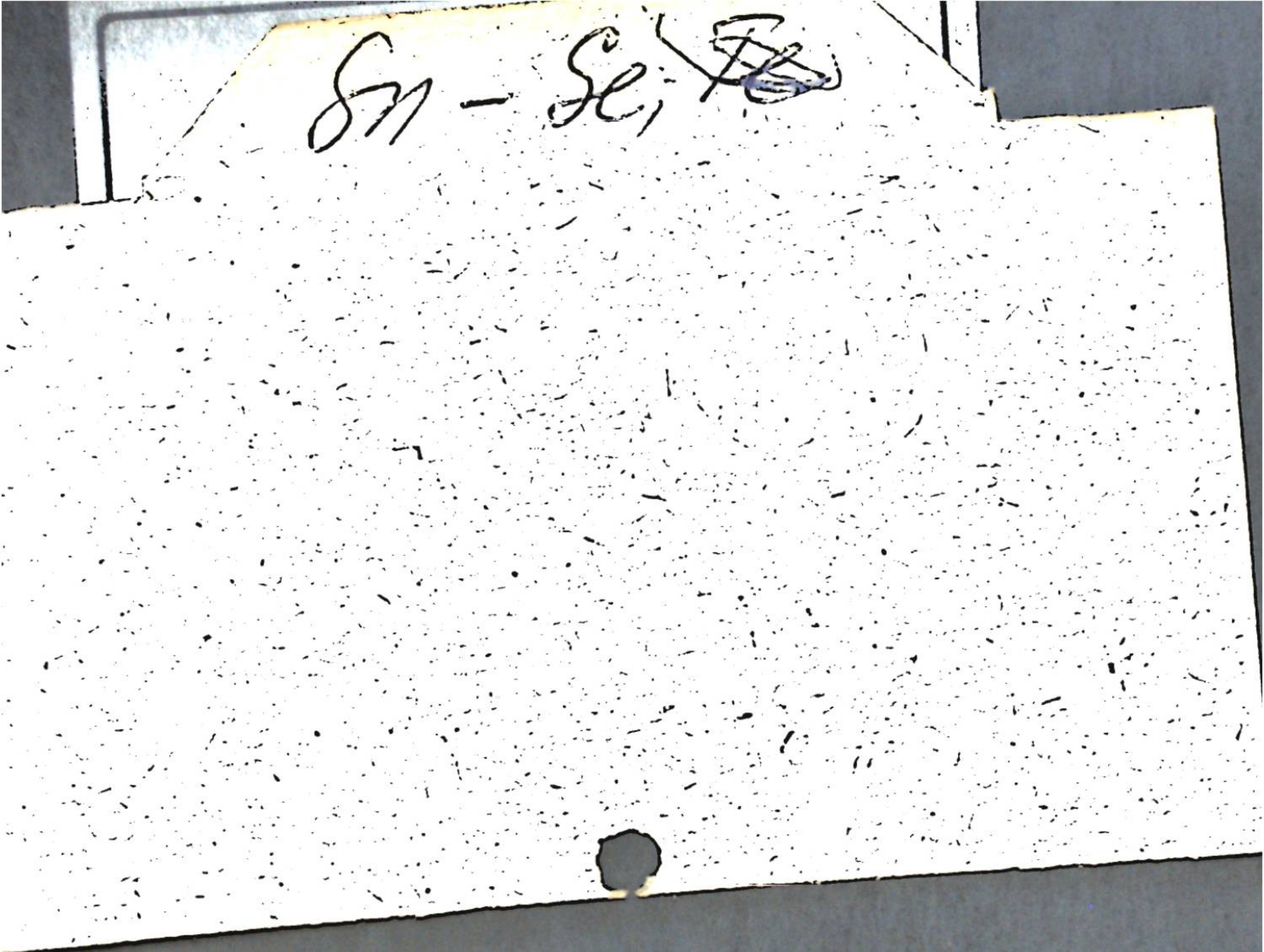

$Sn_3Cl_2Se_5$

$Sn_4Cl_2Te_7$

Бацанов с.с. и др. 1963

ДАНСССР,

152, N3, 606

Халькогенохлориды олова.

