A mentor and a friend

If one were to define Prof Mosonyi with an equation, it would have four factors: Genius, Courage, Humanity and Loyalty.

Genius, in his scientific and technical accomplishments, which he shared with the world through his lectures and consultancy worldwide;

Courage, in the face of several ‘troublesome’ political regimes, when he upheld his principles with dignity;

Loyalty, to his colleagues, his friends, and to his native Hungary; and,

Humanity, in the risks he took for others during the turbulent political times.

We could add to this last factor, the kindness and courtesy he extended to all those around him, with equal measure, whether a waiter serving his soup, or a head of state.

Equations played a significant role in Prof Mosonyi’s life from an early age. He once recalled how, as a young child, he was evacuated for some months to the UK. He spoke no English, and children at the primary school he joined spoke no Hungarian; for a child of less than ten years, this must have been a daunting experience. He sat in the classroom unable to communicate, until at one moment the teacher put an arithmetical problem on the blackboard as a challenge for the children. The young Emil took the chalk, and to the astonishment of the others, wrote an equation on the blackboard to solve the problem. From that moment he was accepted with warmth and respect by the other children. Mathematics had provided the bridge for communication.

Some eight decades later, he stood at a blackboard with chalk, during the colloquium in Karlsruhe to celebrate his 90th birthday, demonstrating that modern computer systems are not a substitute for these more simple tools, when used in conjunction with a human brain.

In between those two incidents there was a wealth of professional achievement, as is clear from the tributes on the pages which follow, contributed by a few of the many friends and colleagues of Emil Mosonyi in various parts of the world.

I first met him 30 years ago, during a conference in Athens on hydropower, organized by the UN Economic Commission for Europe. At one of the social events, participants were invited to recite a song or a poem from their native land. It was then that an extremely charismatic character, reciting some lines in Hungarian, caught my attention, and at that moment a face was put to a name that I had encountered so many times, as author, or cited in the references, of numerous scientific papers. I was honoured to be able to meet this man, who continued to be an inspiration to me, and to the activities of our small team, during the three decades which followed.

In 1982 Prof Mosonyi accepted an invitation to chair, and deliver a keynote speech, at the First European Conference on Small Hydro, in Monte Carlo (the first hydro conference we organized), and from that time on, he not only attended virtually all of our annual events, but also played a key role as the head of our International Steering Committee. His various lectures and speeches had a unique style, and as we often commented, “a hard act to follow”, (which could be tricky, as he normally made the opening speech). The ideas he put forward, full of insight and apparently unlimited technical knowledge, were embellished with just the right degree of mischievous humour.

As well as the exchange of ideas on technical issues, he and his beloved wife Hedvig, always beside him, enjoyed the ‘social and environmental aspects’: the friendship of like-minded colleagues (later referred to as the ‘Hydropower family’, of which he was certainly the father), and the cultural and artistic heritage of the host country. His deep appreciation of music, particularly Italian opera, and art, was another attribute of this multidimensional man.

At HYDRO 2005 in Villach, when he gave his last major speech to the hydro profession, he was in elegant form at the age of 94, and as always was enthusiastically recommending topics for future events, such as hydrological risk associated with climate change, and legal and administrative aspects of hydro development. And in December 2006, at the age of 96, he was the main author of a paper published in Issue 6 of H&D, retrospectively reviewing the ecological and social benefits of the Tiszalök scheme in Hungary.

Despite health problems in the last years of his life, Prof Mosonyi thus remained a vigorous contributor to the world of hydropower. His intellect and his wonderful sense of humour were undiminished.

In a ceremony on 26 May, his ashes were laid to rest at the National Cemetery in Budapest. It is a beautiful and peaceful place, where philosophers, scientists, poets, artists and some former heads of state are buried. Emil is in good company there; and now, so are they. - Alison Bartle, Hydropower & Dams
In memory of Emil Mosonyi

Most of the engineers working in today’s water management services were not able to be the students of the legendary Professor Mosonyi; only those who had the chance to listen to his lectures and remember him in the new era following the changes in Hungary could learn the magic of his personality and intellect.

