Chapter 38 From Individual Personal Contacts 1962–1968 to My 50 Years of Service



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Abstract The author's initial personal random contacts with pioneers in introducing mathematics and computers to geology in Russia, USA and France evolved thanks to the 23rd International Geological Congress and the foundation of the IAMG in Prague 1968. An incredibly large set of colleagues from all over the world have continuously contributed to a long series of regular international sessions at the Mining Příbram Symposia—a unique East–West gateway for the IAMG during the period 1968–1989. Very intensive work has been continuing until 2000 with several new peaks. The author has used many positive international organizational experiences from the work for the IAMG in developing geoethics, where many experts of mathematical geology have brought a considerable contribution to this new field.

Keywords Mathematical geology \cdot IAMG history \cdot East–West contacts Mining Příbram Symposia \cdot Geoethics

38.1 Introduction

My way into geology did not follow an easy direct path. In 1951 my studies of economics (including courses of mathematics and statistics) were stopped because of political reasons I was not admitted to the final 4th year. Instead of my studies I spent the following 26 months in special army units for politically unreliable persons working in the coal mines of the Ostrava region. At the end of 1953 I started to work in a state enterprise for geology of industrial minerals. At that time, this was a Cinderella among the other sectors of uranium, coal or metals deposits. My chief

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appointed me as an assistant to two associate professors of the Charles University who were engaged by our enterprise because of a lack of our own graduated geologists. Both these men later became known as very famous professors: Zdeněk Pouba in economic geology and Zdeněk Špinar in palaeontology. I remained in friendly contact with both of them for the rest of their lives. In 1954 I was able to start distance university studies in applied geophysics (in order to study geology there was a condition of having several years of practice, whereas for my specialization it was only necessary to have finished military service—such was the life in those days). Mathematics was among the key disciplines of my studies and my regular work in my enterprise became more and more focussed on evaluating the results of geological projects concerned with computing ore reserves. I graduated in 1959.

At that time, our Cinderella was incorporated into a new enterprise covering exploration of all sorts of deposits except uranium. Despite some renewed political problems in 1960, I was appointed as chief of a special division for controlling the final reports of the company, being the only trained specialist when two of my new bosses arriving from other sectors preferred employment outside our company. On my own initiative I took my job as a consultant service discussing with my colleagues responsible for individual projects the appropriate methods for computing the reserves. Already in 1961, we started processes with the mechanization of work using punch cards. During a tourist trip to the USSR in 1962 I had my first occasional contacts with several colleagues in Moscow at the State Commission of Ore Reserves—I. D. Kogan was one of the top personalities (his son Robert later became my close friend). After a new reorganization in late 1962 I got a position in which it was possible to realize along with trained computer specialists new ways of applying computers for our specific professional needs.

In 1964—during my first trip behind the Iron Curtain after the Prague coup in February 1948—on a private family visit in the USA I had the chance to contact several colleagues in Colorado and Arizona working in the field of mathematical geology. The existence of the Tucson centre active in this field was discovered from literature by my colleague—economist and statistician Blahomil Soukup. My contacts with the organizers of the APCOM Symposia at that time held in Tucson and other US universities resulted in further interesting contacts. At the Colorado School of Mines R. F. Hewlett gave me the address of Ivan P. Sharapov. The following year (1965) this Russian scientist took a more than 2000 km long flight from Perm to Sochi in order to meet me in person for one weekend during my vacation in that famous Black Sea resort. Ivan was a man who despite incredible personal political problems (several years of arrest and concentration camps) continued to introduce mathematical statistics for applications in geology. He was extremely pleased to meet a colleague from abroad for the first time in his life in his 58th year. He had already established his own written contacts abroad and I obtained from him the addresses of such famous personalities as Danie G. Krige and Georges Matheron.

In 1965 I was among three Czech authors who published their papers at the APCOM Symposium in Tucson which in 1966 gave an impulse to *Dan Merriam* to

contact us in the course of his visit to Europe including the Eastern territory (Krakow and Prague). Further progress in establishing new international contacts became extremely rapid and the approaching 23rd International Geological Congress in Prague (1968) brought me several special engagements among the organizers of the Congress as well as membership of the International Preparatory Committee (headed by *R. A. Reyment*) for the foundation of an international association for the application of mathematical methods and computers in geology (the exact name was under discussion).

