

REPORT

**“AIR PROTECTION 2021”
12th CROATIAN SCIENTIFIC AND PROFESSIONAL
CONFERENCE with international participation
15-17 September 2021, Medulin, Croatia**

The Croatian Air Pollution Prevention Association (CAPP), in cooperation with the Institute for Medical Research and Occupational Health, Zagreb, Croatian Meteorological and Hydrological Service, the European Federation of Clean Air and Environmental Protection Associations (EFCA) and International Union of Air Pollution Prevention and Environmental Protection Associations (IUAPPA), organized this year the 12th Croatian scientific and professional conference with international participation “Air Protection 2021“. The Conference was held under the auspices of the Ministry of Economy and Sustainable Development of the Republic of Croatia, from 15th to 17th September 2021 in Medulin, a small town with rich cultural history, located at the very top of the Istrian peninsula, Croatia.

The president of the Scientific and Expert Committee of “Air Protection 2021” was Gordana Pehcec and the president of the Organizing Committee was Ranka Godec. Other members of the Scientific and Expert Committee were Ivan Bešlić, Darijo Brzoja, Zdenko Franić, Ivana Hrga, Željko Linšak, Željka Zgorelec and Silva Žužul. The other members of the Organizing Committee were Elvis Ciliga, Silvijs Davila, Ivona Igrec, Ivana Jakovljević, Bruno Kostelić, Jasmina Rinkovec, Zdravka Sever Štrukil, Vedran Vadić and Nina Zovko. Members of Advisory Board were Ana Lucić Vrdoljak, Branka Ivančan Picek, Dunja Mazzocco Drvar, Andrzej Jagusiewicz, Thomas Reichert, Richard Mills, Vladimira Vadić, Krešimir Šega and Mirjana Čačković.

The COVID-19 pandemic posed a number of challenges to our society. In an effort to continue with the bi-annual tradition (the meeting “Air Protection” is held regularly every odd-numbered year since 1997), this year’s Conference was for the first time organized simultaneously as a live and virtual meeting. There were more than 130 participants from Croatia and abroad (United Kingdom, Germany, Poland, France, Italy), from which 96 participated in person at the conference venue, in Park Plaza Belvedere Hotel, Medulin. Virtual connection was enabled during all three days of the Conference. Especially EFCA and IUAPPA sessions were well visited by experts and scientists from Turkey, Malesia, Singapore, Iran, Taiwan, who otherwise would not be able to participate in the Conference.

Large number of participants, even in this time of the COVID-19 pandemic, shows not only that the international and domestic professional public are more than interested in the topic of air pollution but also that the work of the Croatian Air Pollution Prevention Association and the Air

Protection Conference itself is well recognized in the country and abroad.

Through this meeting there was an opportunity to display the results, indicate existing and potential problems, exchange experience and opinions among each other, and mutually reach conclusions about future actions. The participants of “Air Protection 2021” presented their experiences and the issues they encounter in their work through the 54 presentations in following topics:

- Topic 1 - Managing air quality – inspection and control
- Topic 2 - Atmospheric emissions of pollutants
- Topic 3 - Monitoring ambient air pollution
- Topic 4 - Developing and testing measuring methods
- Topic 5 - Estimating exposure to air pollutants and impact on health
- Topic 6 - Air Protection in physical planning, construction, and environmental protection
- Topic 7 - EFCA session “Air pollution from shipping emissions”
- Topic 8 - IUAPPA and Global Forum special session: “Respiratory pandemics and air pollution: exploring the links”

The conference started on 15th September with three introductory lectures:

- **Richard Mills** (IUAPPA): GLOBAL AIR POLLUTION: LESSONS FROM THE LAST 20 YEARS
- Sandra Krmpotić, **Nina Zovko**, Gordan Došen (Ministry of Economy and Sustainable Development of the Republic of Croatia): AN OVERVIEW OF LEGISLATION IN THE FIELD OF AIR QUALITY AT NATIONAL AND EU LEVEL
- **Vedranka Bobić** (Expert witness for environmental protection, occupational safety and environmental accidents): EXPERT WITNESS EXAMINATION AND COURT PRACTICE OF ENVIRONMENTAL FACTORS NOT REGULATED BY LAW – ODOURS

Introductory lectures were followed by 17 presentations in Croatian on Topic 1, 2, and 3.

