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Nátr, L.: **Země jako skleník. Proč se bát CO<sub>2</sub>?** [Earth as a Greenhouse. Why to be Afraid of CO<sub>2</sub>?] – Academia, Praha 2006. [In Czech.] ISBN 80-200-1362-8. 142 pp., 150 CZK.

The still increasing CO<sub>2</sub> concentration in the atmosphere and its effects on climate, vegetation, and human community, called 'global climate change', became one of the greatest problems of the recent world. The author of the textbook, professor of plant physiology on the Charles University in Prague, presents a unique analysis in 14 chapters. The first ones are devoted to carbon dioxide (carbon; oxygen; carbon dioxide; carbon monoxide; carbon dioxide as a part of carbon cycle on Earth; past and recent changes of atmospheric CO<sub>2</sub> concentration; carbon cycle on dry land and oceans; fuel consumption and CO<sub>2</sub> production; possible consequences of quantitative changes in carbon cycle on Earth, etc.). Chapters 4 and also 6 are fully devoted to discussion on CO<sub>2</sub> and greenhouse effect (greenhouse gases – water vapour, CO<sub>2</sub>, methane, N<sub>2</sub>O, ozone, chlorofluorocarbons, etc.). A short chapter 5 compares the greenhouse effects on Earth with those on the nearest neighbouring planets, Venus and Mars.

Further chapters (7–10) deal with the complexity of both atmospheric CO<sub>2</sub> and climate changes (limitations of mathematic modelling of climate, effects of aerosol particles in the atmosphere, the role of biosphere as carbon sink and source, mitigation costs of CO<sub>2</sub> sequestration, possible global climate change during the 21<sup>st</sup> century, etc.). The description

of the scientific activities in the Czech Republic emphasizes experiments dealing with long-term effects of enhanced CO<sub>2</sub> concentration on forest ecosystems and review studies on the potential impact of global climate changes on both natural and agricultural ecosystems. Chapters 11–14 are devoted to the effects of CO<sub>2</sub> on plants, health of men, and general consequences for sustainability of human societies. The book is supplemented with extensive lists of both Czech and international literature sources (124 references of books, review articles, and original papers).

Generally, the book is an excellent source of information on the role of CO<sub>2</sub> in the global climate as well as reasons and consequences of the perturbations of the carbon cycle. The main text is accompanied by numerous boxes offering to the reader a comprehensive and reliable information of various terms, definitions, and processes. The book is well edited and printed. It also contains a short subject index (132 items). It can be recommended to readers understanding Czech (predominantly but not exclusively researchers and students) interested in environmental sciences and problems associated with global climate change. Further information on the book is available on [www.academiaknihy.cz](http://www.academiaknihy.cz) and [www.academiabooks.cz](http://www.academiabooks.cz).

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