Emil Mosonyi was an engineer who by himself was able to combine the three main tasks which normally require three people: theoretical work, planning and implementation. And he did so, while he was able to work in his homeland, working for the National Water Management Services.

He was not in an easy position: there were times when he had to take a firm stand during the times of first extreme right-wing and then extreme left-wing dictatorships, and he had to find the narrow line, along which he could make progress and serve his country.

He was working in the professional spotlight during the last years of the Horthy era, and also during the short period of the coalition era, and then, during Rákosi’s left-wing dictatorship. It is quite a paradox that this latter era was the period during which the Hungarian Water Management Services were almost completely destroyed and then the Unified Water Management Organisation was established during the Imre Nagy Government.

Despite all this, Emil Mosonyi was able to play an active role in some significant achievements. The design and implementation of the Tiszalök dam and hydro scheme were regarded at the time as unparalleled engineering tasks. The uninformed coffee-house environmentalists of the 1980s, of course, referred to the Tiszalök system as an unnecessary Stalinist creation, even though the first concepts for it were developed by the Royal Hungarian Water Management Office led by Miklós Kállay and Hugó Lampl. But these environmentalists were wrong not only in their political classifications, but also concerning the operational advantages which continue today, because the Tiszalök system and its East-West Main Water Network has a vital role in the water management of the Tiszántúl region and the Körös area.

The era of Planned Economy still allowed for some progress in a large number of water management issues. The Government and the social system which was based on masterplans covering every last detail, even for shoe making, made it possible for water management professionals to take part in some outstanding projects. Preparations to survey the national water sector and the management of water resources led to the completion of the first water management framework plan. This significant work was initiated and managed by Emil Mosonyi.

It was quite characteristic of Emil Mosonyi to assist all those excellent specialists, during the difficult times, who fell outside the “water management circle”, or those who had no option but to accept jobs unworthy of their abilities and knowledge, because of the political changes. When he could only employ his beloved and highly regarded boss, Mr. Hugo Lampl, who was considerably older than him, as a low paid engineer at the OVH Directorate headed by Emil Mosonyi, he managed to organise for Mr. Lampl to obtain scientific advisor status, and for the Directorate to be in contact with him on a professional basis.

A small example that characterized that era: It was not possible to change the system, but it was not obligatory to become inhuman within that system. Emil Mosonyi never became a Party member, and it was only because of his professional excellence that he was able to afford this type of “luxury”.

However, in 1956, when he, as a university professor, also pledged his support for the revolution, there was no mercy for him. Even though the Water Ministry was not able to function well without his expertise, he was removed from all places where he could influence larger groups of people or where he could have been in contact with university students. He put it in this way: that he was forced to become a “whisperer”. He had to provide regular professional advice for his boss and prepare him for meetings. This was a difficult life for a person who was used to representing his own new ideas, resolving problems, and sharing his expertise in open discussions. He ended up in a position which was similar to that described by Madách, in his drama, when Michelangelo was reduced to carving legs for chairs.

He was not able to tolerate this situation for long. The professor who was always interested in new things and scientific discoveries of our world, whose creative and active mind was able to rely on previous achievements and to influence them at European level, left the country in 1964.

He became truly world famous in his profession as a lecturer at the Karlruhe University, Germany, and once again, as so many times before, our country lost a very valuable treasure! Or, perhaps we can put it in another way, as a kind of Hungarian Beethoven, our country gave one of its treasures, as a gift, to Germany, to Europe and to the world...

While in his homeland he was only able to work as a professor teaching the new water management generation for barely more than 15 years, in his new ‘home’, he was able to pass on his knowledge to an international audience for more than 25 years; the University voted him as the best lecturer one year. Despite all, Emil Mosonyi has never been far from his home country. Hungarian professional experts were always welcomed by him, and when it became possible, he visited Hungary regularly and he took part in scientific conferences.

He was known for his selfless help: when he heard that the water services and the two main forums of the Hungarian Hydrology Association, the Vízügyi Közlemények and the Hydrologiai Közlöny, were struggling with publication problems, his first step was to help them to survive with a significant donation.