The second day of the Conference (16th September) started with a special session of the European Federation of Clean Air and Environmental Protection Associations, which was organized during the “Air Protection” for the fifth time. At the beginning of the session, Vladimira Vadić (CAPP) was honoured from EFCA with the “Honorary Presidency” for her outstanding contribution and support to the development of EFCA and her years’ services as vice president. Vladimira Vadić was employed at the Institute for Medical Research and Occupational Health from 1968 to 2014 and has always been active within national Air Protection Associations. She held various positions in

CAPPA, from secretary to vice-president and finally to its president. In 1992, she became an International Coordinator of CAPPA. Due to her effort CAPPA was first admitted to IUAPPA and then in 1998 to EFCA, where Vladimira Vadić held its vice-presidency since 2020 until her retirement. Since 2019 she is a honorary member of CAPPA.

This year's EFCA session included six presentations in English on air pollution from shipping emissions. The session was chaired by Dr Andrzej Jagusiewicz, the president of the EFCA, who held an introductory presentation on shipping as an aggressive sector of ultrafine particles (UFP) emission. The second presentation was on maritime shipping emissions, reduction techniques and their costs (presenting author Grégoire Bongrand, TFTEI, France), followed by a presentation by Ana Alebić Juretić (Faculty of Medicine Rijeka, Croatia) on the characterization of maritime impact on air quality in two port cities, Rijeka (Croatia) and Venice (Italy). Zdenko Franić (Institute for Medical Research and Occupational Health, Croatia) held a presentation on monitoring, reporting and verification of CO₂ emissions in maritime transport, while Matija Široka (Faculty of Medicine Rijeka, Croatia) showed a quantitative method for assessing the environmental impact of port activities through the port environmental index. Finally, Andrzej Jagusiewicz held a presentation on the cost and environmental benefits of IMO regulations of ship-originated SO_x and NO_x emissions, assessed for the case of the Baltic sea. The panel discussion was moderated by John Murlis (EPUK).

This year, for the second time a special IUAPPA session was organized during the Conference, in cooperation with the International Union of Air Pollution Prevention and Environmental Protection Associations. The topic of the IUAPPA session was on exploring the links between COVID-19 and air pollution. Although the COVID-19 pandemic raised enormous uncertainties and challenges, from the start there was agreement that there were likely to be significant links and interfaces with air pollution even though their nature and scale was unclear. The session was chaired by Richard Mills (IUAPPA) and John Murlis (EPUK). An opening presentation on the WMO Report was given by Vincent-Henri Peuch, a member of the WMO Team and Director of the Copernicus Atmosphere Monitoring Service. The presentation from Professor Robert L. Maynard, UK, reviewed the most significant published studies from 2020 and 2021 and assessed their implications for the future (due to technical difficulties it was presented by John Murlis). Dr Heather Watson, Imperial College, London, UK, gave a presentation on current progress and priorities for future work in understanding the relationships between COVID-19 and air pollution. These presentations provided a starting point for the discussion, in order to clarify and refine the key issues and come to a view on what is known and what remains unknown, and begin to identify priorities for future work.

The consensus from the session was that, although an enormous number of papers had been published in the first year of the pandemic they were of such varying quality that it was difficult at this early stage to reach firm conclusions on the relationship between the virus and air pollution. Nevertheless the following preliminary conclusions could be drawn:

- Particulate matter played no significant role in transport of the virus
- It was not yet clear how far those habitually subject to poor air quality might be more susceptible to infection
- There was clear evidence that those with pre-existing conditions caused or exacerbated by exposure to air pollution would suffer more severe illness from the virus and have a reduced chance of survival.

Within the conference, the annual meeting of the International Board of IUAPPA was held on Tuesday, 14th September in person and online. The meeting provided an important opportunity for the Union to reach decisions on its planned World Congress in Singapore and more broadly on how it could best recover from the effects of the Pandemic.

The other three sessions held on 16th September (Topics 4, 5 and 6) consisted of ten oral presentations in Croatian.

