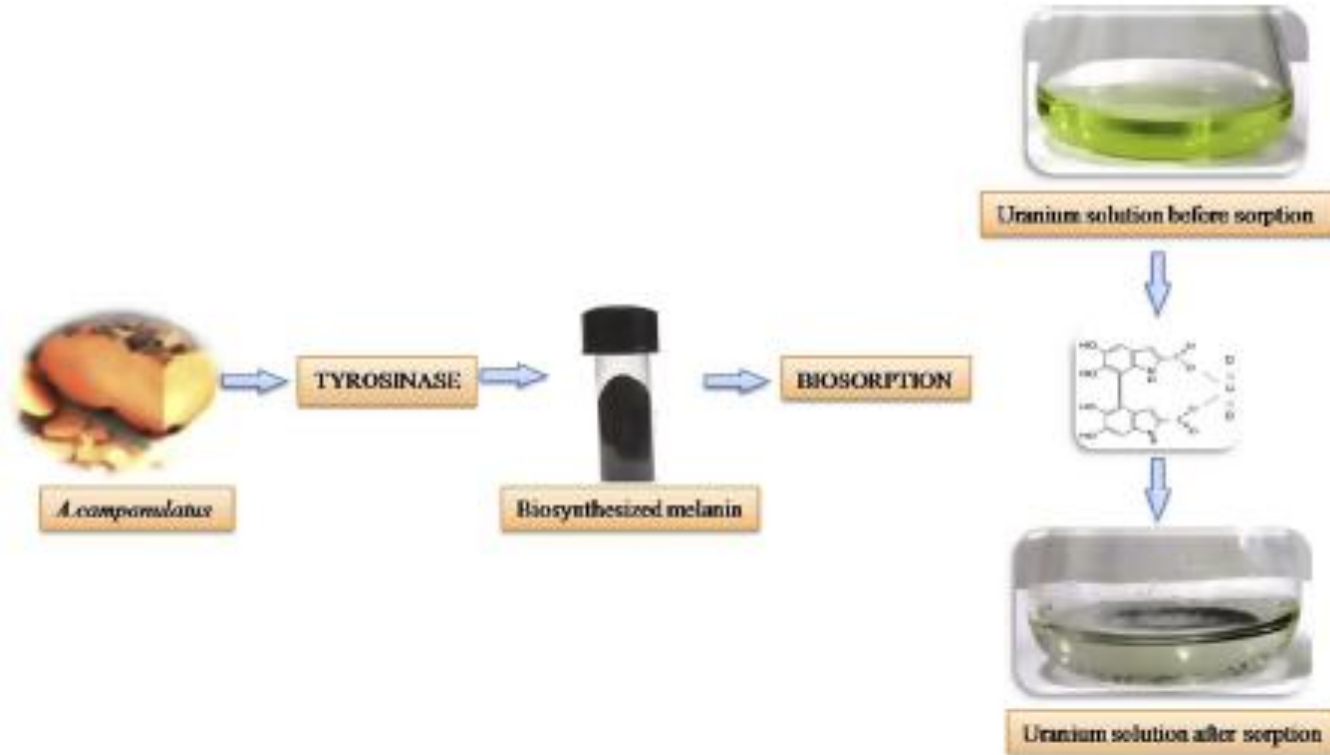


Enzymatic synthesis of nanomelanin and its application in uranium remediation



Melanin is a naturally available black pigment with metal binding properties. It can also be biosynthesized using tyrosinase. Enzyme tyrosinase, extracted from *Amorphophallus campanulatus* was used for biosynthesis of nanomelanin. The nanomelanin carries negative charge and showed high uranium binding capacity 588.24 mg U/g . Its high loading capacity and specificity would be useful for remediation and detection of uranium.