Our current Hungarian Water Management Service acknowledges the everlasting achievements of Emil Mosonyi and places him, as a Royal Chief Engineer, Head of Directorate, University Professor, an Academic, well deservedly, among his great predecessors like Pál Vásárhelyi, Jenő Kvasay, Ödön Bogdányi, Elemér Sajó and Hugo Lampl.

Dear Professor, rest in peace!

L. Kothay, State Secretary for Water Management, Ministry for Environmental Protection and Water Management, Hungary
Farewell to Prof Dr Emil Mosonyi

On behalf of the Múegyetem, as Head of the Faculty, where Professor Mosonyi was once a professor, I should like to say farewell to him.

Last week we held our Jubilee Diploma Award Ceremony at the Construction Engineering Faculty of the Múegyetem. For months we had been busy getting ready to give the first Platinum Diploma to Emil Mosonyi, who graduated in 1934, 75 years ago, with an Honours Degree, who once used to be our Faculty Head, the Honourable Doctor of the Múegyetem, the world famous engineer, teacher and scientist. When on 24 April we heard the sad news about his death, the Diploma had already been prepared. Even though it was not possible to hand it over to him, the Platinum Diploma will remain the testament to the life’s work of Emil Mosonyi for ever.

The academic career of Emil Mosonyi started at the time of his graduation: Mr. Sándor Rohringer, the Rector of the Múegyetem at the time and the head of the Water Construction Faculty, asked Emil Mosonyi to join him as an Assistant Lecturer. But unavoidable national tasks called Emil Mosonyi to the Water Services Management for extended periods. His most important university period was between 1952 and 1957, when he was the Professor and the Head of the Water Construction Faculty. This was a productive period for a man with exceptional talent and a career that was destined to rise without problems, but this culminated - as a result of history’s own laws - in 1956 with events at the Múegyetem that played a key role in the revolution. He became a member of the temporary revolutionary committee of teachers, with colleagues like Mr. Imre Korányi, Endre Kerkápolyi and Lajos Kollár from his own faculty, the Engineering Faculty; from the Construction Engineers’ Faculty Pál Csonka and Jenő Rados; from the Machine Manufacturing Faculty László Heller and from the Electrical Faculty Károly Simonyi. What names! All are people who created a school and who were also popular among their students. And what did they believe in those historic days? Let me quote Professor Mosonyi’s own words from his biography:

“Since the students enjoyed my lectures and my personality, after the revolution broke out, when it seemed that the Russians had gone, I held a speech for the students. It was a gentle speech, not a provocative one. I told them that we should be happy that we managed to get rid of the occupying forces and since I am a Christian and a Catholic, I warned everybody against revenge. Revenge should not characterise our lives and I asked the students not to go with the flow towards atrocity.”

Our most important task is to learn and show that we provide excellent engineers for the free Hungary. Then a girl came up to me, kissed me on my cheek and put a flower on my jacket. A huge ovation followed.”

From 1957, the Hungarian atmosphere gradually became more and more unbearable for Emil Mosonyi, who was still firm in his views and knowledge. He was forbidden to educate the students, and he was less and less able to express what his professional and ethical commitment dictated: moreover, he was not able to listen freely. Eventually, this led him to the decision not to return from a foreign assignment in 1964. From the many offers put to him, he accepted the one from Karlsruhe University in Germany, and became the Director Professor of Water Management Engineering.

Through friends and students, he always maintained strong links with the homeland that he left behind under duress, and its professional life. He was only able to return to Hungary after the political changes. It can be said, however, that wherever he was in the world during his career, he was representing us, Hungarians, unfailingly. And does this have a so-called lasting effect? In those extensive circles where he achieved appreciation for himself, if we can measure this with the same standard as Emil Mosonyi did, yes, definitely. Because who and what is a Hungarian in the eyes of the world? If one is walking, for example in Palermo, and one is asked about one’s nationality: Hungarian, Oh, St. Elisabeth! In Madrid: Oh, Puskás! In intellectual circles: Oh, Bartók! In professional-scientific circles: Oh, Professor Emil Mosonyi! This is a fantastic line of names, let us be proud of it!

