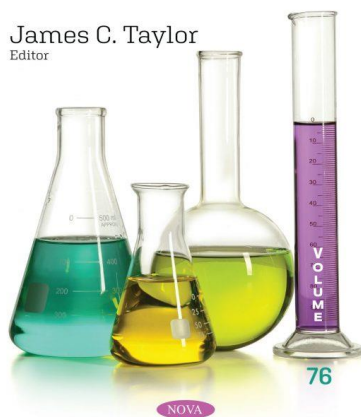


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This book is a collection of eleven chapters discussing various topics on recent advances in chemistry research. Chapter One discusses the potential use of hydrogels in engineering applications. Chapter Two reviews multifunctional supramolecular gels. Chapter Three discusses the various processes used to dry aromatic plants and their effects on final product quality. Chapter Four is an analysis of Single Crystal X-ray structures and anticancer activity studies on substances derived from thiazolidine. Chapter Five examines the design and function of low molecular mass gelators based on derivatives of thiazolidine. Chapter Six is a review of the properties of bismuth niobate-based materials via impedance spectroscopy, a powerful and non-destructive technique. Chapter Seven examines the use of nitrogen containing conjugated building blocks for use in organic electronics. Chapter Eight is a study of transition metal dichalcogenides through an ab-initio approach. Chapter Nine reviews the synthesis process as well as antioxidant and antibacterial properties of substances derived from thiazolidine-4-carboxylic acid. Chapter Ten examines the potential to remove beryllium from aqueous solutions by means of chelating resins. The final chapter discusses the removal of beryllium from aqueous solutions, but presents the possibility of doing so by means of biopolymer-enhanced ultrafiltration.

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