In September 1967 during a private tourist trip to France I established personal contacts with Professor *Georges Matheron* and with several other French colleagues (A. Carlier, Jean Serra). In November 1967 I defended my doctoral thesis (RNDr.) at the Charles University in Prague in the field of economic and mathematical geology based on my first computerized model of three deposits for a cement factory in the suburbs of Prague.

In December 1967 I was the only foreign guest at the Second Siberian Symposium on Mathematical Methods in Geology and Geophysics in Novosibirsk (480 participants) where *Ivan Sharapov* and the local chief organizer *Yuri Voronin* helped me to contact many VIPs in this field from all parts of the USSR (including *Dmitry Rodionov*). When addressing the plenary meeting I invited people to attend the Prague Congress with a specialized session on mathematical geology and informed them about our plans to found a new international association. (*A. B. Vistelius* was the only member from the USSR on the international committee but he did not attend this Symposium).

38.2 IAMG Foundation (Prague 1968)

In 1968 an incredible optimism characterized both the hopeful political development of the Prague Spring as well as the preparations of the International Geological Congress and of the founding meeting of the IAMG. I already had the pleasure to describe more details of these events in the book for the IAMG Silver Jubilee (Němec 1993a).

The euphoric start of the 23rd International Geological Congress gave me the opportunity to meet in person for the first time many new colleagues already well known in the field of mathematical geology (*Frits Agterberg, R. B. McCammon, J. W. Harbaugh, R. A. Reyment, A. B. Vistelius, G. S. Watson,* and *E. H. T. Whitten*). Professor *W. C. Krumbein* informed me that his arrival would be delayed. But very early in the morning of Wednesday August 21 all plans were changed with the entry of five armies under the Warsaw Treaty. Because it was impossible to visit the Congress centre I spent part of that day with Professor Reyment, who was staying in a hotel near my home. He made several telephone calls with the Swedish Embassy. It appeared that the current situation prevented any prediction about the future of the Congress.

On the morning of Thursday August 22nd, 1968 special transportation was set up again for Congress participants and some of the Congress program was re-activated. It became possible to use the room reserved for the preliminary discussions planned prior to founding the new Association. The new situation only permitted essential formal administrative steps including the election of the first IAMG Council. Professor R. A. Reyment as the Chair of the meeting refused the suggestion of John Harbaugh to be elected as President (preferring the position of Secretary General) and asked to elect for this top position A. B. Vistelius. Both key functions were unanimously approved. G. S. Watson was elected as the Vice-President representing a liaison with the International Statistical Institute. My suggestion to elect the absent Prof. W. C. Krumbein to the post of the "Past President' was accepted as well. T. V. Loudon was elected as the Western Treasurer. Prof. Watson suggested me for the post of the Eastern Treasurer. After my election I started my official activity for the new Association by suggesting D. Krige and G. Matheron (in their absence) as IAMG Council members. F. P. Agterberg, D. A. Rodionov and E. H. T. Whitten as well as the absent S. C. Robinson and S. Sengupta were elected as further members of the Council while D. F. Merriam and Graham Lea (absent) were chosen as the first editors of intended IAMG publications. The first IAMG Council had a very good geographical distribution. The election of two Russian scientists to the Council on that day was a testimony in favour of absolute priority being given to personal professional quality avoiding any political concerns.

After a very emotional premature closing ceremony of the Congress on Friday August 23 afternoon I had the honour to represent the IAMG together with *A. B. Vistelius* and *E. H. T. Whitten* at a working meeting of the International Union of Geological Sciences where, in an accelerated process, our Association was officially approved as a new affiliated member. At that time I had no idea how many opportunities were to be awaiting me to work in the IAMG for so many years ahead including my service as the Eastern Treasurer altogether for six terms (1968–1980 and 1984–1996)!

38.3 Activities for the IAMG 1968–1993

Various activities of the new Association had to be negotiated, mostly using normal mail. Today it is already difficult to imagine the modest technical means of that time (without any fax or e-mail). However, some personal contacts helped me to make a start with my duties. At that time, my employer—the geo-exploration state enterprise under a new name of *Geoindustria* became the sole collective IAMG member in Czechoslovakia supporting my official activities abroad by financing a lot of my travel expenses.