Madame Hedvig, his wife, had an invaluable and selfless role in the fact that the career of Prof Emil Mosonyi, spanning from the 1960s to our times, was so successful. We offer our condolences and sympathy to her.

As we say farewell to Emil Baci, Professor Mosonyi, it is clear to us that at the Múegyetem we need to remember your thoughts, especially those that were formed during the turbulent times of 1956, and I quote this once again:

“Our most important task at the moment is to study and to show that we can provide excellent engineers for the free Hungary”... but we must retain in our memory the everlasting girl also, who kissed you and put a flower onto your jacket in the name of our country. - Prof János Józsa, Faculty Head, BME Water Construction and Water Management Faculty, Budapest University of Technology and Economics.

Left: Emil Mosonyi as a young student, aged six years, in Budapest.
Centre: During Prof Mosonyi’s Presidency of the Hungarian Hydrological Society in the 1950s.
Right: At an ICID Anniversary celebration in Budapest in 2005, Prof Mosonyi’s last visit to Hungary.
In remembrance of Prof Emil Mosonyi

Professor em. Dr.tech. Habil. Dr.sc.techn. Dr.-Ing. E.h. Dr. h.c.mult. Emil Mosonyi passed away after a long and fulfilling life on 24 April 2009, in his 99th year. The great loss of an extraordinary person, an extremely gifted hydraulic engineer, a universally valued university lecturer and an excellent scientist, is deeply mourned. Looking back on his life, and his influence over eight decades, is almost like looking through an inexhaustible picture book.

Emil Mosonyi was born on 10 November 1910 in Budapest. He graduated from the Technical University in his hometown in civil engineering at the age of 24. Prof. Rohringer secured his services as a scientific assistant at the School of Hydraulic Engineering and the associated research institute, until he was appointed by the Ministry of Agriculture to lead the planning department of the newly established National Water Office. The first developments, for which he took responsibility, were principally on the Thess, with a barrage and hydroelectric plant at Tiszalök. His tasks required detailed geological investigations, in addition to hydrological knowledge. Emil Mosonyi was chosen as leader of the Hungarian Water Institute at the age of 32. His responsibilities broadened to include numerous river training projects for navigation, various hydro plants and irrigation schemes.

At this time of professional challenges for the young hydraulic engineer, Mosonyi prepared his dissertation on strategies for managing dams. He was awarded a doctorate in 1947 and appointed lecturer at the Technical University in Budapest. A further qualification followed in 1950 and his appointment to the School of Hydraulics.

In 1952, Prof Mosonyi had the honour of being named, at the age of 42, as a correspondent member of the Hungarian Academy of Sciences. This soon led to full membership. The Academy bestowed upon him the highest academic honour in Hungary: the title of Doctor of Technical Sciences.

Examples of the interdisciplinary tasks undertaken by the project office include determining the water management potential of Hungary’s approximate 100,000 km² surface area and offering long-term perspectives for development opportunities. The office also planned the entire Gabčíkovo/Nagymaros river powerplant system, which set trends for the following years.

Observe of becoming an international advisor and consultant soon followed. Among the international organisations which called on Mosonyi were: United Nations Special Fund, the Food and Agriculture Organisation, Economic Commission for Europe and various UNESCO projects. He also took leading roles in the International Commission on Irrigation and Drainage and the International Water Resources Association, which he founded in 1971.

In 1965, Emil Mosonyi was appointed by the Baden-Württemburg Ministry of Culture to the School of Hydraulics and Water Management of the University of Karlsruhe, and was selected as director of the associated Theodor-Rehbock Laboratory for River Engineering. His already wide-ranging research and teaching activities were further extended here, with the main emphasis being on introducing modern hydrology and instrumentation for new calculation methods.

A further characteristic example of the pioneering university lecturer’s activities in scientific and hydrological practice was his investigations into planning, designing, constructing and operating unusually large sluices. Mosonyi was able to indicate to Rhein-Main-Donau AG around 40 years ago that 25 m-high and 190 m-long tide locks could be filled and emptied in an optimum time of 15 minutes using three-sided economical basins. This made it possible for the first time to avoid the complex construction and operation of ship hoists offering only 100 m-long vats.

