

SEDAMDESET GODINA UTEMELJENJA HRVATSKOG METALURŠKOG DRUŠTVA (HMD), 1952. – 2022.

SEVENTY YEARS OF THE FOUNDATION OF CROATIAN METALLURGICAL SOCIETY(CMS), 1952 – 2022

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Cilj članka je dati osvrt na utemeljenje i razvitak Hrvatskog metalurškog društva (HMD) iz Društva inženjera i tehničara Željezare Sisak 1952. – 2022. Istodobno uz praćenje ciljeva i zadataka HMD-a, navode se i glavne aktivnosti Društva: objavljivanje časopisa Metalurgija, međunarodni simpoziji „Materijali i metalurgija“, te plodonosna suradnja s nizom institucija u tuzemstvu i inozemstvu (više od 70, iz 50 država), ali i poteškoće u djelatnostima HMD-a. Osvrt je i na nekoliko samoinicijativnih bezuspješnih tiskovnih priopćenja javnosti članova Društva, u cilju opstanka i revitalizacije hrvatske metalurgije.

Društvo i časopis preživljavaju na temelju skromne novčane podpore Ministarstva znanosti i obrazovanja (u 2020. god. samo cca 10 000 Eur za časopis Metalurgija i cca 3 000 Eur za aktivnosti društva), pristojbi od simpozija, uz isključivo dragovoljački rad svih u Društvu, bez stalnih zaposlenika.

Ključne riječi: metalurgija, društvo, aktivnosti, postignuća

The goal of this article is to give an overview of the foundation and development of Croatian Metallurgical Society (CMS) from the Society of Engineers and Technicians of Steelworks Sisak 1952 – 2012. With monitoring of goals and tasks of CMS, the main activities of the Society are also set out: publishing of the magazine Metalurgija, international symposium „Materials and Metallurgy“, and productive cooperation with an array of institutions in Croatia and abroad but also difficulties in the activities (over 70 institutions from 50th countries).

The overview includes also several futile press notices to the public made by the member of the Society of their own initiative, in order to sustain and revitalize the Croatian metallurgy.

The Society and the Journal survives on the base of modest financial support by the Ministry of Science and Education and Sport (in 2020 y only for Metalurgija Journal 10 000 EUR and cca 3 000 EUR for activities of Society), of Participation Fees from Symposium and exclusively to voluntary work all in Society, without any permanent employees.

Keywords: metallurgy, society, activities, success

UVOD

U drugoj polovini 19. stoljeća, kad se u Europi i svijetu razbuktao industrijski razvoj, i u Hrvatsku, a u okviru Austro-Ugarske Monarhije, dospjeli su odjeci tehnološkog napretka. Svjesna da je za napredak potrebno uložiti puno vlastitog truda, skupina rodoljubnih i naprednih tehničkih stručnjaka započela je već 1875. godine pripreme za okupljanje inženjera i arhitekata. Kad je konačno ondašnja Zemaljska vlada potvrdila pravila, konstituiran je „Klub inžinirah i arhitektah“ – 2.3.1878.

Na taj način još 1878. godine realizirana je vrijedna i dalekovidna ideja, koja je usmjerila naš tehnički i tehnološki razvoj prema progresu, ubrzavajući taj razvoj koliko god su to materijalne, pa i političke prilike dopuštale.

<http://ilija-mamuzic.from.hr>

INTRODUCTION

In the second half of the 19th century when Europe and the world underwent the Industrial Revolution, echoes of technological progress also reached Croatia within the framework of the Austro-Hungarian Monarchy. Being aware that advancement requires invested effort, a group of patriotic and progressive technical experts began preparations for an organization of engineers and architects in 1875. When the Territorial Government granted permission, the Club of Engineers and Architects was founded on March 2, 1878.

Thus in 1878, a worthwhile and farsighted idea was realized which directed our technical and technological development toward progress, accelerating development to the extent permitted by material and political conditions.

„Klub Klub inženirah i arhitektah“ je poslije Prvog svjetskog rata izmijenio naziv u Savez inženjerskih društava Kraljevine Jugoslavije. Za vrijeme Drugog svjetskog rata naziv je Hrvatsko društvo inženjera. Na Osnivačkoj skupštini 1946. godine u Zagrebu obnavljanjem rada pojedinih sekcija utemeljeno je Društvo inženjera i tehničara Hrvatske (DITH).

U to vrijeme u Hrvatskoj dolazi do većih gospodarskih aktivnosti i industrijalizacije uz izgradnju raznih postrojenja i pogona u svim strukama. Ovo prati potreba i utemeljenje odgovarajućih strukovnih udruga.

Navodi se nekoliko primjera:

- Sekcija kemičara – 1947. god. iz Kluba kemičara 1927. god.
- Udruga hrvatskih rudarskih inženjera nastala iz sekcije rudara DITH – a 1948.god.
- Hrvatsko geološko društvo utemeljeno je 1951. god.
- Hrvatsko metalurško društvo / Društvo inženjera i tehničara Željezare Sisak, 1952. god.
- Hrvatsko geodetsko društvo u 1953. god.
- Iz sekcije električara DITH-a utemeljeno je 1953. god. Elektrotehničko društvo Hrvatske
- Hrvatsko udruženje za ljevarstvo utemeljeno je 1953. god.
- Hrvatsko društvo za tehniku zavarivanja isto 1953. god.
- itd.

Budući je utemeljeno više samostalnih društava to i Društvo inženjera i tehničara Hrvatske (DITH) u 1953. mijena naziv u Savez društava inženjera i tehničara Hrvatske (SDITH), a već 1956. u Savez inženjera i tehničara Hrvatske (SITH). Ovo ime se zadržalo do 1992. kad je usvojen i današnji naziv Hrvatski inženjerski savez (HIS). [1, 2]

UTEMELJENJE I RAZVITAK METALURŠKOG DRUŠTVA

Što se tiče struke metalurgije, treba istaknuti da je bez metalurgije bila nezamisliva realizacija plana ubrzanog industrijskog razvitka Hrvatske poslije Drugog svjetskog rata. Već 1947. planirana je uz postojeću Talionicu Caprag izgradnja integralne Željezare Sisak s glavnim završnim proizvodom “bešavne cijevi”.

Predmnijevao se završetak svih glavnih infrastrukturnih i proizvodnih objekata do kraja 1952. Planirana dinamika izgradnje se djelomice realizirala, tako da je puštena u rad samo Laka pruga (cijevi promjera 21-100 mm) valjaonice bešavnih cijevi 1952. [3, 4]

Poteškoće su se prvenstveno odnosile na nedostatak financijskih sredstava, investicijske opreme, tehničke dokumentacije i u znaku pogoršanih političkih odnosa sa SSSR-om. Posebice se osjećao nedostatak stručnjaka svih profila.

Tadašnji malobrojni stručnjaci Željezare Sisak, inženjeri i tehničari, mudro su procijenili važnost organizi-

The Club of Engineers and Architects changed its name after the First World War into the Engineer Associations Union of the Kingdom of Yugoslavia. During the Second World War it was called the Croatian Engineers Society.

The Society of Engineers and Technicians of Croatia (SETC) was founded at the Foundation Assembly in 1946 in Zagreb by restoring the work of individual sections.

At that time, it comes to large economic activities and industrialization with erecting various facilities and plants in all professions. This is followed by the need and foundation of corresponding professional associations.

Let us mention several examples:

- Section of chemist – 1947 y from chemist’s club – 1927 y.
- Croatian Mining Engineers Association originated from the miners section of SETC in 1948 y
- Croatian Geological Society founded in 1951 y
- Croatian Metallurgical Society / Society of Engineers and Technicians of Steelworks Sisak 1952 y
- Croatian Geodetic Society in 1953 y
- Electro-Technical Society of Croatia was founded from the electricians sections of (SETC) in 1953 y
- Croatian Foundry Association was founded in 1953 y
- Croatian Welding Technique Society in 1953 y as well
- Etc.

Since several independent societies were founded, the Society of Engineers and Technicians of Croatia (SETC) changes its name in 1953 into the Societies Union of Engineers and Technicians of Croatia (SUETC), and as early as in 1956 into the Union of Engineers and Technicians of Croatia (UETC). This name was retained until 1992 when today’s name of the Croatian Engineers Association (CEA) was adopted. [1, 2]

FOUNDATION AND DEVELOPMENT OF METALLURGICAL SOCIETY

As for the profession of metallurgy, it needs to be pointed out that the plan realization of rapid industrial development of Croatia after the Second World War was unthinkable without metallurgy. As early as in 1947 it was planned to build an integral Željezara Sisak with the main final product “seamless pipes” near the existing Foundry Caprag.

All the major infrastructural and production facilities were anticipated to be finished by the end of 1952. Planned dynamics of construction was partly realized, so that only the Light Section Mill (pipes of 21-100 mm diameter) of seamless pipe rolling mill was put into operation in 1952. [3, 4]

Difficulties referred primarily to the lack of financial resources, investment equipment, technical documenta-

ranog strukovnog rada, te je održana Osnivačka skupština 1952. i utemeljeno je Društvo inženjera i tehničara Željezare Sisak (DITŽS).

Detaljni osvrt o daljnjim aktivnostima Društva može se iščitati iz "Referata za skupštinu podružnice DIT-a, Kombinata Željezare Sisak u povodu 20-godišnjice postojanja DIT-a". Referat je održao tadašnji predsjednik DIT-a ŽS Dž. Dozić 22. travnja 1972. na Skupštini DIT-a ŽS povodom 20-godišnjice utemeljenja. [5- 7]

Citiraju se neki izvaci iz tog referata. [5]

"Društvo inženjera i tehničara Sisak Željezare Sisak je osnovano 1952., u vrijeme kad su u Željezari Sisak radile visoke peći, a Čeličana i Valjaonica bešavnih cijevi bile u fazi izgradnje, odnosno Laka pruga pred puštanjem u proizvodnju.

Tehničkog kadra, odnosno inženjera i tehničara nije tada bilo u dovoljnom broju, ali onaj mali broj je počeo s organiziranim društvenim radom prije svega u želji da se stručno osposobljavaju tehnički kadrovi Željezare...

Svake godine održano je po nekoliko stručnih predavanja, koja su se uglavnom odnosila na upoznavanje s metalurškim procesima, a predavači su bili ili strani stručnjaci ili iskusni članovi društva. Posjeta predavanjima bila je dobra.

Aktivnim radom isticali su se u prvih nekoliko godina: F. Knežević, V. Logomerac, J. Gradišar, D. Kunstelj, M. Kirinić, T. Viličić, Đ. Lončar, Z. Selenec i drugi.

Već nakon 6 do 7 godina postojanjem Društva, zahvaljujući naglom proširenju željezare, odnosno dola-

tion and they were marked by deteriorated political relations with USSR. The lack of experts of all profiles was felt in particular.

Few experts of Željezara Sisak then, engineers and technicians, made a wise estimate of the importance of organized professional work, so the Foundation Assembly was held in 1952 and the Society of Engineers and Technicians of Steelworks Sisak (SETSS) was founded.

A detailed overview of further activities of the Society can be found in the Report for the Subsidiary Assembly of SET, Steelworks Sisak Complex for 20th Anniversary of SET". The report was presented by the president of SETS SISAK then, Dž. Dozić, on 22 April 1972 at the Assembly of SETS Sisak for 20th anniversary of foundation. [5-7]

Here are the quotes of some excerpts from this report. [5]

"The Society of Engineers and Technicians Steelworks was founded in 1952, in the time when the blast furnaces, steelwork and seamless tube rolling mill were in construction, i.e. light section mill was just about to be put in operation.

Technical staff, i.e. engineers and technicians of that time were insufficient but although small in number they started with organized social work, first of all wanting to enable professional training for technical staff in the Steel Works Sisak.

Every year there were held several professional lectures, mostly to familiarize the members with metallurgical processes, and the lecturers used to be foreign experts or some experienced members of the Society. Attendance rate at the lectures was good.

F. Knežević, V. Logomerac, J. Gradišar, D. Kunstelj, M. Kirinić, T. Viličić, Đ. Lončar, Z. Selenec and some other distinguished themselves through their active work during the first several years.

As early as 6-7 years after its foundation, thanks to sudden expanding of steel works, i.e. upon arrival of the growing number of engineers and technicians and the work of the Managing Board then, there came to an increased social activity.

In the period from 1959 to 1960, one professional lecture was read every two months on the average and a good audience response was usually noted.

The lecturers were mostly experienced engineers from our Society. The Society was active, which can be seen in the documents. No less than 98% of experts working in Steelworks Sisak in 1960 were members of the Society of Engineers and Technicians. The Society had 199 members in total, including 58 graduate engineers, 124 technicians and 17 other members.

After this dynamic and relatively successful period, there came a period of work regression, so the anniversary assembly could not be held in 1962.

Since then the Society has existed as a subsidiary of the Society of Engineers and Technicians – Sisak (SET Sisak), which was established just in the same year.



Poziv za jubilarnu 20 skupštinu DITŽS, 22.04.1972.
Call for the jubile 20th Assembly of SETSS, 1972-04-22

skom u Željezaru sve većeg broj inženjera i tehničara kao i radu tadašnjeg Upravnog odbora, došlo je do veće aktivnosti društva.

U periodu 1959. i 1960. održavano je u prosjeku svaka dva mjeseca po jedno stručno predavanje, na kojima su odaziv i učešće članova bili vrlo dobri.

Predavači su bili uglavnomiskusni inženjeri našeg Društva. Društvo je bilo aktivno, što se vidi i iz podatka da je čak 98% stručnjaka koji su 1960. radili u Željezari Sisak bilo učlanjeno u DIT. U Društvu je bilo ukupno 199 članova, od čega 58 diplomiranih inženjera, 124 tehničara i 17 ostalih.

Poslije toga živog i relativno uspješnog perioda došlo je do popuštanja u radu, tako da se 1962. 10-godišnja jubilarna skupština nije ni održala.

Otada Društvo egzistira kao podružnica DIT-a Sisak, koje je te godine i osnovan.