In January 1969 I visited a conference of mining geodesy in Moscow and paid a visit to A. B. Vistelius in Leningrad. The possibility of visiting Western countries continued until the autumn of 1969 and I therefore had no problem to meet with

many IAMG Council members at the Congress of the International Statistical Institute in London in August 1969, to spend three weeks in September in France attending a special course on geostatistics at Fontainebleau, and to accept with the consent of my employer the invitation of the Kansas Geological Survey in Lawrence (initiated by *Dan Merriam*) to work there from November 1969 until August 1970. This was an excellent opportunity for establishing many further (already global) useful contacts for my activities for the IAMG and for the international development of mathematical geology. I hold deep memories of my experiences from that time (Bonham-Carter et al. 2008), especially the colloquium on Geostatistics (Nemec 1970) held on the campus in Lawrence and the APCOM Symposium in Montreal (both in June 1970).

In addition to my stay in America I also had to work hard to fulfil my professional duties for Geoindustria. The following text will hopefully disclose how useful working at this cosmic speed during this starting period turned out to be for all the hyper-activities carried out during the remaining almost five decades of my further life.

38.4 Příbram—East–West Gate Near the Iron Curtain

As explained elsewhere (Němec 1993b) a symposium "The Mining Příbram in Science and Technique" was organised for the first time in 1962. The city of Příbram —located 60 km SW from Prague—had a long mining tradition going back to the thirteenth century. In November 1968 several Czech colleagues—mostly geophysicists from the Czechoslovakian Uranium Industry—organised a special session on *Mathematical Methods in Geology and Geophysics* for the first time. They also agreed to organise a special seminar on Geostatistics in Prague and I had the honour—in the course of my visit to France in September 1968—to invite *G. Matheron* and *J. Serra* to take part in that two-day seminar as well as in the new session in Příbram. Both guests were deeply impressed by both the Czech audience and hospitality and Prof. Matheron himself suggested continuing the Příbram meetings with co-sponsorship of the IAMG. I immediately started to promote that idea.

From 1969 I acted as the main convenor of that specialised international session, which actually came about as early as October 1969. We had guests from six countries, but it seemed impossible for *A. B. Vistelius* or *I. P. Sharapov* to attend the meeting (they sent in their written articles). Shortly after the meeting I left Prague to start my temporary work in Kansas. Through contact with the secretariat of the Symposium and with several Czech colleagues (*B. Soukup, M. Škubal*) it was possible for me to continue on from Lawrence with preparations for the next session at Příbram in 1970. Using my new contacts, I was able to successfully promote the idea of also holding these rendezvous at the above-mentioned meetings in Lawrence and Montreal. My work in Kansas terminated in August 1970 and in October there were already 26 foreign colleagues from 11 countries who participated in the Příbram session, together with about 55 participants from Czechoslovakia. We had

several guests from America (*Michel David, Dan Merriam*, and *Tim Whitten*), one from India, and also *Dmitry Rodionov* appeared from Russia. Simultaneous translation was used for the first time. This was a very good start for further promotion of this kind of meeting which later took place regularly in October every year until 1973. The 1970 Příbram meeting can be classified as an important milestone of progress.

Since about 1965 the promotion of mathematical methods and computers in the Earth sciences became included in official activities within the framework of the Eastern bloc organization *COMECON* (*Countries of the Mutual Economic Aid*) and just in 1973 a regular meeting of specialists was planned and organized in Czechoslovakia. Many participants of previous regular meetings on this subject already knew Příbram. It became possible to find a way how to join the official meeting for COMECON delegates (it took place in a locality not far from Příbram) with the regular Symposium (all scientific papers presented in Příbram).

This arrangement made it possible to intensify the already existing East–West contacts. After 1973 the section on Mathematical Methods in Geology was regularly organized every second year—in 1983 again in conjunction with a special COMECON meeting. Many IAMG members from both the West and East were taking regular part in the meetings, e.g. *Tim Whitten* visited Příbram as IAMG Secretary General in 1977 and again as IAMG President in 1983. Also, representatives of COGEODATA were among the visitors and thanks to the initiative of *Jiří Hruška* on several occasions official meetings of that organization were arranged in Prague making it possible for their participants to also take part in the Mining Příbram Symposium. In 1989 and 1991 specific problems of geoinformatics were included in a separate parallel section of the Symposium.