Another area of expertise was optimising the construction and operation of run-of-river, reservoir and pumped-storage plants. New ground-breaking methods were developed for the Kulturwehr Kehl and a number of dams along the Rhine, the efficiency of which is closely linked to the name of Emil Mosonyi.

Many studies were conducted at home and abroad with regard to the large-scale use of hydroelectricity, effective flood protection and irrigation systems, which led in turn to the relevant planning methods being optimised and contributed to the general good of hydraulic engineering. This encompasses also hydrological equipment for managing deposits and drainage, principles of measurement for individual basins, storage systems for entire rivers and waterways, and operational guidelines for draining hydraulic structures, as well as numerous optimization processes.

Emil Mosonyi’s professional creativity found its outlet in around 230 expert reports and a host of articles in international publications. There are more than 150 examples of these, including 28 books, which have appeared in Hungarian, German and English, underlining the author’s linguistic skills. He also mastered French and Italian. The 3-volume Water Power Development, encompassing around 2200 pages, stands out in particular. It was not only published in three editions by the Hungarian publisher Akadémia Kiadó, but was translated even into Chinese. This work was also the basis for Wasserkraftanlagen - Planung, Bau und Betrieb, published in collaboration with Jürgen Giesecke in 1997, a book of around 900
Emil Mosonyi: a retrospection on behalf of former members of his Institute in Karlsruhe

In March 1964 Emil Mosonyi was invited to take the chair of Hydraulic Structures and Water Resources Management of the Universität Karlsruhe. He started his activities in October 1965 as Director of this Institute, and the Theodor-Rehbock-Laboratory for River Improvement, which is part of it. The results of his negotiations with the Kultursministerium Baden-Württemberg made it possible to expand his staff substantially. Under his professional guidance, some of his students could start a career as research assistants in the Laboratory, and were involved in important project works.

The personal touch which he introduced when managing the Institute resulted in an atmosphere of trust and team spirit, thus leading to the success which the Institute could achieve under his leadership. As a result of his outstanding professional knowledge and his dynamic character, he pushed forward the development of this Institute in a few years, and his reputation was growing all over the world. His engagement gave us much inspiration in our daily work and was the key for the further development of this Institute.

Ten years later, on the occasion of his 65th birthday, his staff dedicated an honorary publication to him entitled ‘Leitmotiv Wasser’, thus illustrating the wide range of topics in which he was involved. The front and back pages show a map of Leonardo da Vinci with a river regulation work, the Arno-Canal. This map was chosen not only due to his hobby and his love for Italy and history, but also in appreciation of his work as an engineer.

Since he was involved in many projects, including major works on water power development, dam construction, flood control, and inland navigation, he could introduce his experiences resulting from this in his daily work, and give an authentic transmission of his knowledge to us all. In his lectures he proved to be not only an outstanding civil engineer, but also a brilliant and humorous teacher. Impressed by his engagement and charisma, it was a pleasure to follow his explanations, and he could transmit the facts even when the topic was not so easy.

Some of the remarks concerning his valuation of certain developments proved to be familiar quotations in the Institute and still remain helpful today. Especially if someone had too much confidence in the results of mathematical modelling he brought one back down to earth with statements such as:

“All your calculations are wonderful; unfortunately however, the boundary conditions you have chosen are not correct…”

or, if he felt a result of a calculation was suspicious:

“Let us hope that water knows what you have calculated…”

This would be followed by his own approximate calculation, or a rule-of-thumb assessment, proving, that it would be better to check the results again, and demonstrating how important it was to have a lot of practical experience.

His two-volume bestseller Water Power Development (Budapest: Akadémiai Kiadó, 1963) published in several languages, is still appreciated by engineers in hydropower generation and hydraulic machinery design today and some of us are glad to have a copy with his personal dedication; in my copy his signature is dated 30th June 1978.

The numerous honours and awards he received cannot be listed here, however, there is one exception I would like to mention: His work was crowned when he became a member of the Hungarian Academy of Sciences.