Ipak, 1962. podružnica je pokrenula prvi put izdavanje jednog stručnog časopisa. Tada je u izdanju podružnica uz pomoć redakcije Vjesnika Željezara počeo izlaziti časopis "Metalurgija." [8]

Za daljnje djelatnosti DIT-a Željezare Sisak citira se iznovice [5]:

"1962. početo je i s izdavanjem bibliografije, na taj način da su posebno zaduženi članovi podružnice pratili stručne časopise u stručnoj knjižnici, sačinjavali kratke izvratke iz njih i ovi inserti su se u obliku biltena davali inženjerima i tehničarima, kako bi mogli biti upoznati sa sadržajem Časopisa.

Razdoblje od 1962. do 1967. bilo je dosta slabo u radu naše podružnice, a svelo se je na to da je održano nekoliko predavanja i ekskurzija. Već ranije je u traženju sistema rada, a naročito zahvaljujući okolnosti da se je kombinat naglo razvijao i da je priliv stručnjaka u kombinat bivao sve veći, došlo do toga da se pokuša s radom po sekcijama. 1967. društvu je uspjelo osnovati 4 sekcije, od kojih su sekcija građevinara i naročito sekcija metalurga počele aktivnije raditi, pa se ovim dvjema sekcijama treba odati priznanje za uspjehe postignute u radu naše podružnice u posljednje 3 do 4 godine." (završen citat).

U organizaciji i pojačanim akcijama Sekcije metalurga DITŽS-a, važnu ulogu odigrali su tada vodeći metalurzi: D. Stambolija, J. Krajcar, I. Đukić, S. Kovačić, I. Mamuzić (učlanjen u DITŽS još 1960., što znači da obilježava 60. obljetnicu članstva) i drugi.

Posebice, izuzetan doprinos u cjelokupnom razvoju i djelatnosti DITŽS-a, DIT-a Sisak, kao i naknadno metalurškog društva dao je Branko Markušić, dipl. ing. Izabran je još 1958. za tajnika DITŽS-a, kasnije za tajnika DIT-a Sisak. B. Markušić obilježava preko 62 godina vjernosti našim udrugama.

U časopisu Metalurgija 2 (1963)2, 15 objavio je članak "Društvena uloga i zadaci organizacije inženjera i tehničara".

Treba istaći i dugogodišnju djelatnost i doprinos razvitku metalurškog društva mr. sc. Vladimira Ferketića.

Still, in 1962, the subsidiary initiated for the first time one professional magazine to be published. Then, the subsidiary started to publish the magazine of Metalurgija with the aid of Steelworks Herald editorial board. [8]

Further activities of the Society of Engineers and Technicians of Steelworks Sisak are quoted again [5]:

"However, in 1962 the publishing of bibliography was initiated. Some specially entrusted members of the Subsidiary followed professional journals in reference library; compiled short extracts, which were delivered as bulletins to engineers and technicians in order to inform them with the contents of the Journal.

The period from 1962 to 1967 was rather bad regarding our Subsidiary, and was reduced to some lectures and collective trips. Earlier, in looking for a system of function of the society, and especially thanks to the circumstances that the integrated works was in a rapid development and experts' inflow rather increasing, we tried to work in sections. In 1967, the Society successfully founded 4 sections, and two of them – the civil constructors' section and especially metallurgists' section increased their activity, so these two sections should be given due credit for achieved success through their work in our Subsidiary in the course of last 3-4 years." (unquote)

An important role in organization and intensified actions of the Metallurgists' Section of SETS Sisak was played by leading metallurgists then: D. Stambolija, J. Krajcar, I. Đukić, S. Kovačić, I. Mamuzić (became a member of SETS Sisak as early as in 1960, which means that he celebrates 62th anniversary of membership) and others.

In particular, extreme contribution to the entire development and activity of SETS Sisak, SET Sisak, as well as metallurgical society later on was given by Branko Markušić, B.Sc. As early as in 1958 he was elected secretary of SETS Sisak, and later secretary of SET Sisak, and this function he still holds today. B. Markušić celebrates over 50 years of loyalty to our associations.

In Metalurgija Journal 2(1963) 2, 15 have published the article "The Social role and tasks of the organization of engineers and Technicians".

Many years of activity and contribution to the development of metallurgical society and more by Vladimir Ferketić Mr. Sc. need to be pointed out as well. Having started since 1967, he was president of SETS Sisak later, representative in Republic societies, and in addition to several functions he was also elected the first secretary of Society of Metallurgical, Mining, Geological Engineers and Technicians Sisak and Croatian Metallurgical Society in 1992 after foundation. Over 30 years he dedicated to the activity of metallurgical association.

In the meantime at the Croatian level there exist (former names of societies) the Society of Mining Engineers and Technicians of Croatia, the Society of Geological Engineers and Technicians of Croatia, and the Society of

Počevši od 1967., bio je poslije i predsjednik DITŽS-a, zastupnik u Republičkim društvima, a uz više funkcija bio je i prvi izabrani tajnik Društva metalurških, rudarskih i geoloških inženjera i tehničara Sisak 1978. te poslije utemeljenog Hrvatskog metalurškog društva 1992. Preko 30 godina posvetio je djelatnosti metalurške udruge.

U međuvremenu na hrvatskoj razini su (tadašnji nazivi društava) Društvo rudarskih inženjera i tehničara Hrvatske, Društvo geoloških inženjera i tehničara Hrvatske, te Društvo inženjera i tehničara Sisak (DIT Sisak) – sekcija metalurga se povezala u Savez rudarskih, geoloških, metalurških inženjera i tehničara Hrvatske (SRGMITH). Naš Savez je bio i članica Saveza rudarskih, geoloških, metalurških inženjera i tehničara Jugoslavije (SRGMIT Ju), a naša krovna organizacija je bila Savez inženjera i tehničara Hrvatske (SITH).

Budući da je izvan Sekcije metalurga DIT-a ŽS, odnosno Društva inženjera i tehničara (DIT-a) Sisak ostalo neučlanjeno rudarskih, geoloških a i metalurških inženjera i tehničara (zaposleni izvan Željezare Sisak), to je prof. Ilija Mamuzić pokrenuo inicijativu za utemeljenje Društva metalurških, rudarskih i geoloških inženjera i tehničara Sisak (DMRGIT – Sisak). To je već realizirano 1978. Za predsjednika Društva je izabran prof. I. Mamuzić, a za tajnika V. Ferketić, dipl.ing. Ovo je Društvo postalo članica SRGMITH-a, kao i SRGMIT-a Ju, a prof. I. Mamuzić je u mandatnom razdoblju 1988.-1990. bio predsjednik i SRGMITH-a a i dopredsjednik SRGMIT-a Ju.

Naše društvo DMRGIT Sisak bilo je vrlo aktivno. U organizaciji SITH-a Zagreb 1985. na simpoziju “Obrazovanje za vlastiti tehnološki razvoj” I. Mamuzić je održao referat “Obrazovanje u metalurgiji”. Bilo je to razdoblje velikih priprema za izgradnju nove valjaonice bešavnih cijevi MK “Željezara Sisak”. Glede kritičkih osvrta u tisku o ovom projektu, prof. I. Mamuzić je u časopisu Danas, 7 (1988) 332, 28-29 objavio članak “I kompjuteri i cijevi – treba nam moderna, rentabilna proizvodnja vode na kompjuterima”. 1988. organiziran je 12. međunarodni sajam rudarstva, a 1990. i 13. sajam. U organizaciji SRGMIT-a Jugoslavije na simpoziju “Unapređivanje i racionalizacija tehnoloških procesa u rudarstvu, geologiji i metalurgiji” iznovice je I. Mamuzić održao referat “Obrazovanje u funkciji racionalizacije i unapređivanja tehnoloških procesa” Beograd 1990. Povodom poteškoća kroz koje je prolazio MK “Željezara Sisak”, u ime DMRGIT-a Sisak, prof. I. Mamuzić je Poslovnom odboru Kombinata dao detaljniji pisani materijal “Razmišljanje: Perspektivni razvoj MK “Željezara Sisak” u 1990. godini” (Poslije nekoliko godina pokazala se opravdanost ovog dopisa, ali po tome ništa nije realizirano, a ranije poteškoće su se višestruko povećale).

Polazeći od svjetskih postignuća, statusa metalurgije, te demokratskih promjena u Hrvatskoj 1990/1991., prof. I. Mamuzić je iznovice intenzivno pokrenuo ak-

Engineers and Technicians Sisak (SET Sisak) – the metallurgists’ section joined the Union of Mining, Geological, Metallurgical Engineers and Technicians of Croatia (UMGMETC). Our Union was also a member of the Union of Mining, Geological, Metallurgical Engineers and Technicians of Yugoslavia (UMGMET Yu), and our roof organization was the Union of Engineers and Technicians of Croatia (UETC).

Since there were mining, geological and metallurgical engineers and technicians (employed outside of Steelworks Sisak) who were not members of the Metallurgists’ Section of SETS Sisak or SET Sisak, prof. Ilija Mamuzić initiated the foundation of the Society of Metallurgical, Mining and Geological Engineers and Technicians Sisak (SMMGET – Sisak). This was realized as early as in 1978. Prof. I. Mamuzić was elected president of the Society, and V. Ferketić, BS, secretary. This Society became a member of both UMGMET of Croatia, and UMGMET Yu, and prof. I. Mamuzić in his mandate 1988-1990 was president of UMGMET of Croatia and vice-president of UMGMET of Yugoslavia.

Our society SMMGET Sisak was very active. At the symposium “Education for the Own Technological Development” organized by UETC Zagreb in 1985, I. Mamuzić presented a report called “Education in Metallurgy”. It was a period of large preparations for the construction of a new welded pipes rolling mill of the Metallurgical Complex “Steelwork Sisak”. Regarding critical reviews in Print about this project, prof. I. Mamuzić published an article in the magazine Danas, 7 (1988) 332, 28-29 “Both Computers and Pipes – We Need a Modern, Economical Production Managed by Computers”. In 1988 12th International Mining Fair was organized and in 1990 also 13th Fair. At the symposium “Improvement and Rationalization of Technological Processes in Mining, Geology and Metallurgy” organized by UMGMET of Yugoslavia, I. Mamuzić presented a report again “Education in the Function of Rationalization and Improvement of Technological Processes” Belgrade 1990. Regarding difficulties experienced by MC “Steelwork Sisak” on behalf of SMMGET Sisak, prof. I. Mamuzić presented to the Business Board of the Complex a detailed written material “Consideration: Perspective Development of MC “Steelwork Sisak” in 1990” (After a few years, this letter proved to be justified, but nothing was realized thereby, and former difficulties have multifold increased).

Starting from world achievements, status of metallurgy, and democratic changes in Croatia in 1990/1991, prof. I. Mamuzić strongly initiated again the foundation of independent metallurgical society at the level of Croatia.

Independently on war conditions and the position as dean of the Faculty of Metallurgy and SET Sisak (only 3 km from the front line) he started with the reorganization of the Society of metallurgical, mining and geological engineers and technicians (SMMGET) Sisak. By beginning of 1992 (6 th April 1992) this society

ciju za utemeljenje samostojnog metalurškog društva na razini Hrvatske.

Neovisno od ratnih uvjeta i položaja Metalurškog fakulteta i DIT – a Sisak (svega tri kilometra od crte bojišnice) funkcije dekana koju je obnašao, već je u 1991. godini preuzeo aktivnosti u reorganizaciji Društva metalurških, rudarskih i geoloških inženjera i tehničara (DMRGIT) Sisak. Početkom 1992. godine (6. travnja 1992.) dolazi do transformacije ovoga Društva, te je na državnoj razini ustrojeno Hrvatsko metalurško društvo (HMD) na osnivačkoj skupštini održanoj u prostorijama DIT-a Sisak uz nazočnost 30-ak sudionika od Splita, Šibenik, Rijeke do Slavenskog Broda [9].

S ovom akcijom odmah je upoznao svjetsku javnost tako da je HMD pozivano na sastanke svjetskih metalurških društva koje su u organizaciji Verein Deutscher Eisenhüttenleute (VDEh) – Njemačka i Institute of Materials – Engleska.

Već u studenom 1992. godine, bio je I. Mamuzić kao predsjednik HMD-a na međunarodnom sastanku VDEh-a, gdje mu je odobreno traženje za organizaciju 1. međunarodnog simpozija “Materijali i metalurgija” u Hrvatskoj za 1993. godinu.

Budući da je SRGMIT Hrvatske prestao s radom 1992., HMD se učlanio samo u Savez inženjera i tehničara Hrvatske (SITH), kasnije naziv Hrvatski inženjerski savez (HIS).

U časopisu Metalurgija 32 (1993) 1/2, 55-57 I. Mamuzić je objavio članak s osnivačke skupštine “Hrvatsko metalurško društvo – aktivnosti i zadaci”

Mada su to bila teška ratna vremena, predsjednik I. Mamuzić je pokrenuo akciju za izradu vlastitog uredskog prostora. Na temelju dogovora s Udruženjem hrvatskih rudarskih inženjera s kojima se dijelio uredski prostor od 1952. god, došlo je samofinanciranjem do dogradnje sobe br. 7 u HIS-u, Berislavićeva 6, Zagreb. Na taj način HMD ima vlastiti uredski prostor.

CILJEVI I ZADACI DRUŠTVA

Ciljevi Društva su promicanje stručne i znanstvene djelatnosti u metalurškoj struci, razvijanje metalurgije, organiziranje društvene djelatnosti radi širenja metalurškog znanja, popularizacije metalurgije, te stručno i znanstveno usavršavanje članova Društva i ostvarivanje njihovih zajedničkih interesa. [9]

U ostvarivanju ciljeva zbog kojih je osnovano, Društvo među ostalim obavlja ove aktivnosti:

- okuplja i organizira diplomirane inženjere i tehničare metalurške struke i drugi stručni kadar i znanstvenike koji se teoretski i praktično bave problemima metalurgije,
- sudjeluje u stvaranju javnog znanstvenog i stručnog mišljenja i stavova o svim bitnim tehničkim, eko-

transformed on the country level to the Croatian metallurgical society (CMS). At the foundation assembly was held in the premise of SET Sisak with attend 30 – odd of participants from Split, Šibenik, Rijeka till Slavonski Brod. [9]

The public was worldwide informed of the changes and CMS is invited to meetings of metallurgical societies of different countries in the frame of the German Verein Deutscher Eisenhüttenleute (VDEh) and the British Institute of Materials. Already in November 1992 at the international meeting of VDEh-a I. Mamuzić as the president of CMS succeeded in having accepted the organization of the international symposium “Materials and Metallurgy” for the year 1993 in Croatia.