Poster session included 17 posters, which were presented briefly (2-3 minutes) by the authors. The posters presented in the session participated in the selection for the best poster. The winners of the Best Poster Awards in 2021 were:

1st Prize

- **Ivana Hrga**, Iris Bujas, Barbara Stjepanović, Anita Vucić, Ana Večenaj, Mirjana Špehar, Ivan Ivanec, Nikolina Furlan, Itana Bokan Vucelić, Danijela Peroš-Pucar, Marijana Matijić Cvjetović, Ivana Brnica, Mirna Mamić, Tatjana Puljak, Nina Vuletin, Željka Cerovac, Zdenka Šušić, Mirta Eberhard, Marija Mulanović Smolčić, Vesna Kauzlarić, Lea Ivančić, Martina Nadih, Jasenka Babić, Adela Krivohlavek, Dragoslav Dragojlović: POLLEN ALLERGY - REAL TIME INFORMATION VIA THE "PELUDNA PROGNOZA" APPLICATION

2nd Prize

- **Goran Gajski, Marko Gerić**, Mirta Milić, Vilena Kašuba, Katarina Matković, Gordana Pehneć, Silvije Davila, Ivana Jakovljević, Ante Cvitković, Mandica Sanković, Antun Šumanovac, Ana-Marija Domijan, Irena Brčić Karačonji, Irina Guseva Canu, Pascal Wild, Nancy Hopf: EMERGING RESEARCH PROJECT: HUMNap – AIR POLLUTION AND HUMAN BIOMARKERS OF EFFECT

3rd Prize

- **Valentina Jagić**, Vesna Gugec: DEVELOPMENT OF A MULTI-USER DATABASE AIR QUALITY

NETWORK IN THE GIS SYSTEM FOR THE TERRITORY OF REPUBLIC OF CROATIA

- **Jasmina Rinkovec**, Magdalena Vincetić, Gordana Peh nec, Silva Žužul, Silvije Davila, Ivan Bešlić: PLATINUM, PALADIUM AND RHODIUM IN ZAGREB AIR

The third day of the conference was left for a Round Table discussion, the closing ceremony and the excursion. A round table discussion was held as a concluding discussion on all topics of the Conference. The complete report on the discussion at this Round Table is presented in the Box 1. In the afternoon an excursion was organised to the Brijuni National Park.

An abstract book (ed. G. Peh nec) containing presentation abstracts, both in Croatian and English, was distributed to the participants along with other materials. The Book of Abstracts can be found at the Conference web-page: <http://zastitazraka.imi.hr/hr/zbornik-sazetaka>. Authors were invited to send the results presented at the Conference in the form of a scientific paper to the journal Archives of Industrial Hygiene and Toxicology, which is official gazette of CAPP A, as well as to the Conference full-paper Proceedings, which will be published by the end of this year.

The conference “Air Protection 2021” should not be possible without great effort of Scientific and Organizing Committee members as well as Advisory Board members. CAPP A is particularly grateful to all co-organizers and the sponsors: Kobis, SmartSense, Alphachrom, Kemolab, Mettler Toledo, Eko-monitoring, Ekonerg, AnAs, Labomar, MRU, Biovit. We express our great appreciation to all who helped the organization of the Conference.

REPORT ON THE DISCUSSION AT ROUND TABLE OF THE CONFERENCE “AIR PROTECTION 2021”

In the period from 15th to 17th September 2021, the 12th Croatian Scientific and Professional Conference “Air Protection 2021” with international participation was held at the Park Plaza Belvedere Hotel in Medulin, Croatia. The meeting was held for the first time as a combination of live and virtual participation and was attended by more than 130 participants from Croatia and abroad. On September 17th, 2021, a Round Table was held as a concluding discussion on all topics of the Conference.

Below is a summary of the discussion held at the Round Table.

