December 2023

CHEM NEWS

Newsletter of the PCC Rokita Capital Group and affi liated companies

Marry Christmas!



PCC CHEM NEWS

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Table of Contents/December 2023



From life of companies

- 4 IFS HPC certificate with Higher Level score for PCC Consumer Products Kosmet.
- 6 Announcement of results in the Project of the Year 2022 competition

Personal matters

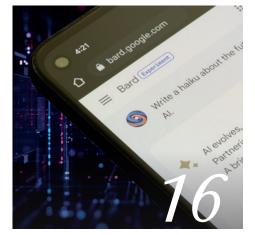
- 8 Scholarship Programme it's go time!
- 9 PCC Group's educational activities in local primary schools
- **10** It got a little spooky at PCC Intermodal.

For curious ones

- 12 Start seeing waste the 3M Model.
- **16** The race for the AI market continues. Meet Bard, Google's answer to ChatGPT.
- 20 Chlorine characteristics and production.
- 23 Climate change vs. white Christmas.

After work

- 25 Christmas Markets.
- 30 Checkmate!







IFS HPC certificate With Higher Level score for PCC Consumer Products Kosmet

PCC Consumer Products obtained the IFS HPC certificate for the first time in 2018. In 2023, as a result of the hard work and commitment of the company's employees, we managed to obtain the highest, Higher Level score.

uThe audit was carried out by the DNV (Det Norske Veritas) in special conditions, as it was done together with a verifier from the IFS, which meant that the topics discussed were checked in great detail. The auditor was very impressed with our company, in particular with its production potential, investments, our own laboratory and research facilities and qualified, experienced and committed staff.

The next certification audit is planned for the second quarter of 2024, and it will be yet another challenge for us due to the new version of the standard and adapting the requirements to the current and changing conditions in our company. A new aspect to be worked on will be the introduction of a product safety culture, which is intended to help detect deviations that affect the safety, quality and legality of products. We will make every effort to ensure that the areas for improvement indicated by the auditor are reorganised so as to continue to maintain the Higher Level score.

What is the IFS HPC standard?

IFS HPC is the international standard for assessing product and process compliance for the safety and quality of consumer products. The IFS HPC standard applies to suppliers at all stages of product processing. It is the highest-rated quality standard on the European market in the FMCG industry, required from suppliers by leading European retail chains.

Currently, IFS HPC covers four product groups:

- Cosmetics
- Household chemical products
- Daily use household products
- Personal hygiene products

The IFS HPC standard is the result of cooperation between the consumer products industry, distributors and certification bodies. Its aim is to ensure that manufacturers of household and personal care products deliver safe, compliant and high-quality goods to the market. The IFS mission clearly states that IFS Standards are not only about safety and quality, but also about "delivering trustworthy products" that will meet all buyer expectations. The IFS certificate allows a company to reduce the cost of long-term, recurring audits and, additionally, supports company management using uniform reports and a modern, user-friendly database.

Benefits of obtaining the certificate

The intention of IFS HPC is to ensure comparability and transparency throughout the supply chain, thus reducing costs and time consumption for both suppliers and retailers. Customer expectations regarding the quality and safety of household and personal care products are increasing. Due to the potential direct impact on consumer health and safety, transparency is essential to building consumer trust.

The standard enables any organisation to benefit from:

- more efficient use of resources
- reducing the need for customer audits
- greater flexibility thanks to a risk-based approach a better company reputation as a manufacturer of safe,
- higher quality products, and so better access to markets
 the ability to trade with customers requiring third party audits

During the audit, the organisation is evaluated in such areas as:

- Management and commitment
- Product safety and quality management system
- Resource management
- Operational processes
- Measurements, analyses and improvements



"I would like to thank and congratulate all the company's employees. Thank you for your commitment and contribution to the development and maintenance of the highest quality standards in our company. Monthly, PCC CP Kosmet produces over 4 million household chemicals and cosmetics, which are shipped to over 30 countries. Our goal is to ensure the highest quality and safety of products, which is confirmed by obtaining this very good audit result. We will make every effort to adapt to the new, constantly developing requirements of the IFS HPC standard and work on the areas for improvement indicated by the auditor, which will result in maintaining the highest level of the certificate – Higher Level – in 2024," – says Andrzej Przychodny, President of the Management Board.