Since UNGMET of Croatia ceased to be active in 1992, CMS became a member of UET of Croatia after name Croatian Engineers Association (CEA) only.

In journal Metalurgija 32 (1993) 1/2, 55-57 I. Mamuzić have publish the article from foundation assembly “Croatian Metallurgical Society - activities and responsibilities”

Although those were the hard war times, president I. Mamuzić initiated the arrangement of its own office premises. Based on agreement with the Association of Croatian Mining Engineers that it shared office premises with since 1952 y, the room No. 7 was annexed in CEA, Berislavićeva 6, Zagreb, by self – finance. This, CMS obtained its own office premises.

GOALS AND TASKS OF THE SOCIETY

The goals of the Society are to encourage professional and scientific activity in the metallurgic professions, develop metallurgy, organize activities for spreading metallurgic knowledge, popularize metallurgy as well as promote the professional and scientific continued education of Society members and realize their common interests. [9]

In realizing the goals for which the Society was founded, the following are some of its activities:

- consolidating and organizing graduate engineers and technicians in the field of metallurgy as well as other professional personnel and scientists who are theoretically or practically engaged in the problems of metallurgy,
- participating in the establishment of public scientific and professional positions and opinions regarding essential technical, economic, production and other problems of metallurgy,
- devoting constant attention to the continuing education of its members, stimulating and recognizing the initiatives of members in production as well as scientific research work in the field of metallurgy,
- organizing and maintaining collaboration with all the organizations and associations engaged in ques-

nomskim, proizvodnim i drugim problemima metalurgije,

- neprekidno brine o stručnom usavršavanju svojih članova potičući i podržavajući inicijative članova u proizvodnom i znanstveno-istraživačkom radu u području metalurgije,
- organizira i održava suradnju sa svim organizacijama i asocijacijama koje se bave pitanjima od interesa za metalurgiju i imaju zajednički interese i ciljeve s djelatnošću Društva,
- surađuje s odgovarajućim međunarodnim organizacijama inženjera i tehničara izvan Republike Hrvatske,
- organizira stručna predavanja, seminare, savjetovanja, kongrese, simpozije, okrugle stolove i ostale stručne i znanstvene skupove,
- potiče izdavanje i izdaje znanstveno-stručne publikacije,
- njeguje i razvija etiku inženjersko-tehničkog poziva u skladu sa specifičnom prirodom posla.

Promjene u političkom i gospodarskom sustavu u Republici Hrvatskoj nameću potrebu proširivanja zadataka i prilagođavanja oblika i načina djelovanja Hrvatskog metalurškog društva stvarnim potrebama metalurgije kao i Hrvatske u cjelini. Traže se aktivne, konkretne i praktične orijentacije u svakodnevnoj djelatnosti. Prvenstveni su zadaci:

1. Učlanjivanje Hrvatskog metalurškog društva u svjetske a posebice europske stručne organizacije i društva metalurga. Sudjelovati aktivno u djelatnosti svih međunarodnih organizacije.
2. Aktivno i dugoročno angažiranje na rješavanju najaktualnijih pitanja razvoja metalurgije u Hrvatskoj. Tu se uklapa i stalna djelatnost na stabilizaciji, korekciji, kvalitetnoj proizvodnji, angažiranje u usavršavanju sustava obrazovanja itd.
3. Okupljanje i poticanje inženjera i tehničara metalurgije na razvijanje stvaralačke inicijative, javno iznošenje znanstvenih i stručnih mišljenja o svim bitnim pitanjima razvoja i u proizvodnji metalurgije Hrvatske. Djelovati na stalnom unapređivanju organizacije djelovanja na znanstvenim osnovama, novim znanjima.
4. Stalno djelovati na afirmaciji tehničkih unapređenja i novatorstva i pri tome usko surađivati sa srodnim društvima.
5. Organizirati i održavati simpozije (savjetovanja), stručne sastanke te upoznati našu i međunarodnu javnost s postignutim rezultatima djelovanja naših stručnjaka i organizacija.
6. Obrazovanje i specijalizaciju kadrova potrebno je osuvremeniti i prilagoditi ih zahtjevima tehnološki-informatičke revolucije. S tim u svezi organizirati stručna usavršavanja inženjera i tehničara metalurgije u suradnji i s međunarodnim institucijama. Osobito je važno poboljšati interdisciplinarna znanja te

tions of interest to metallurgy whose interests and goals are those of the Society,

- cooperating with international organizations engaged theoretically and practically in the problems of metallurgy, as well as with national organizations of engineers and technicians outside the Republic of Croatia,
- organizing professional lectures, seminars, symposiums, round table discussions and other professional and scientific meetings,
- stimulating the publication of scientific-professional works,
- fostering and developing the ethics of the engineering-technical calling in accord with the specific nature of the work.

Changes in the political and economic system in the Republic of Croatia have necessitated the expansion of our responsibilities and the adaptation of the activities of the Croatian Metallurgical Society to the actual needs of metallurgy as well as Croatia as a whole. Active, concrete and practical orientation is required in daily activities. The primary tasks are as follows:

1. The Croatian Metallurgical Society must become a member of world professional organizations and metallurgic societies, especially in Europe. It must actively participate in the activities of all international organizations.
2. Active long-term engagement is necessary for solving the most pressing questions concerning the development of metallurgy in Croatia. This includes continuing activity on stabilization, correction, quality production and especially the coordination of science and manufacturing, improvements in the educational system etc.
3. The consolidation and stimulation of metallurgic engineers and technicians are vital to the development of creative initiative as are the publication of scientific and professional opinions on all important questions of development and metallurgic production in Croatia. Constant activity is required to advance the organization based on scientific foundations and new knowledge.
4. There is also constant activity on the affirmation of technical advancements and innovations as well as close collaboration with related societies.
5. Professional symposiums are held and organized. The Croatian and international public is informed of the results achieved by our professionals and organizations.
6. The education and specialized training of personnel requires modernization and adaptation to the revolution in technology and informatics. It is necessary to organize the professional training of metallurgic engineers and technicians, including cooperation with international institutions. It is especially important

suradivati u tom sustavu sa stručnjacima u tuzemstvu i inozemstvu.

7. Posebnu pažnju pokloniti istraživačkoj djelatnosti kao i obavješćivanju javnosti o djelatnosti Društva. Intenzivno pomoći suizdavanju tiskanja časopisa *Metalurgija*, a po mogućnosti sudjelovati u tiskanju priručnika, zbornika, knjiga, itd. iz područja metalurgije.

Glavne aktivnosti Hrvatskog metalurškog društva

- tiskanje časopisa *Metalurgija*, knjiga
- međunarodni simpoziji iz materijala i metalurgije,
- suradnja u inozemstvu i tuzemstvu,
- opstanak društva (upravni odbor, skupštine, financije, itd.).

TISKANJE ČASOPISA METALURGIJA

Prošlo je šezdeset godina od osnutka i početka objavljivanja časopisa *Metalurgija*. To je značajno za sve znanstvenike i stručnjake metalurških i srodnih struka iz domovine i tuđine, kao i za sve autore i čitatelje koji su svoje rezultate i ideje provjeravali ili ih našli na stranicama ovog časopisa. [9-60]

Dokaz da je časopis *Metalurgija* opravdao svoje postojanje jest tijekom 60 godina neprekidnog izlaženja u 199 svezaka ili 238 brojeva, objavljenih 2721 znanstvenih (i stručnih) članaka te 287 prilog (ukupno 3008 radova) od 3575 autora/suautora posebice. Objavljeno je i 5 knjiga.

Posebno u objavljenim “Zbornicima sažetaka” sa 14 simpozija (14 Uredničkih knjiga) tiskano je 6009 sažetaka od cca deset tisuća autora/suautora.

MEĐUNARODNI SIMPOZIJI “MATERIJALI I METALURGIJA”

Hrvatsko metalurško društvo održalo je prvi simpozij “Materijali i metalurgija” u Zagrebu, 16.-18. veljače 1994. Održano je 88 referata, a sudjelovalo je više od 250 znanstvenika i eksperata iz različitih europskih metalurških institucija.

Ukupno, Hrvatsko metalurško društvo održalo je do sada 14 simpozija, “Materijali i metalurgija” sa 4 sekcije: Sekcija A – Plastična prerada; Sekcija B – Fizička metalurgija i materijali; Sekcija C – Procesna metalurgija; Sekcija D – Metalurgija i srodna područja:

1. Zagreb – 1994 – veljača, 16.-18., (88 referata)
Zbornik sažetaka, *Metalurgija* 32 (1993) 4, 185-199
2. Split – 1996 – lipanj, 20.-22., (150 referata)
Zbornik sažetaka, *Metalurgija* 35 (1996) 2, 105-126
3. Šibenik – 1998 – lipanj, 25.-27., (192 referata)
Zbornik sažetaka, *Metalurgija* 37 (1998) 2, 103-132
4. Opatija – 2000 – lipanj, 25.-29., (333 referata)
Zbornik sažetaka, *Metalurgija* 39 (2000) 3, 191-224

to improve interdisciplinary knowledge and cooperate with Croatian and foreign experts.

7. Particular attention should be devoted to research activity as well as the publication of the activities of the Society. There should be intensive assistance such as the co-publication of the journal *Metalurgija*, and if possible participation in the printing of manuals, proceedings, books etc. from the field of metallurgy.

Principal activities of Croatian Metallurgical Society:

- publishing of the journal *Metalurgija*, books
- international symposiums by the materials and the metallurgy,
- cooperation abroad and in Croatia,
- existence of Society (management board, assemblies, finances, etc.)..

PUBLISHING OF THE JOURNAL METALURGIJA

Sixty years have passed since the foundation and the first publishing of the journal *Metalurgija*. This is important for all scientists and experts in the field of metallurgy and other relevant branches of science from Croatia and abroad, as well as for all authors and readers whose investigation results and ideas have been examined and found on the pages of this journal. [9-60]

The proof that the journal *Metalurgija* has truly justified its existence is continuous publication of 199 issues or 238 numbers, 2721 scientific (and technical) papers and 287 contributions total 3008 of 3575 authors/coauthors) during the last sixty years.

In publishing “Summaries of Lectures” with 14 Symposiums (14 Editorial books) was 6009 abstracts till ten thousands authors/coauthors)

INTERNATIONAL SYMPOSIUMS “MATERIALS AND METALLURGY”

Croatian Metallurgical Society held the first symposium “Materials and Metallurgy” in Zagreb, February 16-18, 1994. Over 88 lectures, a half of which was attended by more than 250 scientists and experts from several European metallurgical associations.

In total, Croatian Metallurgical Society was held 14 symposium “Materials and Metallurgy” with 4 section: Section A – Plastic Processing; Section B – Physical Metallurgy and Materials; Section C – Process Metallurgy; Section D – Metallurgy and Related topics:

- 1st Zagreb, February 16 to 18 1994, (88 contributions)
Summaries of lectures, *Metalurgija* 32 (1993) 4, 185-199
- 2nd Split, June 20 to 22 1996, (150 contributions)
Summaries of lectures, *Metalurgija* 35 (1996) 2, 105-126
- 3rd Šibenik, June 25 to 27 1998, (192 contributins)
Summaries of lectures, *Metalurgija* 37 (1998) 2, 103-132

5. Šibenik – 2002 – lipanj, 23.-27., (375 referata)
Zbornik sažetaka, Metalurgija 41 (2002) 3, 215-268
 6. Šibenik – 2004 – lipanj, 20.-24., (368 referata)
Zbornik sažetaka, Metalurgija 43 (2004) 3, 199-263
 7. Šibenik – 2006 – lipanj, 18.-22., (475 referata)
Zbornik sažetaka, Metalurgija 45 (2006) 3, 185-268
 8. Šibenik – 2008 – lipanj, 22.-26., (615 referata)
Zbornik sažetaka, Metalurgija 47 (2008) 3, 223-284
 9. Šibenik – 2010 – lipnja, 20.-24., (541 referata)
Zbornik sažetaka, Metalurgija 49 (2010) 3, 191-240
 10. Šibenik, 2012, lipanj, 17.-21., (641 referata)
Zbornik sažetaka, Metalurgija 51 (2012) 3, 377-432
 11. Šibenik, 2014, lipanj, 22.-26., (689 referata)
Zbornik sažetaka, Metalurgija 53 (2014) 3, 395-431
 12. Šibenik, 2016, lipanj, 19.-23., (546 referata)
Zbornik sažetaka, Metalurgija 55 (2016) 3, 395-431
 13. Šibenik, 2018, lipanj, 24.-29., (561 referata)
Zbornik sažetaka, Metalurgija 57 (2018) 3, 175-216
 14. Šibenik, 2020, lipanj, 21.-26., (435 referata)
Zbornik sažetaka, Metalurgija 59 (2020) 3, 419-448
Napomena: Otkazan zbog COVID-19
- U organizaciji kao i aktivnom sudjelovanju na svim simpozijima bilo do 50 država i preko 70 institucija.
UKUPNO SAŽETAKA 6.009.
Ukupno više od 10 000 autora/koautora
- 4th Opatija, June 25 to 29 2000, (333 contributions)
Summaries of lectures, Metalurgija 39 (2000) 3, 191-224
 - 5th Šibenik, June 23 to 27 2002, (375 contributions)
Summaries of lectures, Metalurgija 41 (2002) 3, 215-268
 - 6th Šibenik, June 20 to 24 2004, (368 contributions)
Summaries of lectures, Metalurgija 43 (2004) 3, 199-263
 - 7th Šibenik, June 18 to 22 2006, (475 contributions)
Summaries of lectures, Metalurgija 45 (2006) 3, 185-268
 - 8th Šibenik, June 22 to 26 2008, (615 contributions)
Summaries of lectures, Metalurgija 47 (2008) 3, 223-284
 - 9th Šibenik, June 20 to 24 2010, (541 contributions)
Summaries of lectures, Metalurgija 49 (2010) 3, 191-240
 - 10th Šibenik, June 17 to 21 2012, (641 contributions)
Summaries of lectures, Metalurgija 51 (2012) 3, 377-432
 - 11th Šibenik, June 22 to 26 2014, (689 contributions)
Summaries of lectures, Metalurgija 53 (2014) 3, 395-431
 - 12th Šibenik, June 19 to 23 2016, (546 contributions)
Book of Abstracts, Metalurgija 55 (2016) 3, 549-576
 - 13th Šibenik, June 24 to 29 2018, (561 contributions)
Book of Abstracts, Metalurgija 57 (2018) 3, 175-216
 - 14th Šibenik, June 21 to 26 2020, (435 contributions)
Book of Abstracts, Metalurgija 59 (2020) 3, 419-448
Note: Canceled due to COVID-19

In organization and of participated in all symposiums were till 50 countries and over 70 institutions.
TOTAL ABSTRACTS 6 009
Total over 10 000 Authors/Co-authors

**NOSITELJI AKTIVNOSTI 1952.–2022./
LEADERS OF ACTIVITIES 1952–2022**



Prof. dr. sc. Vladimir Logomerac

Jedan od osnivača 1952. g.:

- Društva inženjera i tehničara željezarije Sisak (DITŽS) (zaposlenik od 1949. u Željezari Sisak), i član od 1952.– 1980. godine
- Odjela Tehnološkog fakulteta Sveučilišta u Zagrebu, u Sisku 1960. god.
- Istraživačkog instituta u Sisku od 1957. god.
- Član DIT-a Sisak od 1962.–1980. god.
- zaslužni član Društva inženjera i tehničara Hrvatske (DITH) od 1958. – 1980. god.