Regular meetings of the specialized COMECON groups were organized in different COMECON countries according to their usual format which involved excluding visitors from other countries. However, both their meetings at Příbram in 1973 and 1983 were unique exceptions lifting scientific programs to a level accessible to all scientists from around the world. I was very lucky that this idea was adopted not only by top representatives of the Czechoslovak geological community but also by the representatives of the COMECON Secretariat in Moscow and by the authorities responsible for that sector especially in the USSR, Hungary, Poland and Yugoslavia.

From 1983 onwards the meetings of Příbram were regularly attended by participants of special courses on geochemistry organized regularly in Czechoslovakia by UNESCO with the School of Mines at Ostrava. At that time, I also had some written contact with UNESCO top representatives (see Fig. 38.1).

In 1987 the section was organized jointly with the GEOCHATAUQUA—held for the first time outside North America (unfortunately, without visitors from that part of the world).

The rapidly changing political situation in the Eastern bloc permitted in October 1989 (6 weeks prior to the November *velvet revolution*) the visit to the geo-mathematical section at Příbram Symposium of many people from the East (especially about 65 guests from the USSR). Altogether 125 visitors from 23



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Monsieur le Président,

Permettez-moi, par la présente, de vous remercier de l'honneur que vous avez bien voulu nous faire en remettant à l'Unesco, par l'intermédiaire de Madame d'Andigné de Asis, la médaille d'or de votre congrès.

Nous sommes très sensibles à ce geste et à l'intérêt que vous avez bien voulu, de cette manière, manifester dans nos activités.

De notre côté, nous sommes, croyez-le bien, très attentifs aux résultats obtenus en matière notamment de géologie mathématique dont une remarquable synthèse a pu être établie grâce au Congrès de Pribram.

En vous souhaitant le plus vif succès dans vos travaux, je vous prie de croire, Monsieur le Président, en l'assurance de ma très sincère considération.

Monsieur Vaclav Nemec
Président du Comité d'organisation
du Congrès minier de Pribram
c/o Service géologique
Malostranske Nam. L9
PRAGUE, Tohécoslovaquie

A. Kaddoura
Sous Directeur général
cgargé des sciences

Fig. 38.1 Letter of the UNESCO Deputy Director General A. Kaddoura to Vaclav Nemec. The French text is a warm expression of thanks for the golden medal of the Mining Příbram Symposium appreciating regular co-operation of the international section of mathematical geology with UNESCO courses on geochemistry organized at the School of Mines in Ostrava

foreign countries (both East and West) with also about 125 colleagues from Czechoslovakia represented a new record of participation.

In 1991 the section was already organized in a new political and economic climate. Members of a new ad hoc *committee* of the IAMG appointed by the IAMG President *R. B. McCammon* for preparing the Silver Anniversary Meeting of the IAMG were present among the participants: *Dan Merriam, Frits Agterberg, Peter Dowd, Mike Hohn* (IAMG Secretary General), and *V. Němec*. Intensive talks were

held in my home in Prague prior to the Symposium and everybody seemed to agree with my suggestion to prepare a joint Silver Anniversary Meeting of both IAMG and the Mining Příbram as a festive gathering of Western and Eastern colleagues in Prague following the format of the meetings of the Mining Příbram Symposium in 1993. The resulting information was communicated to all participants at Příbram.

At the IGC 1992 in Kyoto in my paper discussing the 15 geomathematical sessions held regularly at the Mining Příbram Symposia from 1968 until 1991 I had the pleasure to present the following impressive results:

- altogether 970 written contributions (total volume of 8696 printed pages),
- altogether 441 oral contributions (posters were used only marginally, mostly adding data for oral contributions),
- altogether 925 individual authors,
- altogether 30 countries with representatives from the whole world.

Only 45% of the published full texts or abstracts that were given were represented orally, because of the fact that not every author was allowed to come to Příbram. The State authorities, especially in the USSR and in Eastern Germany were watching and controlling the situation and more freedom for individual visitors only became evident in 1989 when the combination of both political and economic situations had become optimal for the possibility of travel to Příbram.