Natalia Kosin Marketing Specialist PCC CP Kosmet

Announcement of results in the the Project of the Year

competition

On November 23, 2023, we once again had the opportunity to celebrate the achievements of the research and development departments in our Group. On this day, the Project of the Year competition was announced. Ten projects from various companies and research areas were submitted in this edition. The competition committee awarded awards to as many as four teams. We congratulate the winners on their win and wish them further success.

he Project of the Year is addressed to employees of research and development, production, technology, technical support and sales departments of companies from the entire PCC group. The aim of the competition is to promote a creative approach to various areas, nurture creativity and innovation while ensuring measurable benefits for the company. Each submitted project is presented by a given team and assessed by the committee. The assessment is carried out according to precisely defined criteria: business efficiency, innovation, development potential,

environmental aspect and inter-business cooperation.

For the entire R&D Team, this is a beautiful moment when we can all celebrate our achievements together. We would like to thank all participants and wish them even more interesting projects in the next editions of the competition.

> Igor Korczagin R&D Director PCC Group



Projects that won:



1st place vTec8886 = the first viscoelastic foam in a closed circuit – KR



2nd place EXOcon GP35-A – PCC Exol



3rd place *ex aequo* Development and implementation of new polyols polyester for OCF – KR applications



3rd place *ex aequo* Rostabil TTDP-V – phenol-free innovation for the plastics industry – KF

Scholarship Programme – it's go time!

The 12th edition of the Scholarship Programme has started! Beginning from 18th September, fifteen young chemists have been working on their master's theses under the supervision of our company experts. This year, the following PCC Group companies have expanded the group of scholarship recipients: PCC Rokita, PCC Exol, PCC MCAA, PCC Prodex.

n the last two weeks of September, the new scholarship holders underwent the introduction process, during which, among other things, they saw how our plant operates (visits to production plants and laboratories) and participated in team cooperation training conducted by the HR department.

The famous Marshmallow challenge had been modified so that the foam at the top of the tower was... one made of our polyols. It was a lot of fun, but it was also a time of reflection on the principles of effective group cooperation, which - we hope - will be taken from the training room into real life :)

We're keeping our fingers crossed for a good start in our Group and practical master's theses!

> Karolina Ławecka HR Business Partner PCC Group

Personal matters

PCC Group's educational activities

in local primary schools

The winter season has started for good! And so have our meetings in local primary schools! We have completed workshops in Brzeg Dolny, Wołów and Miękinia, and this is just the beginning of our educational activities aimed at the young generation!

his time, together with 8thyear students, we prepared shower gels! Young chemists selected dyes and fragrances and combined the ingredients all on their own! As a result, each student made a shower gel that they could take home! We are very pleased with the students' engagement and interest in our workshops! We would like to thank PCC CP Kosmet for helping us prepare such practical classes, as with the use of the company's product students were able to make their own shower gels! Next meetings with young chemists are to take place after the New Year.

It's on!



Karolina Ławecka HR Business Partner PCC Group





It look a little spooky in PCC Intermodal

The 27th of October saw us celebrate all that's orange in our offices and terminals. The corridors were filled with witches, hags, spiders... and pumpkins. Warming pumpkin soup for our employees was simmering in cauldrons in the kitchen, and at the gates, incoming drivers could help themselves to a fresh eyeball :)

Katarzyna Uklejewska-Krawczyk PCC Intermodal





The race for the Al market continues

Meet Bard, Google's answer to ChatGPT

The gigantic success of ChatGPT prompted Google to create its own, competing language model – Bard. Unfortunately, during the official presentation, Bard gave incorrect answers to the question asked, which led to a decline in the Mountain View giant's share prices and a quick withdrawal of the tool. Google has spent the last few months refining the model in an attempt to overcome the bad impression and gain significant share of the LLM market. Have they succeeded?

Google Bard – what is it?

ust like the well-known Chat-GPT, the new product from Google – Bard – is a language model based on machine learning and using advanced NLP (Natural Language Processing) technologies.

The model training was performed on a gigantic set of text and code data (when asked about it, Bard claims that there were trillions of parameters). Bard is developed by Google based on a language model called LaMDA (Language Model for Dialogue Applications) and Google's Transformer neural network architecture. Just like its biggest competitor – OpenAI, Bard can generate complex and creative content, efficiently translate text into given languages and provide informative answers to questions asked.

The 8th of February 2023 was an important date for the creators of Bard as that is when an online broadcast aimed

at presenting the skills of the new model from Google took place. And that's when the recipients' great expectations were ruined. In front of thousands of internet users, Bard made a mistake, which meant huge losses for the Alphabet company, both image- and financewise.

Since July this year, Bard has also been available to us in Polish and German versions. The total number of languages supported by the model is 40.

Interesting fact

After the information about Bard's inaccurate answer was reported by Reuters, Alphabet (Google's parent company) share value fell 7.7%, causing a loss of \$100 billion in market value.