One of the founders, 1952 y:

- *Society of Engineers and Technicians Steel Work Sisak (SETS) (employment in Steelworks Sisak from 1949 y), and the Member 1952–1980*
- *The department of Technological Faculty University of Zagreb, in Sisak in 1960 y*
- *The Research Institute in Sisak 1957*
- *Member of Society of Engineer Technician Sisak (SET Sisak) 1962–1980 y*
- *Men of Merit of Society of Engineers and Technicians of Croatia (SETC) 1958 to 1980.*



Branko Markušić dipl. inž. str. / B.Sc.

Član Društva inženjera i tehničara Željezare Sisak (DITŽS): 1957. – 2005.

Tajnik DITŽS – 1958.-2000.

Član Društva inženjera i tehničara Sisak – (DIT Sisak) 1962. – 2009.

Tajnik DIT Sisak – 1962. -2009.

Član Hrvatskog metalurškog društva (HMD): 1992. – 2010.

Član Upravnog odbora HMD-a: 2006.-2010.

The member of Society of Engineers and Technicians Steelwork Sisak (SETSS): 1957-2005

Secretary of SETSS –: 1958-2000

Member of Society of Engineers and Technicians Sisak (SET Sisak): 1962-2009

Secretary of SET Sisak: 1962-2009

Member of Croatian Metallurgical Society (CMS): 1992-2010

Member of Management Board of CMS: 2006-2010



**Akad./Acad. Ilija Mamuzić, prof.,
prof. h.c., dr. h.c. dr. sc.**

Član DITŽ Sisak i DIT Sisak: 1960.-2005.

Osnivač i Predsjednik Društva metalurških, rudarskih i geoloških inženjera i tehničara Sisak (DMRGIT Sisak): 1978.-1991.

Napomena: Svi članovi DMRGIT Sisak bili automatski i članovi Saveza inženjera i tehničara (SIT) Hrvatske, Saveza rudarskih, geoloških, metalurških inženjera i tehničara Hrvatske (SRGMITH) i Jugoslavije (SRGMITJu)

Predsjednik SRGMITH Hrvatske: 1988.-1990.

Dopredsjednik SRGMITH Jugoslavije: 1989.-1991.

Osnivač HMD-a i predsjednik Upravnog odbora: 1992.-

Predsjednik Hrvatskog metalurškog društva (HMD): 1992.-

Member of SETS Sisak and SET Sisak: 1960-2005

Founder and President of Society of Metallurgical, Mining and Geological Engineers and Technicians Sisak (SMMGET Sisak) 1978-1991

Note: All members of SMMGET Sisak was automatically and member of Union of Engineers and Technicians of Croatia (UETC), Union of Mining, Geological, Metallurgical Engineers and Technicians of Croatia (UMGMETC) and Union of Mining, Geological, Metallurgical Engineers and Technicians of Yugoslavia (UMGMET Yu)

President of UMGMET of Croatia: 1988-1990

Vice president of UMGMET of Yugoslavia: 1989-1991

Founder of CMS and President of Management Board: 1992-

President of CMS: 1992-

Sjedišta Uredničkog odbora časopisa Metalurgija i Hrvatskog metalurškog društava (HMD) Seats of Editorial Board of the Journal Metalurgija and Croatian Metallurgical Societies (CMS)

**1962.-1966. – Prostorije Društva inženjera i tehničara Željezare Sisak kao osnivača /
1962-1966 – Premise of Society Engineers and Technicians Steelworks Sisak, as the Founder**



**1967.-1977. – Tehnološki fakultet, Odjeli u Sisku
- Metalurški fakultet od 1979. godine**

1967-1977 – Faculty of Technology, Sisak Departments - Faculty of Metallurgy from 1979 y

**1978.-1990. – Institut za metalurgiju Sisak /
1978-1990 – Institute of Metallurgy Sisak**

1991.-1997. – Metalurški fakultet (MF)

Bio dekan Ilija Mamuzić. Izborom novog dekana MF-a krajem 1997. godine, Anto Markotić dao izjavu: "Metalurgija ovdje više ne stanuje". Bez potrebite logističke podpore, Uredništvo časopisa je bilo prinuđeno preseliti se poslije 36 godina iz Siska u Zagreb, u Dom Hrvatskog inženjerskog saveza (HIS).

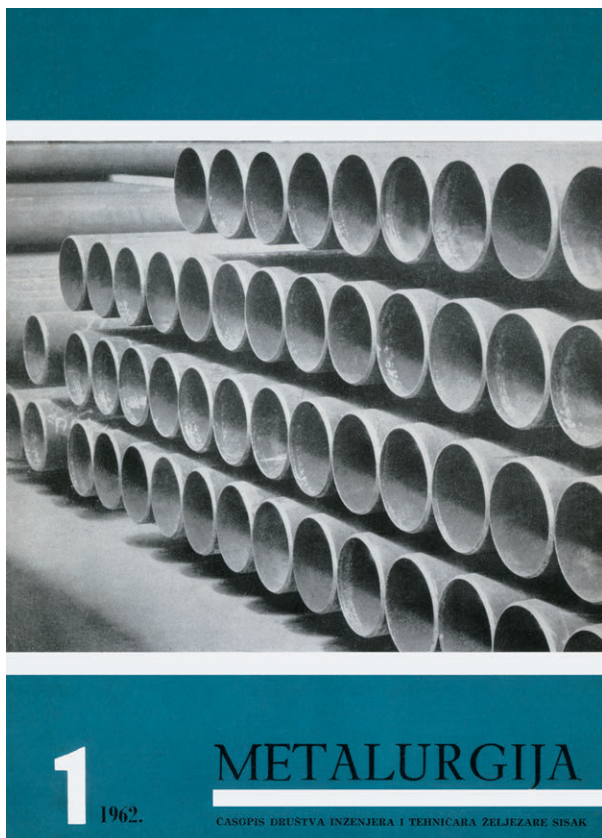
1991-1997 – Faculty of Metallurgy (FM)

Was Dean Ilija Mamuzić. With the election as new dean of the FM by the end of 1997, Anto Markotić gave the declaration "Metalurgija doesn't live here any more". Deprived of any required logistic support, the Editorial Board was forced to move after 36 y from Sisak to Zagreb, in building Croatian Engineering Association (CEA).



1998. – Dom Hrvatskog inženjerskog saveza (HIS). Zajednička prostorija Rudarskog i Metalurškog društva još od 1952. godine. I. Mamuzić osigurao HMD-u dogradnju uredskog prostora 1994. godine (vlastita uložena sredstva)

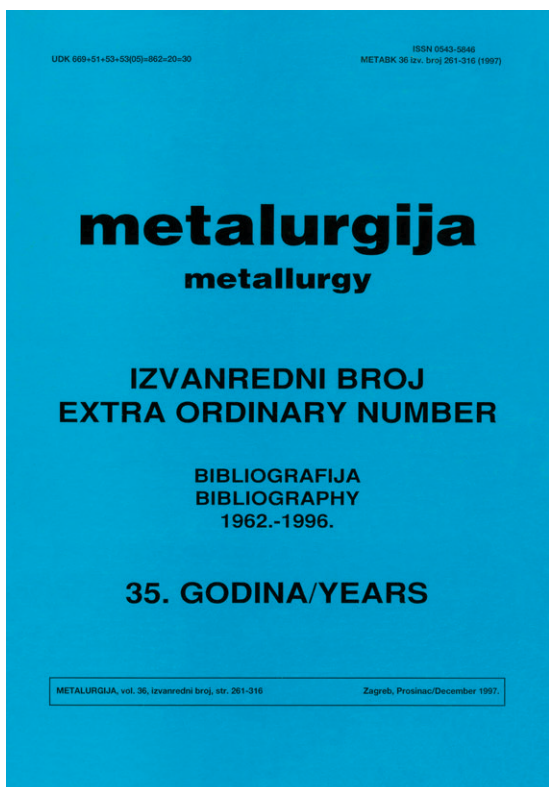
1998 – Building of Croatian Engineering Association (CEA). Common premise Minings and Metallurgical Societies from 1952 y. I. Mamuzić initiated the arrangement and CMS obtained 1994 y (own the office premise by self-finance).



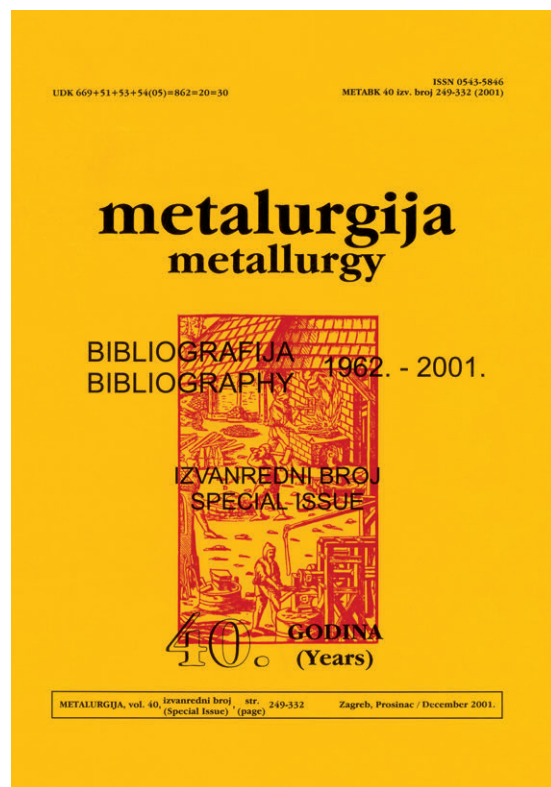
1962. Prvi broj časopisa Metalurgija
 1962 First issue of journal
 Metalurgija 1 (1962)1,1-16
 3 rada / 3 works



2021. Zadnji broj časopisa Metalurgija
 2021 Last issue of journal
 Metalurgija 60 (2021)3-4, 177-464
 80 radova / 80 works



1997. Bibliografija / Bibliography
 Metalurgija 36 (1997), special issue, 265-315



2001. Bibliografija / Bibliography
 Metalurgija 40 (2001), special issue, 249-332



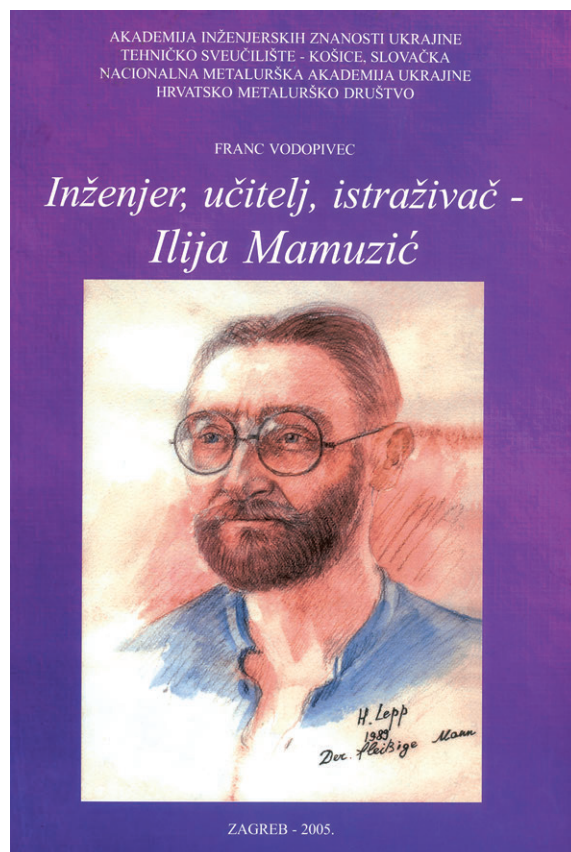
2017. Bibliografija časopisa Metalurgija 1962.–2017. (55 godina)
2017 Bibliography of Metalurgija Journal 1962–2017 (55 years)



1962.–2021. Prikaz svih objavljenih brojeva časopisa Metalurgija (60 godina)
1962–2021 Picture of all issues of Metalurgija Journal (60 years)



