

LIST OF PUBLICATIONS OF LISA HELLER-KALLAI

- 1 J. D. Dunitz and L. Weissmann (Heller), The constitution of the dimer of acenaphthylene. *Acta Cryst.*, 2 (1949) 62.
- 2 L. Heller and H. F. W. Taylor, Hydrated calcium silicates. Part II, hydrothermal reactions: lime : silica ratio 1:1. *J. C. S.*, 531 (1951) 2397-2401.
- 3 L. Heller and H. F. W. Taylor, Hydrated calcium silicates. Part III, hydrothermal reactions of mixture of lime : silica molar ratio 3:2. *J.C.S.*, 180 (1952) 1018-1020.
- 4 L. Heller and H. F. W. Taylor, Hydrated calcium silicates. Part IV, hydrothermal reactions: lime : silica ratios 2:1 and 3:1. *J.C.S.* 480 (1952) 2535-2541.
- 5 L. Heller, The structure of dicalcium silicate α -hydrate. *Acta Cryst.*, 5 (1952) 724-728.
- 6 L. Heller, X-ray investigation of hillebrandite. *Min. Mag.*, 30 (1953) 150-154.
- 7 J. W. Jeffery and L. Heller, Preliminary X-ray investigation of pseudo-wollastonite. *Acta Cryst.*, 6 (1953) 807-808.
- 8 L. Heller, The thermal decomposition of the hydrated calcium silicates. Third International Symposium on the Chemistry of Cement, London, 1952, p. 237.
- 9 L. Heller and Z. H. Kalman, An approximate determination of the position of some cations in dehydroxylated montmorillonite. *Clay Min. Bull.*, 4 (1961) 213-220.
- 10 L. Heller and M. Ben-Yair, Formation of calcium choraluminate by interaction of Portland cement with sea-water and chloride solutions. *Nature*, 191: 4787 (1961) 488-489.
- 11 A. Slatkine and L. Heller, A petrological study of the flint clay from Makhtesh Ramon, Israel. International Geological Congress, Copenhagen, XXIV, (1960) 88-107.
- 12 L. Heller, An X-ray method for the determination of small quantities of palygorskite in clay mineral mixtures. *Acta Universitatis Carolinae*, 1961, 173-180.
- 13 L. Heller, The thermal transformation of pyrophyllite to mullite. *Amer. Min.*, 47 (1962) 156-157.
- 14 L. Heller, V. C. Farmer, R. C. Mackenzie, B. D. Mitchell and H. F. W. Taylor, The dehydroxylation and rehydroxylation of triphormic dioctahedral clay minerals. *Clay Min. Bull.*, 5 (1962) 56-72.
- 15 Z. H. Kalman and L. Heller, Theoretical study of X-ray fluorescent determination of traces of heavy elements in a light matrix. *Anal. Chem.*, 34 (1962) 946-951.
- 16 L. Heller and M. Ben-Yair, Effect of Dead Sea water on Portland cement. *J. Appl. Chem.*, 12 (1962) 481-485.
- 17 L. Heller and M. Ben-Yair, Effect of sulphate solutions on normal and sulphate-resisting Portland cement. *J. Appl. Chem.*, 14 (1964) 20-30.
- 18 Y. K. Bendor, W. Bodenheimer and L. Heller, A reconnaissance survey of the relationship between clay mineralogy and geological environment in the Negev, Southern Israel. *J. Sed. Petrol.*, 33 (1963) 874-903.
- 19 Y. K. Bendor, S. Gross and L. Heller, High-temperature minerals in non-metamorphosed sediments in Israel. *Nature*, 199: 4892 (1963) 478-479.
- 20 Y. K. Bendor, S. Gross and L. Heller, Some unusual minerals from the Mottled Zone complex. Israel. *Amer. Miner.*, 48 (1963) 924-930.
- 21 S. Gross and L. Heller, A natural occurrence of bayerite. *Min. Mag.*, 33 (1963) 723-724.
- 22 W. Bodenheimer, L. Heller, B. Kirson and S. Yariv, Organometallic clay complexes. Part II. *Clay Min. Bull.*, 5 (1962) 145-154.

- 22 W. Bodenheimer, L. Heller, B. Kirson and S. Yariv, Organometallic clay complexes. Part II. *Clay Min. Bull.*, 5 (1962) 145–154.
