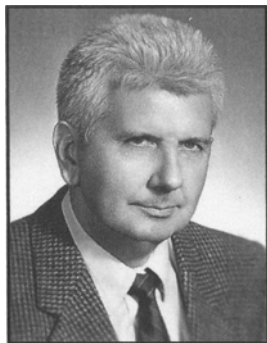


Editorial



This editorial continues the history of “the thermodynamic family,” and several interesting features are observed. One part is connected with calculations of phase equilibria from thermodynamic data which were the basis of a workshop held in Ringberg castle in Germany in March/April 1995 that was devoted to unary data for elements, compounds, and terminal solutions. Participants in the workshop represented experience in experimental work and in theoretical modeling including first principles calculations. In the winter scenery of the Bavarian Alps, attendees were treated like medieval dukes, without plenary lectures, normal presentations, or poster sessions. Rather while split into several groups, they participated in informal discussions. Results were published in *Calphad*, Vol. 19, 1995 and laid the foundation for the next meeting, which was devoted to modeling of solutions. Various topics considered during the workshop led in other directions. An example is a paper in the *Journal of Phase Equilibria*, Vol. 17, 1996, 173, entitled “Enthalpies of Formation of Ni_3Al : Experiment Versus Theory.” It involved extrapolation of the temperature dependence of enthalpies of formation to 0 K. The intent was to minimize thermal contributions to produce values for better

comparison with theoretical modeling. This approach seems most reliable in the case of compounds with evident temperature dependence of the enthalpy of formation.

The other visible tendency of the members of our family from several postcommunist countries is to integrate with technical communities in the west. One can observe the increasing number of participants from post communist countries not only in various scientific congresses, for example, at the recent Calphad XXV in Erice, Sicily (Italy), but also in international committees, for instance in the Alloy Phase Diagram International Commission (APDIC). Annual meetings of APDIC held simultaneously with Calphad provide another platform to discuss various problems quite normal in the west, and to some extent completely new to the postcommunist countries. I think about severe competition to get money for projects. It is hard to believe that the average American professor spends about 75% of his time preparing proposals. We are slowly following the same path as budgets coming from governmental sources are not sufficient to maintain our institutes to continue research, especially those dealing with experimental studies. We are still trying to perform such studies within the members of the Polish Phase Diagram Committee, but we are noting that all over the world, including Poland, “computer disease” tends to be especially popular among young scientists. It is our role and duty to maintain as long as possible each center dealing with experimental studies. It is important that experiments continue the long tradition of improving the accuracy of data and very often of building “homemade equipment” much more suitable than that commercially available.

In this connection, I would like to mention calorimetry. The No. 1 position in this field is held by Kleppa, whom I had the chance to meet several times. I remember very well our first contacts in 1966 in Ulvik, Hardanger, Norway, during the conference on molten salts. At that time, the official “suit with a tie” was more the rule than the exception. Kleppa was an exception, wearing a short-sleeved shirt. He was characterized as the visitor from USA back in his native country feeling at home, where the official uniform is not necessary.

Last year in Chicago during the conference devoted to liquid and amorphous alloys, I, along with other participants, had the opportunity to visit Kleppa’s laboratory. Discussing with him various aspects of calorimetry and seeing different “homemade equipment,” I understood quite well that Kleppa had devoted his life to calorimetry. Following his retirement, these famous calorimeters will probably be spread all over the world. That would be a pity and a great loss. Such milestones in calorimetry should be preserved. There is also no doubt that the theory in each field needs experimental data to test modeling. It reminds me that in past times, well-known laboratories worked in close cooperation to test and maintain standards. This is so important, especially for pure substances. There is some correlation between this last statement and the Ringberg workshop.

I would like to mention that this most recent Calphad meeting was connected with Calphad’s 25th anniversary and included the presentation of a gold medal for the patriarch of all previous, and I hope future, meetings—Larry Kaufman. Due to his personal attitude, his initiative, and his contributions, the *Calphad* journal has spread to a large number of technical libraries, existing in close partnership with the younger *Journal of Phase Equilibria*. Note also that the “young blood” is nourished by “old roots,” not only at Calphad meetings. Professional recognition is being encouraged by APDIC also. At the recent APDIC meeting in Erice, Sicily (Italy), it was decided that APDIC will institute a new prize for the best paper published in the field of alloy phase diagram data assessment (see announcement following).

Z. Moser
Polish Academy of Sciences