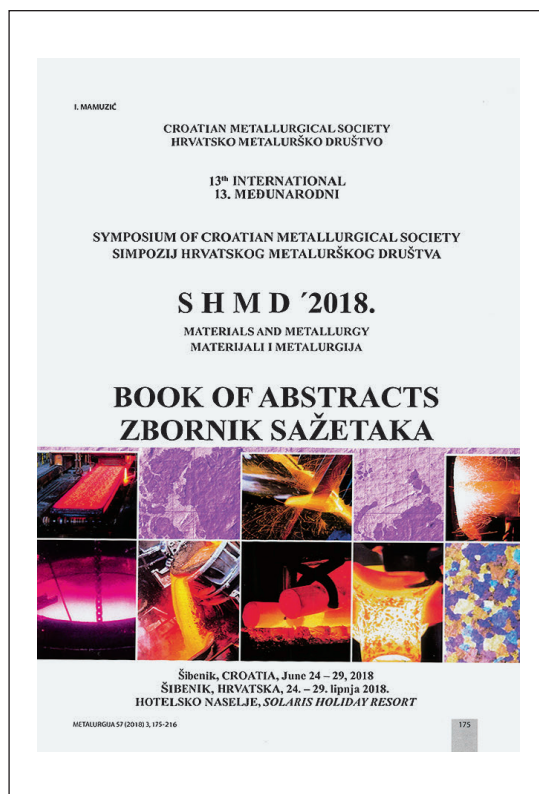
1996. Objavljena Monografija /
1996 Published Monography



2005. F. Vodopivec, Životopis I. Mamuzića /
2005 Biography of I. Mamuzić



2012. Monografija, Sadržaj: Povijest metalurgije u Hrvatskoj, Hrvatsko Metalurško društvo, Bibliografija časopisa Metalurgija 1962.-2012.; 50 godina Sveučilišnog studija Metalurgije /
2012 Monography, Content: History of the Metallurgy in Croatia, Croatian Metallurgical Society, Bibliography of Metalurgija journal 1962-2012; 50 years of the University Study of Metallurgy



2018. Jedna od 14 Uredničkih knjiga sa svih simpozija Hrvatskog metalurškog društva, 1994.-2020./
2018 One of 14 editorial books from all symposiums of Croatian Metallurgical Society, 1994-2020

SIMPOZIJI 1993.–2020. GODINE
SYMPOSIUMS 1993–2020 Y



Sastanak (svake godine, studeni, Düsseldorf, Njemačka koordinacija međunarodnih konferencija / simpozija) međunarodnih društava i europske konfederacije. Svi simpoziji Hrvatskog metalurškog društva od 1993. – 2022. god. prihvaćeni na ovim sastancima. / Meeting (every year, november, Düsseldorf, Germany coordinated International Conferences / Symposiums) of International Societies of the Steel Institute (ISSI), and European Steel Institutes Confederation (ESIC). All Symposiums of Croatian Metallurgical Society accepted in this meeting 1993 – 2022 y.

ZELJEZARKE
Godina XLII Sisak, 25. veljače Broj 810

ZNANSTVENO O DOSTIGNUĆIMA I RAZVOJU METALURGIJE

Istaknuti metalurški stručnjaci iz zemlje i inozemstva, njih više od 200, dva su dana u Zagrebu pokušavali odgovoriti na niz aktualnih pitanja obnove i razvoja metalurgije u Hrvatskoj. Na ovaj način, Metalurški fakultet iz Siska i Hrvatsko metalurško društvo kao organizatori prvog Simpozija hrvatskih metalurga, dali su i svoj prilog znanstvenom pristupu razvoju ove industrijske grane, posebice crne metalurgije, čiji status još uvijek nije u potpunosti riješen. Vrlo dobar odaziv, zanimanje stranih znanstvenika za sudjelovanje, zavidna organizacija i visoka znanstvena razina, bila su osnovna obilježja upravo održanog skupa, koji će, po svemu sudeći, postati tradicionalan.

Simpozij je ukazao na svjetska dostignuća u metalurgiji, čija se primjena očekuje i kod nas – trenutak sa otvorenja Simpozija

Snimio: M. Gajdek

1. međunarodni simpozij 1994. godine – otvorenje
First International Symposium 1994 y – opening ceremony



Obilježje 1. međunarodnog simpozija – 1993. (1994.) godine / *The Mark of 1st International Symposium – 1993 (1994)*

* Glede ratnih djelovanja u Sisku 15.-17. rujna 1993. godine simpozij odgođen te je naknadno održan u Zagrebu 16.-18. veljače 1994. godine u prostorijama Fakulteta strojarstva i brodogradnje.

It was postponed due to war operations at the time, and subsequently held in Zagreb (February 16-18, 1994) on the premises of the Faculty of Mechanical Engineering and Naval Architecture.



4. međunarodni simpozij – 2000. god. Otvaranje – Dio sudionika / *4th International Symposium – 2000 y Opening – Part of Participations*



6. međunarodni simpozij – 2004. god. Otvaranje – Pozdravno slovo prof. dr. sc. Franc Vodopivca u ime Slovenskih metalurga / *6th International Symposium – 2004 y Opening ceremony – Welcoming words by Prof. D. Sc. Franc Vodopivec in the name of Slovenia Metallurgists*



7. međunarodni simpozij – 2006. god. Otvaranje – Pozdravno slovo dipl. inž. Vitomir Živković u ime sponzora Željezare Split / *7th International Symposium – 2006 y Opening ceremony – Welcoming words by B. Sc. Vitomir Živković B. Sc. in the name of the sponsor Steelworks Split*



9. međunarodni simpozij – 2010. god. Zatvaranje simpozija – dio sudionika / *9th International Symposium – 2010 y. Closing ceremony of Symposium – part of Participants*



9. međunarodni simpozij – 2010. god. Prof. dr. sc. S. Dobatkin i prof. dr. sc. S. Nikulin u ime institucija Ruske akademije znanosti, uručuju diplomu i zlatnu medalju A. A. Bočvara predsjedniku HMD-a, akademiku I. Mamuziću / *9th International Symposium – 2010 y. Prof. D. Sc. S. Dobatkin and Prof. D. Sc. S. Nikulin in the name of Institutions of Russian academy of Science, deliver the Diploma and Gold medal of A. A. Bocvar to president of CMS Acad. I. Mamuzić*



10. međunarodni simpozij – 2012. god. promocija monografije "Metalurgija uvijek prosperitet za čovječanstvo" – autor Ilija Mamuzić / *10th International Symposium – 2012 y. Promotion of monograph "Metallurgy always prosperity for Humanity" the Author Ilija Mamuzić*
(s lijeva na desno / *set from left to right: Acad. I. Mamuzić, prof. F. Vodopivec, prof. J. Kliber, prof. I. Samardžić*



11. međunarodni simpozij – 2014. god.
Pozvana plenarna predavanja /
11th International Symposium – 2014 y. Invite Plenary lecture
Voditelji s lijeva na desno / *Chairman from left to right: prof. I. Kuraga, prof. F. Vodopivec, prof. J. Kliber*



12. međunarodni simpozij – 2016. god.
Otvaranje – dio sudionika /
12th International Symposium – 2016 y. Opening ceremony of Symposium – part of Participants



13. međunarodni simpozij – 2018. god.
Otvaranje – dio sudionika /
13th International Symposium – 2018 y. Opening ceremony of Symposium – part of Participants

OPSTOJNOST DRUŠTVA / EXISTENCE OF SOCIETY

Godišnje skupštine Hrvatskog metalurškog društva (HMD) održane svake godine od 1992.–2021.
Annual Assemblies of Croatian Metallurgical Society (CMS) holding every year from 1992–2021



Zastupnici iz Hrvatske, Slovenije, Slovačke, Češke, Poljske, Njemačke, Rusije, Ukrajine, Solaris – Šibenik, 22. lipnja 2010.
Delegate from Croatia, Slovenia, Slovakia, Czech Republic, Poland, Germany, Russia, Ukraine, Solaris – Šibenik, 22 June 2010.



2013. god. / 2013 y
Vidjeti / see: Metalurgija 53 (2014) 2, 148



2014. god. / 2014 y
Vidjeti / see: Metalurgija 54 (2015) 1, 8



2015. god. / 2015 y
Vidjeti / see: Metalurgija 55 (2016) 1, 143



2016. god. / 2016 y
Vidjeti / see: Metalurgija 57 (2018) 1-2, 5



2017. god. / 2017 y
Vidjeti / see: Metalurgija 57 (2018) 1-2, 284



2018. god. / 2018 y
Vidjeti / see: Metalurgija 57 (2018) 4, 376



2019. god. / 2019 y
Vidjeti / see: Metalurgija 59 (2020) 1, 144

Napomena: 2020. godine bila telefonski – COVID-19
Note: 2020 y were teleconferences COVID-19
Vidjeti / see: Metalurgija 59(2020)4, 589 i Metalurgija 61(2022)1-2

FINANCIJE / FINANCES



Companywall business, London,
19.11.2020. godine / November 19,
2020

Priznanje Hrvatskom metalurškom
društvu (HMD) za uspješno poslo-
vanje

Certificate to Croatian Metallurgical
Society (CMS) for successful business



Još jedan dokaz / One more of the proof

Bankovna kartica / kredit HMD-a, Privredna banka Zagreb / Banker's card / Credit of CMS, Privredna banka Zagreb

Predsjednik HMD-a od 1992 nije koristio, stanje uvijek "0" / President of CMS from 1992 did not was user, status always "0"

Suradnja u tuzemstvu i inozemstvu

Hrvatsko metalurško društvo ima izuzetno plodonosnu suradnju s nizom srodnih udruga, tvrtkama, stručnim, znanstvenim i sveučilišnim institucijama u tuzemstvu i inozemstvu.

Inozemna suradnja

Suradnja u inozemstvu odnosi se na pravne subjekte u 50 država, što je zaista rijetkost za hrvatske udruge. Suradnja se odvija na tri razine:

Svjetska razina

U organizaciji udruga Stahlinstitut VDEh i European Steel Institute Confederation (ESIC) svake godine početkom mjeseca studenog održava se u Düsseldorfu – Njemačka susret svih svjetskih udruga za čelik, te metalurških društava pod službenim nazivom “International Meeting of Steel and Metallurgical Societies”. Nazočni su zastupnici ovih udruga iz oko 50 država. Raspravlja se o rasporedu svjetskih, europskih i međunarodnih simpozija s područja djelatnosti ovih udruga, stanju metalurgije, posebice proizvodnje čelika u svijetu i pojedinim državama, perspektivama razvoja, a često i o obrazovanju stručnjaka za metalurgiju. (Vidjeti sliku str. 25)

Od 1992. kada je HMD došao na razinu države, naši zastupnici su svake godine pozivani i većinom su bili nazočni na tim susretima. Ovaj svjetski skup je uvijek raspravljao, odobravao i primao završna izvješća svih naših do sada organiziranih 14 simpozija, a već je prihvaćen 15. za 2022. godinu.

Svi sudionici su se pohvalno izražavali o organizaciji naših simpozija i podnesenim detaljnim izvješćima, uz posebno isticanje brojnosti referata na našim simpozijima (i preko 600, npr. 11. simpozij 2014. godine 689 referata).

Europska razina

Ova suradnja odnosi se uglavnom na pet ustanova:

- European Steel Institute Confederation – ESIC, u kojem je predsjednik HMD-a I. Mamuzić član Upravnog odbora, a sastanci se održavaju minimalno jedanput godišnje (prima osobne pozive od čelnika metalurških udruga)
- European Steel Federation (ESF)
- International Iron and Steel Institute (IISI)

S ovim ustanovama suradnja je i u organizaciji simpozija HMD-a.

- Central European Metallurgical Co-operation (CEMCO) (bio)
- **Europska unija**

To se odnosi na projekt Europ Aid/120977/C/SV Multi, pod nazivom “Steel Restructuring Technical Assistance for Bulgaria, Romania, Croatia and Turkey”.

Ustanova WYG-International (Engleska) nositelj je cijelog projekta, a HMD i I. Mamuzić kao glavni istraživač za Hrvatsku. Nažalost ovaj angažman uslijedio je

Cooperation in Croatia and Abroad

Croatian Metallurgical Society has an extremely productive cooperation with a number of related associations, companies, professional, scientific and university institutions in Croatia and abroad.

Cooperation Abroad

Cooperation abroad refers to legal entities in over 50 countries, which is really rare among Croatian associations. The cooperation takes place on three levels:

World level

The meeting of all of the world associations for steel, and metallurgical societies officially called “International Meeting of Steel and Metallurgical Societies” organized by associations of Stahlinstitut VDEh and European Steel Institute Confederation (ESIC) is being held every year by the beginning of November in Düsseldorf – Germany. It is attended by representatives of these associations from about 50 countries. It is discussed about the schedule of world, European and international symposiums in the activity area of these associations, about the status of metallurgy, particularly steel production in the world and individual countries, about development perspectives, and often also about education of experts for metallurgy. (see photo p. 25)

Since 1992, when CMS came to the level of the state, Croatian representatives were invited every year and mostly attended these meetings. This world meeting has always discussed about, approved of and received final reports from all of our 14 symposiums organized so far, and the 15 for 2022 y symposium has been already accepted.

All participants expressed their appreciation regarding organization of Croatian symposiums and detailed reports submitted, especially pointing out the large number of reports at Croatian symposiums (even over 600, fi. – 11th Symposium 2014 y 689 contributions).

European level

This cooperation refers mostly to five institutions:

- European Steel Institute Confederation – ESIC, where the CMS president I. Mamuzić is a member of the Management Board, and meetings are being held at least once a year.
- European Steel Federation (ESF)
- International Iron and Steel Institute (IISI)

These institutions participate also in the organization of CMS symposiums.

- Central European Metallurgical Co-operation (CEMCO) (was)
- **European Union**

This refers to the project Europ Aid/120977/C/SV Multi, called “Steel Restructuring Technical Assistance for Bulgaria, Romania, Croatia and Turkey”.

