

# Contents

## Part I Keynotes

- 1 **Weather and Climate – Difficult Science Problems** . . . . . 3  
Stoytcho Panchev and Tatiana Spassova
- 2 **Climate Change and the Balkans: Real Concern or  
“Useless Arithmetic”** . . . . . 11  
C. Gregory Knight
- 3 **Global Environmental Change and Related Impacts** . . . . . 21  
Lučka Kajfež Bogataj
- 4 **Science, Society and Action** . . . . . 39  
Marieta P. Staneva

## Part II Global Change and Climate Change in SEE

- 5 **Climate Modelling Beyond the Complexity: Challenges in  
Model-Building** . . . . . 53  
Dragutin T. Mihailovic
- 6 **Changes in Different Type of Clouds in South-Eastern  
Europe in Association with Climate Change** . . . . . 65  
Blanka Bartók
- 7 **Research on 21st Century Climate Change in the Republic  
of Macedonia** . . . . . 75  
Suzana Alcinova Monevska and Pece Ristevski
- 8 **The Impact of Climate Change on the Precipitation  
Regime in Bosnia and Herzegovina** . . . . . 91  
Dženan Zulum and Željko Majstorović
- 9 **Climatological Analysis of the Synoptic Situations  
Causing Torrential Precipitation Events in Bulgaria over  
the Period 1961–2007** . . . . . 97  
Lilia Bocheva, Ilian Gospodinov, Petio Simeonov, and  
Tania Marinova

### Part III Environmental Impacts

- 10 A Summary of Sector and Region Specific Economic Impact and Vulnerability Assessments by Case Study in Bulgaria, Romania and Hungary . . . . . 111**  
Franz Pretenthaler and Judith Köberl
- 11 Cecilia – EC FP6 Project on the Assessment of Climate Change Impacts in Central and Eastern Europe . . . . . 125**  
Tomas Halenka
- 12 Vulnerabilities and Adaptation Options of European Agriculture 139**  
Josef Eitzinger, Sabina Thaler, Gerhard Kubu,  
Vesselin Alexandrov, Angel Utset, Dragutin T. Mihailovic,  
Branislava Lalic, Miroslav Trnka, Zdenek Zalud,  
Daniela Semeradova, Domenico Ventrella,  
Dimos P. Anastasiou, Mahmoud Medany, Samar Altaher,  
Janusz Olejnik, Jacek Leśny, Natalia Nemeshko,  
Michael Nikolaev, Catalin Simota, and George Cojocaru
- 13 Projection of Climate Change for South East Europe and Related Impacts . . . . . 161**  
Eglantina Bruci
- 14 Forests in Serbia as Factor of Soil and Water Protection Against Degradation in the Conditions of Global Climate Changes 177**  
Stanimir Kostadinov

### Part IV Impacts on Society and Economy

- 15 Impacts of Climate Change on Tourism . . . . . 193**  
Plamen Mishev and Milkana Mochurova
- 16 The Social Impact of Heavy Rains in Albania . . . . . 201**  
Liri Muçaj, Eglantina Bruci, and Vangjel Mustaqi
- 17 Effects of Chronic Exposure to Urban Air Pollution on Red Blood Cells in Children . . . . . 211**  
Maja Nikolić and Dragana Nikić
- 18 Moldova's Challenge in the Face of Surface Water Resource Changes . . . . . 221**  
Igor G. Sirodoev
- 19 Long-Term Trends of Lead-210 Concentrations in the Ground-Level Air in Finland and Bulgaria . . . . . 229**  
Jussi Paatero, Blagorodka Veleva, and Juha Hatakka

**Part V From Global to Local and Vice Versa**

<b>20 Drought Management Centre for South Eastern Europe . . . . .</b>	<b>237</b>
Gregor Gregorič and Andreja Sušnik	
<b>21 The Role of Local Communities in Revising National Action Programs to Mitigate Drought, and Prevent and Combat Desertification: Lessons from Romania . . . . .</b>	<b>243</b>
Doru Leonard Irimie, Viorel Blujdea and Ciprian Pahonțu	
<b>22 Strengthening Capacities in Western Balkan Countries to Address Environmental Problems Through Remediation of High Priority Hot Spots . . . . .</b>	<b>259</b>
Stewart Williams and Sladan Maslač	
<b>23 Pilot Training Programme for Integration of Global Environmental Concerns into the Regional and Spatial Planning Process in Bulgaria . . . . .</b>	<b>267</b>
Nataliya Dimitrova-Popova	
<b>Index . . . . .</b>	<b>275</b>