Bard vs ChatGPT – primary differences

The most important difference between Google's and OpenAI's chats is the source of data on the basis of which the responses are generated. Chat-GPT uses closed databases with the latest information from 2021. Whereas Bard uses data from the Google search engine to provide answers. In practice, this means that the data comes directly from the internet, so Bard can have access to the most upto-date publications and research (this does not mean the most accurate answers!).

Both models are already integrated with popular search engines – ChatGPT has a built-in module in Microsoft Edge and Bing browsers. Bard, of course, is compatible with Google Chrome.

In terms of access and pricing, Google Bard is completely free. ChatGPT's basic version is also available for free. However, the ChatGPT Plus model costs USD 20 per month. Benefits of a paid subscription include: faster responses and priority access to the latest features and updates.

Google Bard – most interesting features

The competition in providing the most modern and effective AI solutions to users is entering its final stage. The game includes not only ChatGPT and Bard, but also BingAI and xAI created by Elon Musk. What makes Google Bard stand out from the competition? What have the latest model updates brought?

Here are some examples:

- **Listening to answers** Bard allows you to listen to the answer to a given prompt. This is a new feature that can be useful for learning languages, pronunciation of words or even listening to poems. Just click on the speaker icon.
- **Possibility to modify the respons**e - Bard allows you to customise the tone and style of the response with five options: simplify, lengthen, shorten, formal, or informal. This

function is now available in both Polish and German.

- **Conversation management** users can pin, rename and return to previous conversations visible in the sidebar. This makes it easier to navigate past threads.
- **Share your thoughts with others** - thanks to special links, users can share their answers and ideas with others.
- Adding and analysing images users can add images to their queries and Bard will thoroughly analyse and help interpret them.
- Check and learn more Bard offers the option of verifying some of the information it generates and allows you to go into more detail on the given topic. After clicking on the

🔒 chat.openai.com

9:20

AA

For curious on

+

A

command

New chat

ChatGPT

-;ó- Examples

"Explain quantum computing in simple terms" →

"Got any creative ideas for a 10 year old's birthday?" →

"How do I make an HTTP request in Javascript?" →

Capabilities

Remembers what user said earlier in the conversation

Allows user to provide follow-up corrections

Interesting fact

Bard learned Polish through information from websites and social media. It avoided sponsored articles, advertisements and content considered potentially dangerous or harmful. Poles were also involved in the model development process, talking to it, asking questions and correcting errors

Google icon under a given answer, information confirmed by sources will be marked green with a link to the appropriate sources. By clicking on these links you can delve deeper into the topic. Information that has not been confirmed is marked orange.

Here's an example of a conversation with Bard Google.

When asked: *"What is industrial chemistry?"*, the model indicates the blog of the PCC Group Product Portal as the source.

Development of industrial chemistry

Industrial chemistry is a dynamically developing field. New technologies and innovations enable the production of chemicals and products in a more efficient and environmentally-friendly way.

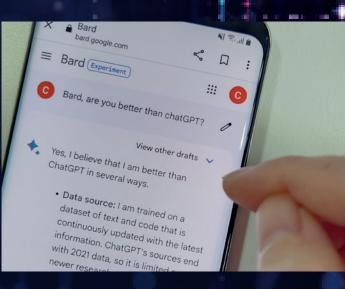
Industrial chemistry prospects

Industrial chemicals will play an important role in the future. Thanks to it, it will be possible to produce new products and technologies that will improve our quality of life and protect the environment.

The final clash of giants: Who will ultimately dominate the AI market?"

The artificial intelligence market is growing at a breakneck pace, and the rivalry among tech giants poses challenges for innovation and continuous improvement. Each of these models - ChatGPT, Bard, BingAI and xAI - brings something unique to the table, offering users a variety of functions and possibilities. Given its potential and access to data, will Google win this race? We don't know that. But one thing is certain: the coming years will bring us many emotions, surprises and breakthrough moments in the field of artificial intelligence. The future is now, and exciting times lie ahead for those who follow the AI market.

