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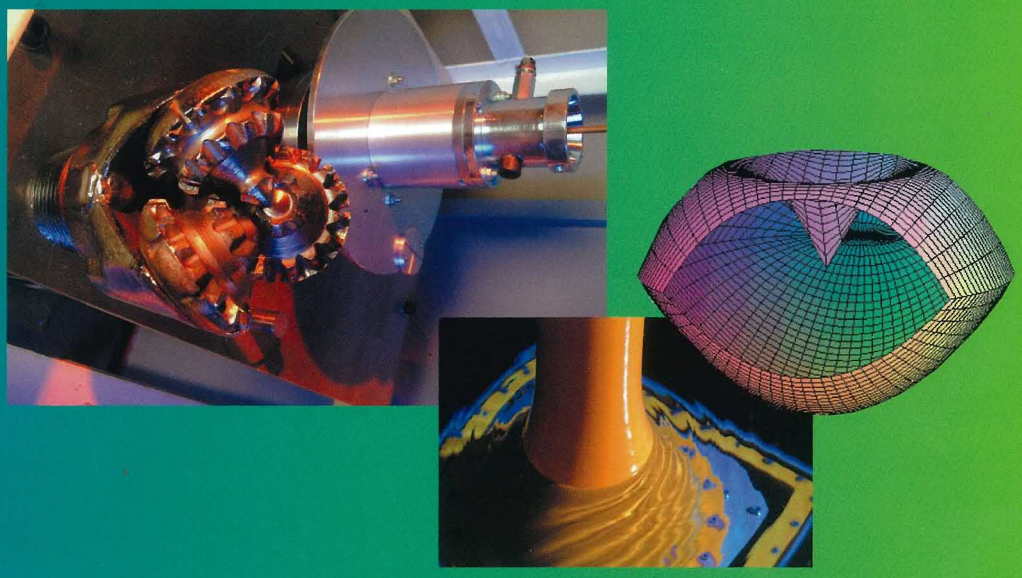

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ORIGINAL PAPERS

BOOK REVIEWS

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Book Review

Karl-Eugen Kurrer, The History of the Theory of Structures. From Arch Analysis to Computational Mechanics, Verlag Ernst & Sohn Berlin, 2008. 848 pages, Hardcover, € 119.00, sFr 188.00, ISBN: 978-3-433-01838-5

When the reviewer studied civil engineering in the seventies, he concentrated on the numerical formulation of ultimate limit state calculations, a new discipline at that time. During discussions he was confronted with arguments, such a kind, that it should not be allowed to assure against plastic limit states. It was referred to disputations of Stüssi, Kollbrunner, and Kazinczy in the thirties. This was the beginning of the activities of the reviewer in the field of the history of the nonlinear behaviour of structures. While doing literature research he realised that there was really no literature available on the history of the theory of structures.

Nevertheless, he learned that it is very effective to study a topic, starting from the very beginning in history. How observed researchers, universal genius like Leonardo da Vinci, nature and how did they describe the observations? What was their way of thinking? How did they develop models? Why it took almost hundred years to achieve what is today called Bernoulli's hypothesis? To find answers to such questions makes it much easier to understand better development processes and to teach students. It takes time to understand.

To the knowledge of the reviewer, Eugen Kurrer is the first and only world wide, who studied the history of the theory of structures. In his book, he described that there are seven gates to the knowledge of the history of the theory of structures, as they are: History of science, Construction history, Didactics, Biographic studies, Bibliographic studies, Aesthetics, and Theory of science. One could add Civil engineering structures embedded in culture and time.

In times where students are convinced that the world behaves in accordance with available numerical tools, and they do not realize that they turn physics upside down, it becomes more and more important to refer back to the origins of our profession.

Eugen Kurrers book is fascinating and it has already become part of my teaching. I would like to recommend it not only to students and civil engineers, it is of great interest to all interested in load-bearing structures, wherever in aerospace engineering, mechanical engineering, sport-equipment industry, etc.

It is an opus of uniqueness.

Munich **Norbert Gebbeken**

