

## **Einzelveröffentlichungen 1985 - 1989**

**(peer-review Publikationen durch Fettdruck gekennzeichnet)**

- Degens, E. T., S. Kempe & A. Spitz (1985): Spurenstoffe: was geschieht in der Atmosphäre? - Umschau **85**/3: 155-156. Nachdruck in Chinesisch in "Umwelt der Provinz Qinghai" **1985**/3: 61-62.
- Grassl, H., S. Kempe, E. Maier-Reimer et al. (1985): Das Kohlendioxid in der Atmosphäre als Teil des globalen Kohlenstoffkreislaufs und seine Wechselwirkungen zu Klima und Pflanzenwachstum. - Veröffentl. Naturforsch. Ges. Emden, N. F. **1-1.1**, Ser. 1: 1-60.
- Kempe, S. & R. Herrera (1985): Alexander von Humboldt (1769-1859). - In "Transport of Carbon and Minerals in Major World Rivers", Pt. 3 (eds. E.T. Degens, S. Kempe & R. Herrera), Mitt. Geol.-Paläont. Inst. Univ. Hamburg, SCOPE/UNEP Sonderband **58**: 1-6.
- Kempe, S. & all participants of the SCOPE/UNEP Project on "Transport of Carbon and Minerals in Major World Rivers" (1985): Compilation of carbon and nutrient discharge from major world rivers. - In "Transport of Carbon and Minerals in Major World Rivers", Pt. 3 (eds. E.T. Degens, S. Kempe & R. Herrera), Mitt. Geol.-Paläont. Inst. Univ. Hamburg, SCOPE/UNEP Sonderband **58**: 29-32.
- Kempe, S. & K. Emeis (1985): Carbonate chemistry and the formation of Plitvice Lakes. - In "Transport of Carbon and Minerals in Major World Rivers", Pt. 3 (eds. E.T. Degens, S. Kempe & R. Herrera), Mitt. Geol.-Paläont. Inst. Univ. Hamburg, SCOPE/UNEP Sonderband **58**: 351-383.
- Borchert, G. & S. Kempe (1985): A Zambezi aqueduct. - In "Transport of Carbon and Minerals in Major World Rivers", Pt. 3 (eds. E.T. Degens, S. Kempe & R. Herrera), Mitt. Geol.-Paläont. Inst. Univ. Hamburg, SCOPE/UNEP Sonderband **58**: 443-457.
- Kempe, S. & E.T. Degens (1985): An early soda ocean? - Chem. Geol. **53**: 95-108.**
- Degens, E.T. & S. Kempe (1985): The global carbon cycle, Part 3: CO<sub>2</sub> and carbon in the freshwater system. - First R&D Programme in the Field of Climatology 1981-1985, Comm. Europ. Commun. Environm. and Quality of Life, Rep. EUR 9920 EN: 313-316.
- Kempe, S. & K. Emeis (1986): Travertine formation in the Plitvice National Park. - Proc. 10th Intern. Speleol. Congr.: 55-59.**
- Emeis, K. & S. Kempe (1986): Speleothems of the Winterberg and Quaternary climate of the Harz Mountains. - Proc. 10th Intern. Speleol. Congr. Barcelona: 281-284.**
- Kempe, S. & E.T. Degens (1986): Enthielt der urzeitliche Ozean Soda statt Kochsalz? - Spektrum der Wissenschaft 11: 28-30.
- Emeis, K., H.-H. Richnow & S. Kempe (1987): Travertine formation in Plitvice National Park/Yugoslavia: Chemical vs. biological control. - Sedimentology **34**: 595-609.**
- Izdar, E., T. Konuk, V. Ittekkot, S. Kempe & E. T. Degens (1987): Particle flux in the Black Sea: Nature of the organic matter. - In "Particle Flux in the Ocean" (eds. E.T. Degens, E. Izdar & S. Honjo), Mitt. Geol.-Paläont. Inst. Univ. Hamburg, SCOPE/UNEP Sonderband **62**: 1-18.
- Honjo, S., B.J. Hay, S.J. Manganini, V.L. Asper, E.T. Degens, S. Kempe, V. Ittekkot, E. Izdar, Y.T. Konuk & H. A. Benli (1987): Seasonal cyclicity of lithogenic particle fluxes at a southern Black Sea sediment trap station. - In "Particle Flux in the Ocean" (eds. E.T. Degens, E. Izdar & S. Honjo), Mitt. Geol.-Paläont. Inst. Univ. Hamburg, SCOPE/UNEP Sonderband **62**: 19-39.
- Kempe, S., H. Nies, V. Ittekkot, E.T. Degens, K.O. Buesseler, H. Livingston, S. Honjo, B.J. Hay, S.J. Manganini, E. Izdar & T. Konuk (1987): Comparison of Chernobyl nuclide deposition in the Black Sea and in the North Sea. - In "Particle Flux in the Ocean" (eds. E.T. Degens, E. Izdar & S. Honjo), Mitt. Geol.-Paläont. Inst. Univ. Hamburg, SCOPE/UNEP Sonderband **62**: 165-178.
- Kempe, S. & H. Nies (1987): Chernobyl nuclide record from North Sea sediment trap. - Nature **329**: 825-828.**
- Kempe, S. (1988): Estuaries - their natural and anthropogenic changes. - In "Scales and Global Change" (eds. T. Rosswall, R.G. Woodmansee & P.G. Risser), SCOPE Report **35**, Chichester, New York, Brisbane, Toronto, Singapore, J. Wiley & Sons: 251-285.**
- Kempe, S. (1988): Freshwater carbon and the weathering cycle. - In "Physical and Chemical Weathering in Geochemical Cycles" (eds. A. Lerman & M. Meybeck), NATO ASI Series C **251**, Dordrecht, Boston, Lancaster, Kluwer Acad. Publ.: 197-223.**