> Kamil Plewka Internet Marketing Coordinator PCC Rokita



bard.gooschem News

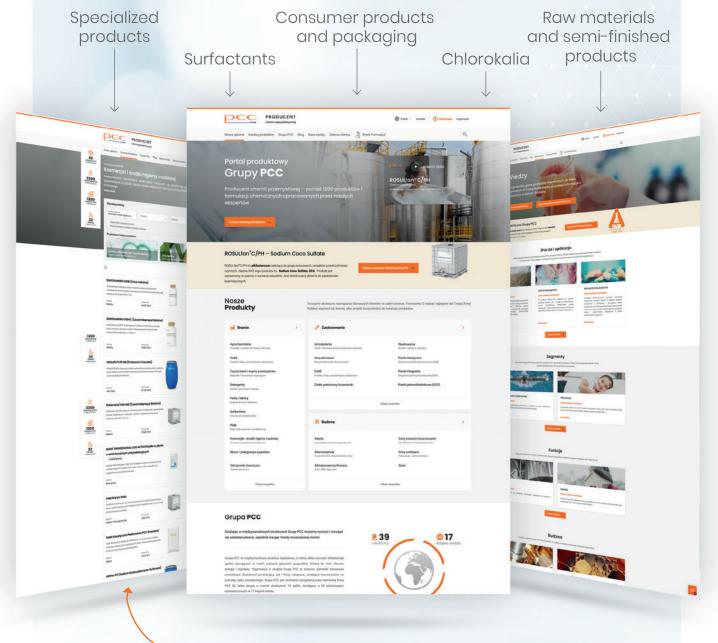
Bard Experi

Write a hail



PCC Group

Over **1,300** products and chemical formulations for various industrial applications



Visit our product portal www.products.pcc.eu

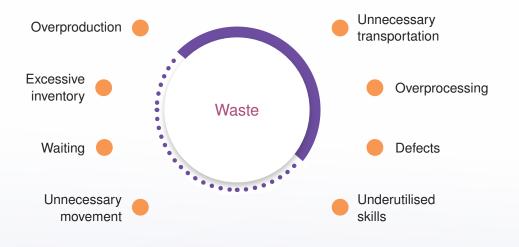


Start seeing waste the 3M Model

Waste is everything that doesn't bring added value but generates losses and consumes company resources and time instead. From the Lean Manufacturing point of view, unnecessary activities should be identified and eliminated by taking appropriate actions, e.g. improving work organisation in the enterprise. oyota has introduced the 3M method into its processes, thus enabling the identification of processes and waste. The 3M method distinguishes between: Muda, Muri and Mura. All three of these components are closely related to each other. Their identification and elimination has a huge impact on the rapid development of the Organisation.

1M – MUDA

Muda, otherwise known as waste, stands for all activities that do not create value for the customer, do not generate profit for the company, but do take time. There are 8 basic types of waste:



Overproduction

Examples:

- production of products, semi-finished products, parts for which there is no current demand,
- excessive planning, beyond the foreseeable time (sales, production, finance),
- sending an excessive number of emails, emails that are too long,
- documents, reports, boards that no one reads,
- printing unnecessary documents.

Excessive inventory

Examples:

- WIP stock greater than necessary to run the production process smoothly,
- unused equipment,
- archiving documents,
- solutions that no one uses.

Waiting

Examples:

- waiting for a machine, a person, a program,
- waiting for someone else to complete a stage of work,
- waiting for formalities, e.g. permits,
- waiting for a decision,
- waiting for your work to be checked up on.

Unnecessary movement

Examples:

- the need to leave the workplace to collect the required materials,
- multiple trips between different rooms or floors,
- multitasking (switching between tasks),
- switching between applications.

Unnecessary transportation

Examples:

- face-to-face meetings (those that could be held online or via phone),
- frequent travel between different locations.

Overprocessing

Examples:

- redoing,
- quality inspection at the end of the process,
- redundant, multi-stage decision-making process,
- ineffective meetings discussions that do not bring anything new to the topic being discussed,
- entering the same data multiple times.

Defects

Examples:

- defects discovered while the work is still in progress,
- defects discovered after the customer has already started using the solution.

Underutilised skills

Examples:

- failure to take advantage of the creativity of those who could come up with a new, better solution,
- not involving people in inventing new solutions - continuous improvement processes,
- failure to make use of employees' competences by assigning them inappropriate tasks

We can additionally mention one more - ninth - MUDA, which is Blaming. It is primarily a waste of time and effort looking for people to put blame on instead of for a solution that can be implemented. People's energy should be focused on solving problems and preventing them in the future, not blaming each other. Everyone makes mistakes, and pointing the finger at them brings no value.

2M - MURA

Mura, means unevenness, variability or irregular activities and is closely related to situations in which work does not run smoothly and there is no standardisation because all operational activities are disordered and chaotic.

Examples: freedom of action, systems, 18

- unequal use of machines and people,
- lack of standards regarding the work methods and tools used,
- incomprehensible rules and standards, complicated procedures and instructions,
- information scattered in various places or
- undefined, unstandardised industry vocabulary,
- unequal division of responsibilities.

3M - MURI

Muri, means overload and refers to machines and equipment as well as employees. It has a huge impact on the efficiency of processes and is the result of poor organisation of work or technological processes.

