

## NEW MINERALS: SPECIMENS FOR COLLECTORS AND MUSEUMS OR SUPPLIERS OF NEW FINDINGS IN CRYSTAL CHEMISTRY

TILLMANN, E.

Institut für Mineralogie und Kristallographie der Universität Wien, Geozentrum, Althanstr. 14, A-1090 Wien, Austria  
E-mail: [ekkehart.tillmanns@univie.ac.at](mailto:ekkehart.tillmanns@univie.ac.at)

A number of new minerals which display so far unknown crystal chemical features have been described by the author and his colleagues. Minerals are presented in microphotographs and crystal structure drawings with respect to the special features in crystal chemistry. Selected minerals from the Eifel area, Germany, are almarudite,  $K(\square, Na)_2(Mg, Fe, Mn)_2(Be, Al)_3[Si_{12}O_{19}]$ , and rondorfite,  $Ca_8Mg[SiO_4]_4Cl_2$ , (MIHAJLOVIĆ *et al.*, 2004), batiferrite,  $Ba[Ti_2Fe_{10}]O_{19}$ , (LENGAUER *et al.*, 2001), batisite,  $(Ba, K)(K, Na)Na(Ti, Fe, Nb, Zr)Si_4O_{14}$ , (SCHMAHL & TILLMANN, 1987), bellbergite,  $(K, Ba, Sr)_2Sr_2Ca_2(Ca, Na)_4Al_{18}Si_{18}O_{72} \cdot 30H_2O$ , (RÜDINGER *et al.*, 1993), brenkrite,  $Ca_2F_2(CO_3)$ , (LEUFER & TILLMANN, 1980), hannebachite,  $CaSO_3 \cdot 1/2H_2O$ , (HENTSCHEL *et al.*, 1985), liebautite,  $Ca_3Cu_5Si_9O_{26}$ , (ZÖLLER & TILLMANN, 1992), and the zeolite minerals tschörtnerite,  $Ca_4(K, Ca, Sr, Ba)_3Cu_3(OH)_8 [Si_{12}Al_{12}O_{48}] \cdot 20H_2O$ , (EFFENBERGER *et al.*, 1998) and willhendersonite,  $KCaAl_3Si_3O_{12} \cdot 5H_2O$ , (TILLMANN *et al.*, 1984). Minerals from the Odenwald and Spessart areas, Germany, are cornubite,  $Cu_5(AsO_4)_2(OH)_4$ , (TILLMANN *et al.*, 1985), hentschelite,  $CuFe_2(PO_4)_2(OH)_2$  and reichenbachite,  $Cu_5(PO_4)_2(OH)_4$ , (SIEBER *et al.*, 1987), and sailaufite,  $(Ca, Na, \square)_2Mn_3O_2(AsO_4)_2(CO_3) \cdot 3H_2O$ , (WILDNER *et al.*, 2003), while tillmannsite,  $(Ag_3Hg)(As,V)O_4$  has first been described from the copper mines of Roua, Departement Alpes-Maritimes (France) (SARP *et al.*, 2003).

### References

- EFFENBERGER, H., GIESTER, G., KRAUSE, W. & BERNHARDT, H.-J. (1998): *American Mineralogist*, 83: 607–617.
- HENTSCHEL, G., TILLMANN, E. & HOFMEISTER, W. (1985): *Neues Jahrbuch für Mineralogie, Monatshefte*, (6): 241–250.
- LENGAUER, C.L., TILLMANN, E. & HENTSCHEL, G. (2001): *Mineralogy and Petrology*, 71: 1–19.
- LEUFER, U. & TILLMANN, E. (1980): *Tschermaks Mineralogische und Petrographische Mitteilungen*, 27: 261–266.
- MIHAJLOVIĆ, T., LENGAUER, C.L., NTAFLAS, T., KO-LITSCH, U. & TILLMANN, E. (2004): *Neues Jahrbuch für Mineralogie, Abhandlungen*, 179: 265–294.
- RÜDINGER, B., TILLMANN, E. & HENTSCHEL, G. (1993): *Mineralogy and Petrology*, 48: 147–152.
- SARP, H., PUSHCHAROVSKY, D.Y., MACLEAN, E.J., TEAT, S.J. & ZUBKOVA, N.V. (2003): *European Journal of Mineralogy*, 15: 177–180.
- SCHMAHL, W.W. & TILLMANN, E. (1987): *Neues Jahrbuch für Mineralogie, Monatshefte*, (3): 107–118.
- SIEBER, N.H.W., TILLMANN, E. & MEDENBACH, O. (1987): *American Mineralogist*, 72: 404–408.
- TILLMANN, E., FISCHER, R.X. & BAUR, W.H. (1984): *Neues Jahrbuch für Mineralogie, Monatshefte*, (12): 547–558.
- TILLMANN, E., HOFMEISTER, W. & PETITJEAN, K. (1985): *Bulletin of the Geological Society of Finland*, 57: 119–127.
- WILDNER, M., TILLMANN, E., ANDRUT, M. & LORENZ, J. (2003): *European Journal of Mineralogy*, 15: 555–564.
- ZÖLLER, M. & TILLMANN, E. (1992): *Zeitschrift für Kristallographie*, 200: 115–126.