38.5 My Own Professional Work

In 1972 I was asked by the Central Geological Institute in Prague for a peer review of a book prepared by the Czech authors *Vladimír Sattran* and *Blahomil Soukup* about the application of mathematical methods in geology. It was published in the Czech language in 580 copies (Sattran and Soukup 1973). A large list of publications from prominent authors, both Western and Eastern, represented a very good review and the whole book reflected the actual situation and some promising future development trends.

In my own work at Geoindustria in Prague I had the possibility to continue developing new space and time models for various deposits as well as arranging the agendas for the Mining Příbram symposia. My continuing position in the IAMG Council was accepted by top representatives not only from my employer but also of the Czechoslovak Bureau of Geology. I had the chance to visit at least partially all the International Geological Congresses since 1980 (see Fig. 38.2 from Moscow 1984), and International Stratigraphic Congresses in Heidelberg (1971) and in Nice (1975), APCOM Symposia in Clausthal (1975) and London (1983). Every year I was a regular guest at geomathematical meetings organized in Krakow by Professor *Janusz Kotlarczyk*, in Freiberg (Saxony—Eastern Germany as section of large events), and at many meetings in various parts of the USSR as well as several meetings in Hungary (*Istvan Dienes, Endre Dudich*).



Fig. 38.2 Václav Němec attending a session on mathematical geology at the International Geological Congress in Moscow (1984). The neighbour of Václav Němec is the highly respected French expert in geomorphology and petrography André Cailleux

I spent one month on a lecturing tour in Italy (1971—see Fig. 38.3) and another lecturing tour in Canada and the USA (1986); also, several working visits in Vietnam and in Mongolia should be mentioned because of the possibilities of making some special contacts with local academic circles (Professor *Ochir Gerel* in Ulaan Baatar).

In all these meetings I was presenting my own (sometimes co-authored) scientific papers, mostly in the domain of space and time models for various kinds of deposits. I always emphasized that special attention should be given to achieving a geologically correct solution by avoiding inappropriate mathematical processes (interpolation) leading to erroneous geological interpretations. My speciality also covered so-called inserted subsystems (Němec 1988).

Every opportunity was used for spreading information about the IAMG and about the possibility of visiting Příbram as the only relatively easily accessible East–West meeting point. The success was partially achieved thanks to my ability to communicate in different local languages.

I had also the possibility to officially invite several specialists to give individual courses or lectures in Prague (*Frits Agterberg, Tim Whitten,* and *Jan Harff*).

In the early 1970s I was already a guest lecturer at the Charles University in Prague, then in the late 80s at the Technical University of Košice and in 1991/92 at the Comenius University in Bratislava, providing special courses about applying



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Il Presidente

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PROSSIMA CONFERENZA

Facendo seguito a quanto preannunciato con lettera circolare del 26/4 preciso che lunedi 10 maggio corrente, con inizio alle ore 18,15, nel= la consueta aula dell'Istituto di Geologia e Giacimenti Minerari, il Dott. Václaw NĚMEC, noto studioso di Geologia Matematica, appartenente alla "Geoindustria" di Praga e membro della International Association for Mathematical Geology, terrà - in lingua italiana - una conferenza su

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soffermandosi in particolare sulle questioni concernenti <u>la valutazione dei</u> giacimenti minerari con l'impiego di calcolatori elettronici.

Il Dott. Němec svolgerà poi - sempre nella stessa sede del Politecnico - secondo il programma riportato in calce, delle lezioni di seminario comprendenti un'ampia discussione degli argomenti esposti, con l'esame di casi pratici.

I seminari sono specificamente riservati ai docenti ed agli stu= denti della Sezione di Ingegneria mineraria del Politecnico. Quei <u>Soci</u> però che <u>avessero interesse</u> agli argomenti, <u>potranno intervenire dandone preventiva notizia alla Segreteria dell'Associazione</u>. A tal riguardo, anzi, se= gnalo ancora che il Dott. Němec sarà particolarmente lieto di incontrare tecnici e studiosi del campo industriale minerario per discutere con essi applicazioni concrete della matematica per la soluzione di problemi di va= lutazione e gestione dei giacimenti.

(Prof.Dott.Ing. Lelio Stragiotti)

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Fig. 38.3 Announcement of a presentation of Dr. Němec and of his following seminar in Italy The Italian announcement signed by the Rector of the Polytechnic Institute in Torino Prof. Dr. Ing. Lelio Stragiotti informs about a special conference on the application of mathematics to problems of mineral deposits from the point of their exploration and mining exploitation followed by three days of seminars about the computerized evaluation of reserves of deposits. Seminars were reserved for teaching staff and students of the Institute but also accessible for specialists and members of the Sub Alps Mining Association (May 1971, all events were held in the Italian language)

mathematical methods and models in the Earth sciences (including mining processes).