The institution of WYG-International (England) is the owner of the entire project, and CMS and I. Mamuzić as the major researcher for Croatia. Unfortunately, this

tek krajem 2006. kad se samo može utvrditi posrnulost hrvatske metalurgije, a i poziv je došao iz inozemstva, uz našu ograničenu mogućnost utjecaja i odlučivanja.

Nacionalna (bilateralna) razina

Ova suradnja odnosi se na jednu ili čak više raznih sadržaja djelatnosti ustanova iz 50-ak država. Navode se samo važnije koje su dosad sudjelovale, a i sada su sudjelovale u organizaciji 14. međunarodnog simpozija “Materijali i metalurgija” Šibenik, 2020. Neke od navedenih ustanova su i izravne članice HMD-a, te odgovorno sudjeluju u radu HMD-a; **nazivi institucija samo na engleskom jeziku**

PATRONS / POKROVITELJI

- European Steel Institute Confederation (ESIC)
- European Steel Federation (ESF)
- World Steel Association (WSA)
- Ministry of Science, Education and Sport Republic of Croatia
- Croatian Chamber of Economy
- Sisak – Moslavina County
- University of Rijeka, Technical Faculty
- University of Split, Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture

CO-ORGANIZERS / SUORGANIZATORI

- Academy of Engineering Science of Ukraine
- University of Mining and Metallurgy, Faculty of Foundry Engineering, Krakow
- University of Ljubljana, Faculty of Natural Science and Engineering
- Baikov Institute of Metallurgy and Materials Science Russian Academy of Sciences, Moscow
- University of Zenica, Faculty for Metallurgy and Materials Science, Zenica
- National Metallurgical Academy of Ukraine
- Technical University of Košice, Faculty of Metallurgy
- Technical University of Košice, Faculty of Mechanical Engineering
- Technical University of Košice, Berg Faculty
- University of Zagreb, Faculty of Mechanical Engineering and Naval Architecture
- University of Osijek, Faculty of Mechanical Engineering, Slavonski Brod
- VŠB Technical University of Ostrava
- Institute of Materials Research of the Slovak Academy of Sciences in Košice
- Steel Works Split
- Moscow State Steel and Alloys Institute

engagement happened to be as late as by the end of 2006 when it was only possible to establish that Croatian metallurgy has stumbled, and the invitation came from abroad, with our limited possibility to exert influence and make decisions.

National (bilateral) level

This cooperation refers to one or more various activities of institutions from 50 states. Let us mention only the major ones that have participated so far and participated now in the organization of the 14th International symposium “Materials and Metallurgy” Šibenik, 2020. Some of these institutions are also direct members of CMS, and they participate in the work of CMS with responsibility. **Names of Institutions only in English language.**

- Physico-Technical Institute National Academie of Science, Minsk
- Politehnica University of Bucharest
- Institute of Metallurgy “Kemal Kapetanović”, Zenica
- Pisarenko Institute of Problems of Strength NASU, Kiev
- Dnepropetrovsk National University
- Czech Steel Federation
- Slovak University of Technology in Bratislava, Faculty of Materials Science and Technology
- Vatrostalna Sisak d.o.o.
- TLM – TPP (Tvornica prešanih proizvoda), Croatia
- High Technical School – Bjelovar
- University of Applied Sciences, Slavonski Brod
- University of Applied Sciences, Vukovar
- University of Applied Sciences, Varaždin
- Croatian Chamber of Economy County Chamber Šibenik
- Institute of Metals and Technology, Ljubljana

CO-OPERATION WITH ORGANIZATIONS / SURADNIČNE INSTITUCIJE

- Stahlinstitut VDEh, Germany
- ATS – Association Technique de la Siderurgie Francaise
- CENIM – Centro National de Investigaciones Metalurgicas Spain
- ChSM – The Chinese Society for Metals China
- CRM – Centre de Recherches Metallurgiques Belgium
- ASMET – The Austrian Society for Metallurgy and Materials
- American Iron and Steel Institute, USA
- ISIJ – The Iron and Steel Institute of Japan
- JERN – Jernkontoret, Sweden
- SRM Romanian Society for Metallurgy
- SITPH – Association of Polish Metallurgical Engineers

- HOOGOVENS, The Netherlands
- SHS – Slovak Metallurgical Society
- Sociedade Portuguesa de Materiais
- MVAE – Association of Hungarian Steel Industry
- Steel Federation of the Czech Republic
- Union of Bulgarian Metallurgists
- IBS – Instituto Brasileiro de Siderurgia
- AIM – Associazione Italiana di Metallurgia
- The Japan Institute of Metals
- Egyptian Association for Industrial Development
- Instituto Argentino de Siderurgia
- Associacao Brasileira de Metalurgia e Materiais
- ILAFA – Instituto Latinoamericano del ferroy el Acero, Chile
- Société Française de Métallurgie et de Matériaux
- The Institut of Materials, Minerals and Mining, England
- P. T. Krakatau Steel, Indonesia
- KOSA – Korea Iron and Steel Association
- Amsteel Mills Sdn Bhd, Malaysia
- Philippine Iron & Steel Institute
- NatSteel Asia (S) Pte Ltd, Singapur
- The South African Institute of Mining and Metallurgy
- Iron and Steel Institute of Thailand
- Vietnam Steel Corporation

S mnogim institucijama sačinjeni su i Dogovori o suradnji. Kao ilustracija daje se djelić iz teksta “DRAFT AGREEMENT (Minutes of meeting)” između University of Massachusetts, SAD i HMD-a (samo na engleskom jeziku – izvorno) – citat:

“On April 24th 2000, Professor Mamuzic, President of the Metallurgical Society of Croatia and Dr. Sherif Elwakil, Dean of the College of Engineering at the University of Massachusetts Dartmouth met to discuss possible collaboration in different areas and agreed that there is a good potential in areas of Materials Science and Engineering, Environmental Protection, as well as advanced modern science and engineering.” Etc.

Suradnja u Hrvatskoj

I ova suradnja se odvija u više putokaza:

- Povodom 120. obljetnice, HIS 1998. izdao knjigu “Uspostava Hrvatskog inženjerskog saveza” u kojoj je I. Mamuzić napisao poglavlje o HMD-u (str. 225-243). Iznovice povodom 125. obljetnice HIS-a 2003 god.. HIS je izdao SPOMEN-KNJIGU (HIS 1878.-2003.) I. Mamuzić je napisao poglavlje o prošlosti, sadašnjosti i budućnosti hrvatske metalurgije (str. 293-308).
- Navodi se da je tuzemna suradnja s više srodnih udruuga tehničke struke bila u razmjenama časopisa, ili mišljenja, zajedničkim strukovnim akcijama itd.:
 - Hrvatsko društvo kemijskih inženjera i tehnologa
 - Hrvatsko društvo za goriva i maziva
 - Hrvatsko društvo za mehaniku
 - Hrvatsko društvo za tehniku zavarivanja
 - Hrvatsko kemijsko društvo
 - Hrvatska udruga za ljevarstvo
 - Udruga hrvatskih rudarskih inženjera
 - Hrvatski strojarški i brodograđevni inženjerski savez itd.
- Hrvatsko metalurško društvo imalo dobru suradnju i sa znanstveno-nastavnim ustanovama sa tri hrvatska sveučilišta:

Agreements on Cooperation are made with many institutions. As an illustration, please refer to a part of the text “DRAFT AGREEMENT (minutes of meeting)” between University of Massachusetts, USA and CMS (original only in English language) quote:

“On April 24th 2000, Professor Mamuzic, President of the Metallurgical Society of Croatia and Dr. Sherif Elwakil, Dean of the College of Engineering at the University of Massachusetts Dartmouth met to discuss possible collaboration in different areas and agreed that there is a good potential in areas of Materials Science and Engineering, Environmental Protection, as well as advanced modern science and engineering.” Etc.

Cooperation in Croatia

Cooperation in Croatia This cooperation develops in several directions as well:

- As a member of Croatian Engineers Association (CEA), CMS was being invited to the Annual Assemblies of CEA, and upon invitation it participates in actions of CEA organized from time to time. Thus, on the occasion of 120th anniversary of CEA in 1998, it published a book “Establishment of Croatian Engineers Association” where I. Mamuzić wrote a chapter on CMS (p. 225-243). Again, on the occasion of 125th anniversary of CEA in 2003, CEA published the MEMORIAL BOOK (CEA 1878-2003) in which I. Mamuzić wrote a chapter on the past, present and future of the Croatian metallurgy (p. 293-308).
- It is mentioned that the cooperation in Croatia with several related associations of technical profession was in exchange of magazines, or opinions, joint professional actions etc.:
 - Croatian Society of Chemical Engineers and Technologists
 - Croatian Society for Fuels and Lubricants
 - Croatian Society for Mechanics
 - Croatian Society for Welding Technique
 - Croatian Chemical Society
 - Croatian Foundry Association
 - Association of Croatian Mining Engineers

- Sveučilište u Zagrebu, Fakultet strojarstva i brodogradnje – Zagreb
- Sveučilište u Rijeci, Tehnički fakultet Rijeka
- Sveučilište u Slavonski Brod, Strojarski fakultet Slavonski Brod

Sva tri fakulteta sudjeluju u organizaciji simpozija, njihovi znanstvenici su članovi međunarodnog Uredničkog odbora časopisa *Metalurgija*, sudjeluju u radu tijela HMD-a suglasno Statutu itd.

Mnoge znanstvene ustanove kao članice HMD-a iz inozemstva ili tuzemstva imaju za to i osobni znanstveni (izbor djelatnika u odgovarajuća znanstvena i nastavna zvanja i/ili i za obranu svojih projekata) ali i uz ekonomske pokazatelje. Sadašnji aktivisti HMD-a su ponosni i sretni svojim radom, jer postignuti rezultati na svjetskoj razini opravdavaju golem uloženi trud, što uz ljubav prema struci je i želja da metalurgija kao struka u Hrvatskoj ne doživi potpuni slom.

– Suradnja sa metalurškim tvrtkama

U Hrvatskoj bila:

- Željezara Split – prestala sa proizvodnjom 2009.
- Vatrostalna Sisak
- Željezara Sisak – 2012. god. obustavljena sva proizvodnja
- Tvornica lakih metala (TLM), Šibenik – privatizirana od slovenskog Impola)

Tvrtke su bile dugogodišnje članice HMD-a suradnja je bila dobra, a tvrtke su imale zastupnike u Upravnom odboru HMD-a i ovisno o broju članova i do 4 zastupnika na godišnjoj skupštini HMD-a. Na svim simpozijima su bili suorganizatori. Sve prestalo.

POTEŠKOĆE I OGRANIČENJA

Nažalost, na svom putu od lokalne Sisačke razine do istaknutih postignuća u svijetu, npr. za 13. simpozij «Materiali i metalurgija» 2018. prijavljeno 561 referata a sudjeluje 50 država, te uključivanja časopisa *Metalurgija* u više od 30-ak svjetskih baza podataka, čelnici HMD-a i Uredništvo časopisa je prolazilo kroz velike poteškoće.

U međuvremenu je HMD-e postalo jedno od prestižnijih društava u svijetu, kakovo nemaju ni jedna država sa područja bivše države, na razini je najrazvijenijih europskih i svjetskih država. To uvjetuje suradnja sa 70-ak raznih institucija na 5 kontinenta.

Ovi uspjesi i postignuti rezultati HMD-a i na svjetskoj razini, umjesto priznanja i zahvalnosti za skrb i opstojnost metalurške struke i metalurgije u Hrvatskoj, doveli su i do poteškoća u djelatnosti. Njih su proizročili čelnici i ustanova od kojih bi se to najmanje očekivalo. To su pojedini čelnici i ustanova Metalurški fakultet Sveučilišta u Zagrebu (MF).

Upravo obrnuto, trebali su od svih drugih dati najveću podporu. Fakultet, kao i časopis, a i Društvo HMD-a,

- Croatian Union of Mechanical Engineers and Naval Architects
- Croatian Metallurgical Society has a good cooperation also with scientific-educational institutions with three Croatian universities:
 - University in Zagreb, Faculty of Mechanical Engineering and Naval Architecture – Zagreb
 - University in Rijeka, Technical Faculty Rijeka
 - University in Slavonski Brod, Faculty of Mechanical Engineering, Slavonski Brod

All three faculties have participate in symposiums organization, their scientists are members of the international Editorial Board of the Journal *Metalurgija*, they participate in the work of CMS bodies pursuant to the Statute of CMS etc.

Many scientific institutions as members of CMS from abroad or Croatia have their personal scientific (election of employees into adequate scientific and educational professions and/or for defence of their projects) but in addition to economic indicators.

Current activists of CMS are proud of and happy with their work, because the results achieved on the world level justify huge efforts made; they love their profession and wish for metallurgy as a profession in Croatia not to experience the total collapse.

– Cooperation with metallurgical companies

In Croatia were:

- Steelworks Split / stopping of production 2009
- Vatrostalna Sisak
- Steelworks Sisak / In 2012 y stopped all productions)
- Light Metal Factory (LMF) Šibenik, (at privatization by Impol – Slovenia)

Companies, was members of CMS for many years now, the cooperation was good, and the companies had their representatives in the Management Board of CMS and depending on the number of member they have up to 4 representatives at the annual assembly of CMS. They were co-organizers at all the symposiums. All is stop.

DIFFICULTIES AND CONSTRAINTS

Unfortunately, on its way from the local Sisak level to its major achievements in the world, e.g. for 13 symposium «Materials and Metallurgy» 2018 y. 561 papers were submitted, with 50 countries taking part, exemplified by its inclusion in 30 – odd international databases of the Journal of *Metalurgija*, heads of CMS, and its Editorial Board of the Journal has been encountering a series of problems.

Meanwhile the CMS became one of the leading societies of its kind in the world, non – existent in any other state arisen from the former Yugoslavia, comparable to those in the advanced industrialized countries. As a result, the CMS cooperates with 70 – odd various institutions worldwide.