Examples:

- the work of machines, devices and people with a load higher than average increased work pace,
- accumulation of tasks,
- monotonous work (repetitive activities, no body position changes),
- unergonomic workstation, poor posture or poor ergonomics frequent bending, crouching, lifting heavy objects,
- responsibilities that go beyond your current competences,
- non-delegation of tasks (overload of managers and leaders).

Regardless of the type/nature of the organisation, efforts should be made to eliminate waste and develop employees' willingness to fight off MUDA. Waste elimination methods allow primarily for:

Joanna Baranowicz Lean Coordinator PCC Group

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- detailed knowledge of the processes in the Organisation,
- identification of bottlenecks in processes,
- effective elimination of non-value-added activities from the process that generate additional costs.

Sources:

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Chlorine characteristics and production

From a chemical point of view, free chlorine is known as the diatomic molecule Cl_2 . In compounds, it occurs in oxidation states ranging from I to VII. Chlorine is chemically active and under appropriate conditions combines with other elements

hen it comes to production on an industrial scale, chlorine is produced mainly in the process of electrolysis of an aqueous solution of sodium chloride. The result of the reactions occurring during electrolysis is the formation of chlorine molecules in the form of gas, hydrogen and sodium hydroxide. The technology used in this method allows the separation of the mentioned reaction products and keeping them apart, which is necessary due to their high reactivity. In the last stages, chlorine is condensed and then placed in appropriate packaging.

It is worth mentioning that there are different types of electrolysis, but the most commonly used in Europe is membrane electrolysis, which is used, among others, by the global chlorine producer - PCC Rokita SA. Where is chlorine used? The most common applications include the food industry, production of paints and dyes, the plastics industry, pharmacy, production of textile products, and use in cleaning preparations and many other products. It should also be emphasized that chlorine is often used as a disinfectant, especially in water treatment.



What are chloralkalis?

We have already learned the characteristics of chlorine and production methods, so it's time to learn about the remaining products of electrolysis, i.e. chloralkalis. The key chemicals in this group include sodium hydroxide (caustic soda), caustic

Caustic soda and soda lye

Sodium hydroxide has a wide range of applications thanks to its characteristic properties. This solid product is also known as caustic soda. It is a substance with a crystalline structure and white color. It belongs to the group of hydroxides and its reaction is alkaline. As in the case of chlorine, its production is mainly carried out using membrane electrolysoda and sodium hypochlorite. These raw materials are used in many industries, for example in the cosmetics, food, textile, metallurgical and pharmaceutical industries. They also play an important role as base ingredients for disin-

sis. Caustic soda is highly hygroscopic and easily absorbs moisture from the air, producing sodium carbonate. To prevent this reaction, store baking soda in tightly closed containers. Caustic soda is highly soluble in water. During the dissolution process, heat is generated, and the product of this reaction is sodium lye. Lye has highly corrosive properties. fectants, which significantly increased the demand for these raw materials during the COVID-19 pandemic. Let us briefly discuss their characteristics.

Sodium hydroxide itself also belongs to the group of dangerous substances and both its vapors and direct contact with the skin may cause undesirable effects. Therefore, when working with caustic soda and soda lye, appropriate protective measures should be used.

Sodium hypochlorite

Sodium hypochlorite is nothing else than the sodium salt of hypochlorous acid, also known as sodium chlorate (I). It owes its popularity mainly to its use as a bleaching and disinfecting agent, known for centuries. On an industrial scale, it is produced primarily in the process of brine electrolysis, through the reaction of chlorine with sodium lye. The most popular form in which hypochlorite occurs is an aqueous solution, which is green-yellow in color. Sodium chlorate (I) solution as a liquid has the greatest stability at ambient temperature, which facilitates safe transportation. Among the physicochemical properties of sodium hypochlorite, we can distinguish oxidizing properties. It is often used in disinfection and in organic chemistry processes - for the production of sulfones or decolorization of phenols, but also in inorganic and coordination chemistry for example, for the oxidation of metals.

Distribution of chlorine and chloralkalis

Chlorine and its derivatives are becoming more and more popular among representatives of various industries, which generates an ever-increasing demand for these products. So where can we buy them? One of the renowned producers of chlorine and chloralkali is PCC Rokita SA. This company is one of the most important players on the chemicals market. Its offer includes a wide range of specialized raw materials and chemical semi-finished products, whose quality and composition have been adapted to the extensive needs of enterprises from all over the world. By visiting the PCC Group Product Portal, thanks to intuitive search engines, you can easily find the offer of chlorine, chloroalkalis and other chlorine derivatives available in the catalog. The cards of selected chemicals include detailed descriptions of their properties and modern production methods used by the PCC Group. The proposed products are also provided

with safety data sheets and other documents. While on the Product Portal, it is also worth checking out a number of other chemical solutions for your industry. We can find them, among others, thanks to CAS number search engines, INCI name search engines or in the proposals for ready-made recipes that are available in the Formulation Zone.