His outstanding reputation and professional competence combined, with his enthusiasm, inspired us and we are grateful to him. We say goodbye to Mosonyi Emil a vízépítés professzora. - Hans Helmut Bernhart, University of Karlsruhe, Germany.
Homage to Prof Emil Mosonyi

I met Professor Emil Mosonyi for the first in 1994 at an international conference. I was extremely impressed. He was 64 years old, and appeared to be a historical icon of science and technology, representative of human genius in the design and construction of large hydraulic works during the epoch of their realization during the 20th century, especially in Europe.

With his eminent personality, Emil conveyed to us a profound feeling of force and stability, a part of eternity, and at the instant when he is restored to God, we understand that he has naturally entered eternity. Although we are saddened by his departure, in fact he remains present in our environment.

Emil Mosonyi was a great engineer in the field of water resources planning and hydraulic works: a designer and builder. He was also a great professor, and a great manager.

His qualities as a designer and teacher are clearly evident in his books, the major ones being published in English in 1963, 1987 and 1991. "Water Power Development", with two volumes: 'Low-head power plants' and 'High-head power plants'. In 2005 a revised version in German 'Wasserkraft anlagen. Planung, Bau und Betrieb' was also published, co-authored with Prof Jürgen Giesecke. These books testify to the high level of practical skill of a man of commonsense, perception and experience, who has really been a creator, and who believes in reasoning, resorting to all the theoretical tools when necessary. His books find their rightful place in the library of all engineers specializing in this field of hydropower.

The qualities of Emil Mosonyi were also exemplified by his splendid style of conference presentations. Clear, simple, and concise, Emil presented, by heart, his cardinal message, as if he were performing in a classical theatre production (respecting the rules of unity, action, place and timing, as an actor of the Comédie Française), often colouring his talk with a delicate sense of humour.

We can recall his lecture at Karlsruhe University, on the occasion of his 90th birthday, when he was explaining how it could be useful in the first phase of planning (the most important one) to use only a pencil, a few sheets of paper, a slide-rule and a personal biological "computer". On another occasion, speaking of penstocks, he explained the general law of failure under temperature of the skin of a wienerly (a typical small sausage of Vienna). According to the current constitutive laws of materials, the crack failure is always longitudinal and not transverse.

I remember also that, when referring to his age, he said: "The majority of my students are already retired".

But finally I should mention also the great sense of management of Professor Mosonyi, which I had the pleasure to experience during the foundation of the International Hydropower Association. It is very remarkable that, already in his eighth decade he decided, with great energy and enthusiasm, to bring IHA to the baptismal font, on 16 November 1995 in Paris, UNESCO being present as Observer. It appeared to him that this association was a necessity: with only 20 per cent of hydro resources having been developed in the world, and this renewable energy representing around 20 per cent of total electricity consumption, clearly this consumption should increase by a factor of three by 2050, to take care of the welfare of the population. However, opponents to dams and hydropower were politically very active and practically unchallenged on the battlefield. The industries and the contractors were disheartened.

Professor Mosonyi fixed the principles of the IHA Constitution clearly: the main objective of the association was to increase awareness of the role hydropower can play in sustainable development. It was to be a democratic body, with the General Assembly of its members as the supreme organ. The Council, guiding its activities, was to represent the various fields of the profession and the countries of the world. Permanent Committees were created (technology, finance and economics, environment, public relations, research and education) to develop activities in accordance with the objectives. And finally, to be supported by a very strong organ of communication, the International Journal on Hydropower & Dams, the organization he had invited to support him in forming the Association. IHA was at the same time invited by AMI to co-host its annual international conferences. Always up to date with progresses in technology, full of inspiration and concerned by necessity to exchange of knowledge and experience among the specialists, Prof. Mosonyi was regularly suggesting themes or sessions for these events, and played an active role himself.

Deeply concerned also by the importance of the environmental issues, he was, with a poetic sensitivity, the author of the idea of the Blue Planet Prize, to give recognition to the best hydropower schemes in the world.