- 23 W. Bodenheimer, L. Heller, B. Kirson and S. Yariv, Organometallic clay complexes. Part III. *International Clay Conference, Stockholm*, 2 (1963) 351–363.
- 24 W. Bodenheimer, L. Heller, B. Kirson and S. Yariv, Organometallic clay complexes. Part IV. *Israel J. Chem.*, 1 (1963) 391–403.
- 25 W. Bodenheimer, L. Heller and S. Yariv, Organo-metallic clay complexes. Part V. *Israel J. Chem.*, 2 (1964) 201–208.
- 26 W. Bodenheimer, L. Heller and S. Yariv, Organo-metallic clay complexes. Part VI. *Proceedings of the International Clay Conference, Jerusalem*, 1 (1966) 251–261.
- 27 W. Bodenheimer, L. Heller and S. Yariv, Organo-metallic clay complexes. Part VIa. *Proceedings of the International Clay Conference, Jerusalem*, 2 (1966) 171–176.
- 28 W. Bodenheimer, L. Heller and S. Yariv, Organo-metallic clay complexes. Part VII. *Clay Minerals*, 6 (1966) 167–177.
- 29 L. Heller, Sorption of glycol and glycerol by preheated monoionic montmorillonite. *International Clay Conference, Stockholm*, 2 (1963) 105–114.
- 30 M. Ben Yair and L. Heller, The behaviour of concrete in sea-water. R.I.L.E.M.-A.I.P.C.N. *International Conference, Palermo* 1965.
- 31 L. Heller and M. Ben Yair, Effect of chloride solutions on Portland cement. *J. Appl. Chem.*, 16 (1966) 223–226.
- 32 W. Bodenheimer, L. Heller and J. Bartura, Intersalation of potassium acetate in flint clay. *Clay Minerals*, 7 (1967) 237–239.
- 33 W. Bodenheimer and L. Heller, Sorption of α -amino-acids by copper montmorillonite. *Clay Minerals*, 7 (1967) 167–176.
- 34 W. Bodenheimer and L. Heller, Sorption of methylene blue by montmorillonite saturated with different cations. *Mokady Memorial Issue, Israel J. Chem.*, 6 (1968) 307–314.
- 35 S. Yariv, L. Heller, Z. Sofer and W. Bodenheimer, Sorption of aniline by montmorillonite. *Felix Bergmann Anniversary Issue, Israel J. Chem.* 6 (1968) 741–756.
- 36 L. Heller and S. Yariv, Sorption of some anilines by Mn-, Co-, Ni-, Cu-, Zn- and Cd-montmorillonite. *Proceedings of the International Clay Conference, Tokyo*, I (1969) 741–755.
- 37 S. Yariv, L. Heller and N. Kaufherr, Effect of acidity in montmorillonite interlayers on the sorption of aniline derivatives. *Clays and Clay Minerals*, 17 (1969) 301–308.
- 38 Z. Sofer, L. Heller and S. Yariv, Sorption of indoles by montmorillonite. *Israel J. Chem.*, 7 (1969) 697–712,
- 39 L. Heller and S. Yariv, Anilinium montmorillonites and the formation of ammoniumamine associations. *Israel J. Chem.*, 8 (1970) 391–397.
- 40 S. Yariv and L. Heller, Sorption of cyclohexylamine by montmorillonites, 1970. *Israel J. Chem.*, 8 (1970) 935–945.
- 41 N. Kaufherr, S. Yariv and L. Heller, The effect of exchangeable cations on the sorption of chlorophyllin by montmorillonite. *Clays and Clay Minerals*, 19 (1971) 193–200.
- 42 S. Yariv, L. Heller, Y. Deutsch and W. Bodenheimer, DTA of various cyclohexylammonium smectites. *Thermal Analysis, Proc. Third ICTA, Davos*, 3, 1971, p. 663–674.
- 43 L. Heller and Z. H. Kalman, Some naturally occurring illite-smectite interstratifications. *Clays and Clay Minerals*, 20 (1972) 165–168.
- 44 S. Yariv and L. Heller-Kallai, IR evidence for migration of protons in H- and organo-montmorillonites. *Clays and Clay Minerals*, 21 (1972) 199–200.
- 45 L. Heller-Kallai, S. Yariv and M. Riemer, Effect of acidity on the sorption of histidine by montmorillonite. *Proc. International Clay Conference, 1972*, p. 651–661.