The discussion with introductory lectures highlighted the need for greater involvement of experts in the field of legislation regarding environmental issues. The need to unify air protection policy against pollution and climate change, the vagueness of certain regulations at both national and European level, the inconsistency of legislation within the EU in certain areas (e.g. protection against odours, accident situations) indicate that a comprehensive approach

to problems is needed. Legal experts are insufficiently involved. In many situations, citizens are left to themselves to file private lawsuits, and for certain situations there are no effective mechanisms of action. Previous meetings were often attended by inspectors from the field of environmental protection, and we had the opportunity to hear their experiences first hand. Due to the merger of inspection services at the ministries with the State Inspectorate, some contacts were lost, so all participants in the Conference and members of the Association are asked to help establish further communication. It was concluded that the Association will try to establish contacts with legal experts dealing with environmental issues and try to include them in future activities of the Association as well as in the next meeting of Air Protection.

The problem of the lack of more detailed data on emissions required for the development of action plans was pointed out. The applications of the model for urban and rural areas, the limitations of the use of the LOTOS-EUROS, ADMS and EMEP models, and the status of model development at the State Hydrometeorological Institute were discussed. Interest was shown in the results of measuring the chemical composition of suspended particles at background measuring stations (Desinić was cited as an example). It was emphasized that caution should be exercised when using the model and that, although it may contain certain errors, it is an informative and necessary tool in future planning.

It was noted that recommendations should be made to standardize air sampling heights. Although certain ranges are specified in the Ordinance on air quality monitoring, it was pointed out that research shows a significant difference depending on the height of the sampling inlet (i.e. between 1.5 and 4 m) and that this should be uniform between measuring stations, i.e. take into account any differences in the interpretation of measurement results.

Problems that may arise when interpreting the results of indicative measurements are discussed. Given the low time coverage of such measurements, a comparison should be made on the basis of the corresponding (relevant) percentiles. It was agreed that the author of the presentation Rounding Rule and Relevant Percentiles (authors Vedran Vadić, Iva Baček, Predrag Hercog) will be asked to agree to put it on the Conference website, because it is very informative and could be useful to the professional community.

It has been agreed that the organizer will send a request to all lecturers for consent to publish and/or share their presentations, but this is purely voluntary. It was also emphasized that a book of papers from the Conference is planned for this year, so the presented material can be exhibited in this way.

It was also suggested that, given that due to the COVID-19 pandemic it will probably not be possible to organize a HUIZZ seminar in 2022, one-day meetings on a specific topic (live or possibly as webinars) should be

organized instead in order to develop certain guidelines which would then be sent to the relevant institutions. A potential topic for a meeting is the problem of unpleasant odours, where it is necessary to develop legislation in this area, because the current one covers only a small number of pollutants (NH_3 , H_2S , mercaptans, formaldehyde) related to specific pollutants, but there are many unpleasant odours that are not covered, there is a problem of equalization to the 24-hour average (no short-term intensive episodes have been recorded), etc. It is necessary to make a comparison of regulations with other EU countries. In addition, another issue is related to the issuance of environmental permits, and there is the problem of the detection limit of certain methods and equipment in relation to the prescribed limit values, because the thresholds of odours are usually many times lower than the levels at which adverse health effects may occur. Earlier, the health inspection was in charge of the problem of unpleasant odours, and now it is the state inspectorate. Everyone is invited to give concrete proposals that could lead to better regulations in the field of unpleasant odours.

The problems of informing citizens about air quality by sending unvalidated and validated data to web portals were discussed below. It has been shown that the public availability of data, in addition to numerous advantages, also brings certain problems because it creates concern among citizens due to misinterpretation of results. The air quality index was made to make the data more understandable to citizens, but the question is whether it is the best way to inform the public. A problem was pointed out, for example, in the reporting of PM_{10} suspended particles, where 35 exceedances of the limit value per year are tolerated. The proposal is to mark the value not every time the limit value is exceeded but only when it happens for the 35th time.

Sensor air quality measurements were also discussed. Although they are increasingly represented through various projects and have a wide range of applications, when presenting results it should always be emphasized that these are informative data, not measurement data in terms of the Air Protection Act and the Ordinance on air quality monitoring. Therefore, there is no duty or legal obligation to finance such projects. It was emphasized that top laboratories in Europe are working on the development of sensors and procedures for their calibration and validation of measurement data, but for now the position of the Joint Research Center (JRC), published on their website, is that they cannot replace the reference methods required through EU Directives. It is necessary to inform citizens, but also local self-government units that these are non-referenced, unvalidated, and often insufficiently reliable data.