This organization created by Professor Emil Mosonyi, in accordance with his rules of ethics, was extremely efficient in its activities. By his savoir-faire, his faire-savoir, his charisma, Prof Mosonyi was able to gather around him devoted and motivated persons. When he relinquished the Presidency after two years of service, becoming Honorary President, IHA was on a growth trajectory, already recognized worldwide, and especially by its sister associations: International Commission on Large Dams and the International Commission on Irrigation and Drainage.

During the 20th century, a meteor appeared in the sky of our Blue Planet: Emil Mosonyi, an eminent engineer, and we had the pleasure to watch its bright and pure trajectory.

- Prof Raymond Lafitte, Switzerland.
Prof Emil Mosonyi, the Great Doyen of Hydropower

So much has been written, reported and narrated about Emil Mosonyi and so many honours have been attributed to him, fortunately already during his lifetime, that I feel unable to add much which has not already been eloquently expressed. Hence, I will just recall some of the main instances which remain in my memory, making me proud to have been one of Emil’s personal friends.

When I met Emir in 1987, he was hosting a committee of experts from Pakistan in his beautiful hideaway in Büssingen - half in Germany and half in Switzerland. The encounter was impressive: he was leading the discussions with ease, understanding, elegance and high spirit. Everybody enjoyed being with him, nobody felt the burden of work. Still, there was tremendous progress in the quality of project development and everybody felt enriched by his creative approach to technical and economic questions.

In 1995, after several encounters at hydropower conferences, he was encouraged by his many friends to develop his initiative to found the International Hydropower Association. It made me proud to be invited to the premises of UNESCO in Paris as a Founding Member. We were a small group of dedicated hydropower professionals and, under the leadership of Emil, we were convinced of creating something exceptional. As history shows, we were taking the right direction and set the foundations for an international community of environmentally considerate technicians, economists and other proponents, fostering the sustainable development of hydro resources.

Among many further contacts and meetings with Prof Mosonyi, I can clearly recall his spirited speeches and presentations at various occasions, inimitable in style and greatness, switching between various languages with complete ease, and absorbing his professional and non-professional audience likewise. It gave me special pride to see him at the opening of our Freudenau power scheme in Vienna in 1997, and finally to share a session with him in Villach at the HYDRO 2005 conference.

Emil Mosonyi was a real scientist, fathoming, developing and sharing the clandestine secrets of nature and technology. Still more he was a humanist, understanding the feelings and emotions of his many friends and, by remaining down to earth, gaining their admiration and utmost respect. Above all, however, he was a congenial partner. Together with his dear wife Hedvig, they were a most lovable, inseparable couple, always caring for each other and bringing delight to any society. They will always be in our hearts. - Gerhard Wedam, Austria.

Tributes from New Zealand

There will never be another person with such a comprehensive understanding of hydropower development and technology. There are, and will be, people who know more about individual aspects of hydropower development but never again will we see such great expertise covering all aspects of development. - Bryan Leyland, New Zealand

Several generations of hydro engineers have grown up with Emil Mosonyi’s definitive treatise on all aspects of hydropower, and it could be said that at the end of Sir Christopher Wren’s epitaph “Lector, Si Monumentum requiris, circumpsicere”.

But it was the man himself who so many of us will remember - from first meeting a truly iconic figure at those early conferences, and being at the feet of the master - to the privilege of getting to know a warm hearted man and his dear wife. He had experienced much that we can only imagine, and always had a kind word of advice for all. We treasure the memory of his visit to New Zealand, and his memory lives on in an annual prize to water resource students at Auckland University. Hopefully some permanent memorial will arise internationally to this truly remarkable man. - John Duder, New Zealand

I admired Prof Mosonyi immensely for being an outstanding human being from all possible viewpoints. And I am proud for having had the privilege of being in close contact to his great enthusiasm for hydropower and other passions, for example, music. I still cherish the time I spent as his guest in his hometown in 1997. Also I have fond memories of the time spent together with him, Hedvig (or Edvige, like she liked to be called when in contact with Italians), in Lausanne in 1996.

Professor Mosonyi leaves a huge legacy to the hydropower engineering fraternity in terms of professional standards, ethics and humanity. - Jo Grilli, New Zealand.