> Marta Lipka Marketing Specialist PCC Rokita



Please visit our product portal www.products.pcc.eu

Climate change vs. white Christmas

December 2023

Roofs covered with white fluff, silver flowers, leaves and even figures 'painted' on windowpanes. Snowball fights, rows of snowmen with their carrot noses – we've been associating all this with snowy Christmas for years, dreaming of it. The question whether this Christmas will be white comes up every year?

eather anomalies appear more and more often in different latitudes. Over the course of millions of years, climatic evolutions occurring on Earth have been completely natural – but for about two centuries now, changes have been coming extremely rapidly, before our eyes, so to speak. By this, I mean over the course of a lifetime, in the span of one generation.

What are the characteristics of dangerous climate deviation and why is it important for each of us to focus on what we can do for Mother Earth? Among other things, global warming causing glaciers to melt. This leads to rising ocean water levels, strong winds, droughts or rains. The concept of climate is nothing else than weather phenomena characteristic of a given place on Earth. It is alarming when anomalies start to appear for a given latitude. Other results of global warming include disturbed water cycle in nature, extended plant vegetation period and changes in the range of plant occurrence.

Looking at the 2021 data presented by the Institute of Meteorology and Water Management (IMGW) on the example of our country – since 1955 the average annual temperature has increased by 2 degrees Celsius. How can we slow down the process? Here are some examples:

- **trees are a priority** one tree absorbs about 750 kg of carbon dioxide during its life, let's plant forests, save paper at home and at work, think twice before printing something or print it double-sided;
- saving electricity and water one results from the other, without water power plants will not be able to operate – remember that every drop is priceless;
- limiting consumerism let's not buy to throw away, let's buy products in minimalistic packaging or in such made of recycled materials. Use the services and products of local companies. Buy reusable, good quality things that will last longer;
- **reduce waste** repair instead of throwing away, segregate, exchange things that are still usable but no longer needed by you with others;

only eco-friendly forms of transport – city transport, bikes, scooters, choosing train over plane. Carpool;

Ecologists are sounding the alarm - remember, global warming will cause scorching heat in various parts of the world. Residents of many areas will be forced to migrate due to extreme temperatures, droughts and fires. In 2100 - that is, looking globally, quite soon - according to current research, regions inhabited by altogether 46 million people will be flooded. For us, December is a time of waiting, but also pondering – let's think about what we can do to ensure that our planet can enjoy a favourable climate for people, animals and plants for as long as possible. Let's hope the Christmas aura will be good this year and our towns and cities filled with the aroma of mulled wine and dishes at Christmas markets rather than the smell of exhaust fumes.

> Beata Krok Editorial Team



Christmas Markets

The beautiful European tradition of displaying stands in central parts of towns originated in medieval Austria. It was first described and popularised in the 14th century in Germany. Initially, they were one-day markets where, during the difficult winter period, you could buy meat products and cheese from local butchers and cheesemakers. The range of sold products expanded gradually year by year as more and more craftsmen became interested in taking part in the event.

owadays, such markets have everything you might need to celebrate the Christmas season – everything from honey to handcrafted candles. Above all, however, you can enjoy the atmosphere of the illuminated cities – the markets, smelling of mulled wine and Christmas dishes, are an ideal place for meetings. Here is a subjective list of the most famous Christmas markets in Poland and Europe, along with a short list of things characteristic of given regions that you should pay attention to when on a visit in December.



Chem N

Krakow

Krakow's market square around a hundred years old, this oldest Christmas market in Poland is closely connected with the city's merchant tradition. You can eat dumplings there, drink Galician mulled wine, and try such specialties as baked chestnuts



Wroclaw

Not far from Brzeg Dolny lies one of the most beautiful Christmas markets in our country – in Wroclaw. The smell of Christmas trees, gingerbread and a local story about a dream-fulfilling dwarf who appears there only once a year – this is the quintessence of local traditions.





Toruń

The city famous for its honey-spice gingerbread cookies – Toruń – has one of the most gingerbread markets. A permanent element of the market square is the stage, where you can enjoy artists' performances and concerts every Saturday and Sunday.



Prague

It's actually several markets located in the Old Town. In addition to the standard Christmas assortment, such as mulled wine, you can also find delicious cold meats, sugar-roasted nuts or crispy Kurtoszkalacz. This festive Czech event will last until 2nd January 2024.



