

CONTENTS

Transition Metals Complexes with Helical 2,2'-Bipyridine Ligands <i>Martin Kos</i>	7
Phosphorus Derivatives of Helicenes <i>Ing. Tomáš Beránek</i>	9
Synthesis and Functionalization of Aza[5]phenacenes <i>Ing. Lubomír Váňa</i>	10
From Cationic Carbosilane Dendrimers and Glycodendrimers towards Multifunctional Dendritic Wedges <i>Ing. Monika Müllerová</i>	12
Effect of Conditions on TiO ₂ Aerogel Crystallization Using Modified Supercritical Carbon Dioxide <i>Ing. Marie Cerhová</i>	14
Analyzing the Experimental Thermodynamic Data for Ionic Liquids and their Study as Thermal Energy Storage Materials <i>Maja Čanji, MSc.</i>	16
Single-Step Purification of Raw Biogas to Biomethane Quality by Hollow Fiber Membranes without any Pre-Treatment – Innovation in Biogas Upgrading <i>Ing. Michal Žák</i>	18
Magnesium Silicide and Germanide from Waste as a Source of CVD Precursors and Ultrapure Semiconductors <i>Ing. Jakub Bumba</i>	20
Hydrodynamic Behavior of Large Bubbles in Slot Channels <i>Kingsley Ezeji, MSc.</i>	22