Representatives of SmartSense have requested that they be supported as the only Croatian sensor manufacturer, which has so far participated in several projects and are interested in the continuous improvement and development of their services.

Participants were reminded that the new proposal of the Ordinance on the Register of Environmental Pollution is available at the e-Consultation until September 30, thus enabling the interested public to view and comment. Participants were asked to use the opportunity to review the proposal of the new ROO Rulebook and submit any remarks, comments and additional proposals that will be processed after public consultation and accepted or rejected with an explanation.

It was emphasized that it is necessary to make the population aware of invasive and allergenic plants because pollen allergies are a significant public health problem that should be considered in the context of environmental protection and prevention of climate change. As part of the funds provided for adaptation to climate change (measure: Strengthening the system for monitoring allergen species), the possibility of co-financing projects related to this issue by the Fund for Environmental Protection and Energy Efficiency has been opened.

The proposal to adopt European directives as an original was discussed, as is the case with standards, which would potentially prevent the influence of individual lobbies. An example is the measurement of emissions from household appliances per year, regardless of type and consumption. It was pointed out that for Croatia there are currently no exact data on the extent to which households use gas, wood, fuel oil and what are the types of fireboxes. Technical standards for combustion devices to reduce particulate emissions were also discussed.

In conclusion, it was agreed that the conclusions and discussion of this Round Table will be sent to the sponsor, the Ministry of Economy and Sustainable Development, and the Meeting will be reported through the Archives of Occupational Hygiene and Toxicology and the EFCA Newsletter.

Gordana Pehnek, PhD



Figure 1 Introductory lectures, 15th September 2021



Figure 2. EFCA session, 16th September 2021



Figure 3. Vladimira Vadić honoured by the EFCA with “Honorary Presidency”



Figure 4. IUAPPA session



Figure 5. Best poster



Figure 6. Round table discussion



Figure 7. Closing ceremony



Figure 8. Excursion to Brijuni National Park

REPORT

VI. Hrvatski toksikološki kongres s međunarodnim sudjelovanjem (6th Croatian Congress of Toxicology with International Participation; CROTOX 2021) Rabac, 3.-6. listopada 2021.

Hrvatsko toksikološko društvo održalo je VI. hrvatski toksikološki kongres s međunarodnim sudjelovanjem u Rapcu 3.-6. listopada 2021.

Prije Kongresa održan je *Continous Education Course* (CEC) za mlade istraživače. Na tom su tečaju naslovljenom „Old methods, new perspectives: new regulation and approaches to toxicity testing of food chemicals“ predavači bili prof. Andrew Collins, prof. Maria Dusinska, dr. sc. Goran Gajski, prof. Ksenija Durgo i prof. Javier Esteban. Uvodno predavanje na CEC-u održala je prof. Emanuela Corsini, koja je i moderirala tečaj. Na tečaju je sudjelovalo 25 sudionika. Održavanje ovakvih tečajeva posebno je važno budući da u Hrvatskoj, a niti susjednim zemljama ne postoji edukacija iz toksikologije.

Na kongresu je u okviru osam sekcija: Clinical Toxicology, Analytical Toxicology, Emerging Approaches in Toxicology, Young Scientists Awards, Ecotoxicology & Exposure Assessment, Genotoxicology and Aging, Computational Toxicology, Nanotoxicology & Microplastics, održano 13 pozvanih predavanja, 12 kratkih predavanja, osam predavanja mladih znanstvenika te prikazano 80 posterskih prezentacija. Sudjelovalo je ukupno 117 znanstvenika iz Austrije, Bosne i Hercegovine, Francuske, Hrvatske, Italije, Njemačke, Norveške, Portugala, Slovačke, Slovenije, Srbije, Španjolske, Švicarske i Turske. Profesorice Vanessa Moraes de Andrade iz Brazila i Snežana Đorđević iz Srbije održale su pozvana predavanja putem platforme *Teams*. Sva predavanja mogla su se pratiti putem platforme *Teams*, a tu mogućnost su iskoristili sudionici koji na skupu nisu mogli sudjelovati uživo.