- 46 L. Heller-Kallai, S. Yariv and M. Riemer, The formation of hydroxy interlayers in smectites under the influence of organic bases. *Clay Minerals*, 10 (1973) 35–40.
- 47 L. Heller-Kallai, Y. Nathan and T. Weissbrod, The clay mineralogy of Paleozoic sediments from Southern Israel. *Israel J. Earth Sciences*, 22 (1973) 157–164.
- 48 L. Heller-Kallai, Y. Nathan and I. Zak, Clay mineralogy of Triassic sediments in Southern Israel and Sinai. *Sedimentology*, 20 (1973) 513–521.
- 49 S. Yariv and L. Heller-Kallai, The relationship between the IR spectra of serpentines and their structures. *Clays and Clay Minerals*, 23 (1975) 145–152.
- 50 L. Heller-Kallai, S. Yariv and S. Gross, Hydroxyl-stretching frequencies of serpentine minerals. *Mineral. Mag.*, 40 (1975) 197–200.
- 51 L. Heller-Kallai, Montmorillonite-alkali halide interaction: a possible mechanism for illitization. *Clays and Clay Minerals*, 23 (1975) 462–467.
- 52 L. Heller-Kallai, Interaction of montmorillonite with alkali halide. *Proc. Int. Clay Conference, Mexico 1975*, p. 361–372.
- 53 S. Yariv and L. Heller-Kallai, Comments on the paper: The adsorption of aromatic, heterocyclic and cyclic ammonium cations by montmorillonite. *Clay Minerals*, 10 (1975) 479–481.
- 54 M. Frenkel and L. Heller-Kallai, Racemisation of organic compounds by montmorillonite – implications for age determinations and stereocatalysis. *Chemical Geology*, 19 (1977) 161–166.
- 55 I. Rozenson and L. Heller-Kallai, Reduction and oxidation of Fe^{3+} in dioctahedral smectites – 1: Reduction with hydrazine and dithionite. *Clays and Clay Minerals*, 24 (1976) 271–282.
- 56 I. Rozenson and L. Heller-Kallai, Reduction and oxidation of Fe^{3+} in dioctahedral smectites – 2: Reduction with sodium sulphide solutions. *Clays and Clay Minerals*, 24 (1976) 283–288.
- 57 I. Rozenson and L. Heller-Kallai, Reduction and oxidation of Fe^{3+} in dioctahedral smectites – 3: Oxidation of octahedral iron in montmorillonite. *Clays and Clay Minerals*, 26 (1978) 88–92.
- 58 I. Rozenson and L. Heller-Kallai, Mössbauer spectra of dioctahedral smectites. *Clays and Clay Minerals*, 25 (1977) 94–101.
- 59 M. Frenkel and L. Heller-Kallai, Aromatization of limonene – a geochemical model. *Organic Geochemistry*, 1 (1977) 3–5.
- 60 I. Rozenson and L. Heller-Kallai, Mössbauer spectra of glauconites reexamined. *Clays and Clay Minerals*, 26 (1978) 173–175.
- 61 L. Heller-Kallai, Reactions of salts with kaolinite at elevated temperatures, Part I. *Clay Minerals*, 13 (1978) 221–235.
- 62 L. Heller-Kallai and M. Frenkel, Reactions of salts with kaolinite at elevated temperatures, Part 2. *Proc. Int. Clay Conf., Oxford, 1978*, p. 629–637.
- 63 L. Heller-Kallai and I. Rozenson, Removal of magnesium from interstitial waters in reducing environments – the problem reconsidered. *Geochim. Cosmochim. Acta*, 42 (1978) 1907–1909.
- 64 B. Spiro, L. Heller-Kallai and Z. Aizenshtat, Environment of deposition and diagenesis of some oil shales in Israel. 10th Int. Assoc. Sedimentol. Conf., Jerusalem, 1978, p. 632–633.
- 65 I. Rozenson, E. R. Bauminger and L. Heller-Kallai, Mössbauer spectra of iron in 1:1 phyllosilicates. *Amer. Miner.*, 64 (1979) 893–901.
- 66 D. P. E. Dickson, L. Heller-Kallai and I. Rozenson, Mössbauer spectroscopic studies of iron in organic material from natural sedimentary environments. *Geochim. Cosmochim. Acta*, 43 (1979) 1449–1453.