- Fenag Jian-Xiang & S. Kempe (1987): The concentration and transportation of major ions in the lower Huanghe. - In "Transport of Carbon and Minerals in Major World Rivers", Pt. 4 (eds. E.T. Degens, S. Kempe & Gan Weibin), Mitt. Geol.-Paläont. Inst. Univ. Hamburg, SCOPE/UNEP Sonderband **64**: 161-170.
- Gan Weibin & S. Kempe (1987): The Changjiang: Its long-term changes in  $\text{PCO}_2$  and carbonate mineral saturation. - In "Transport of Carbon and Minerals in Major World Rivers", Pt. 4 (eds. E.T. Degens, S. Kempe & Gan Weibin), Mitt. Geol.-Paläont. Inst. Univ. Hamburg, SCOPE/UNEP Sonderband **64**: 207-215.
- Kempe, S., G. Liebezeit, V. Dethlefsen & U. Harms (1988): Synopsis. - In "Biogeochemistry and Distribution of Suspended Matter in the North Sea and Implications to Fisheries Biology" (eds. S. Kempe, G. Liebezeit, V. Dethlefsen & U. Harms), Mitt. Geol.-Paläont. Inst. Univ. Hamburg, SCOPE/UNEP Sonderband **65**: XI-XXIII.
- Pegler, K. & S. Kempe (1988): The carbonate system of the North Sea: Determination of alkalinity and  $\text{TCO}_2$  and calculation of  $\text{PCO}_2$  and  $\text{SI}_{\text{cal}}$  (Spring 1986). - In "Biogeochemistry and Distribution of Suspended Matter in the North Sea and Implications to Fisheries Biology" (eds. S. Kempe, G. Liebezeit, V. Dethlefsen & U. Harms), Mitt. Geol.-Paläont. Inst. Univ. Hamburg, SCOPE/UNEP Sonderband **65**: 35-87.
- Kempe, S. & T. C. Jennerjahn (1988): The vertical particle flux in the northern North Sea, its seasonality and composition. - In "Biogeochemistry and Distribution of Suspended Matter in the North Sea and Implications to Fisheries Biology" (eds. S. Kempe, G. Liebezeit, V. Dethlefsen & U. Harms), Mitt. Geol.-Paläont. Inst. Univ. Hamburg, SCOPE/UNEP Sonderband **65**: 229-267.
- Kempe, S. & F. Vladi (1988): Die Lichtenstein-Höhle, eine präholozäne Gerinnehöhle im Gips und Stätte urgeschichtlicher Menschenopfer am Südweststrand des Harzes (Gemarkung Dorste, Landkreis Osterode am Harz). - Heimatbl. für den süd-westl. Harzrand **44**: 1-12.
- Honjo, S., B. Hay et al. (1988): Temporal and Spatial Variability in Sedimentation in the Black Sea: Cruise Report, R/V KNORR 134-8, Black Sea leg 1, April 16 - May 7, 1988. - PIRI REIS Intern. Contr. Ser. **6**, WHOI-88-35: 156 pp.
- Kempe, S. Liebezeit, G., Diercks, A., Nicholson, J., Gagnon, A., Woodward, B. & Realander, M. (1988): Water column analysis.- In: Honjo, S., B. Hay (eds.), Temporal and Spatial Variability in Sedimentation in the Black Sea: Cruise Report, R/V KNORR 134-8, Black Sea leg 1, April 16 - May 7, 1988. - PIRI REIS Intern. Contr. Ser. **6**, WHOI-88-35: 31-41.
- Nicholson, J., Kempe, S. Liebezeit, G., & Woodward, B. (1988): Sediment trap supernatant chemistry with comparison to the water column chemistry.- In: Honjo, S., B. Hay (eds.), Temporal and Spatial Variability in Sedimentation in the Black Sea: Cruise Report, R/V KNORR 134-8, Black Sea leg 1, April 16 - May 7, 1988. - PIRI REIS Intern. Contr. Ser. **6**, WHOI-88-35: 43-53.