U prezentacijama iz različitih područja toksikologije, koje su bile dobro pripremljene, na zanimljiv su način prikazani rezultati najnovijih toksikoloških istraživanja napravljenih *in vitro*, *in vivo* ili računalnim modeliranjem, metode iz analitičke toksikologije te prikazi slučajeva iz bolnica.

Pokrovitelj kongresa bio je Institut za medicinska istraživanja i medicinu rada iz Zagreba (u daljem tekstu Institut), čiji su mnogi zaposlenici sudjelovali na skupu.

Predsjednica kongresa je bila dr. sc. Maja Peraica. Članovi Znanstvenoga odbora kongresa iz Instituta bili su: dr. sc. Goran Gajski, dr. sc. Jasna Jurasović, dr. sc. Nevenka Kopjar, dr. sc. Mirta Milić, dr. sc. Martina Piasek i dr. sc. Davor Želježić. Članovi Organizacijskoga odbora iz Instituta bili su: dr. sc. Dubravka Rašić (predsjednica Organizacijskoga odbora), dr. sc. Maja Lazarus (tajnica kongresa), dr. sc. Irena Brčić Karačonji, dr. sc. Marko Gerić, dr. sc. Andreja Jurič, dr. sc. Anja Katić, i dr. sc. Blanka Tariba Lovaković. Kratka predavanja održali su: dr. sc. Željka Babić, dr. sc. Marko Gerić, prim. dr. sc. Jelena Macan i dr. sc. Ivica Prlić. Suradnici Instituta dr. sc. Željka Babić, dr. sc. Goran Gajski, dr. sc. Marko Gerić, dr. sc. Nevenka Kopjar, dr. sc. Maja Peraica, dr. sc. Alica Pizent i prof. dr. sc. Davor Želježić predsjedavali su kongresnim sekcijama.

Organizacijski odbor Kongresa dodijelio je osam nagrada mladim znanstvenicima, od kojih su tri iz Instituta za medicinska istraživanja i medicinu rada (dr. sc. Antonio Zandona, Vedran Micek, dr. vet. med. i Karla Jagić, mag. chem.). Ti su znanstvenici održali predavanja o rezultatima svojih istraživanja.

Na Kongresu je prikazano 25 posterskih prezentacija čiji su autori zaposlenici Instituta. Povjerenstvo za dodjelu nagrada za najbolje postere dodijelilo je treću nagradu za najbolji poster našoj suradnici dr. sc. Anji Katić, dok je prvu nagradu osvojio dr. sc. Dean Karaica.

Ovaj će Kongres biti zapamćen po jako dobrim izlaganjima svih sudionika, kao i po neobično veselom druženju, što je vjerojatno posljedica potrebe znanstvenika da međusobno komuniciraju.

Atmosferu sa skupa može opisati par priloženih fotografija.

Program i sažeci sa skupa objavljeni su u supplementu *Arhiva za higijenu rada i toksikologiju* koji je uredio prof. dr. sc. Daniel Mark Lyons, a ta publikacija je u otvorenom pristupu dostupna na portalu Hrcak (https://hrcak.srce.hr/index.php?show=toc&id_broj=20925).

Dubravka Rašić



Slika 1. Sudionici VI. Hrvatskog toksikološkog kongresa



Slika 2. Pogled iz hotela Valamar Girandella Resort, Rabac, gdje je održan Kongres

REPORT

Izborna skupština Zbora članova Hrvatskog društva za zaštitu od zračenja Zagreb, 6. listopada 2021.

Hrvatsko društvo za zaštitu od zračenja (HDZZ) bira vodstvo Društva svake 4 godine. Izborna skupština Zbora članova HDZZ-a se tradicionalno održava tijekom simpozija. Međutim, simpozij koji je trebao biti organiziran tijekom 2021. godine, odgođen je predvidivo za 2023. godinu zbog pandemije COVID-19. Dosadašnjem vodstvu mandat je produljen za šest mjeseci do listopada 2021., te je Izborna skupština Zbora članova HDZZ-a organizirana 6. listopada 2021. na Institutu Ruđer Bošković u Zagrebu. Sudjelovala su 33 člana Društva, što je bilo dovoljno da prema Statutu HDZZ-a izborna skupština bude pravovaljana.