These achievements by CMS (Croatian Metallurgical Society), including those at international level, in-

su jedini iz znanstvenog polja metalurgije, za razliku od ostalih znanstvenih polja gdje postoji više fakulteta, više časopisa, više Društva itd. (npr.; strojarstvo, kemija, promet, fizika, ekonomija itd.). Svi ti Fakulteti i njihovi čelnici daju bezrezervnu podršku ali i novčanu podršku za rad ovih udruga i časopisa kroz članarinu, donaciju i slično.

U vrijeme kad je metalurško društvo utemeljeno na razini Hrvatske države (06.04.1992. god.) izabrani članovi Upravnog odbora HMD-a, pokretač ove akcije I. Mamuzić, predsjednik Društva metalurških, rudarskih, geoloških inženjera i tehničara Sisak te tajnik tog Društva V. Ferketić, bili su djelatnici MF-a. I. Mamuzić izabrani predsjednik HMD-a bio je i redoviti profesor i dekan, a izabrani tajnik HMD-a V. Ferketić viši predavač i tajnik MF-a. (Napomena: Na osnivačkoj Skupštini HMD-a u Sisku u prostoriji DIT Sisak udaljenoj 2 km od MF-a bili su nazočni zastupnici od Splita do Slavonskog Broda. Sa MF-a samo ova dvojica).

Poslije utemeljenja HMD-a, MF je bio član HMD-a, na jednak način kao i s drugim ustanovama organizirani su 1. i 2. međunarodni simpoziji "Materijali i metalurgija" a pokretač simpozija je iznovice bio I. Mamuzić, a sjedište uredništva časopisa Metalurgija bilo je u prostorijama MF-a. Svi djelatnici MF-a su bili članovi Godišnjih skupština HMD-a, a 2 su člana u Upravnom odboru. Svi djelatnici izabrani u odgovarajuće zvanje dobivali su svaki broj časopisa Metalurgija, sudjelovali na simpozijima HMD-a bez pristojbe itd. Sve do kraja mandata dekana I. Mamuzića (1990.-1997.) nije bilo prigovora od strane MF-a kao ni od bilo koje ustanove u Hrvatskoj ili svijetu. Nažalost izborom za dekana MF-a prof. dr. sc. A. Markotića 1997. god., odmah je uslijedio prigovor o netransparentnosti i suradnje HMD-a prema MF-u, uz zahtjev za preuzimanje dijela djelatnosti HMD-a, koje su i u Statutu HMD-a: organizacija simpozija i Uredništvo časopisa Metalurgija. Ultimati su nastavljeni te je došlo i do prestanka članstva MF-a u HMD-u.

Mada je ovaj prigovor došao samo od jedne od stotinjak suradničkih organizacija, čelništvo HMD-a je vrlo ozbiljno shvatilo poruku o netransparentnosti, odnosno prijenosu svojih djelatnosti na MF. Ovo je prešedan i nijedan hrvatski fakultet to nije tražio od svojih udruga, neovisno jesu li aktivne ili ne. Sve je prosljedeće čak i na Izbornu skupštinu HMD-a (1999.) u Slavonском Brodu i gdje se glasovalo za novo čelništvo u tije-lima HMD-a.

Puč djelatnika MF-a A. Markotića i F. Unkića na ovoj izbornoj skupštini je propao kao i ponovljeni na sjednici Upravnog odbora HMD-a u Opatiji 2000. god.

Izborom za dekane MF-a prof. dr. sc. J. Črnka (2001.-2005.) i prof. dr. sc. P. Matkovića (2005.-2009.) situacije je ostala nepromjenjena glede podpore u djelatnosti časopisa kao i HMD-a. Mada je jednom i drugom ponuđeno kao znanstvenicima biti članovima Me-

stead of acknowledgements and thanks for the care shown for the survival of metallurgy in Croatia, have led to difficulties encountered by CMS in its activities.

Problems, caused by some executive individuals and institutions least expected, those actually to provide maximum assistance. They include some persons from the Zagreb University Faculty of Metallurgy (FM).

The Faculty, as well as the Journal and the Croatian Metallurgical Society (CMS), are the sole representatives of the scientific field of metallurgy in the country, unlike the other scientific fields that are supported by more faculties, more journals, more societies, etc. (such as mechanical engineering, chemistry, traffic, physics, economy etc.). All these faculties and their managers give unreserved support and funding for the work of such societies and journals through membership fees, grants and the like.

At the time when metallurgical society was founded on the level of the Croatian state by April, 6, 1992, elected members of the Management Board of CMS, initiator of this action, President of Society of Metallurgical, Mining, and Geological Engineers and Technician Sisak. I. Mamuzić and the secretary of this Society V. Ferketić were employees of FM Sisak. I. Mamuzić, elected president of CMS was the full professor and dean of FM, and elected secretary of CMS V. Ferketić was a senior lecturer and secretary of FM.

(Note: At the foundation assembly of CMS – Sisak, at the premise SET Sisak, only 2 km from MF, was Participants from Split till SlavonSKI Brod. From FM only this two).

After the foundation of CMS FM was a member of CMS, equally as with other institutions there were organized the 1st and 2nd International Symposium "Materials and Metallurgy", and the founder of Symposium was again I. Mamuzić, the headquarters of the editorial board of the Journal Metalurgija were in the premises of FM etc. All the FM employees were members of Annual Assemblies of CMS, and 2 members are in the Management Board. All the employees selected into an adequate profession were receiving every issue of the Journal Metalurgija, participated in the symposium of CMS without any fee etc. All the way through to the end of the dean's mandate I. Mamuzić (1990-1997) there was no complaint by FM or any other institution in Croatia or in the world.

Upon electing prof. D. Sc. Anto Markotić (1997) the dean of FM, there was immediately filed a complaint on non – transparency of cooperation with CMS and a request to take over the activity of CMS contained in the Statute of society of CMS: organization of symposium and editing the Journal of Metalurgija. Ultimatums continued and after all, FM stopped the membership in CMS.

Although this complaint was filed by only one out of about hundred cooperative organizations, the leadership of CMS took very seriously this message on non – transparency i.e. on transfer of its activities to FM. This was a precedent and none of the Croatian faculties has requested this from their associations, independent of their being

đunarodnog Uredničkog odbora časopisa, te MF-u u članstvo HMD-u, odbili su, jer po njihovim navodima, Kolegij MF-a, na kojem upravo oni kao članci predsjedavaju, nije zainteresiran za suradnju. Pogotovo ako se radi i o najmanjoj novčanoj podpori a koji većina Fakulteta hrvatskih Sveučilišta daje časopisima i Udrugama iz svog znanstvenog polja. Izborom za dekana poslije prof. F. Unkića, prof. L. Lazića, prof. Z. Z. Brodarac i do 2022. godine nema suradnje.

To su i teškoće u novčanoj podpori za djelatnost društva i posebno tisak časopisa. Do 1990. god. bivši SIZ-I (za znanost) dostavljao je podporu i do 50 000 DM godišnje za časopis Metalurgija. Tu treba dodati i podporu od jakog metalurškog kompleksa (npr. Željezara Sisak), posebice logističku podporu Instituta za metalurgiju Sisak i MF-a do 1997. god.

Nažalost, glede rata u Hrvatskoj, dolazi do jakog urušavanja proizvodnje hrvatske metalurgije. Kolaps metalurške proizvodnje u Hrvatskoj, ima veliki utjecaj i na djelatnost HMD-a. Razumljivo od takovog gospodarstva nema nikakove podpore.

Ministarstvo znanosti i obrazovanja (MZO) glede teže financijske situacije u državi, smanjilo je podpore za tisak časopisa Metalurgija, i u 2020. god. bila samo 10.000 eura, a za rad Društva 3.000 eura.

Sve ove velike i izuzetno redovite aktivnosti (povezivanje, održavanje djelatnosti HMD-a, simpoziji, suradnja s velikim brojem znanstvenih i stručnih institucija u inozemstvu i tuzemstvu), članovi HMD-a posebice predsjednik I. Mamuzić, koji je ujedno i glavni i odgovorni urednik časopisa Metalurgija od 1985. god., kao i Urednički odbor časopisa, Upravni odbor, predsjednik i tajnik Društva, obnašaju bez stalnih zaposlenika na potpuno dragovoljačkom temelju tj. bez naknade ili honorara. Dokaz je i u podatku da od podizanja HMD-a na državnu razinu 1992. do sada – 2021. nikad im nije isplaćen niti jedan honorar.

OPSTANAK METALURGIJE U HRVATSKOJ

Postavlja se pitanje kako je došlo do kolapsa hrvatske metalurgije, a HMD-e ima u svojim redovima priznate metalurške znanstvenike i stručnjake iz tuzemstva i inozemstva i tko je za to odgovoran i sada ali i u budućnosti? Odgovor je jednostavan.

Za razliku od drugih tranzicijskih država koje su u metalurgiji prolazile iste poteškoće, ali su za prerestrukturiranje uzele najjače stručnjake (npr. u Sloveniji tim stručnjaka predvodio je prof. dr. sc. Franc Vodopivec i slovenska metalurgija danas je 40 % jača od vremena do 1990. i vrlo rentabilna), u Hrvatskoj to nije bio slučaj. Nikada poslije 1990. državna tijela nisu zatražila niti mišljenje, niti pomoć, niti suradnju od HMD-a.

active or not. Everything was forwarded even to the Election Assembly of CMS (in 1999 in Slavonski Brod) where the new leadership in CMS s bodies was voted for.

The coup of employes of FM, A. Markotić and F. Unkić in this Election Assembly failed, as again in the Meeting of Management Board of CMS, Opatija 2000, also.

The election of Prof. Dr. Črnko (2001-2005) and Prof. Dr. P. Matković (2005-2009) as FM Deans has left the situation unchanged in terms of support to the activities of the Journal and the CMS. Both scientists were offered membership of the International Editorial Board of Journal, also the membership in CMS, but they refused the offer because, as said, the FM s teaching board, chaired by them as senior staff, was not interested to cooperate. Especially if it means even a minimal financial assistance that most faculties of the Croatian universities provide for the journals and associations from their domain.

The election after for as dean prof. F. Unkić, prof. L. Lazić, prof. Z. Z. Brodarac till 2022 have not cooperation.

Financing of the Activity of Society and separately of the Journal remains a cause of concern. Until 1990 the former government agency for science SIZ – I was remitting subsidies in the amount of up to 50 000 German Marks for Metalurgija Journal. Add to it the support from the powerful metallurgic complex at that time (Sisak Steelworks, for example), especially the logistic support offered by the Sisak Institute of Metallurgy and Faculty of metallurgy (FM) until 1997 y. Unfortunately, the war in Croatia led to a collapse of metallurgical production in Croatia. The collapse if metallurgical production in Croatia have great the influence on the activity of the CMS. It goes without saying that from an industry like this you cannot expect any support.

Ministry of Science and Education (MSE) reduced its support to the Journal due to the financial situation in the country (only ≈ Eur 10 000 in 2020 y), are for activities of society 3 000 Eur.

All of these comprehensive and extremely regular activities (connections, maintenance of the activity of CMS, symposium, cooperation with a large number of scientific and professional institutions and companies abroad and in Croatia) are being perform by the members of CMS, especially the president I. Mamuzić, who also performs the function of the editor-in-chief of the Journal Metalurgija since 1985., like editorial board of the Journal, management board the president and the secretary of Society without any permanent employees, on a completely voluntary basis i.e. without any compensational or honorarium. The evidence lies in a datum that since CMS was raised up to the national level in 1992 until now – 2021 there has never been paid one honorarium.

EXISTENCE OF METALLURGY IN CROATIA

There ia a question raised about how the Croatian metallurgy was brought to collapse, and CMS have recognized metallurgical scientists and experts from Croatia and the abroad among themselves and who is responsible for that as much as now as in the future, too?

U prvom poglavlju Monografije “9000 godina u svijetu, a 6000 metalurgije na tlu Hrvatske” (Hrvatsko metalurško društvo, Zagreb 2012), dani su prikazi nastojanja članova HMD-a, kao i nekoliko drugih stručnjaka u težnji opstanka hrvatske metalurgije.

Sada se daje samo tekst prof. F. Vodopivca “5.4. opstanak metalurgije u Hrvatskoj” objavljen u Metalurgiji 49 (2010) 3, 252-253 o višegodišnjim zalaganjima predsjednika HMD-a I. Mamuzića u tom putokazu (citat):

“Neiscrpu energiju tijekom dugogodišnjeg rada pokazao je zalaganjem za opstojnost i razvitak metalurgije u Hrvatskoj. Napisao je niz članaka, dao više izjava na radio postajama, a i u tiskovinama. Tako se 1988. god. založio za izgradnju nove Valjaonice bešavnih cijevi u Željezari Sisak (“I kompjutori i cijevi”), u novinama Danas 7 (1988.) 332, 28-29. Jasno je upozorio na sve teže poslovanje MK Željezara Sisak i mogućnost perspektivnog razvoja u radu: Razmišljanje – Perspektivni razvoj MK Željezara Sisak 1990. god. Tu je i članak “Tehnološki razvitak u Hrvatskoj: ograničenja i perspektive – primjer metalurgije” sa znanstveno – stručno – poslovnog skupa Ministarstva znanosti i tehnologije, Brtonigla 1994. Treba istaći i članak “Presporo do strateške odluke” Večernji list, 08. siječnja 1996. Uvijek se jednako zalagao za jaku industriju u Hrvatskoj gdje bi metalurgija imala važno mjesto (vidjeti: “Bez jake industrije Hrvatska nema budućnosti” – Slobodna Dalmacija, 29. srpnja 2002.)” – završen citat.

Nažalost, njegovi argumenti da bez jake industrije Hrvatska nema budućnosti, nisu naišli na razumijevanje u političkim i ekonomskim krugovima. Rezultat: nema sada proizvodnje čelika u Hrvatskoj.

Dok su razvijene industrijske države restrukturirale svoju metalurgiju do 1983. god., države u tranziciji do 1997. god., u Hrvatskoj je metalurgiji ostalo izuzetno teško i složeno stanje: uz zatvaranje više tvrtki, stalne gubitke u preostalim tvrtkama, neuspjelim privatizacijama, ponuđeno je i preseljenje čeličane iz Splita u Sisak. Glede toga Ilija Mamuzić je dao intervju Dnevniku, 10. prosinca 2004. “Spajanje željezara upropastit će Split, a neće spasiti Sisak”.