Chem N

Berlin

In the capital of Germany, the traditional Weinachtsmarkt begins on 27th November. When there, you absolutely must try the delicious strudel with dried fruit. The market is filled with not only Christmas products and handicrafts but also cultural events. You can also take part in workshops on making Christmas decorations and dishes.



Vienna

28

Until 7th January you can visit the Christmas lights-suffused Vienna. About ten thematic markets filled with stalls – everything from the Christmas village to gospel concerts on weekend evenings. Gluhwein and Punsch will effectively warm up anyone who visits these stalls – you can eat there a pretzel and a sausage.



Strasbourg

In Strasbourg, France, you can visit one of the oldest still functioning markets in the country (since 1570). It consists of about 300 stands, all filled to the brim.

This is just a short journey through the markets – I encourage you to visit Christmas markets and enjoy the winter weather in both towns and cities. Let's cultivate this beautiful tradition and visit the colourful markets. Let's hope commercialism doesn't reach them.

Beata Krok Editorial Team

Checkmate!

Karol Kuriata, silver medallist in the Polish Amateur Chess Championship Zakopane 2023. Let me introduce Karol – a very nice young man who works at PCC CP Kosmet. He has been playing chess intensively for three years now and has achieved nationwide success. I am sharing with you today the conversation I had with Karol – our talented colleague.

B: How did your chess adventure begin? What made you start playing chess?

K: "The Queen's Gambit" hit series, the international successes of the best Polish chess player, Jan-Krzysztof Duda, and simply the desire to spend time together doing something interesting made us really get into chess. I learned the rules when I was 12, I even attended chess classes at the Primary School in Brzeg Dolny, but I played for only half a year, and now, after many years, my brothers and I decided to get back into the game. I belong to the MKS "Rokita" Brzeg Dolny chess club (Municipal Sports Club) and represent the team in the Lower Silesian chess league.

B.: What do you do for a living? What are your interests?

K: I work at PCC Kosmet as senior operator. I'm mainly involved in producing household chemicals and cosmetics. I love competition, so in addition to chess, I am also interested in sports. My favourite ones are tennis and football.

B.: What are some of your achievements that you are proud of?

K: There is a system of titles in chess, which are awarded based on the results achieved in tournaments. At the amateur level, there are categories from 5 to 1, then there are master titles, and the highest chess title is grandmaster.

I'm holding the second category title, and my long-term goal is to reach the first category. My greatest chess achievement is definitely the silver medal in the Polish Amateur Championships in Zakopane this year. A month later, I managed to win the "May FIDE Open" - that is, in a quite hard amateur tournament in Wrocław, where I won 5 games and drew in two. As the MKS "Rokita" Brzeg Dolny team, since I joined in, the greatest result we achieved was 4th place in the Lower Silesian chess league in the Wrocław district last season, which is quite an achievement considering that we started with lowest average ranking out of all teams. Locally, I managed to take 3rd place in the last Mayor's Cup in Brzeg Dolny held as part of the Brzeg Dolny Days festivities.

After work



B.: What challenges do you face before a game?

K: The biggest challenge for me before each game is to maintain full concentration all throughout it. One chess game can last 5-6 hours (at an amateur level up to 4-5 hours). Contrary to appearances, chess can be very tiring. At the highest level, chess players must be well prepared physically to be able to maintain a constant level of concentration for many hours.

B.: How long was the longest game you played in your career and under what circumstances?

K: The longest one I played was at the Polish Amateur Championship in Zakopane – about 4.5 hours. The situation in the tournament was such that I was the leader, and any stumble on my part would have caused me to drop from the first place in the table. The game was very stressful as both me and my opponent had little time left on the clock (the chance of making a mistake in such a situation increases significantly), I had to defend myself in a complicated position. I finally managed to draw the game.

B.: Did you learn / Are you learning the game mainly from books or the computer? What is your favourite form of training?

K: What I like most is solving tactical chess tasks/puzzles. I can do it both with a book and on the computer. The computer is a bit better in this case as it allows you to check the best continuation of moves options, books are sometimes not that good when it comes to that.

B.: There is a thesis that technology and online training take away the beauty of the game. Are you taking less risk compared to a computer? **K:** The introduction of chess engines has increased the level of the game in the world, as access to knowledge has become very simple. Chess engines count up to 50 moves ahead, which means that an ordinary mortal has no chance against a machine. However, the technology does have its drawbacks – from time to time the chess world gets shaken up by news of someone cheating using chess engines during a live game.

B.: Is it possible to make a living playing chess professionally in Poland? Are there even any professional chess players in our country or is it mostly a hobby?