Predsjedavajući Zbora Željko Grahek podnio je izvještaj o radu Zbora u proteklom mandatu (2017. – 2021.) naglasivši da tijekom 2020. i 2021. i nije bilo posebne aktivnosti Zbora upravo zbog pandemijskih uvjeta. Predsjednica Društva Ines Krajcar Bronić podnijela je izvještaj o radu Upravnog odbora u proteklom mandatu. Znatno više aktivnosti, uključujući i organizaciju 12. simpozija, provedeno je u prvoj polovini mandata. Sekcija mladih organizirala je Prvi i Drugi skup sekcije mladih HDZZ-a, 2018. i 2020. godine, a tijekom 12. simpozija organizirano je neformalno druženje mladih HDZZ-a sa sudionicima simpozija. Raspisani su natječaji za najbolji rad mladih znanstvenika i stručnjaka iz područja zaštite od zračenja ili znanosti o zračenju. Na natječaje raspisane 2017. i 2021. nije bilo prijavljenih kandidata, tako da HDZZ nije imao predstavnika u natjecanju mladih na europskim kongresima IRPA 2018. i 2022. godine. Na natječaju iz 2019. godine nagradu je osvojio Marko Gerić te je predstavljao HDZZ na 15. Kongresu IRPA koji se održao online u siječnju 2021. Društvo je redovno sudjelovalo sa svojim predstavnikom na sastancima europskih društava za zaštitu od zračenja. U listopadu 2019. godine organiziran je skup u Zagrebu, na kojem je sudjelovalo 25 predstavnika 15 europskih društava. Napomenimo da je to bio posljednji

takav skup uživo, a nakon toga su skupovi 2020. i 2021. održani online. U proteklom razdoblju provedena je revizija članstva te je smanjen broj članova na trenutnih 121. Društvo je imalo i plodnu suradnju s društvima u regiji, a posebno treba naglasiti suradnju sa Društvom za zaštitu od zračenja Srbije i Crne Gore (DZZSCG) i Slovenskim društvom za zaštitu od zračenja. Predstavnici tih društava redovno su sudjelovali na simpozijima HDZZ-a, a predstavnici HDZZ-a na simpozijima koje je organiziralo DZZSCG.

Rizničarka Jasminka Senčar je u svom financijskom izvještaju naglasila da je Društvo i dalje likvidno i da redovno ispunjava svoje financijske obveze. U ime Nadzornog odbora izvještaj je podnijela Gorana Karanović naglasivši da je Nadzorni odbor imao uvid u rad Upravnog odbora tijekom cijelog mandata i da nisu bile uočene nepravilnosti u radu. Nakon što su svi izvještaji prihvaćeni, članovi vodstva Društva u razdoblju 2017. – 2021. dobili su razrješnice i pristupilo se utvrđivanju kandidata za funkcije u Društvu i članstvo u Upravnom i Nadzornom odboru. Nakon potvrđivanja izborne liste pristupilo se glasovanju i Izorno povjerenstvo je nakon prebrojavanja glasova izvjestilo o rezultatima.

Za predsjednicu HDZZ-a izabrana je Ivana Coha, a za dopredsjednika Branko Petrinc. Za tajnicu je izabrana Renata Ban te za rizničarku Iva Franulović. Za predsjedavajućeg Zbora ponovno je izabran Željko Grahek. Izabrani članovi Upravnog odbora su: Tomislav Bituh, Hrvoje Hršak, Željka Knežević Medija, Marija Majer, Luka Pavelić, Marina Poje Sovilj i Jelena Popić. Za članove Nadzornog odbora izabrani su: Marko Gerić, Gorana Karanović i Ines Krajcar Bronić.

Prije završetka Zbora, bivša predsjednica dala je nekoliko prijedloga za rad Upravnog odbora u novom mandatu, a novoizabrana predsjednica pismom je zahvalila na povjerenju.

*Ines Krajcar Bronić, Ivana Coha,
Željka Knežević Medija, Renata Ban*