To su intervjui: Šibenskom listu (Broj 2217 od 01. srpnja 2006.) “Metalurgija je neprofitna jedino u Hrvatskoj”; Slobodna Dalmacija (24. lipnja 2008) “Svaka treća tona čelika iz Kine”; Vjesnik (16. srpnja 2008) “Enormni porast proizvodnje čelika u svijetu” i Slobodna Dalmacija (16. srpnja 2008) “Slom metalurgije / Država je spiskala milijardu dolara i uništila cijelu industrijsku granu”.

Daljnja razmišljanja o stanju hrvatske metalurgije dao je u intervjuu časopisu “Inovacije, razvoj, tehnologija – IRT 3000” ožujak 2009. u tekstu – Akademik Ilija Mamuzić prvi čovjek hrvatske metalurgije i predsjednik Hrvatskog metalurškog društva, “55. obljetnica utemeljenja Hrvatskog metalurškog društva” (završen citat F. Vodopivca).

The answer is a simple one.

Unlike other transition countries that were undergoing the same difficulties in metallurgy, but took the strongest expert for restructuring (e.g. a team of experts in Slovenia was led by prof. Franc Vodopivec, PhD and Slovenian metallurgy is even 40 % stronger today than it was in the times until 1990 and it is very economical), this was not the case in Croatia. After 1990, the state authorities have never asked for either an opinion, or help, or cooperation from CMS.

In first chapter of Monograph, “9,000 years of metallurgy in the world and 6,000 on Croatian soil” (Croatian Metallurgical Society, Zagreb 2012), gives an account of the efforts put by CMS members and some other experts to save metallurgy in Croatia.

Now only the text by Prof. F. Vodopivec, “5.4 Survival of metallurgy in Croatia” is published in Metalurgija 49 (2011) 3, 252 – 253: about many years of dedicated work by I. Mamuzić on that path (quote):

“During a number of years dr I. Mamuzić has demonstrated an inexhaustible energy for existence and development of metallurgy in Croatia. He authored a number of articles, gave several public declarations in radio emissions and in daylys. In 1988 he supported the building of a new rolling mill for seamless tubes in Steelworks Sisak the article entitled “Computers and tubes” printed in the weekly Danas 7 (1988) 332, 28-29. He called the attention on the difficult economic position of Steelworks Sisak and discussed the development possibilities in the article “Considerations on the perspective of development for Steelworks Sisak” in 1990. In the communication “Technological development in Croatia, limits and perspective – case of metallurgy” on the economic scientific conference organised by the Ministry of science and technology in Brtonigla in 1994 he supported the idea of development of strong metallurgy in Croatia. The article “To slow in strategic decisions” in the daily Večernji list, January 08 th 1996 should not be forgotten, also. He always supported the idea of a strong industry in Croatia with an important place for metallurgy, see the article “Without strong industry there is no future for Croatia” in the daily Slobodna Dalmacija of July 29 th 2002.” (unquote)

Unfortunately, his arguments did not find support in the political and economic sphere. The consequence is the much greater decrease of production of steel in Croatia than in other transition countries. While, in developed countries metallurgy was restructured up to approximately 1983 and in transition countries up to 1996, the metallurgy in Croatia found himself in a complicated and difficult position, as some companies were closed up and others operated with constant losses. The success privatisation process was poor and it was even proposed to move the steel plant from Sisak to Split. With relation to this idea I. Mamuzić gave an interview to the daily Dnevniku (Daily) on December 10 th 2004 “The joining of Steelworks will bring to ruin Split and will not save Sisak”.

In the interviews he explained the personal opinion on the problem of metallurgy industry, f. i.: Šibenski list, Nr.

Napomena: I. Mamuzić je i poslije dao više intervjuja sve vidjeti Metalurgija 61 (2022), 1-4.

Početak 2011. god. prestala je proizvodnja u Željezari Split. Dotadašnji vlasnik Zlomrex se povukao. Glede daljnje borbe za opstojnost i Željezare Split, dao je intervju Slobodnoj Dalmaciji objavljen 21.06.2009. god. Sam naslov dovoljno govori o novonastaloj situaciji “Krivo je neznanje, sve željezare u svijetu u plusu, Poljaci u splitskoj proizveli gubitak”.

Jednako tako treba navesti intervju Slobodnoj Dalmaciji, objavljen 28.06.2010. god., pod naslovom “O agoniji Splitske željezare koja predugo traje; Akademik Ilija Mamuzić o željezari: Na uvozu čelika netko mlati velike pare”.

U intervju je dao i osvrt na stanje u CMC (bivša Željezara Sisak).

Višegodišnja srkb za opstojnost hrvatske metalurgije iz novice za Željezaru Split, dana je i televiziji, kanal 5 – Split 11.10.2011. god., a može se izčitati i iz intervjuja časopisu Lider 14. listopada 2011. god. citat “Kapaciteti Željezare Split bili bi dovoljni za potreba cijele Hrvatske”, citat “cijelokupna metalurška proizvodnja je pala na 9,2 % prijeratne proizvodnje”.

Treba navesti i važan podatak još iz 2004. god. sa Godišnje skupštine HMD-a, kada je upućen zahtjev / zamolba premijeru I. Sanaderu za uključivanje stručnjaka HMD-a u programe restrukturiranja hrvatske metalurgije. Odgovor nikad nije dobiven, a sve je nastavljeno po starom.

Jedino je imenovani A. Markotić “ad personam” i po pozivu državnih tijela bio uključen i vodeći u svim projalim projektima restrukturiranja hrvatske metalurgije.

Kao stručnjak za proizvodnju željeza – visoko pećarstvo je uvijek bio glavni savjetnik za raznoliku metaluršku proizvodnju, osim za svoju specijalnost – proizvodnju gvožđa / visoke peći. On je uvijek osobno bio pozvan i angažiran u ime državnih tijela. Nekome je bila potrebna titula, podobnost, poslušnost, a ne znanje.

Nažalost, HMD nikad nije dobio upit niti je zatraženo njegovo strukovno mišljenje od službenih tijela Hrvatske glede prerestrukturiranja i budućnosti hrvatske metalurgije. HMD je imao mogućnost biti samo promatrač propasti hrvatske metalurgije.

ZAKLJUČAK

70. obljetnicu utemeljenja 1952.-2022. Hrvatsko metalurško društvo obilježava bez metalurške proizvodnje u Hrvatskoj.

Hrvatsko metalurško društvo, utemeljeno je iz Društva inženjera i tehničara Željezare Sisak (DITŽS) – 1952. god., i Društva metalurških, rudarskih i geoloških inženjera i tehničara Sisak (DMRGIT Sisak) 1978. god., te odgovorno za razvitak i budućnost Hrvatske, a sa svrhom da se doprinos njenom napretku temelji na promicanju metalurgije. Iz novice se ponavlja da HMD-e nikad

2217 from July 1 th 2006, title 2 “Metallurgy is not profitable only in Croatia”; Slobodna Dalmacija, July 24 th 2008 “Every third ton of steel from China”; Vjesnik, July 16 th 2008 “Enormus growth of steel production in the World” and Slobodna Dalmacija, July 16 th 2008 “Breakdown of metallurgy / The country has spent 1 billion of USD and has destroyed the whole industrial branch”.

He expressed further considerations on the state of Croatian metallurgy in an interview to the journal “Innovation, development, technology – IRT 3000” in March 2009, where He was introduced as “Acad. I. Mamuzić, first person of the Croatian metallurgy and president of the Croatian metallurgical society” in the article “55 th anniversary of the establishment of the Croatian metallurgical society” (unquote of F. Vodopivec).

Note: I. Mamuzić also gave a number of subsequent interviews all see in Metalurgija 61 (2022), 1-4.

In early 2011 y Split Steelworks ceased to work. The previous owner, Zlomrex, withdrew. About the struggle for the survival of the Split Steelworks I. Mamuzić gave an interview to Slobodna Dalmacija daily of 21 June 2009, the subtitle of which well illustrates the new situation: “Fault lies with incompetence, all Steelworks in the world are operating with profit. At the Split Steelworks, however, the Poles have created a loss”.

What should also be mentioned is the interview given by I. Mamuzić to Slobodna Dalmacija of 28 June 2010, entitled “On steel imports somebody is making big money”.

The interview also contains a comment on the situation in CMC (former Sisak Steelworks).

The years of care taken of the survival of Croatian metallurgy, the Split Steelworks in particular, were commented on TV Channel 5 – Split, 11 October 2011, as well as in an interview published in Lider magazine of 14 October 2011, quote: “The capacity of Split Steelworks would suffice for the whole country”, and “The whole metallurgical production has shrunk to 9,2 % of what it was before the war”.

Also included should be the important fact that back in 2004 a request was sent from CMS Annual Assembly to the then prime minister Sanader to include CMS experts in the programmes to restructure Croatian metallurgy. The answer has never been received and all has remained the same.

It was only the appointed prof. Anto Markotić, PhD, who was leading “ad personam” and upon invitation of the state authorities in a number of the Croatian metallurgy restructuring unsuccessful.

As an expert for high furnace operation he was always a chief advisor for various metallurgical production, except for his specialty – pig iron production / blast furnaces. He was always personally invited and engaged on behalf of the state authorities. Someone needed a title, political credentials, obedience, and not knowledge (see chapter 1).

Unfortunately, CMS has never received an inquiry nor was its professional opinion requested by official bodies of Croatia regarding restructuring and future of

nije dobio upit niti zatraženo njegovo strukovno mišljenje od službenih tijela Hrvatske glede prestrukturiranja metalurgije. HMD-e je imao mogućnost biti samo promatrač propasti hrvatske metalurgije.

Preostale aktivnosti u nadležnosti Statuta, HMD je izuzetno uspješno provodio: od priznanja za dosege od srodnih svjetskih udruga što dokazuje suradnja preko 70-ak institucija iz 50-ak država, tisak i redovitost objavljivanja prestižnog znanstvenog časopisa Metalurgija, organizacija svjetskih simpozija “Materijali i metalurgija” gdje se prijavi i do 689 referata itd.

Dalekosežnost odluke I. Mamuzića o utemeljenju HMD-a na razini Države pokazuje i podatak: npr: Slovačka, Slovenija, itd. sa profitabilnom metalurgijom kao i sve novonastale države bivše Jugoslavije, također s jakom metalurgijom nemaju metalurška društva (osim Srbije po pravnom nasljedstvu, što HMD nije osporavao).

Namjera Hrvatskog metalurškog društva nije ni probitak niti želja da se impresionira svojim uspjesima, nego stvaranje prigoda za rad i stvaralaštvo, za bolje životne uvjete i duševni mir. Poticat će zato i stjecanje znanja i stvaranje povjerenja, samopouzdanja i dostojanstvo članova. Želimo da nas uvažavaju, a mi ćemo uvažavati prava i način mišljenja ostalih. Sadašnji aktivisti HMD-a su ponosni i sretni svojom djelatnošću, jer postignuti rezultati na svjetskoj sceni opravdavaju golem uloženi trud.

Članovi HMD-a, zaljubljenici u svoju struku – metalurgiju kojoj su ostali vjerni i dosljedni cijeli život, svjesni su da je metalurgija povijesno išla gore, dolje, ali nikad nije prestala. Želja je, da metalurgija kao struka ne doživi potpuni slom u Hrvatskoj.

Jednako želimo iskazati divljenje, počast i veliko poštovanje svim pojedincima i naraštajima inženjera i tehničara Željezare Sisak (a kasnije i šire), koji su utemeljili našu udругu i pridonosili njenom rastu kroz proteklih 70 godina. Mnogi od njih su umrli. Slava im i hvala.

Croatian metallurgy. CMS had a possibility to be only a bystander to the collapse of Croatian metallurgy.

CONCLUSION

Croatian Metallurgical Society celebrates 70th anniversary of foundation 1952-2022 in an extremely difficult situation of Croatian metallurgy. Croatian Metallurgical Society is founded from Society of Engineers and Technicians of Steel works Sisak in 1952 y and Society of Metallurgical, Mining, Geological Engineers and Technicians Sisak (SMMGET) Sisak 1978 y and responsible for development and future of Croatia, with the purpose to base the contribution to its progress on promotion of metallurgy. Again, heads of CMS must emphasise unfortunately, CMS has never received an inquiry nor was its professional opinion requested by official bodies of Croatia regarding restructuring and future of Croatian metallurgy. CMS had a possibility to be only a bystander to the collapse of Croatian metallurgy.

The remaining activities within competence of the Statute of CMS were successfully performed by CMS: from acknowledgement for achievements by related world associations proven by cooperation with up to 70 – odd Institutions from 50 – odd states, printing and regular publishing of a prestigious scientific Journal Metalurgija, to organization of world symposiums “Materials and Metallurgy” where till 689 contributions are filed to be presented etc.

Far – sighted of the decision by I. Mamuzić about of foundation of CMS at the level of the state, the date were given: Slovakia, Slovenia, etc. with strong metallurgy, like all the newly established states in Ex- Yugoslavia, also with strong metallurgy, have not of Metallurgical Societies (except Serbia assumed the legal heritage without objection from CMS).

The intention of the Croatian Metallurgical Society is to neither secure advantage nor display our successes but to establish the conditions for work and creativity, for better living conditions and spiritual peace. Therefore, it shall foster knowledge, trust, self-reliance and dignity among its members. We want to be respected and we shall respect the rights and opinions of others. Current activists of CMS are proud of and happy with their work, because the results achieve on the world level justify huge efforts made.

Members of CMS, lovers of their profession – metallurgy to which they remained loyal and consistent throughout their lives, are aware that metallurgy in the history went up and down, but it never stopped. There is a wish for metallurgy as a profession in Croatia not to experience the total collapse.

We also wish to express our admiration, honour and great respect to all the individuals and generations of engineers and technicians of Steelworks Sisak (and beyond, later on), who established our association and contributed to its growth through the past 60 years. Many of them died. May their memory live with gratitude.

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