- 67 D. P. E. Dickson, L. Heller-Kallai and I. Rozenson, Mössbauer spectroscopic studies of humic and fulvic acid soil fractions. *Journal de Physique, Colloque 01*, 41, (1980) C1-409-410 (Abstract).
- 68 L. Heller-Kallai and I. Rozenson, Dehydroxylation of dioctahedral phyllosilicates. *Clays and Clay Minerals*, 28 (1980) 355-368.
- 69 I. Rozenson and L. Heller-Kallai, Order-disorder phenomena accompanying the dehydroxylation of dioctahedral phyllosilicates. *Clays and Clay Minerals*, 28 (1980) 391-392.
- 70 L. Heller-kallai and S. Yariv, Swelling of montmorillonite containing coordination complexes of amines with transition metal cations. *J. of Colloid and Interface Science*, 79 (1981) 479-485.
- 71 L. Heller-Kallai and I. Rozenson, Nontronite after acid or alkali attack. *Chemical Geology*, 32 (1981) 95-102.
- 72 L. Heller-Kallai and I. Rozenson, Mössbauer studies of palygorskite and some aspects of palygorskite mineralogy. *Clays and Clay Minerals*, 29 (1981) 226-232.
- 73 L. Heller-Kallai and I. Rozenson, The use of Mössbauer spectroscopy of iron in clay mineralogy. *Physics and Chemistry of Minerals*, 7 (1981) 223-238.
- 74 L. Heller-Kallai, Mössbauer studies of synthetic and natural micas on the polythionite-siderophyllite join: comment. *Physics and Chemistry of Minerals*, 8 (1982) 98.
- 75 L. Heller-Kallai, Clay-salt interactions. Introductory Lecture. *Int. Clay Conf. 1981.Proc. Int. Clay Conf. Developments in Sedimentology*, 1982, p. 127-132.
- 76 M. Frenkel and L. Heller-Kallai, Interlayer cations as reaction directors in the transformation of limonene on montmorillonite. *Clays and Clay Minerals*, 31 (1983) 92-96.
- 77 Z. Grauer, S. Yariv, L. Heller-Kallai and D. Avnir, Effect of temperature on the conformation of dibenzotropone adsorbed on montmorillonites. *J. Thermal Anal.*, 26 (1983) 49-64.
- 78 Z. Aizenshtat, I. Miloslavski and L. Heller-Kallai, The effect of montmorillonite on the thermal decomposition of fatty acids under 'bulk flow' conditions. *Organic Geochemistry*, 7 (1984) 85-90.
- 79 S. Yariv and L. Heller-Kallai, Thermal treatment of sepiolite- and palygorskite-stearic acid associations. *Chemical Geology*, 45 (1984) 313-327.
- 80 L. Heller-Kallai, Z. Aizenshtat and I. Miloslavski, The effect of various clay minerals on the thermal decomposition of stearic acid under 'bulk flow' conditions. *Clay Minerals*, 19 (1984) 779-788.
- 81 L. Heller-Kallai, G. Esterson, Z. Aizenshtat and M. Pisman, Mineral reactions on pyrolysis of Israeli oil shale. *J. Applied Pyrolysis*, 6 (1984) 375-389.
- 82 B. Luz, K. Heller-Kallai and A. Almogi-Labin, Carbonate mineralogy of late Pleistocene sediments from the Northern Red Sea. *Israel J. Earth-Sci.*, 33 (1984) 157-166.
- 83 A. Singer, P. Stoffers, L. Heller-Kallai and D. Szafranek, Iron-rich nontronite in deep-sea cores from the South Pacific. *Clays and Clay Minerals*. 32 (1984) 375-383.
- 84 L. Heller-Kallai, Do clay minerals act as catalysts in the thermal alteration of organic matter in nature? Problems of simulation experiments. *Miner. Petrogr. Acta*, 29A (1985) 3-16.
- 85 L. Heller-Kallai, S. Yariv and I. Friedman, Thermal analysis of the interaction between stearic acid and pyrophyllite or talc - IR and DTA studies. *J. Thermal Anal.*, 31 (1986) 95-106.
- 86 Z. Grauer, H. Peled, D. Avnir S. Yariv and L. Heller-Kallai, The effect of induced aromaticity on sorption of organic molecules by montmorillonite: comparison of dibenzosuberone with dibenzotropone. *J. Coll. Interface Science*, 111 (1986) 261-268.