(См. $Sn_2Cl_2S_3$) I

$SnI_4 \cdot 2SeS_7$

OP-19862-IV 1963

Sulfur-selenium and sulfur-tellurium cyclic interchalcogen compounds. Lorin L. Hawes (Australian Natl. Univ., Canberra). *Nature* 198, 1267–70(1963). The cryst. product, formed by fusing Se and S (1:1 at. ratio) *in vacuo* at 450° and cooling, was partly sol. in boiling C_6H_6. Fractional crystn. of the sol. portion gave red, cryst. Se_4S_4, m. 113° (decompn.), d. 3.20, soly. in C_6H_6 at 20° = 0.4 g./l. Similarly, from a fusion of Se and S (1:4–9 at. ratio) was obtained orange, cryst. Se_2S_6, m. 121.5°, d. 2.44, soly. in C_6H_6 at 20° = 12 g./l. (in soln., Se_2S_6 decompd. slowly to Se_4S_4 and S_8). Adding SnI_4 to the C_6H_6 mother liquors after removing Se_2S_6 gave red, cryst. $SnI_4.2SeS_7$, m. 98.0°, d. 3.05, *a* 20.94, *b* 22.20, *c* 11.51A. The space group (*Fdd*2) is the same as that of $SnI_4.2S_8$, but the 2 compds. are not completely isostructural owing to strain introduced by incorporation of Se into the S_8 ring. At. coordinates were detd. for $SnI_4.2SeS_7$. Evapn. of C_6H_6 solns. of the fusion product of Te and S (~5 at. % Te) gave red crystals that had an expanded α-S lattice. Adding SnI_4 to the unstable C_6H_6 solns. of these crystals pptd. an addn. compd., $SnI_4.2(TeS_7,S_8)$. Approx. 18% of the S_8 rings were replaced by TeS_7. Richard H. Jaquith

T_m of 7931-IV

C.A. 1963. 59. 6

6021 fg

+1

Sn - халькопирит

1975

Новоселова А.Б. и др

(р) М., Наука, 1978.

Сер. Zn - халькопирит

Sn-Se | оп. 1981 | 1984

Глазов В.М., Павлов О.М.
и др.

P-T-X диаграм.

Изв. АН СССР. Неорган. матер., 1984, 20, №9, 1476 — 1482.

Sn - Se

расплав

1985

103: 93229q **Measuring the vapor pressure by the boiling points of incongruently evaporating melts.** Glazov, V. M.; Pavlova, L. M.; Gaev, D. S. (Inst. Electron. Tekh., Moscow, USSR). *Zavod. Lab.* 1985, 51(6), 42–5 (Russ). A method is presented and an app. is described for detn. of the vapor pressure of incongruently evapg. metallic and semiconducting melts in a wide temp. and pressure range. The method is based on the b.p. method of mixts. (G.I. Novihov and O.G. Polyschenok, 1961) and was tested on Sn–Se melts. The results agree with those obtained by using the membrane null-manometer.

(p, $T_б$)

С. А. 1985, 103, N 12

Sn-Se

ж. сплав

1987

108: 27606n **Thermodynamic study of tin-selenium alloys.** Kotchi, Pierre Kouadio; Castanet, Robert; Mathieu, Jean Claude (Cent. Thermodyn. Microcalorimetr., CNRS, F-13003 Marseille, Fr.). *Z. Metallkd.* 1987, 78(10), 714-20 (Fr). The enthalpies of formation of the Sn-Se liq. alloys were measured by direct reaction calorimetry (drop method) at eight temps. (611-1243 K) for $0 < x_{Se} < 0.75$. The Gibbs energy of formation was estd. at 1175 K from the literature data. A complete set of data is presented for the thermodn. functions of formation of the liq. phase (enthalpy, Gibbs energy, entropy, heat capacity). The calorimetric measurements were used to det. also the enthalpies of formation and of fusion of the two intermediate compds. Some phase boundaries were also deduced. The Sn-Se liq. alloys is a strongly assocd. system, mainly due to SnSe clusters.

($\Delta_f G$)

C.A. 1988, 108, NY

$SnSe_2$

1987

Пассерини А.С.,
Жаров Вл. В.

Р;

Изв. АН СССР. Неорган. матер., 1987, 23, №3, 387 - 389.

(см. SnS_2; I)

Sn – Se

(m. 30383)

1988

сплав

Kotchi K.P., Bilet M. et al.,

термодин.

J. less-Common Metals 1988, 143, 11-16

$Sn(SeO_3)_2$

1989

Gospodinov G.G.,
Bogdanov B.G.,

C_p^o; Thermochim. acta 1989, 146, с 15-19

(см. Be($\bullet$ SeO_3)$_2$; I)

$Sn(SeO_3)_2$ Gospodinov G., Slavcheva Yu., Popova E. 1991

$\Delta H_f, \Delta G_{f,3}$ Thermochim. acta. 1991. 181, c. 337-339.

(см. $CuSeO_3$ Cu_2SeO_3; I)

Sn-Se

1996

термодин. св-ва

124: 243597h **Phase diagram investigation and proposition of a thermodynamic evaluation of the tin–selenium system.** Feutelais, Y.; Majid, M.; Legendre, B.; Fries, S. G. (Faculte Pharmacie, Lab. Chimie Physique Minerale Bioinorganique, F–92296 Chatenay–Mal abry, Fr.). *J. Phase Equilib.* **1996**, 17(1), 40–9 (Eng). Differential scanning calorimetry and x–ray diffraction measurements were used to det. phase diagram data over the whole compn. range. From the results and literature data, an optimization and calcn. study was made to generate the thermodn. functions of each phase.

C. A. 1996, 124, N 18

1997

$SnSe_\delta S_{2-\delta}$

$(0 \leq \delta \leq 2)$ Perez-Vicente C., Julien C.

перед. Mater. Sci. Eng., B
ф-ла. 1997, B47 (2), 137-149.

(см. $Sn Se_\delta S_{2-\delta}$; III)