In 1987 I defended my higher scientific degree C.Sc. (candidate in sciences as a Ph.D. equivalent) at the Technical University in Košice (in the mining sciences). The work, without any supervisor, was based on summarizing my development of space and time models for optimizing the long-term mining processes at various kinds of deposits.

38.6 Two Separate Silver Anniversary Meetings of Mathematical Geologists in Prague (1993)

The idea to select Příbram 1993 for a broad international meeting in close co-operation with the IAMG had been discussed originally in 1986 during my trip to North America on the occasion of the Geochautauqua in Calgary and also when visiting *Dan Merriam* in Wichita. These talks continued in Washington DC at the International Geological Congress 1989, when the process of considerable change in the Eastern block was already starting. A few months later the velvet revolution in Czechoslovakia opened the door for fulfilling the idea in a more impressive way. The IAMG President *R. B. McCammon* in particular was emphasising his vision of a broad historical meeting of colleagues from both the West and East. All my activities at that period were oriented toward this goal and all authorities responsible for the Mining Příbram Symposium also agreed with such a vision.

With the help of my wife, Lidmila Němcová I arranged for contacts with the centre Krystal in Prague-working for three main Prague universities and administrated by the University of Economics (where my wife was teaching). This centre seemed to be the optimal place for holding the Silver Anniversary Meeting (technical equipment, advantage of relatively low prices in comparison with other possible centres, hotel capacity, very good access from the airport as well as from the down-town area, good personal contacts with administrators). We had also found several other possibilities of accommodation (some of them in the neighbourhood of Krystal)—at that time allowing people accommodation for only about 10 US\$ per night. The members of the already aforementioned ad hoc committee were able to verify the situation as well as the IAMG President R. McCammon who paid his personal visit to Prague in November 1991. We also started to prepare a special "silver" medal for the Silver Anniversary meeting: Antonín Ryčl, secretary of the Příbram Symposium, introduced us to the famous Czech medallist Lumír *Šindelář* who after several discussions designed both marvellous sides of it. In April 1992 John Davis and Jan Harff visited Prague which, in addition to our intensive talks included a visit of the artist. We all expressed strong enthusiasm for the design of the medal and only a few small corrections seemed to be necessary. John Davis

prepared on his PC a Memorandum of Discussions and later I also received this document from *Dan Merriam* with an accompanying letter giving full approval to all the results achieved. It was possible to arrange for the final production of the medal in the mint house of Kremnica and to continue with the standard preparations for the Jubilee meeting.

In the meantime, I was also very pleased when the IAMG President *Dick McCammon* announced to me by phone that I was elected as W. C. Krumbein medallist for 1991. This highest IAMG award primarily reflected my long-term service to the profession by organizing and keeping uninterrupted contact between East–West between mathematical geologists through the gateway of Příbram.

Unfortunately, some misunderstandings arose: one of them was connected with the side of the medal commemorating the liaison of Prague and Příbram with the IAMG (use of some religious symbols from the Saint Hill—a famous pilgrim locality at the border of Příbram). At that time the renewal of religious freedom was highly appreciated in Czechoslovakia and in other countries of the Eastern bloc. However, the American colleagues entertained different points of view for the standards of international contacts. After my arrival at the IGC in Kyoto (1992) I was asked to arrange with the artist to replace that side of the medal just by the official IAMG logo. Another idea consisted in separating the IAMG Silver Jubilee from the same jubilee of our meetings at Příbram. In my role as the IAMG officer I continued my loyal service to the Association, arranging for contacts with the Carolina agency as needed (enabling preparations for the IAMG Silver Anniversary meeting in the Krystal centre). On the other hand, I also had to prepare the Silver Anniversary meeting for the international section of the Mining Příbram Symposium. The respective authorities approved the use of the Krystal centre for that purpose for the days following the IAMG meeting. All potential participants of the "Příbram" Symposium (about 400!) were informed in time by me about the IAMG meeting as well. A special advertisement was published in the Czechoslovak monthly geological magazine.