- Realander, M., Kempe, S., Diercks, A., & Hay, B. (1988): CTD observations.- In: Honjo, S., B. Hay (eds.), Temporal and Spatial Variability in Sedimentation in the Black Sea: Cruise Report, R/V KNORR 134-8, Black Sea leg 1, April 16 - May 7, 1988. - PIRI REIS Intern. Contr. Ser. **6**, WHOI-88-35: 63-79.
- Kempe, S., & Diercks, A. (1988): In-situ pumping at the Mn-layer in the Black Sea.- In: Honjo, S., B. Hay (eds.), Temporal and Spatial Variability in Sedimentation in the Black Sea: Cruise Report, R/V KNORR 134-8, Black Sea leg 1, April 16 - May 7, 1988. - PIRI REIS Intern. Contr. Ser. **6**, WHOI-88-35: 81-85.
- Diercks, A. & Kempe, S. (1988): Visual inspections of the water column and sea bottom and of the microplankton and macroflocs in the upper 200 m of the water column with a video camera and photo camera equipped Mini-Rover.- In: Honjo, S., B. Hay (eds.), Temporal and Spatial Variability in Sedimentation in the Black Sea: Cruise Report, R/V KNORR 134-8, Black Sea leg 1, April 16 - May 7, 1988. - PIRI REIS Intern. Contr. Ser. **6**, WHOI-88-35: 87-91.
- Kempe, S., J. Kazmierczak & E.T. Degens (1989): The soda ocean concept and its bearing on biotic and crustal evolution. - In "Origin, Evolution and Modern Aspects of Biomineralization in Plants and Animals" (ed. R.E. Crick), Proc. 5th Intern. Symp. Biomineralization, Arlington, Texas, May, 1986, New York, Plenum Press: 29-43.**
- Kempe, S., G. Liebezeit & M. Schröder (1989): Inventory of phosphorus in the North Sea. - In "Phosphorus Cycles in Terrestrial and Aquatic Ecosystems" (ed. H. Thiessen), Regional Workshop 1: Europe, SCOPE Workshop, Proceedings: 319-339, Saskatchewan Inst. of Pedology, University of Saskatchewan, Saskatoon, Canada.
- Kempe, S. (1989): Sinterschäden: verursacht durch Permafrost oder Erdbeben? - Mitt. Verb. dt. Höhlen- u. Karstforsch. (Binder Festschrift) **35**: 87-90.
- Reimer, A. & S. Kempe (1989): Recent and paleokarst systems and their relation to ore mineralization in the Iberg-reef-complex, Harz Mountains. - Proc. 10th Intern. Congr. Speleol., Budapest, August 13-20, 1989: 1-2.**

**Svensson, U. & S. Kempe (1989): Hydrochemistry of karst waters in the Iberg-reef-complex, Harz Mountains. - Proc. 10th Intern. Congr. Speleol., Budapest, August 13-21, 1989: 3-5.**

Commission des Grandes Cavités (Matériaux rassemblés par Claude Chabert) (1989): Les grandes cavités mondiales en roches non-Calcaires. - Budapest: 34 pp. (unter Mitwirkung von S. Kempe für die Gipshöhlen)

Lohse, J., S. Kempe & G. Liebezeit, (1989): Weiträumige Belastung der Nordsee. - Die Geowissenschaften 7/6: 151-156.

Sündermann, J. & E.T. Degens (eds.) (1989): Die Nordsee/The North Sea. - Univ. Hamburg: 51 pp. (mit Beiträgen vieler Autoren, u.a. S. Kempe)