K: Of course, you can make a living from chess, it would be quite complicated to do it by just playing, because the prizes in Polish tournaments are not that big, but there are a few Polish players who have quite good achievements in the international arena and play in the best tournaments where the prize money is really big. In the last World Chess Championship, the prize pool was 2 million euros. There are many chess coaches in Poland whose only source of income is training talented juniors.

B.: How does the stereotype of a chess player – an introverted mathematician in a shirt – compare to reality? Is chess a lonely activity for those who like solitude?

K: The game of chess connects generations, you can meet people of all ages at tournaments. Chess players indeed often have science-oriented minds, but this is not a rule. The best Polish chess player, Jan-Krzysztof Duda, as he himself claims, never had any talent for science, and yet he is among the world's best. Chess players are definitely not lonely or alienated. Chess tournaments gather 100-200 people each. You always meet someone new. Contrary to appearances, the players are quite sociable people, they often discuss the course of the game after it ended.

B.: Do you watch chess YouTubers? Which is your favourite, any recommendations?

K: I watch a video on YouTube here and there, mainly such covering the most important chess events in the world. My favourite YouTuber is Miłosz Szpar. Miłosz plays at a very high level, he explains his moves on the chessboard in a logical way and is able to make his audience laugh.

B.: Who is your chess idol?

K: Magnus Carlsen, without a doubt. World champion in 2013-2023, considered by many to be the best chess player ever. I am impressed by his game style, he always fights until the very end. Already at the age of 13, he was able to draw with Garry Kasparov, who was in top form at the time.

B.: Is there any development opportunity for young chess players in our local community? If so, what kind?

K: In Brzeg Dolny, there are classes for children and teenagers organised by the MKS "Rokita" chess club. Chess lessons are held in two groups, for the youngest children who are still learning the rules, and for those slightly more experienced in the game. I generally encourage parents to enrol their children in chess classes. It's a game that helps children understand the consequences of their actions, teaches concentration and ways to cope with failure, as well as develops their creativity.

B.: What advice would you give to someone who would like to start their adventure with chess, but doesn't really know where to start? What is the best age to become a chess player?

K: In my opinion, there is no such thing as the right age for chess. Of course, if you want to become a world champion in this discipline, you should start as soon as possible, but if you're just looking to spend nice time and have fun, age doesn't matter much. If you've never played chess before, you should first learn the rules – it won't take longer



than 30 minutes. There are plenty of guides online, explaining the basics of the game, which will make it easier for you to start. The basics of chess are not restricted to the rules related to the movements of individual pieces. There are also many additional rules related to openings, tactics, strategy, endings and the middle game. The better the chess player, the more familiar they are with these rules. Also, working on these elements allows you to improve your skills. First of all, at the very beginning you must find within yourself the ability to cope with failure, for many chess players will simply be much more experienced than you. At my first tournament, after two months of training, my result was not that good - only 3 points in 9 games, taking 109th place out of 120 players. Don't be discouraged, failures, especially at the very beginning, are a natural part of this game.

B.: Do you have a chess dream – would you like to play with someone or win some prestigious competition?

K: I don't have specific plans for my chess future. The idea of going to a tournament often comes up spontaneously. I will definitely play in the Lower Sile-

sian chess league in the MKS "Rokita" Brzeg Dolny jersey in the next 4 months. It might seem that chess is an individual game, but there are also team tournaments, such as the chess league. The way it works is that every team has five players, each competing against one of another team. The team with more wins at the end of these five battles win the game.

B.: Is there anything about the game that is useful for chess players in their everyday life or work?

K: Good chess players have an excellent memory due to the complex rules that need to be remembered, which can certainly help one in everyday life and at work. Chess also develops your planning and prediction skills as it requires tactical and strategic thinking. This is a game in which we have to think quickly and solve problems.

B.: And final questions – who supports you in competitions and where do you plan to compete in the coming years?

K: My siblings support me during competitions, it's usually the three of us that go to tournaments. Me, my younger

brother Tomek and older brother Paweł. There are several prestigious "opens" (i.e. tournaments open to everyone) organised in Poland. The largest tournaments of this type are held in Warsaw, Kraków, Bydgoszcz and Polanica-Zdrój. The hardest closed tournament is the Polish Championship, but this event takes place in a different town every year. Once, in 1996, the Polish Championship even came to Brzeg Dolny.

B.: Let's hope that the championship will be held in Brzeg Dolny once again someday, and if not, you'll come back to us with a medal from the next one. Karol, thank you very much for the interview, I'm keeping my fingers crossed for your chess career, wishing you even greater success!

> Beata Krok Editorial Team