The final solution resulted in two separate Silver Anniversary meetings taking place in Prague at the same Krystal centre. The IAMG sessions were visited by 152 (mostly Western) people, the Příbram sessions by 140 (mostly Eastern) people. Only about 40 persons attended both meetings. Just one compromise had been finally reached: a common half-a-day meeting accessible to both IAMG and Příbram participants focussed on the history of mathematical geology.

In the end I think that the various misunderstandings and misconceptions connected with the IAMG Silver Anniversary Meeting in Prague also had some positive consequences: more freedom was given to all local organizers of subsequent annual IAMG conferences and the IAMG Councils in the years following until 1999 continued to provide some financial and moral support for the geomathematical sessions organized by the Mining Příbram Symposium.

38.7 From The Silver to the Golden IAMG Jubilee

In 1994 I received a diploma of "engineer" from the University of Economics in Prague as restitution of the violation of my rights when I was not permitted to complete my studies of economics in 1951 in spite of good results in my studies.

I continued to organize the international meetings as part of the Mining Příbram Symposia in the years 1995, 1997 and 1999. These sessions were held again at the Krystal centre in Prague without any help from any official congress agency, and always with the moral and some financial support of the IAMG. *Mike Hohn*—the IAMG President—honoured the session in 1995 by his presence and was able to contact many Eastern participants. Financial support from the IAMG made it possible to pay local expenses and registration fees for about 15 foreign colleagues (for each session). We always had about 80–100 participants from abroad and the scientific level of presentations was good. The new economic situation in the Czech Republic led to decreasing participation from Czech colleagues who were represented by only a small minority.

Czech colleagues who helped me in my organization work until 1989 were not available anymore (being completely absorbed by other activities, retired or deceased). Western colleagues preferred to attend the official IAMG Annual Conferences. For some Eastern colleagues (especially from the countries of the former USSR) a new visa policy demanded lots of extra work for me as a volunteer organizer of the Příbram meetings. Therefore, I decided to stop further activities for the traditional session of "Mathematical Methods in Geology" organized 19 times between 1968 and 1999. I only revived this old tradition in 2011 on the occasion of the Mining Příbram Golden Jubilee Symposium, already reported in connection with my new field of interest in the following text of this article. Very positive remarks were published by Vera Pawlowsky in the Presidential Forum in the IAMG Newsletter (December 2011).

38.8 The IAMG Experiences Applied to Develop a New Discipline of Geoethics

With the inspiration and support of my wife Lidmila Němcová (expert on business ethics) I have worked since 1991 to establish a new discipline in the family of earth sciences—*geoethics*. Originally, the main reason was focussed on ethical problems connected with the non-renewability of mineral resources.

The relatively good start of the new discipline and its rapid development became possible thanks to our extensive contacts established especially in the former Eastern bloc where many colleagues had first-hand knowledge of and personal experience with the Mining Příbram Symposia and with their traditional sessions on mathematical methods in geology.

It is beyond the scope of this contribution to describe the proper development of this new field of interest. On the other hand, I feel it as my duty to express thanks to the IAMG representatives who supported these activities when the development was not yet covered by another association (AGID since 2004).

38.9 Conclusion

I started my final preparation of this article during the days following the death of the famous IAMG promoter Professor *Dan Merriam* as well as at the time of his funeral service in Lawrence. I have never changed my very positive evaluation of himself and of his merits for the IAMG as expressed in my Introduction to the "Festschrift" (Němec 1993a). I was deeply moved when reading in the official obituary about the Gold medal of the Mining Příbram Symposium 1970 which was the first place among a lot of other awards for his activities. His personality and his spirit will accompany the readers of this contribution at every page. It is impossible for me to put across his image on this occasion to anybody of the many very happy, pleasant and unforgettable events connected with Dan and other old fellows I had the privilege to meet during my long service to the IAMG.

Let me emphasize my personal conviction that just a trans-generational solidarity is the "secret" explaining the otherwise unbelievable success of the half-a-century IAMG history. A recipe for the further 50 years of the IAMG: Enthusiasm of the young generation should be always accompanied by life experiences and the know-how of the old pioneers.

Vivat IAMG!

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Numerous personal reports of V. Němec as well as reports of others about his activities can be found in the IAMG Newsletters at the IAMG website

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