- 87 L. Heller-Kallai, I. Miloslavski and Z. Aizenshtat, 'Dissolution' of calcite by steam derived from clay minerals. *Naturwissenschaften*, 73 (1986) 615-616.

- 88 L. Heller-Kallai, I. Miloslavski and Z. Aizenshtat, Volatile products of clay mineral pyrolysis revealed by their effect on calcite. *Clay Minerals*, 22 (1987) 339–348.
- 89 L. Heller-Kallai and R. C. Mackenzie, Effect of volatiles from kaolinite on calcite dissolution: DTA evidence. *Clay Minerals*, 22 (1987) 349–350.
- 90 L. Heller-Kallai, I. Miloslavski, Z. Aizenshtat and L. Halicz, Chemical and mass-spectrometric analysis of volatiles derived from clays. *Amer. Mineral.*, 73 (1988) 376–382.
- 91 S. Yariv, L. Heller-Kallai and Y. Deutsch, Adsorption of stearic acid by allophane. *Chem. Geol.* 68 (1988) 199–206.
- 92 R. C. Mackenzie, L. Heller-Kallai, A. A. Rahman and H. M. Moir, Interaction of Kaolinite with calcite on heating. III. Effect of different kaolinites. *Clay Minerals*, 23 (1988) 191–203.
- 93 L. Heller-Kallai, I. Miloslavski and Z. Aizenshtat, Reactions of clay volatiles with n-alkanes. *Clays and Clay Minerals*, 37 (1989) 446–450.
- 94 L. Heller-Kallai, I. Miloslavski and A. Grayevski, Evolution of hydrogen on dehydroxylation of clay minerals. *Amer. Mineral.*, 74 (1989) 818–820.
- 95 L. Heller-Kallai and R. C. Mackenzie, Interaction of kaolinite with calcite on heating. IV Rehydroxylated and recarbonated samples. *Thermochim. Acta* 148 (1989) 439–444.
- 96 L. Heller-Kallai, E. Huard and R. Prost, Disorder induced by de-intercalation of DMSO from kaolinite. *Clay Minerals*, 26 (1991) 245–253.
- 97 R. C. Mackenzie, L. Heller-Kallai and E. E. Lachowski, An unusual kaolinite-calcite interaction. *Applied Clay Science*, 6 (1991) 69–77.
- 98 N. Porath, J. Yellin, L. Heller-Kallai and L. Halicz, Correlation between petrography, NA and ICP analyses applied to Early Bronze Egyptian pottery from Canaan. *Geoarcheology*, 6 (1991) 133–149.
- 99 Y. Deutsch and L. Heller-Kallai, De- and recarbonation of calcite heated in CO₂. *Thermochim. Acta*, 182 (1991) 77–89.
- 100 I. Miloslavski, L. Heller-Kallai and Z. Aizenshtat, Reactions of clay condensates with n-alkanes – comparison between condensates and volatiles. *Chemical Geology*, 91 (1991) 287–296.
- 101 L. Heller-Kallai and I. Miloslavski, Clay volatiles and condensates; *pH/Eh* values and reactivity. *Proc. 7th European Clay Conference, Dresden, 1991*, p. 479–484.
- 102 L. Heller-Kallai and I. Miloslavski, Reactions between clay volatiles and calcite reinvestigated. *Clays and Clay Minerals*, 40 (1992) 522–530.
- 103 F. Tsvetkov, L. Heller-Kallai and U. Mingelgrin, Potassium halide-treated montmorillonite (KTM) as a solid phase in liquid chromatography. *Clays and Clay Minerals*, in press.

BOOKS

- 1 Monograph: Crystallographic Data for the Calcium Silicates, London, Stationary Office 1956, by L. Heller and H. F. W. Taylor.
- 2 Proceedings of the International Clay Conference, Jerusalem, 1966, vol. 1: L. Heller and A. Weiss, editors. Israel Program for Scientific Translations, 1966.
- 3 Proceedings of the international clay conference, Jerusalem, 1966, vol. 2: L. Heller, editor, Israel Program for Scientific Translations, 1967.
- 4 Proceedings of the International Clay Conference, Tokyo, 1969, vol. 1: L. Heller, editor-in-chief, Israel University Press, 1969.
- 5 Proceedings of the International Clay Conference, Tokyo, 1969, vol. 2: L. Heller, editor-in-chief, Israel University Press, 1970.